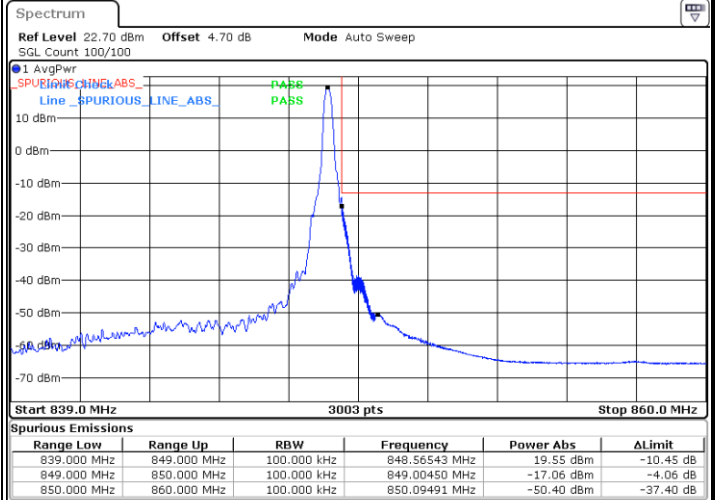
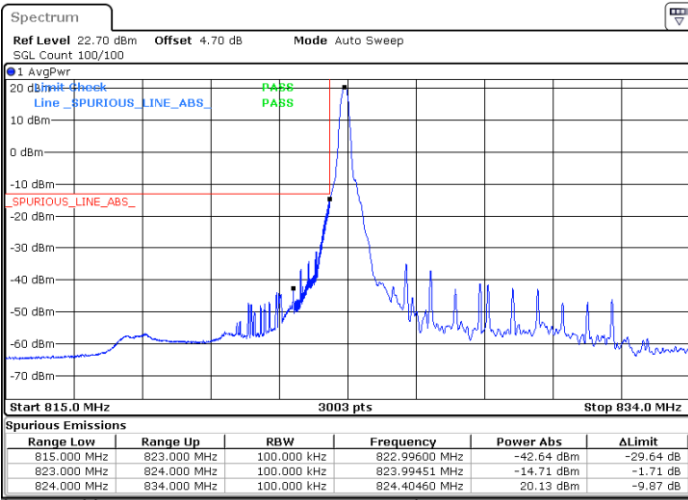




FR1 n5 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

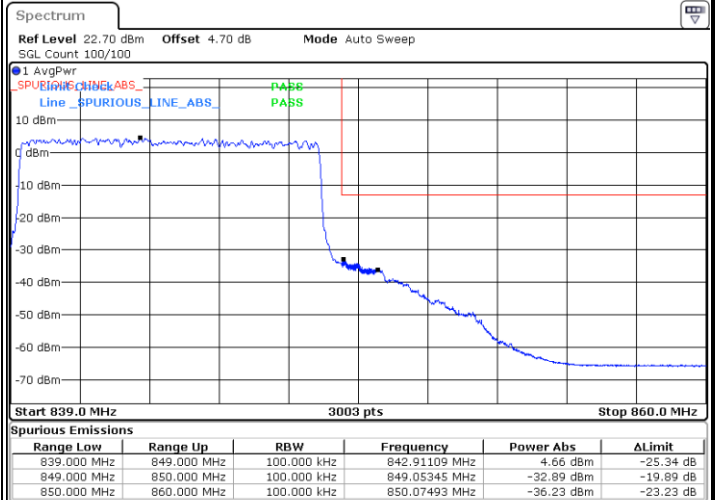
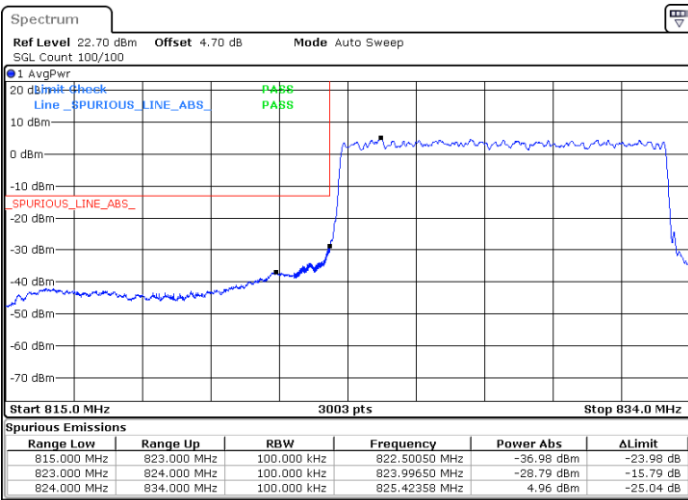


Date: 12.SEP.2020 11:15:38

Date: 12.SEP.2020 11:38:14

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.SEP.2020 11:08:54

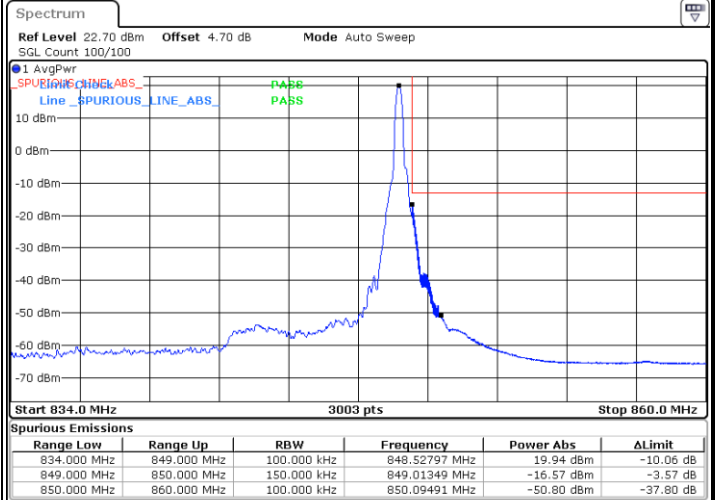
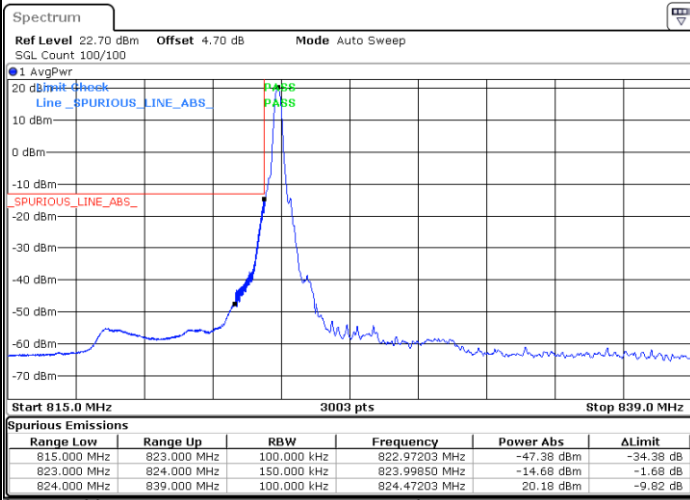
Date: 12.SEP.2020 11:27:48



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

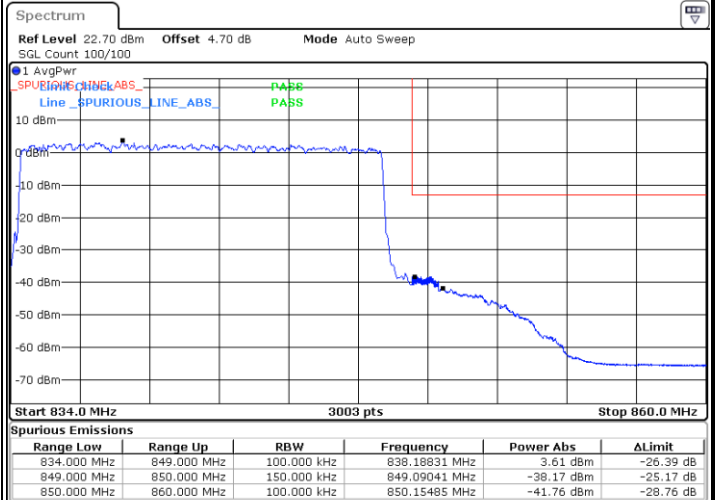
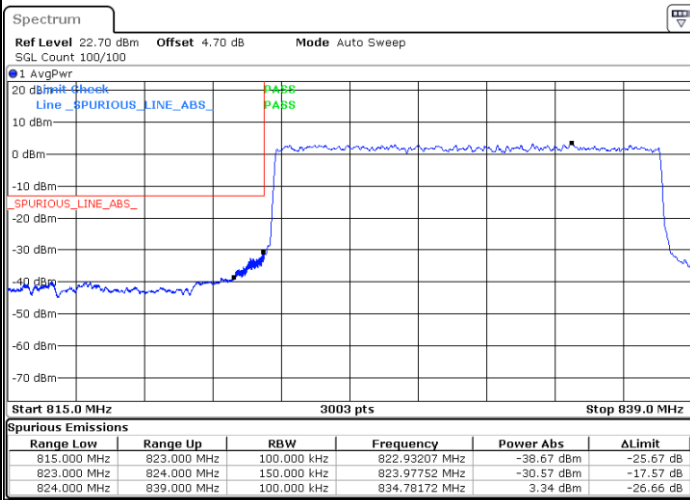


Date: 12.SEP.2020 12:03:24

Date: 12.SEP.2020 12:24:25

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.SEP.2020 11:41:02

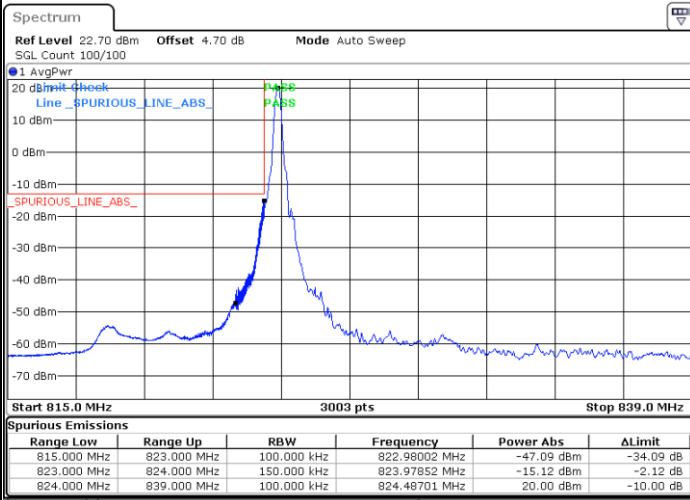
Date: 12.SEP.2020 12:16:27



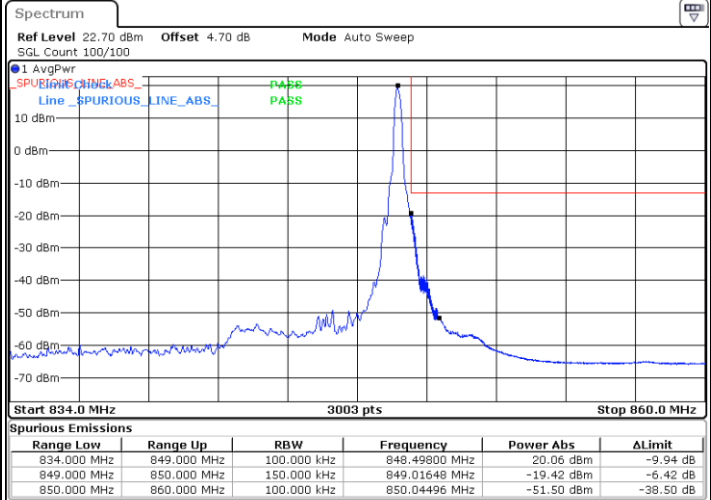
FR1 n5 / 15MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



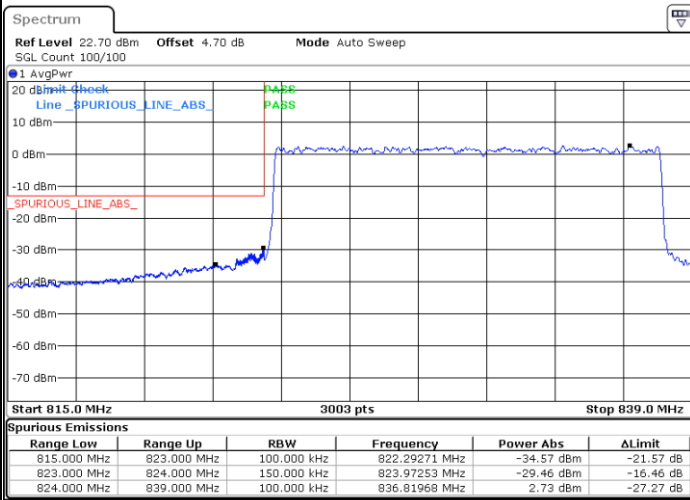
Date: 12.SEP.2020 12:05:19



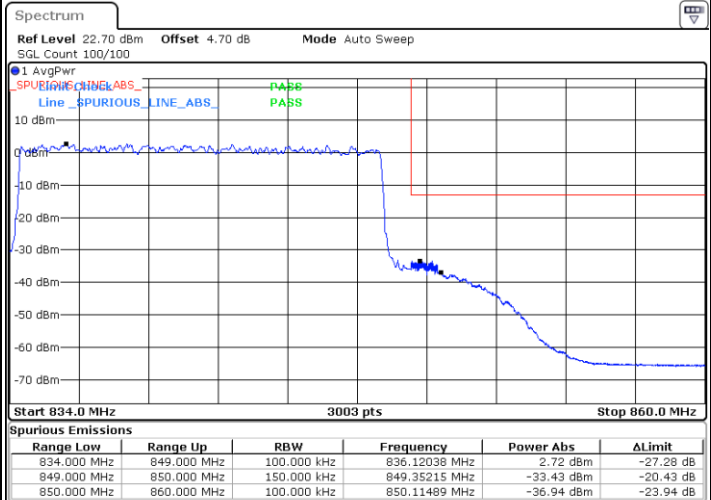
Date: 12.SEP.2020 12:23:42

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.SEP.2020 11:41:55



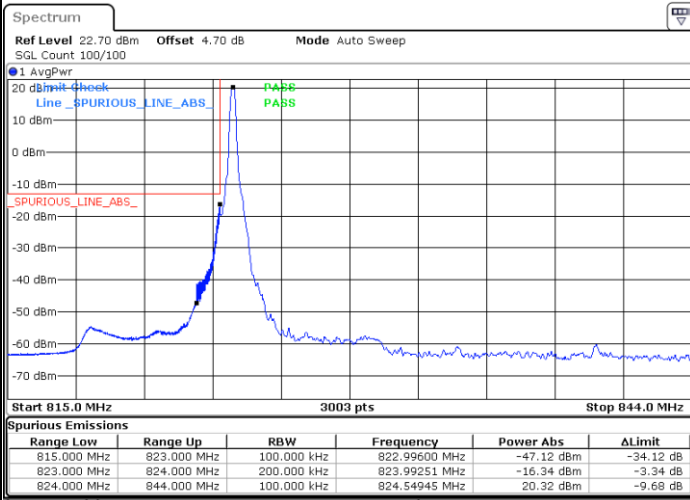
Date: 12.SEP.2020 12:17:26



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



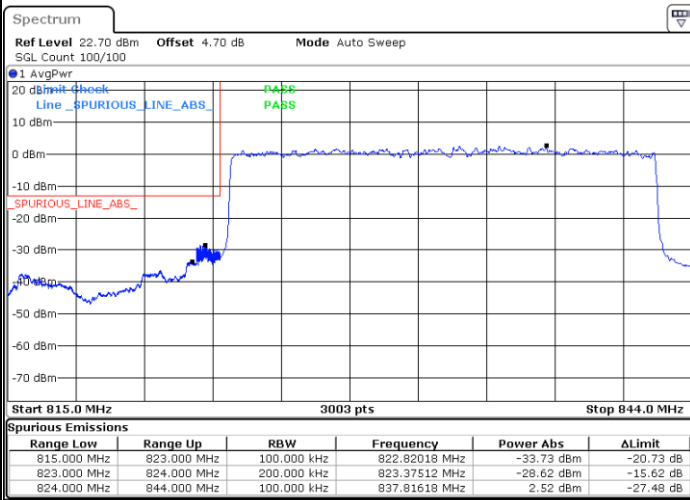
Date: 12.SEP.2020 12:35:21



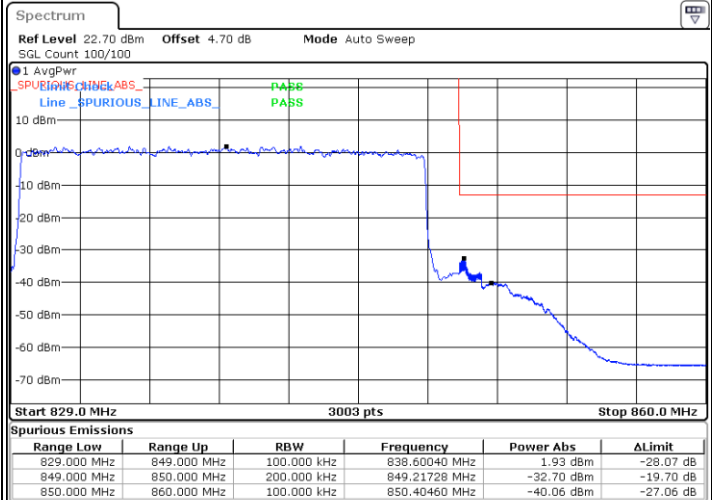
Date: 12.SEP.2020 12:59:29

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.SEP.2020 12:29:40



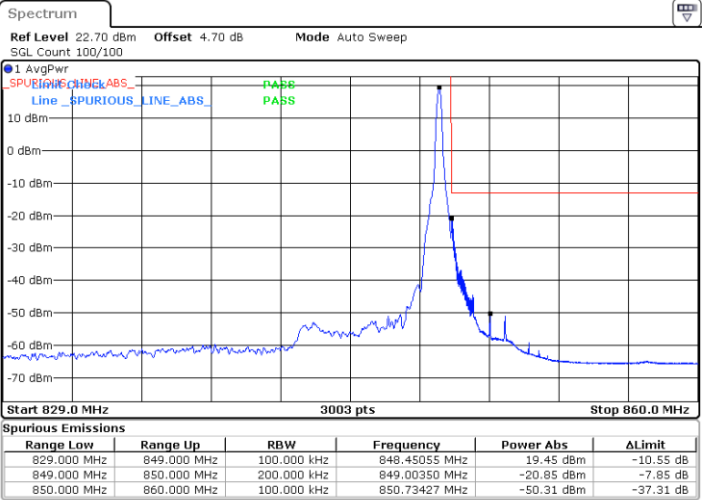
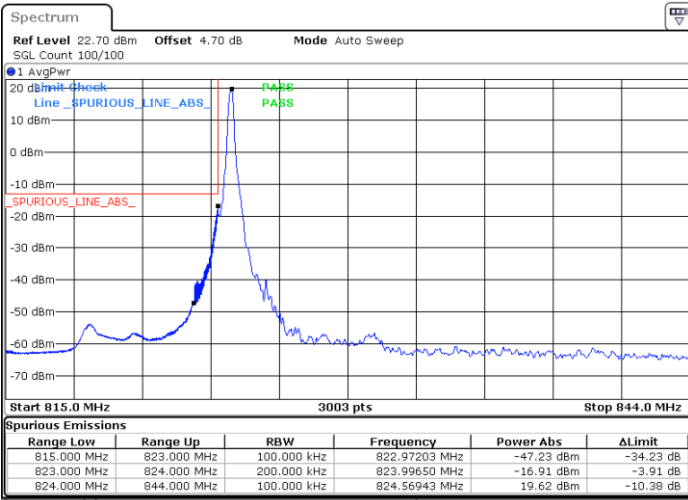
Date: 12.SEP.2020 12:52:33



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

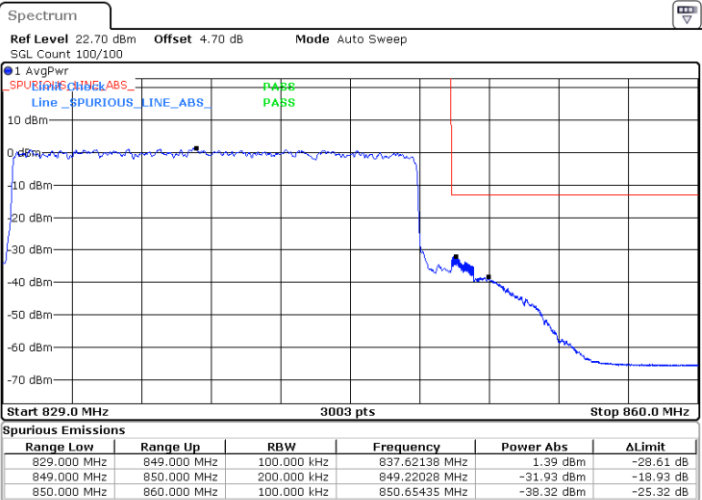
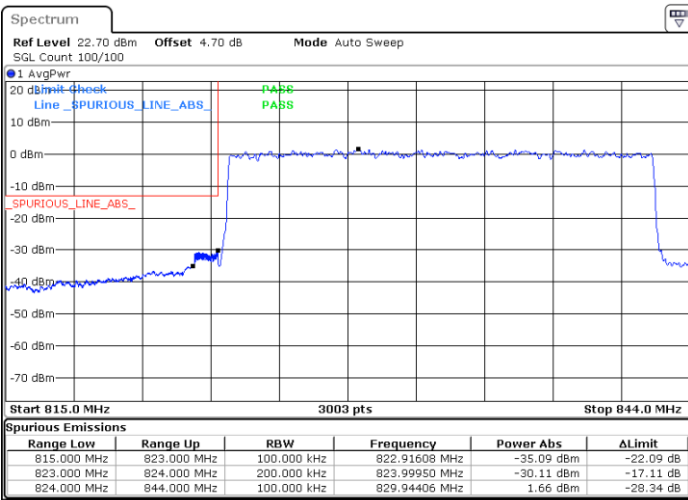


Date: 12.SEP.2020 12:38:20

Date: 12.SEP.2020 13:01:42

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.SEP.2020 12:30:44

Date: 12.SEP.2020 12:53:40

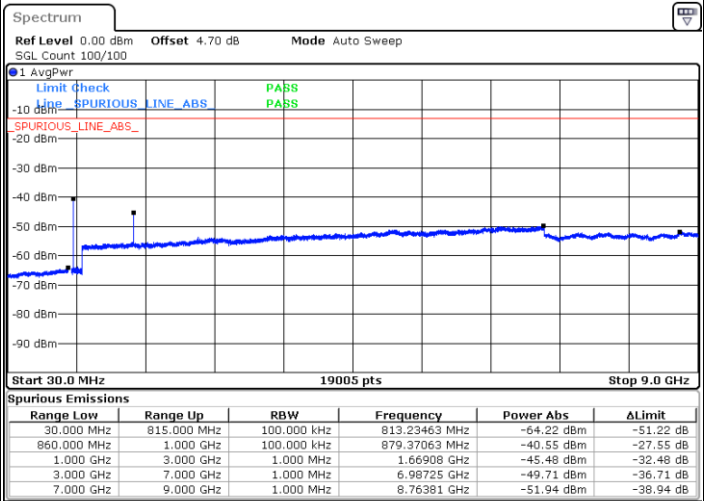
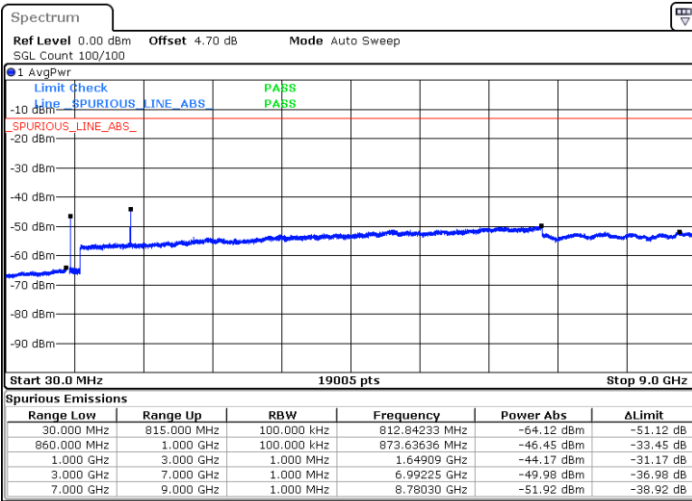


Conducted Spurious Emission

FR1 n5 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Channel / 1RB0

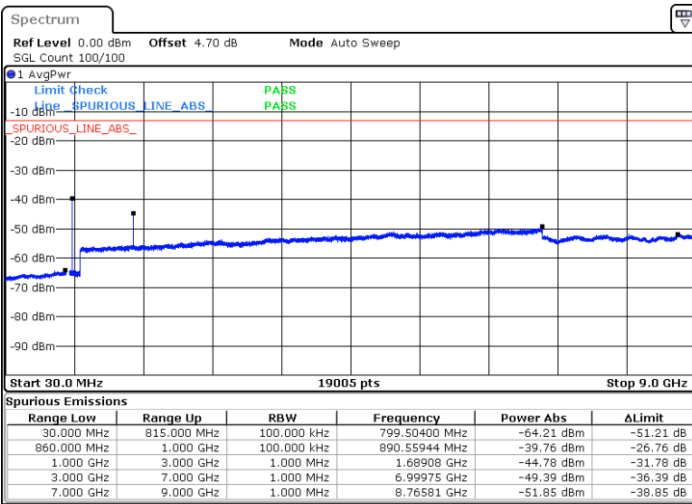
Middle Channel / 1RB0



Date: 12 SEP. 2020 10:40:34

Date: 12 SEP. 2020 10:46:13

Highest Channel / 1RB0



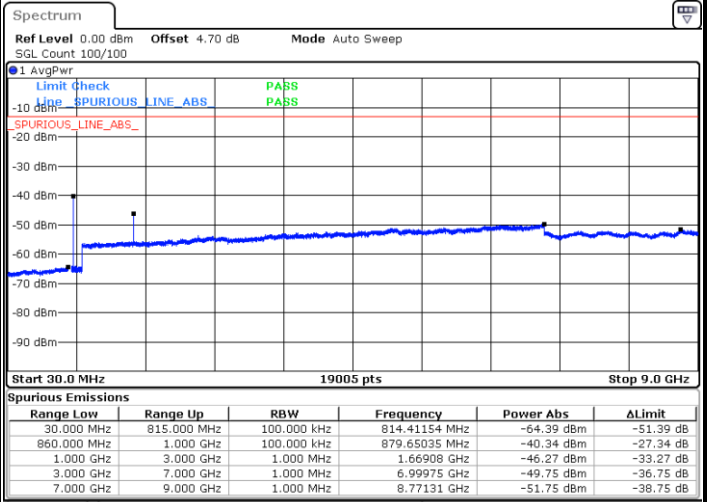
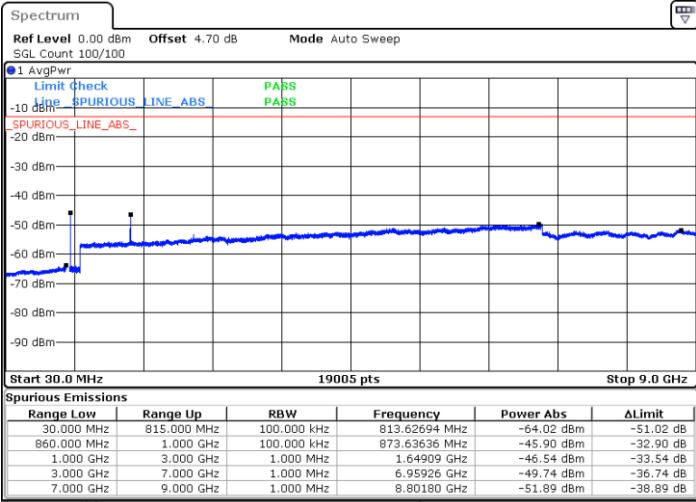
Date: 12 SEP. 2020 10:58:01



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

Lowest Channel / 1RB0

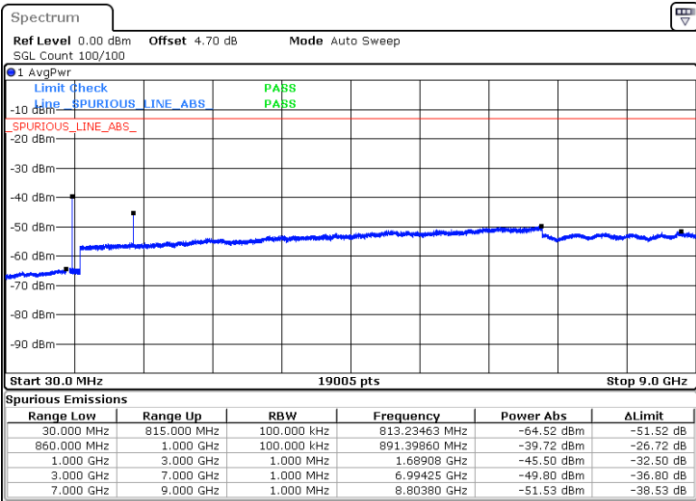
Middle Channel / 1RB0



Date: 12 SEP.2020 10:42:41

Date: 12 SEP.2020 10:46:44

Highest Channel / 1RB0



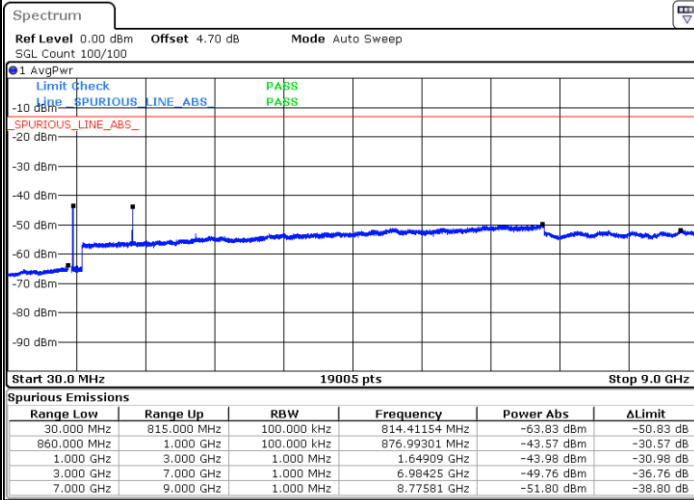
Date: 12 SEP.2020 10:58:32



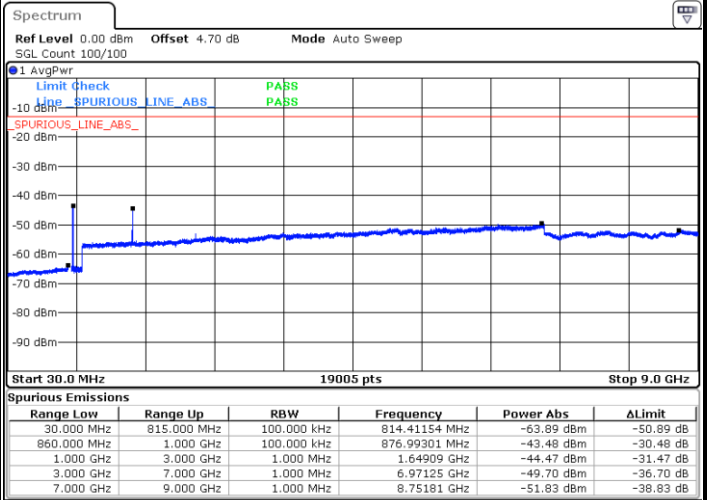
FR1 n5 / 10MHz / DFT-S OFDM / PI/2 BPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0

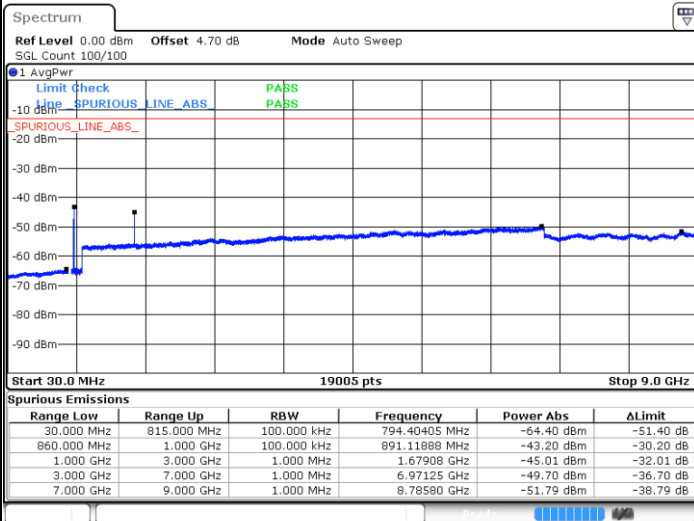


Date: 12 SEP 2020 11:13:53



Date: 12 SEP 2020 11:20:40

Highest Channel / 1RB0



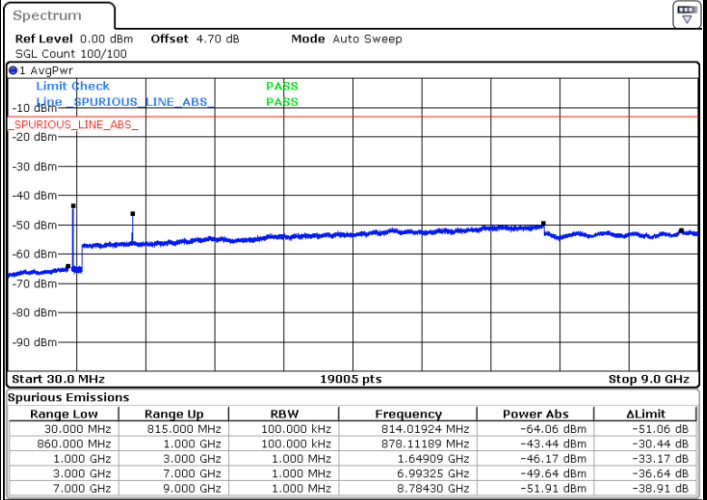
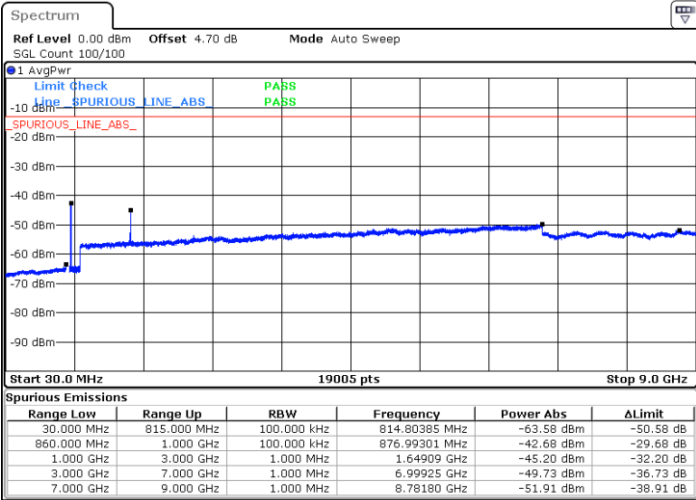
Date: 12 SEP 2020 11:31:49



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

Lowest Channel / 1RB0

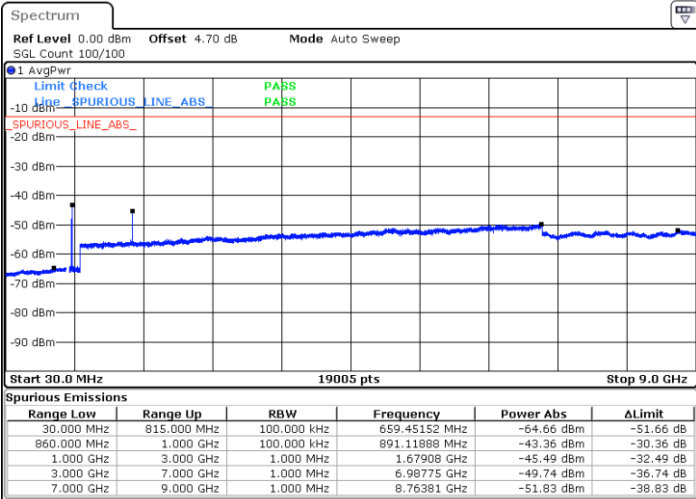
Middle Channel / 1RB0



Date: 12 SEP 2020 11:16:03

Date: 12 SEP 2020 11:21:12

Highest Channel / 1RB0



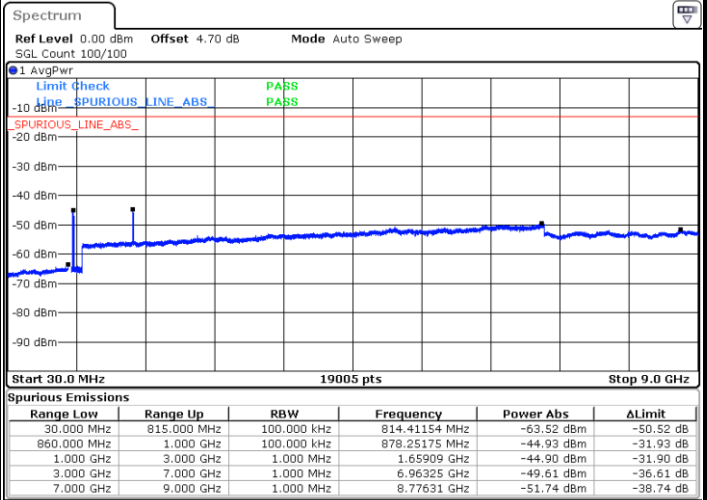
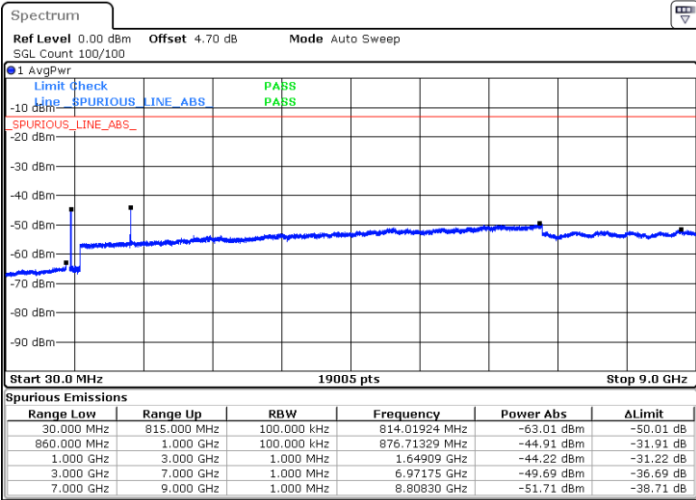
Date: 12 SEP 2020 11:33:12



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

Lowest Channel / 1RB0

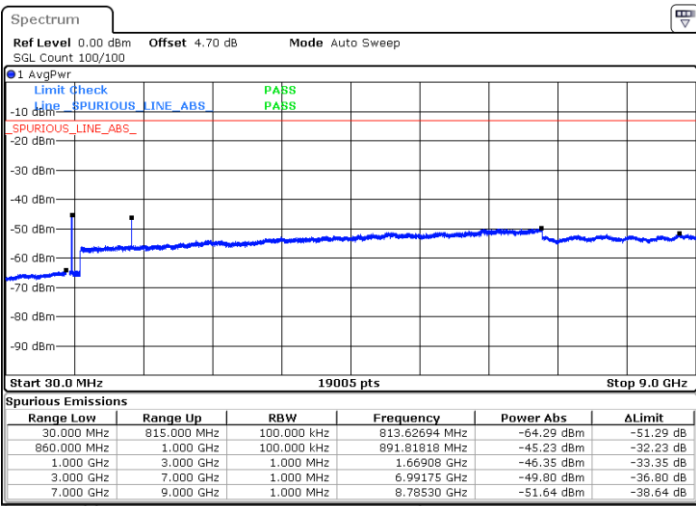
Middle Channel / 1RB0



Date: 12 SEP 2020 12:03:49

Date: 12 SEP 2020 12:10:48

Highest Channel / 1RB0



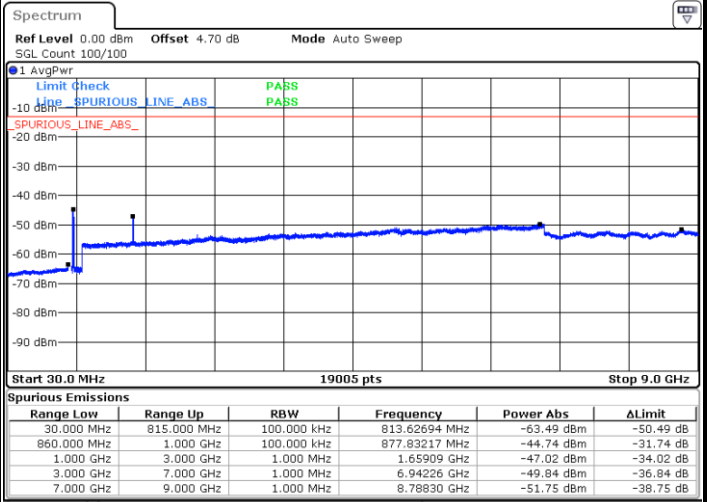
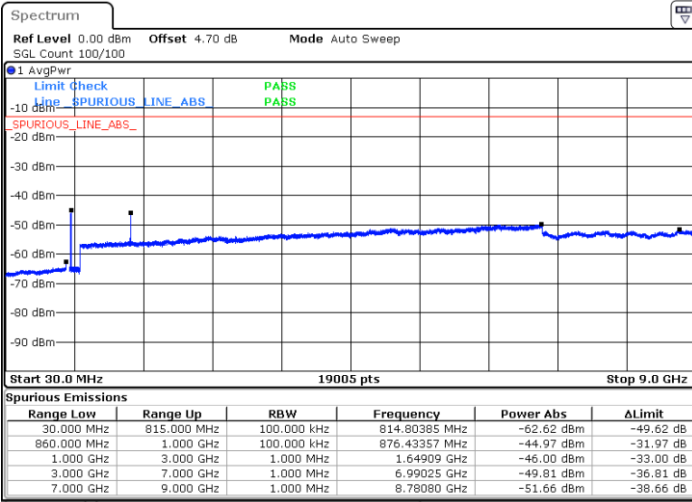
Date: 12 SEP 2020 12:25:05



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

Lowest Channel / 1RB0

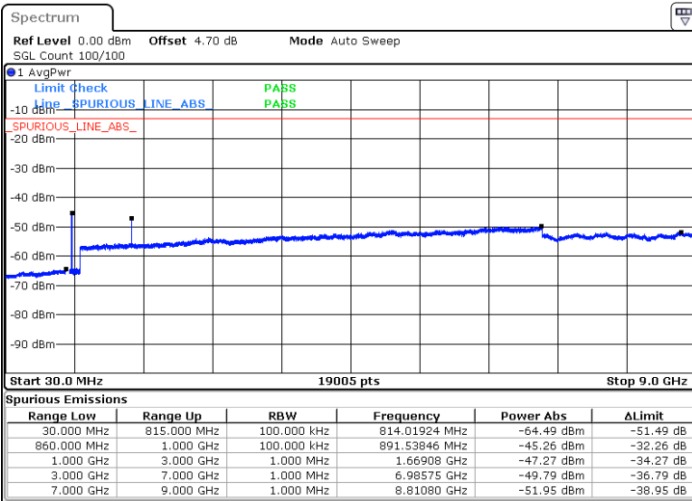
Middle Channel / 1RB0



Date: 12 SEP 2020 12:05:46

Date: 12 SEP 2020 12:11:21

Highest Channel / 1RB0



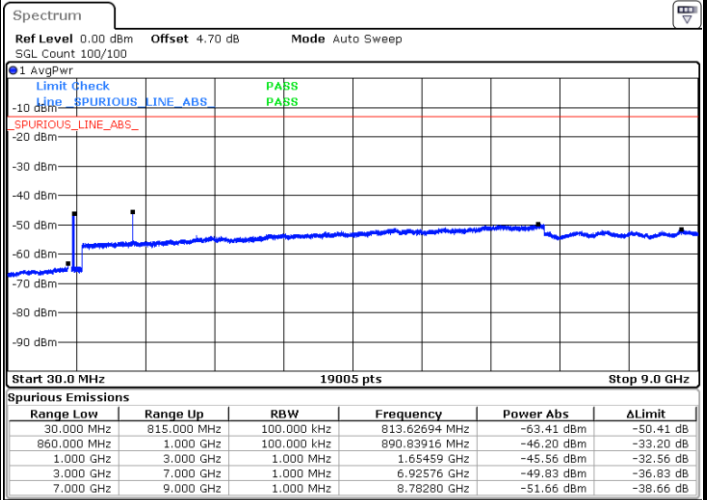
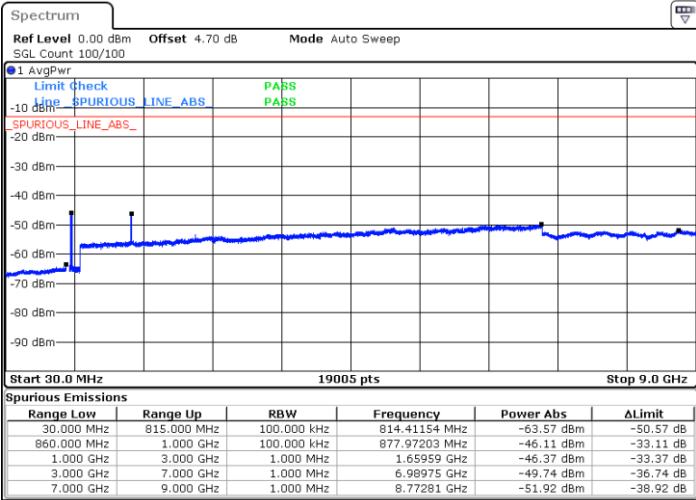
Date: 12 SEP 2020 12:26:12



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

Lowest Channel / 1RB0

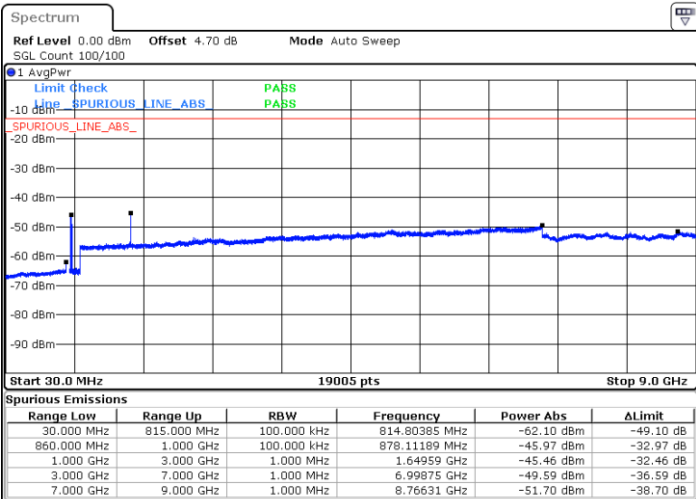
Middle Channel / 1RB0



Date: 12 SEP.2020 13:06:28

Date: 12 SEP.2020 12:45:23

Highest Channel / 1RB0



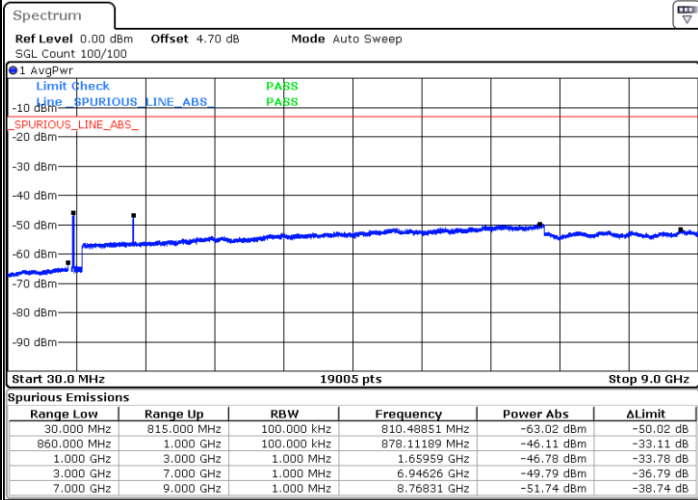
Date: 12 SEP.2020 12:36:49



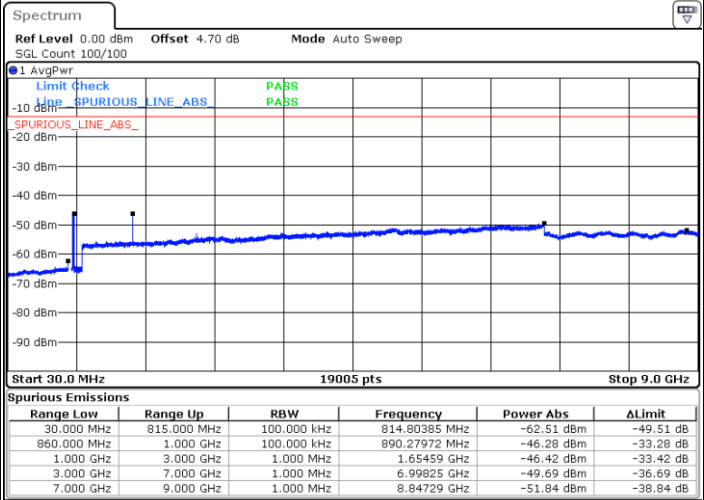
FR1 n5 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0

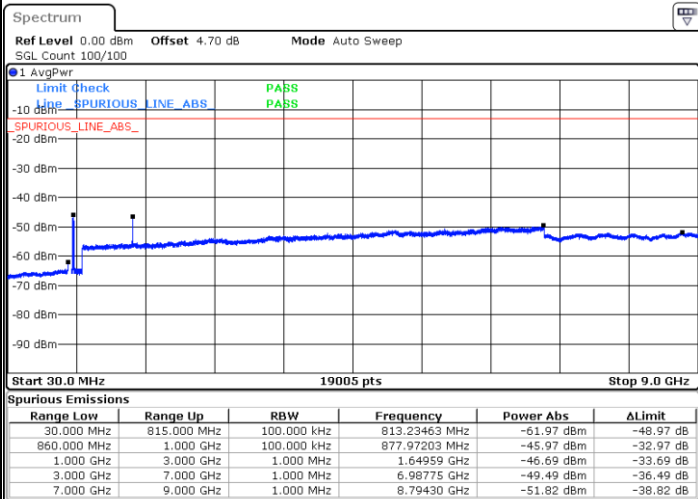


Date: 12 SEP. 2020 13:08:11



Date: 12 SEP. 2020 12:46:04

Highest Channel / 1RB0



Date: 12 SEP. 2020 12:39:01



Frequency Stability

Test Conditions		FR1 n5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0032	PAS S
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0053	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0052	
-10	Normal Voltage	0.0055	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0045	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



FR1 n7

Peak-to-Average Ratio

Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK			Limit: 13dB
RB Size	Full RB	Full RB			Result
Lowest CH	4.09	5.51			PASS
Middle CH	3.59	5.01			
Highest CH	4.23	5.74			

S



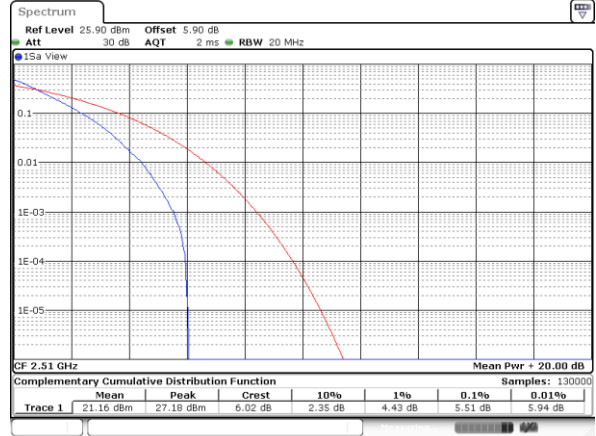
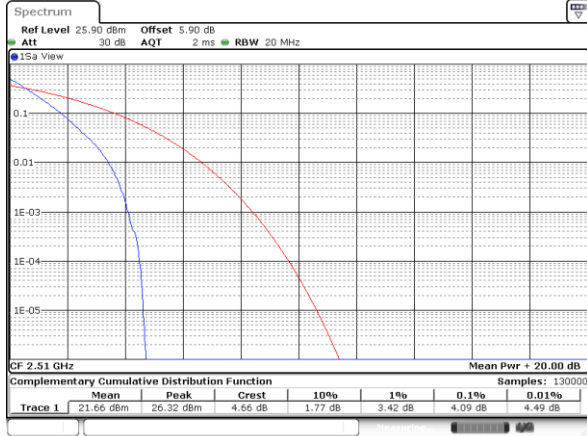
FR1 n7 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

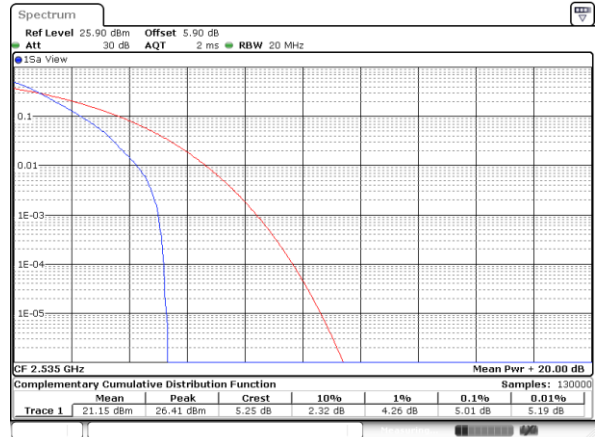
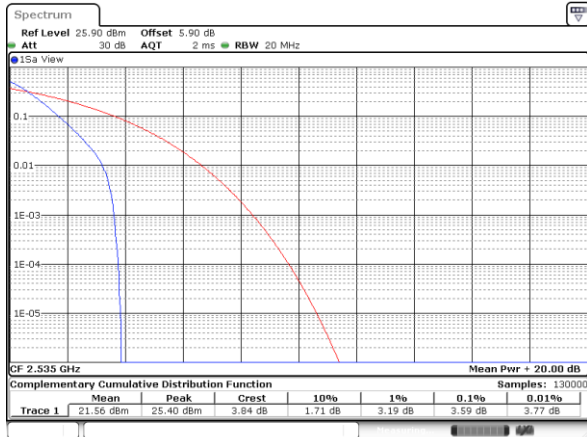


Date: 12 SEP 2020 22:12:41

Date: 12 SEP 2020 22:12:33

Middle Channel / Full RB

Middle Channel / Full RB

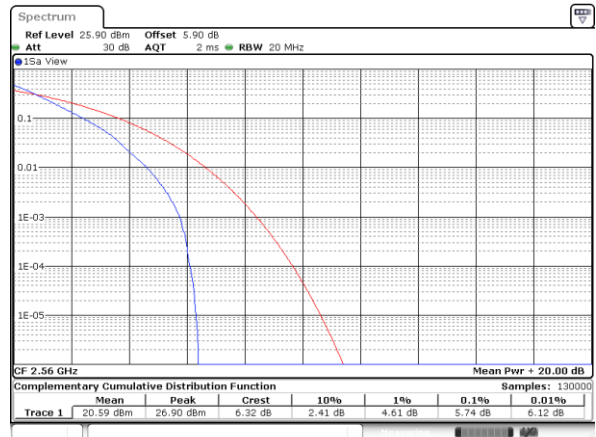
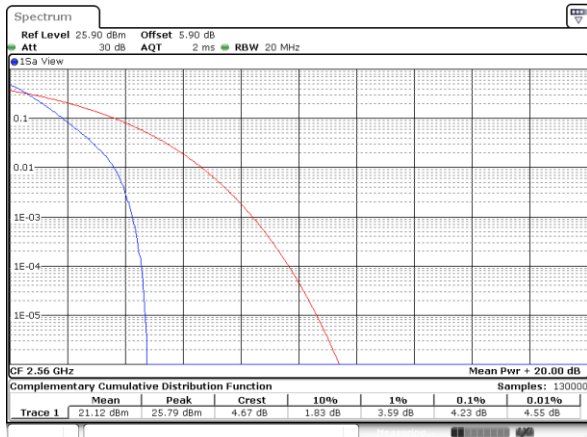


Date: 12 SEP 2020 22:03:10

Date: 12 SEP 2020 22:03:20

Highest Channel / Full RB

Highest Channel / Full RB



Date: 12 SEP 2020 22:05:32

Date: 12 SEP 2020 22:05:55



26dB Bandwidth

Mode	FR1 n7 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Lowest CH	4.945	4.995	9.75	9.73	14.236	14.176	20.10	20.18
Middle CH	4.975	4.975	9.83	9.73	14.176	14.386	20.10	20.10
Highest CH	4.915	4.965	9.81	9.73	14.266	14.296	20.26	20.26



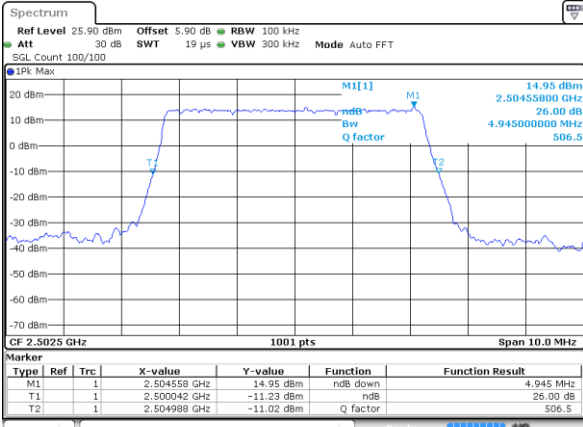
FR1 n7 / 5MHz / DFT-S OFDM

PI/2 BPSK

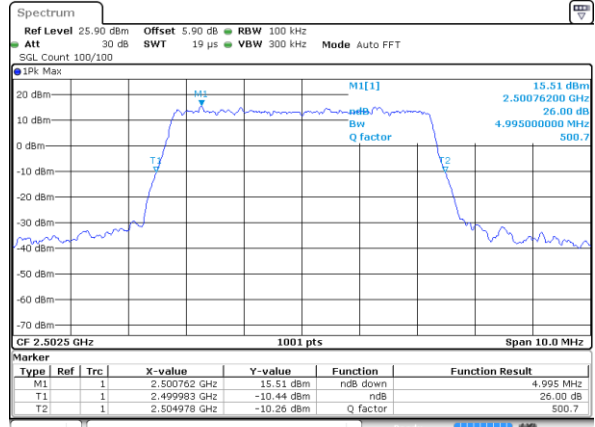
QPSK

Lowest Channel

Lowest Channel



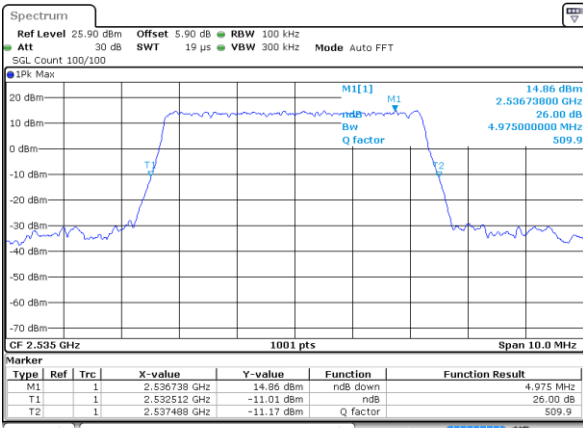
Date: 12 SEP 2020 21:40:45



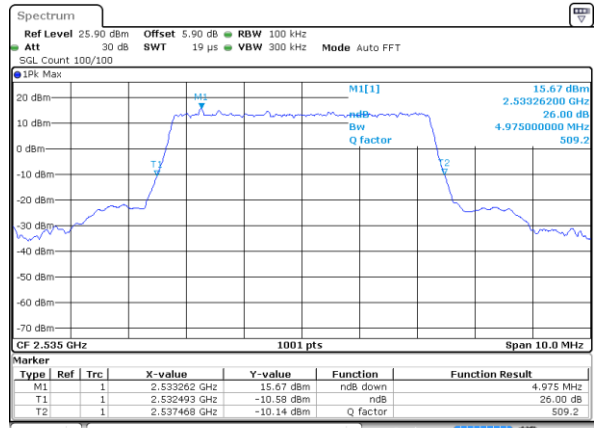
Date: 12 SEP 2020 21:41:05

Middle Channel

Middle Channel



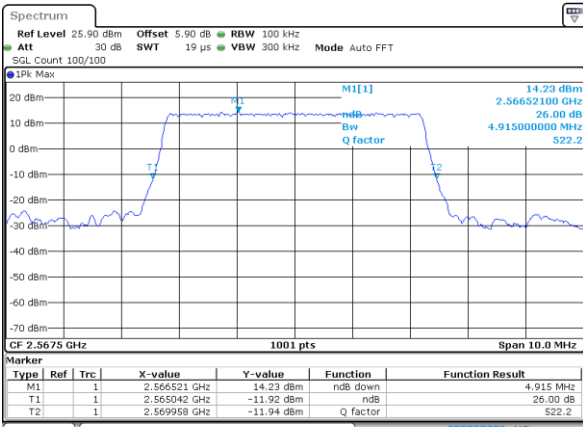
Date: 12 SEP 2020 21:43:02



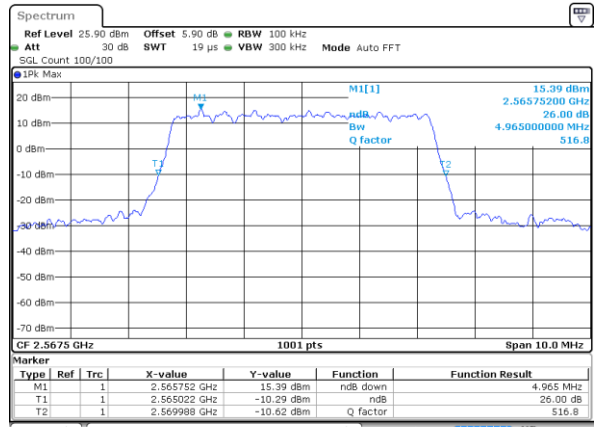
Date: 12 SEP 2020 21:43:18

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:44:39



Date: 12 SEP 2020 21:44:58



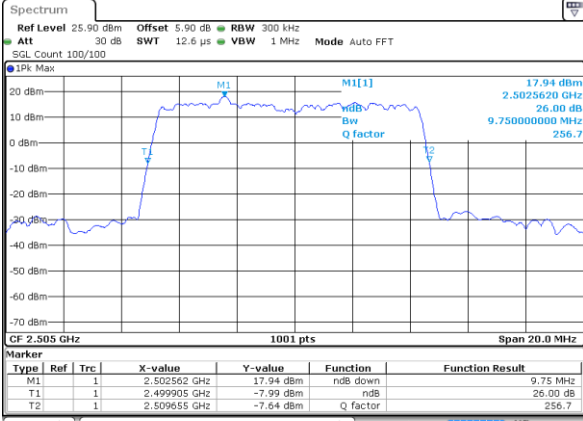
FR1 n7 / 10MHz / DFT-S OFDM

PI/2 BPSK

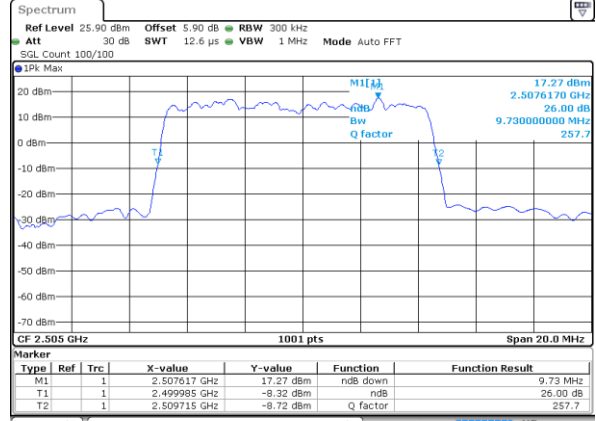
QPSK

Lowest Channel

Lowest Channel



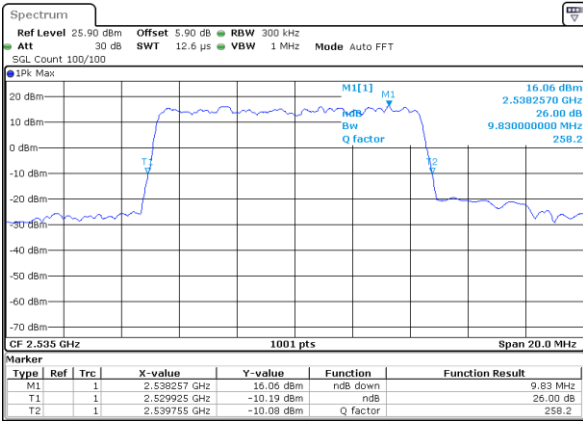
Date: 12 SEP 2020 21:47:03



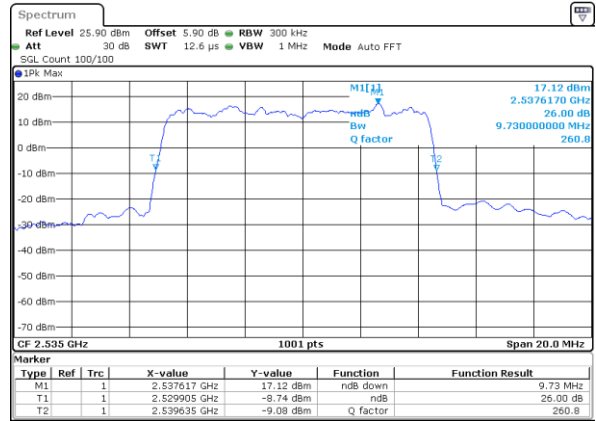
Date: 12 SEP 2020 21:47:52

Middle Channel

Middle Channel



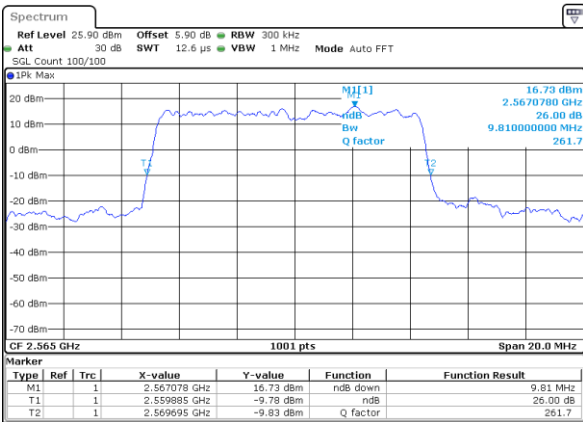
Date: 12 SEP 2020 21:49:12



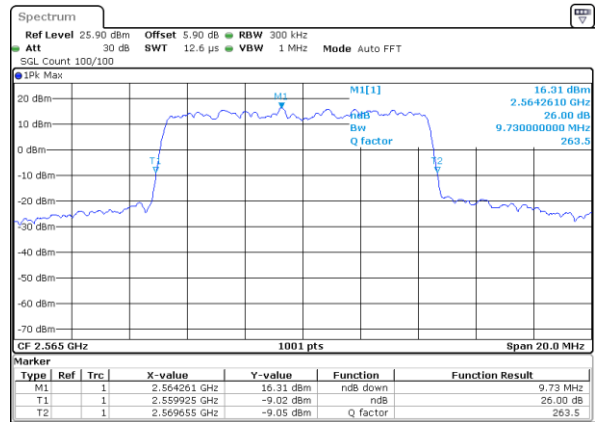
Date: 12 SEP 2020 21:49:30

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:52:54



Date: 12 SEP 2020 21:53:12



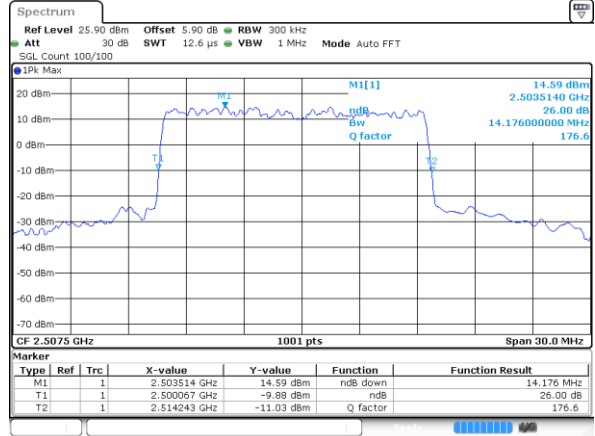
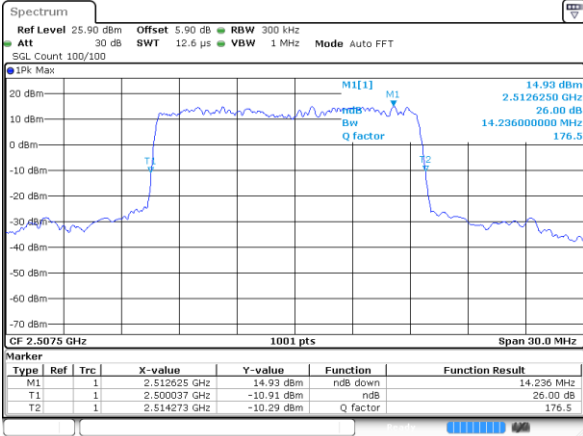
FR1 n7 / 15MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel

Lowest Channel

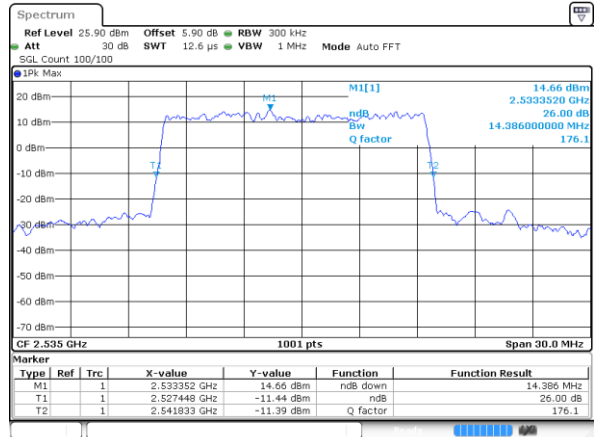
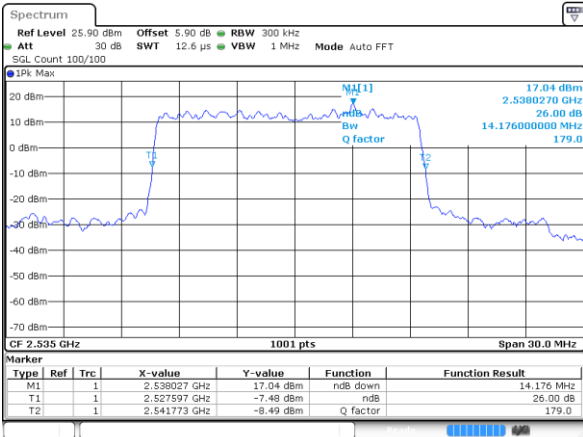


Date: 12 SEP 2020 21:55:10

Date: 12 SEP 2020 21:55:25

Middle Channel

Middle Channel

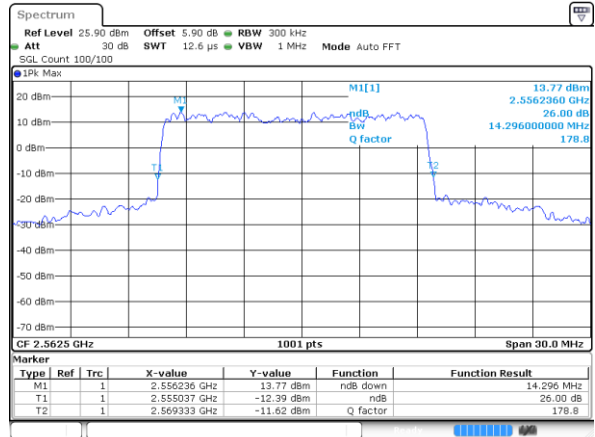
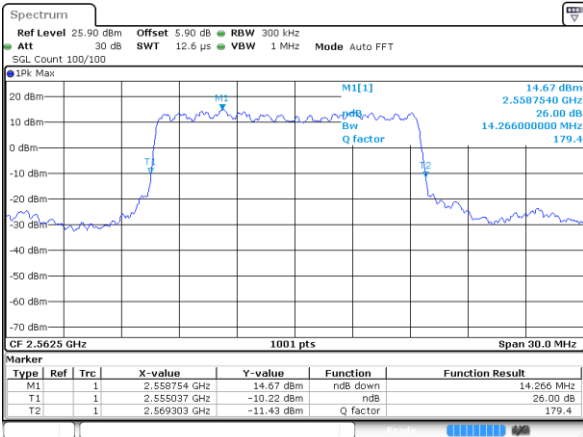


Date: 12 SEP 2020 21:56:43

Date: 12 SEP 2020 21:56:59

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:58:16

Date: 12 SEP 2020 21:58:31



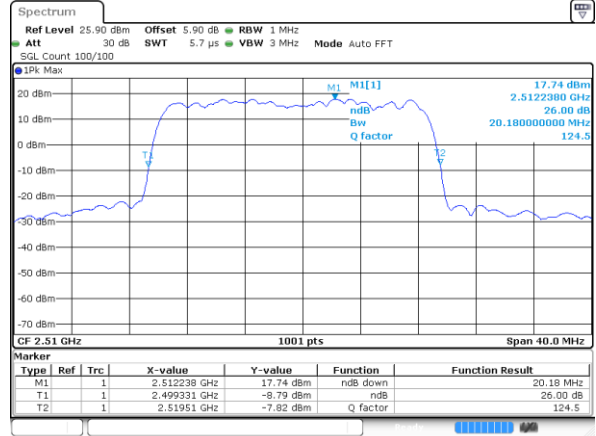
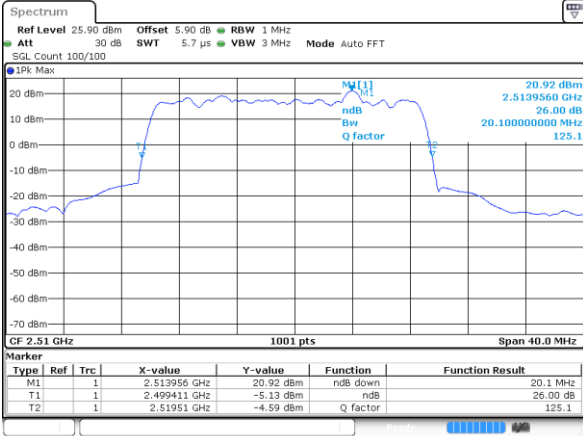
FR1 n7 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel

Lowest Channel

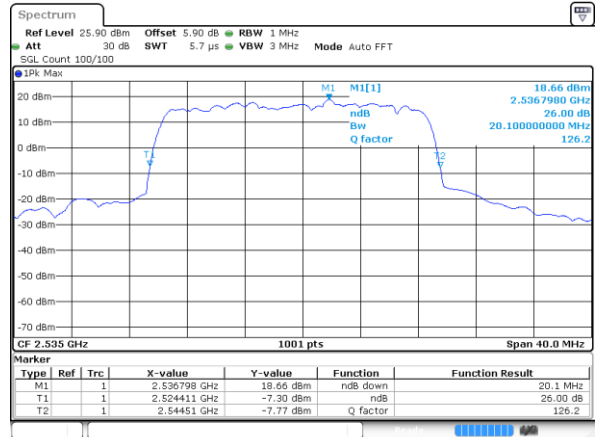
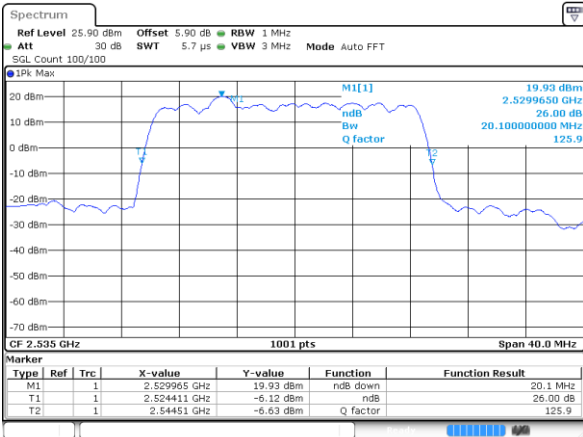


Date: 12 SEP 2020 22:00:06

Date: 12 SEP 2020 22:00:24

Middle Channel

Middle Channel

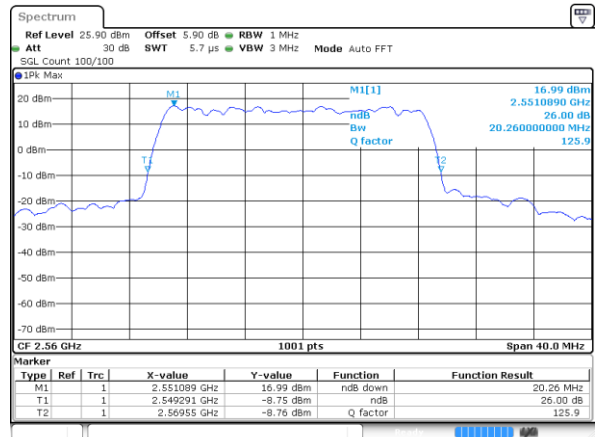
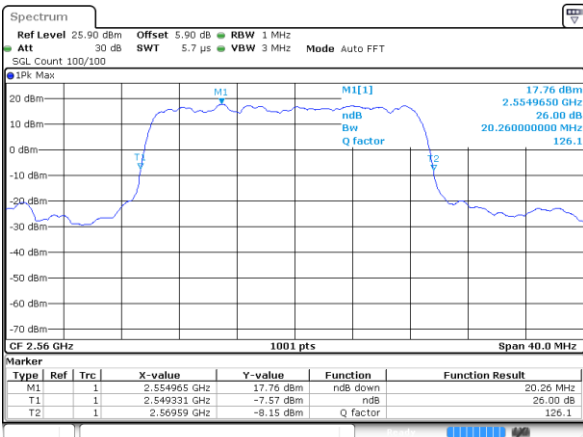


Date: 12 SEP 2020 22:01:42

Date: 12 SEP 2020 22:01:57

Highest Channel

Highest Channel



Date: 12 SEP 2020 22:05:45

Date: 12 SEP 2020 22:08:16



Occupied Bandwidth

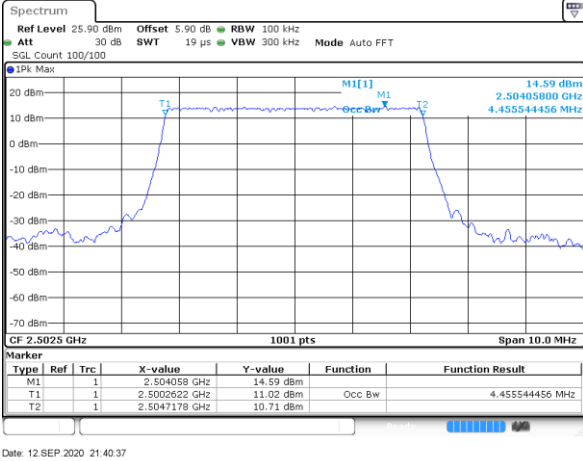
Mode	FR1 n7 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Lowest CH	4.456		9.051		13.427		18.541	
Middle CH	4.456		9.071		13.487		18.382	
Highest CH	4.446		9.051		13.487		18.581	
Mode	FR1 n7 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.496	4.496	9.071	9.071	13.546	13.487	18.422	18.382
Middle CH	4.466	4.476	9.051	9.051	13.516	13.457	18.342	18.382
Highest CH	4.486	4.486	9.071	9.011	13.546	13.457	18.262	18.382
Mode	FR1 n7 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	4.486	4.505	9.051	9.031	13.457	13.457	18.342	18.342
Middle CH	4.496	4.505	9.031	9.031	13.457	13.427	18.302	18.302
Highest CH	4.505	4.496	9.031	9.071	13.457	13.487	18.342	18.422



FR1 n7 / 5MHz / DFT-S OFDM

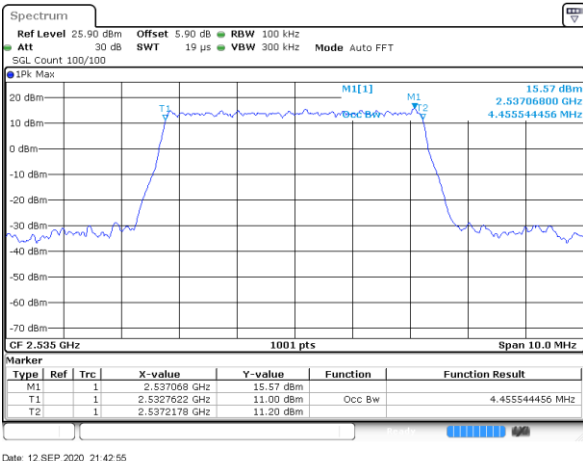
PI/2 BPSK

Lowest Channel



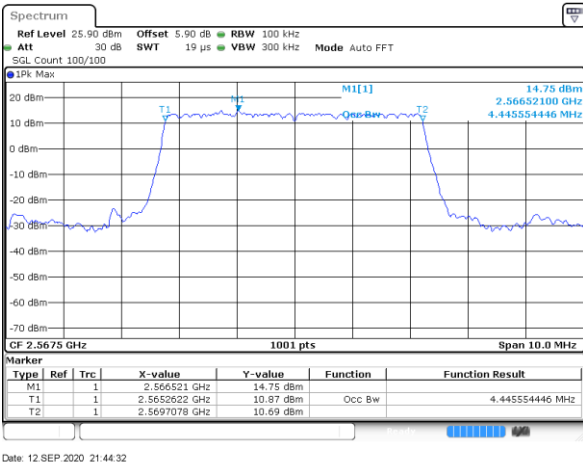
Date: 12 SEP 2020 21:40:37

Middle Channel



Date: 12 SEP 2020 21:42:55

Highest Channel



Date: 12 SEP 2020 21:44:32



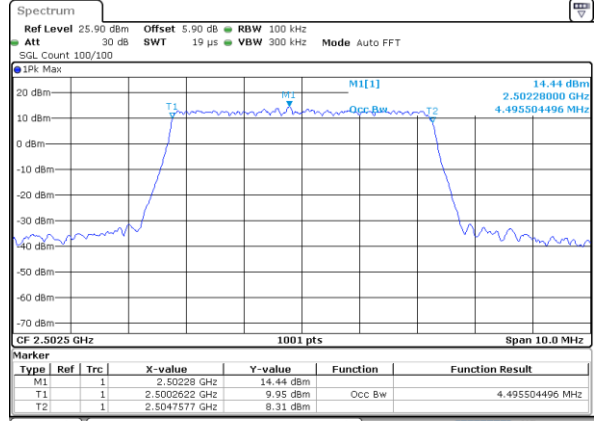
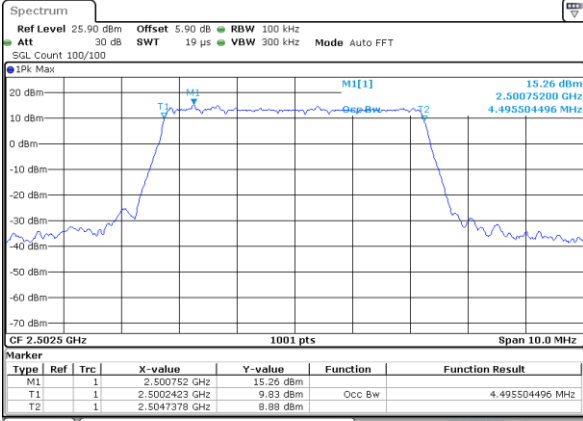
FR1 n7 / 5MHz / DFT-S OFDM

PI/2 BPSK

16QAM

Lowest Channel

Lowest Channel

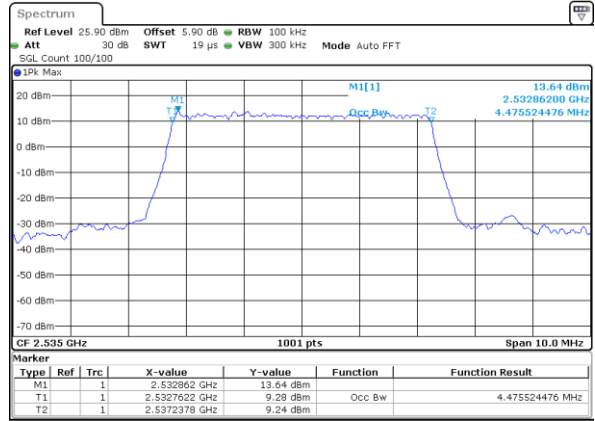
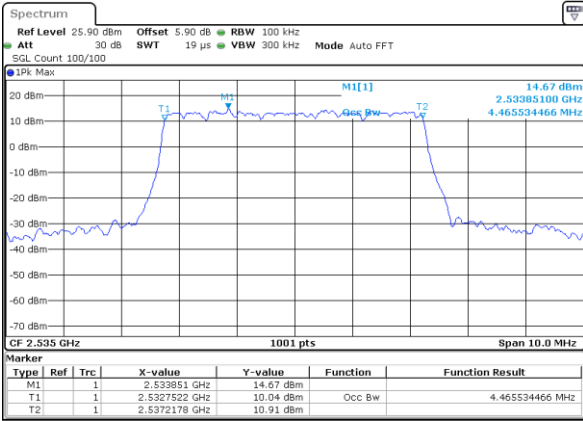


Date: 12 SEP 2020 21:40:58

Date: 12 SEP 2020 21:41:16

Middle Channel

Middle Channel

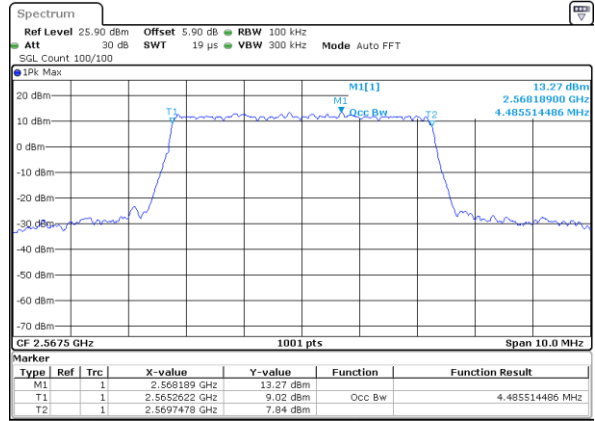
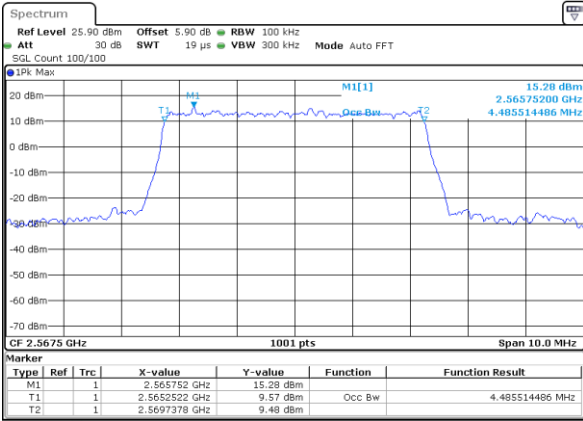


Date: 12 SEP 2020 21:43:11

Date: 12 SEP 2020 21:43:29

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:44:51

Date: 12 SEP 2020 21:45:06



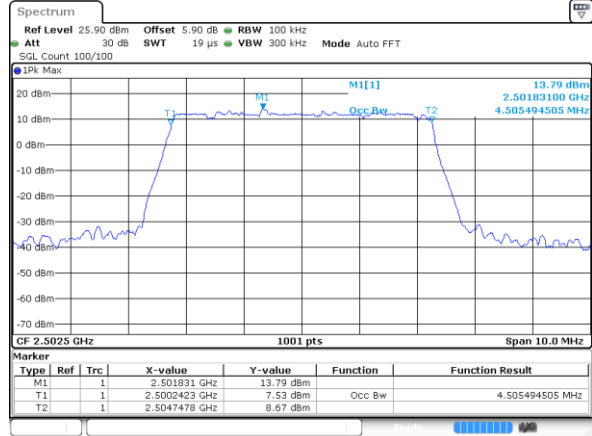
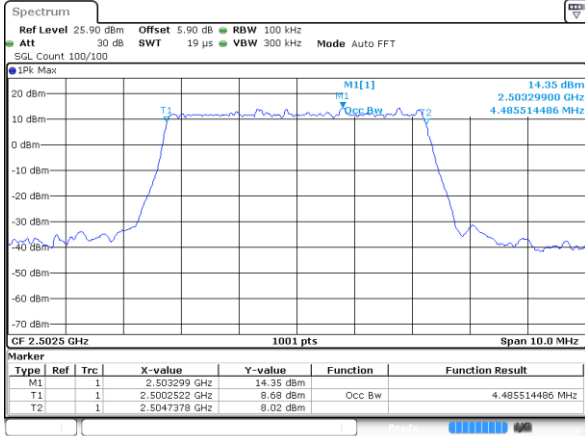
FR1 n7 / 5MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

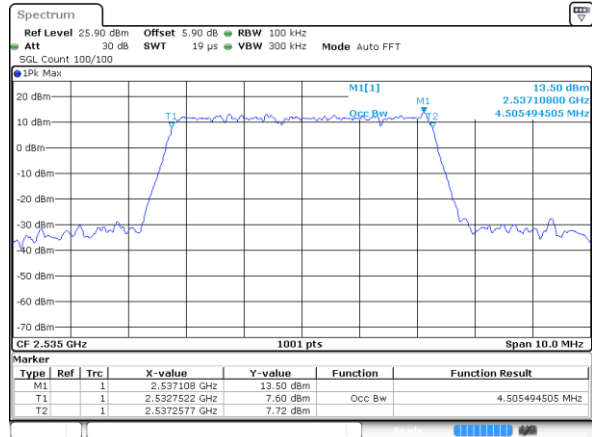
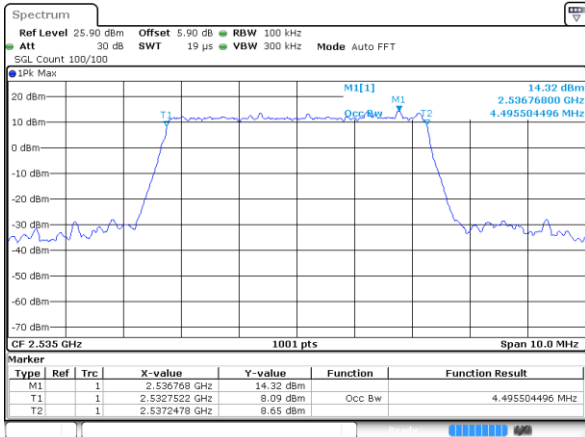


Date: 12 SEP 2020 21:41:34

Date: 12 SEP 2020 21:42:10

Middle Channel

Middle Channel

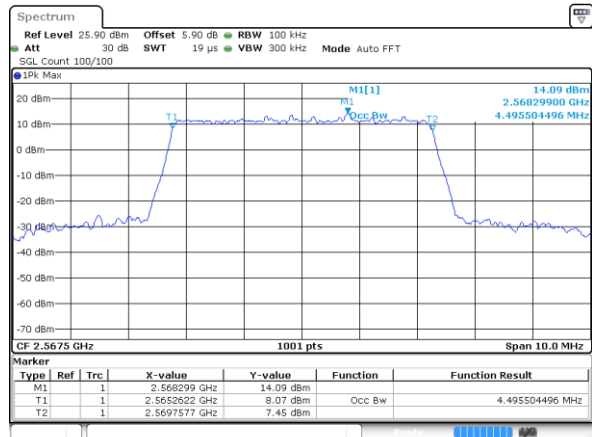
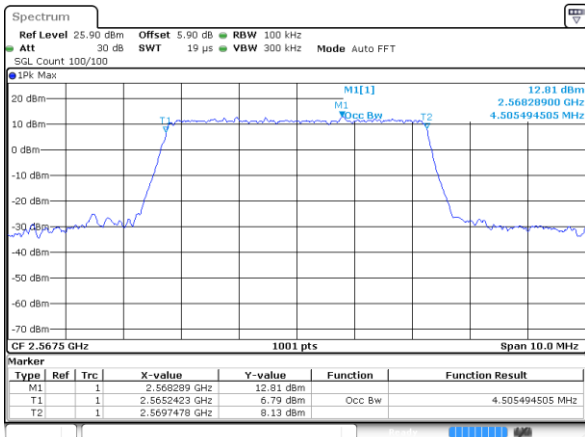


Date: 12 SEP 2020 21:43:46

Date: 12 SEP 2020 21:44:01

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:45:25

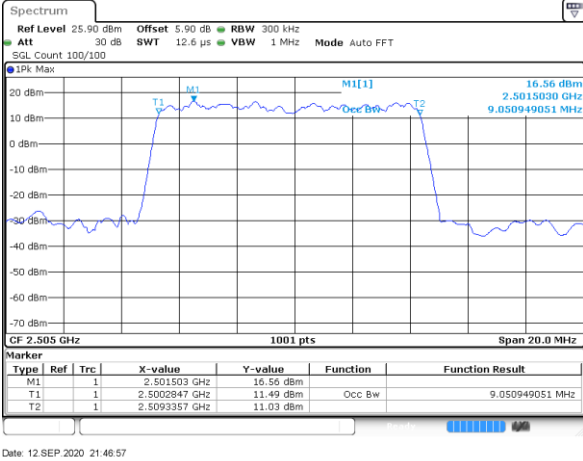
Date: 12 SEP 2020 21:45:39



FR1 n7 / 10MHz / DFT-S OFDM

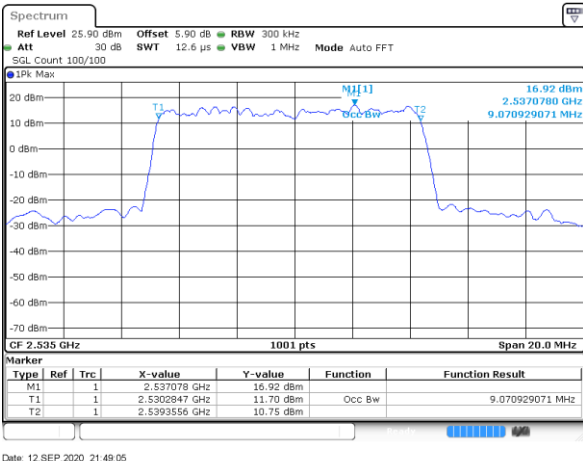
PI/2 BPSK

Lowest Channel



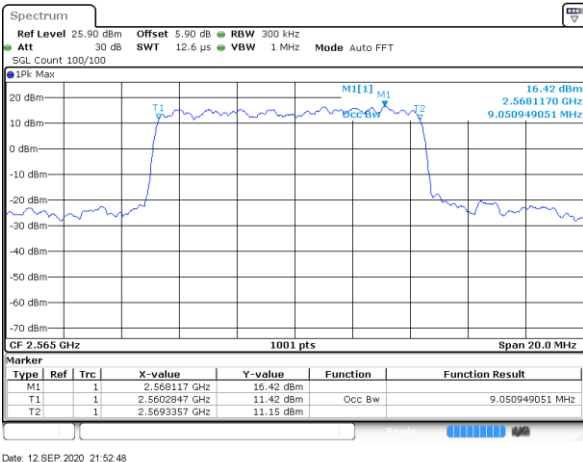
Date: 12 SEP 2020 21:46:57

Middle Channel



Date: 12 SEP 2020 21:49:05

Highest Channel



Date: 12 SEP 2020 21:52:48



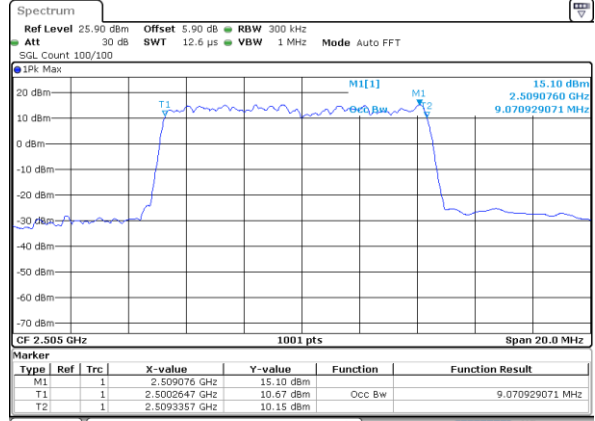
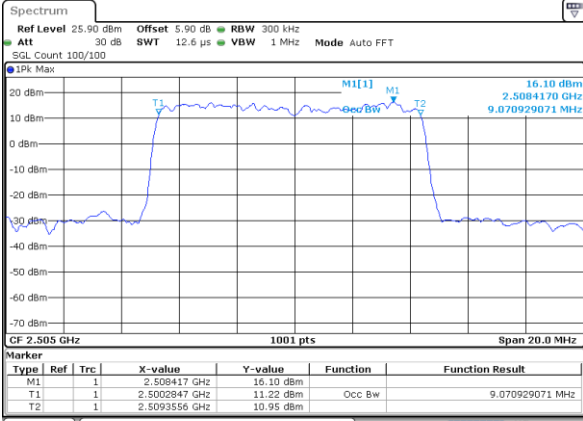
FR1 n7 / 10MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

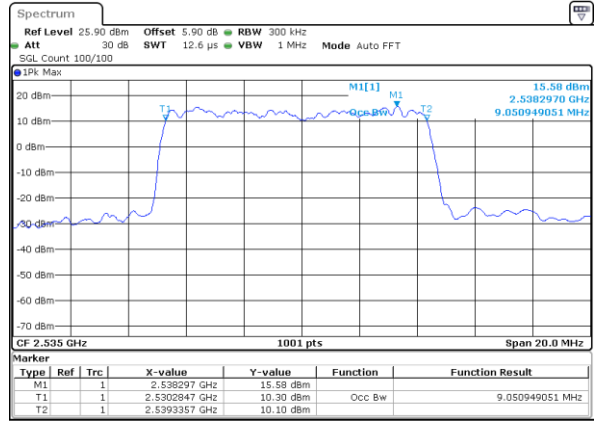
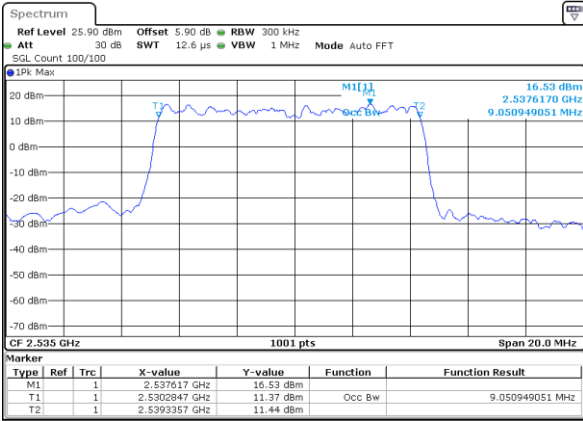


Date: 12 SEP 2020 21:47:45

Date: 12 SEP 2020 21:48:02

Middle Channel

Middle Channel

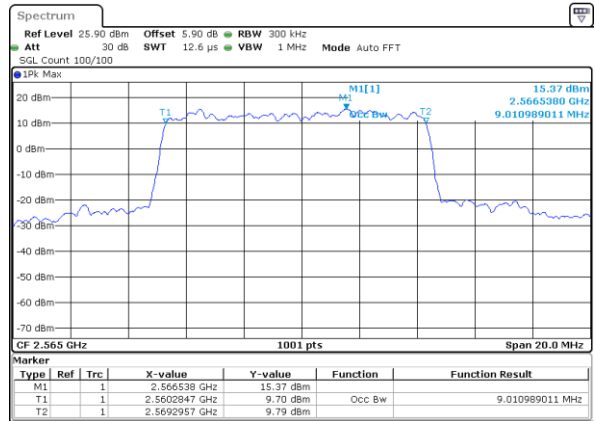
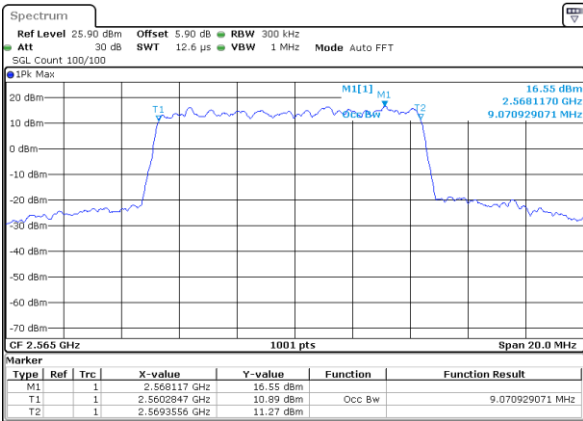


Date: 12 SEP 2020 21:49:24

Date: 12 SEP 2020 21:49:39

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:53:06

Date: 12 SEP 2020 21:53:23



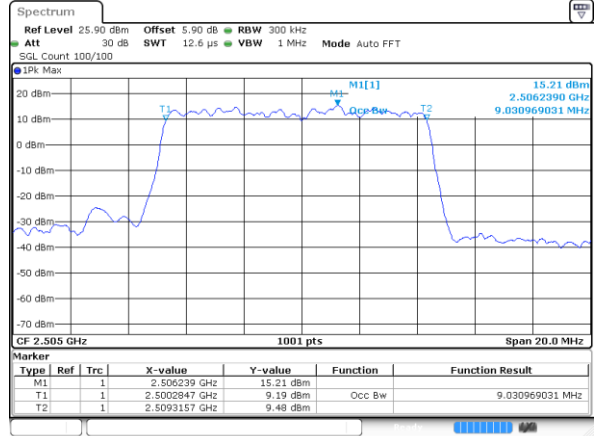
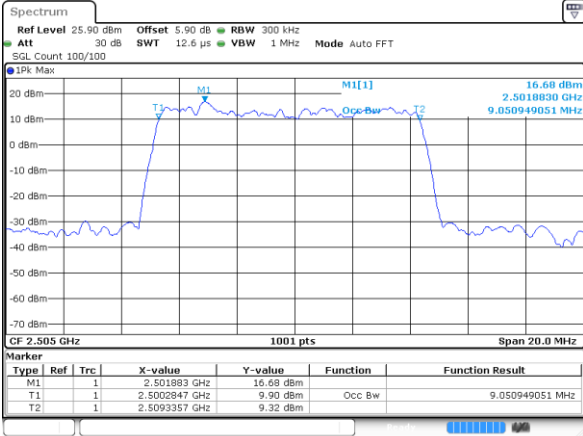
FR1 n7 / 10MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

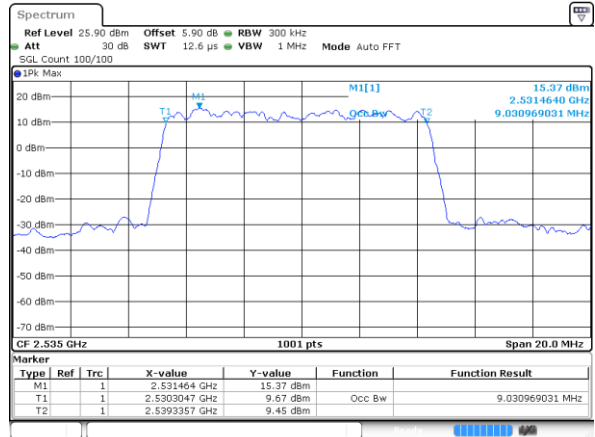
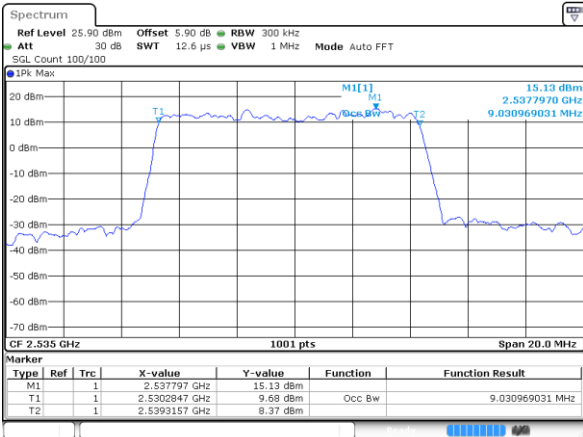


Date: 12 SEP 2020 21:48:19

Date: 12 SEP 2020 21:48:33

Middle Channel

Middle Channel

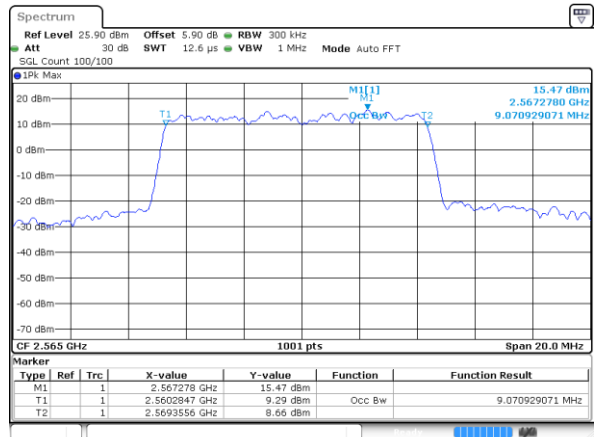
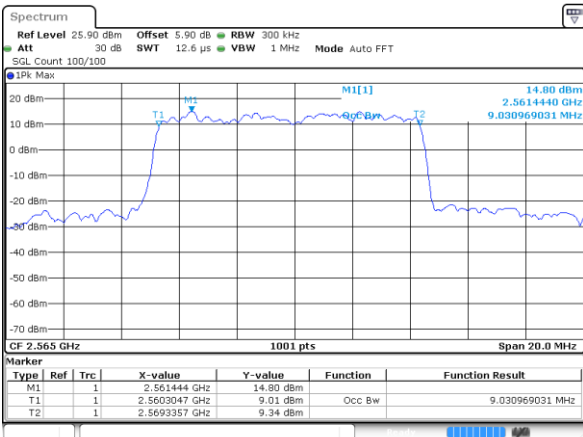


Date: 12 SEP 2020 21:50:38

Date: 12 SEP 2020 21:50:53

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:53:40

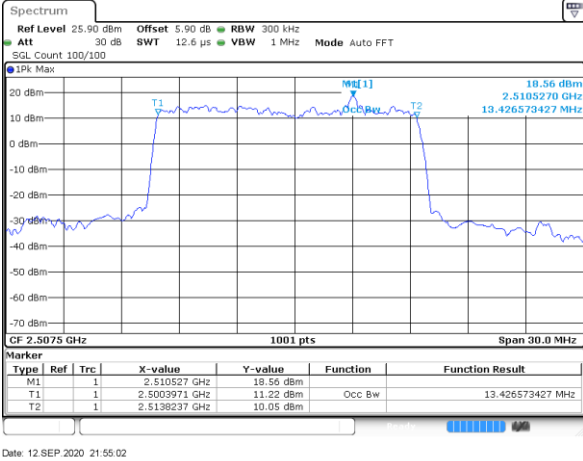
Date: 12 SEP 2020 21:53:55



FR1 n7 / 15MHz / DFT-S OFDM

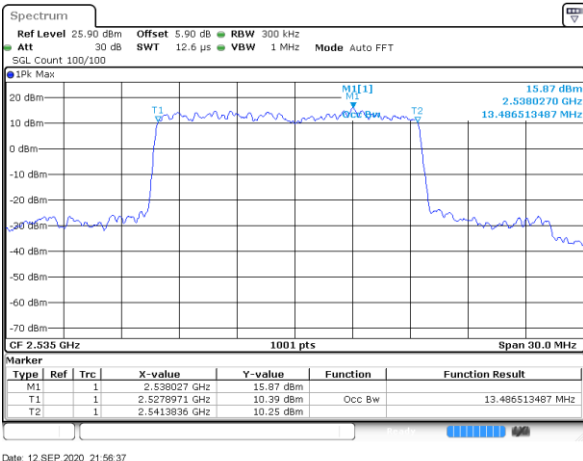
PI/2 BPSK

Lowest Channel



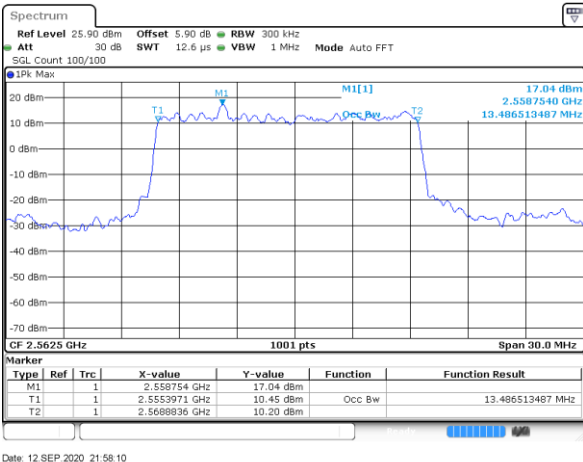
Date: 12 SEP 2020 21:55:02

Middle Channel



Date: 12 SEP 2020 21:56:37

Highest Channel



Date: 12 SEP 2020 21:58:10



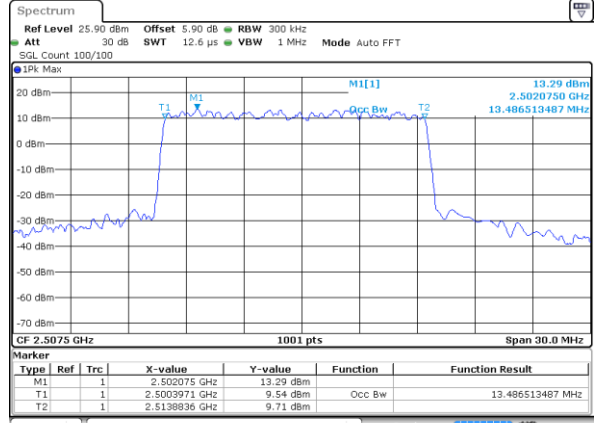
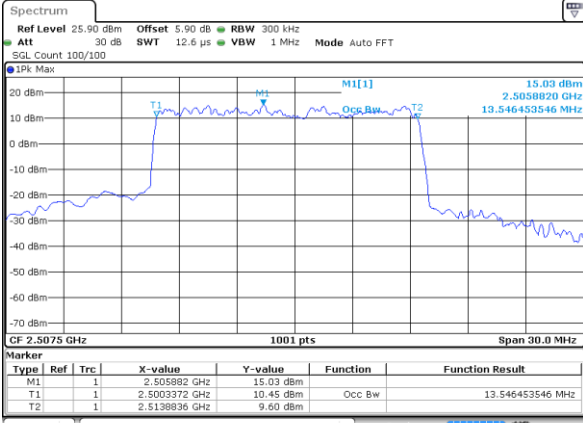
FR1 n7 / 15MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

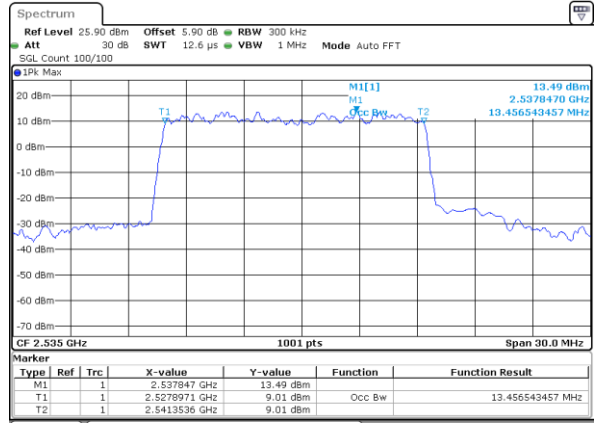
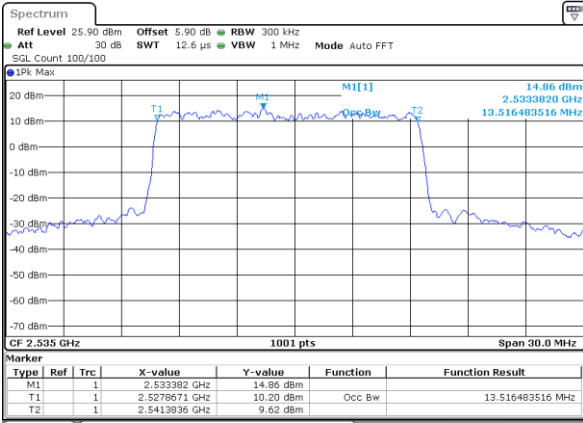


Date: 12 SEP 2020 21:55:19

Date: 12 SEP 2020 21:55:35

Middle Channel

Middle Channel

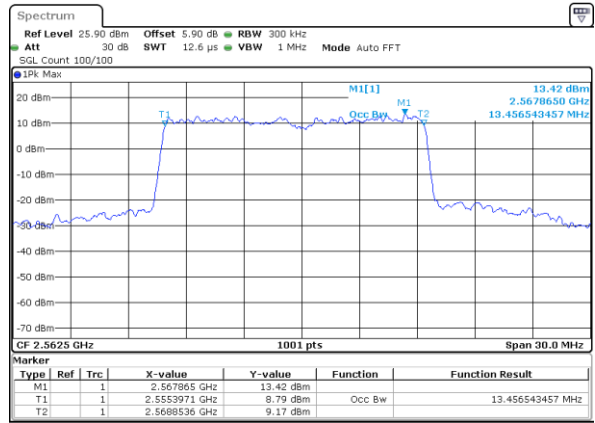
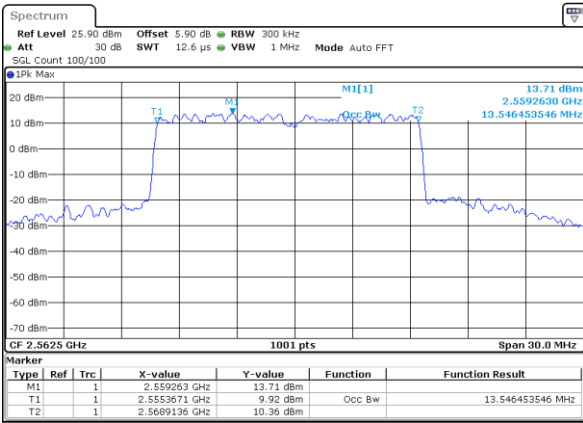


Date: 12 SEP 2020 21:56:52

Date: 12 SEP 2020 21:57:08

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:58:24

Date: 12 SEP 2020 21:58:41



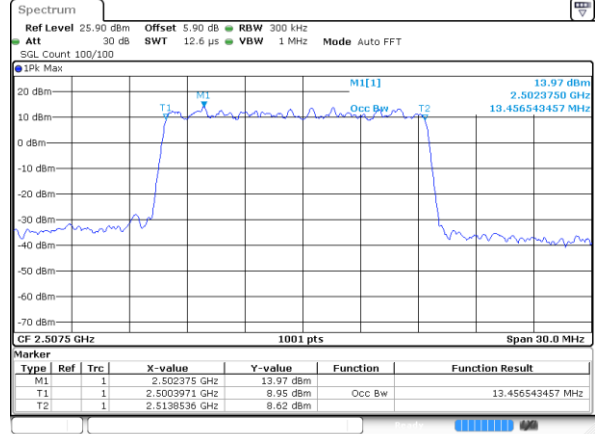
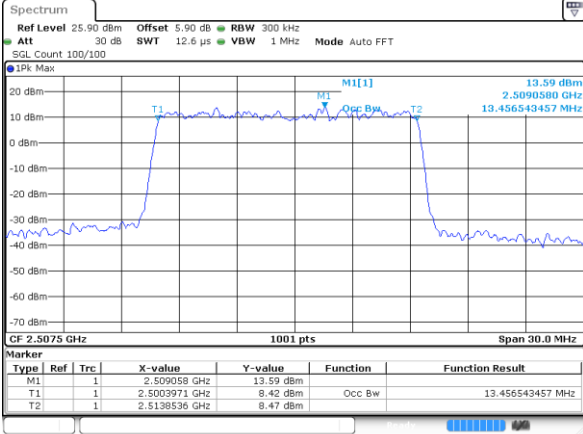
FR1 n7 / 15MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

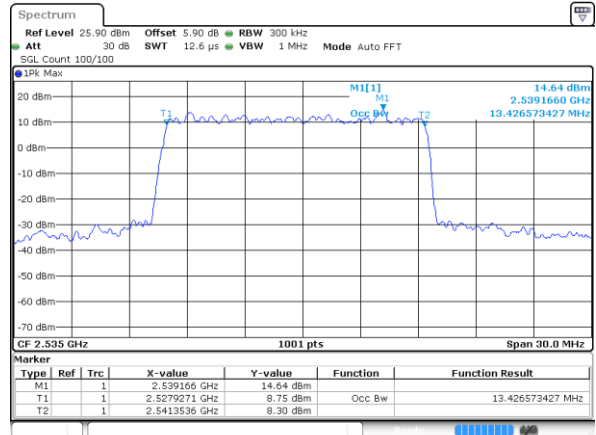
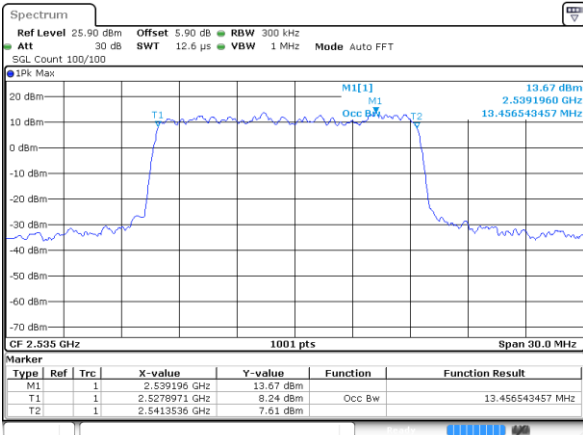


Date: 12 SEP 2020 21:55:52

Date: 12 SEP 2020 21:56:10

Middle Channel

Middle Channel

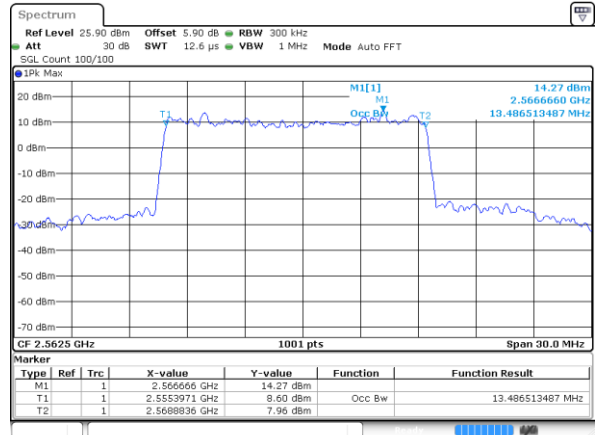
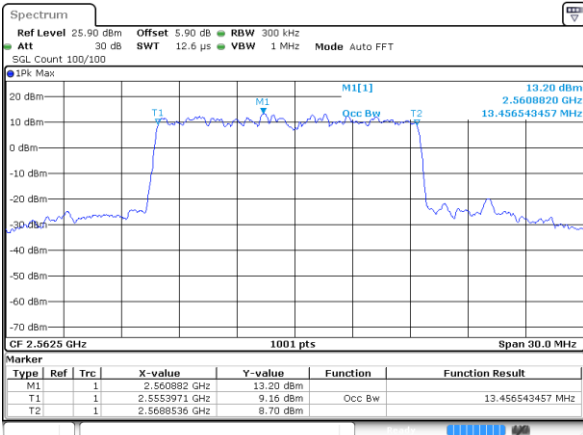


Date: 12 SEP 2020 21:57:23

Date: 12 SEP 2020 21:57:40

Highest Channel

Highest Channel



Date: 12 SEP 2020 21:58:58

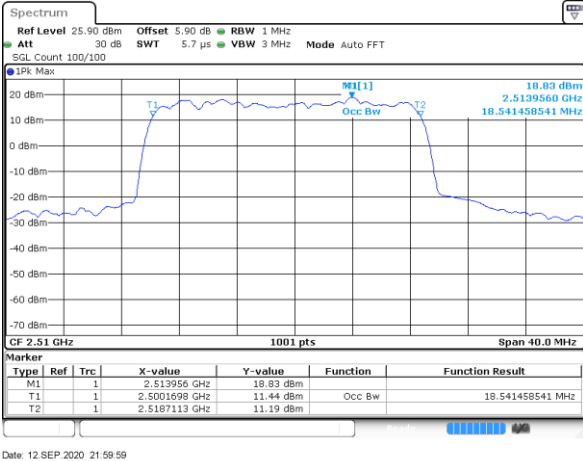
Date: 12 SEP 2020 21:59:12



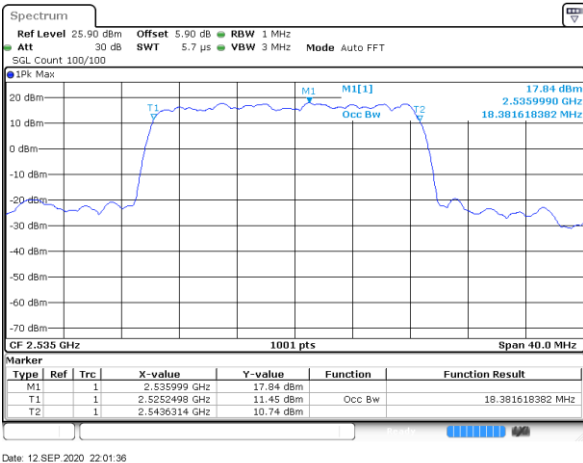
FR1 n7 / 20MHz / DFT-S OFDM

PI/2 BPSK

Lowest Channel



Middle Channel



Highest Channel

