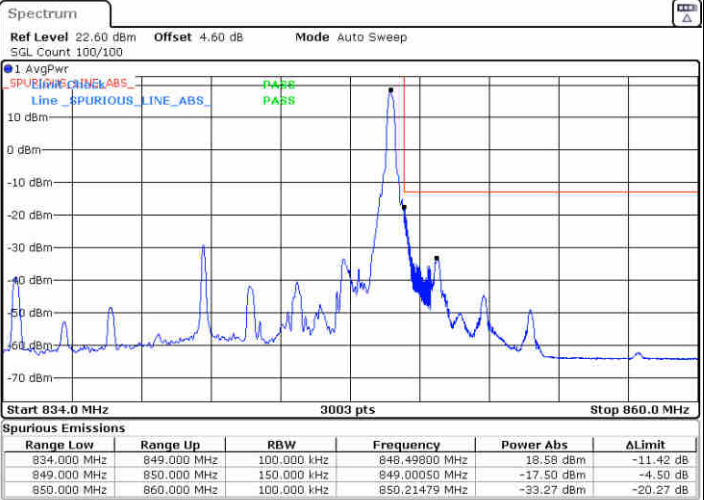
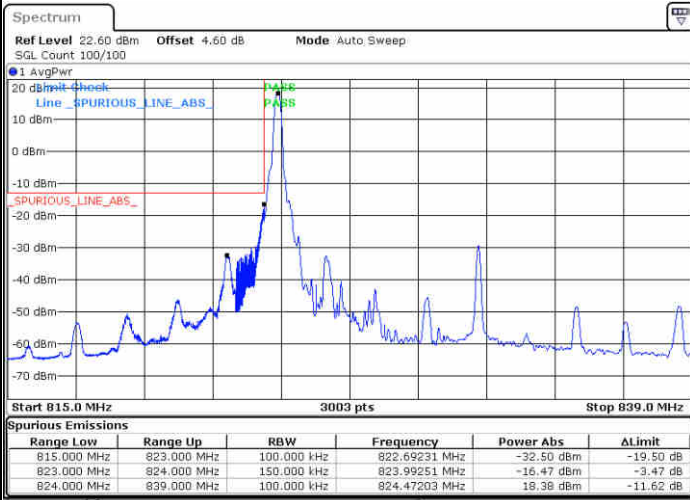




FR1 n5 / 15MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

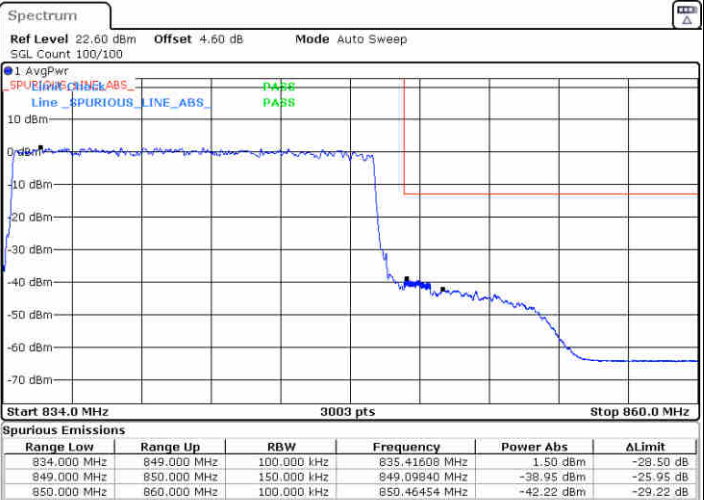
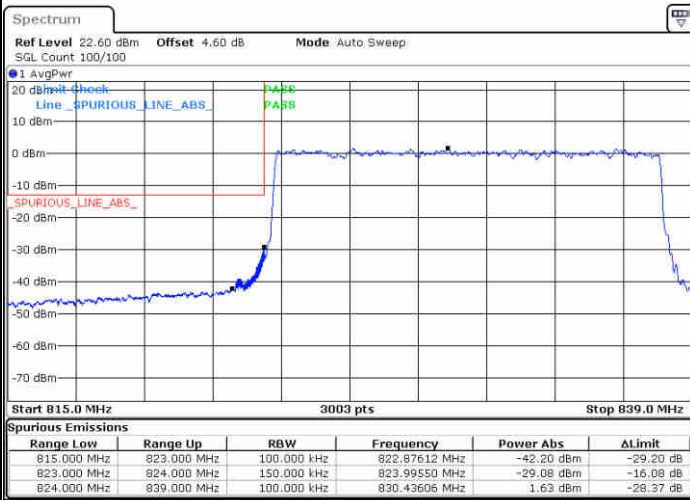


Date: 7.JUL.2020 15:17:21

Date: 7.JUL.2020 16:19:20

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7.JUL.2020 15:11:25

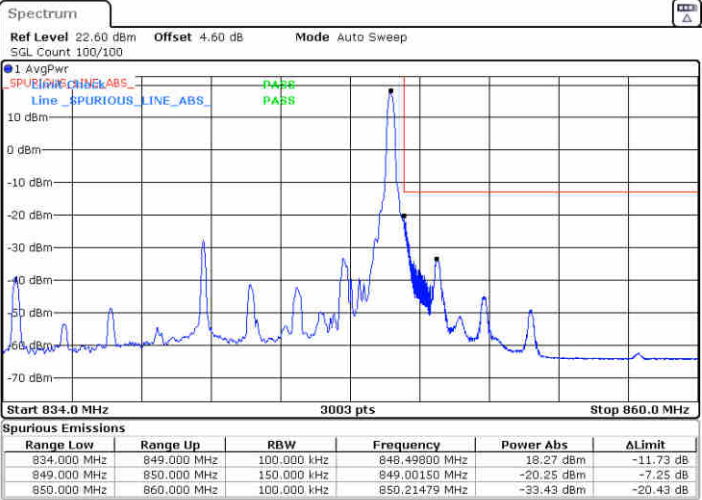
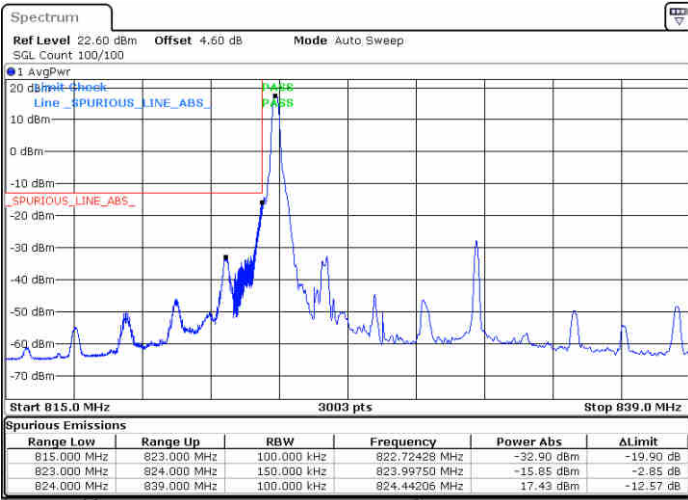
Date: 7.JUL.2020 14:44:47



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

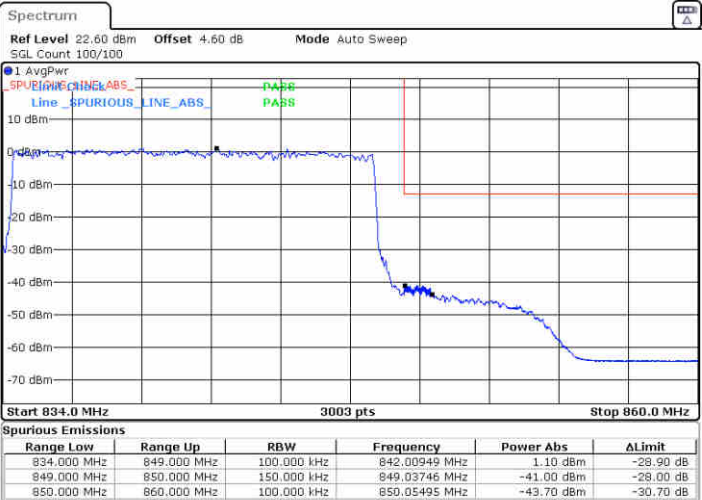
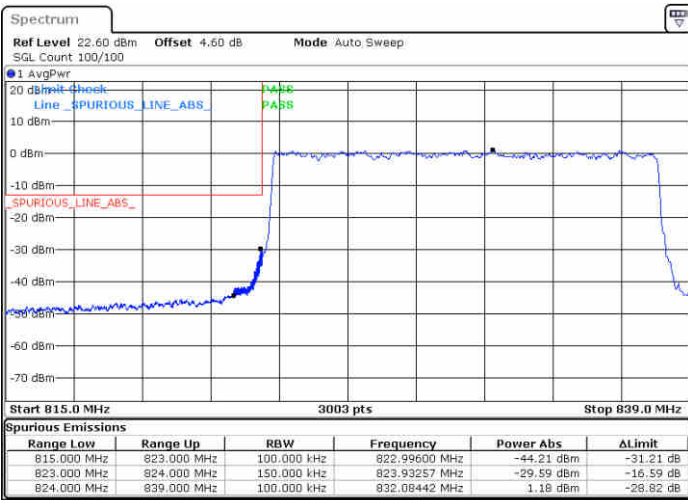


Date: 7 JUL 2020 15:16:19

Date: 7 JUL 2020 16:18:41

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7 JUL 2020 15:12:17

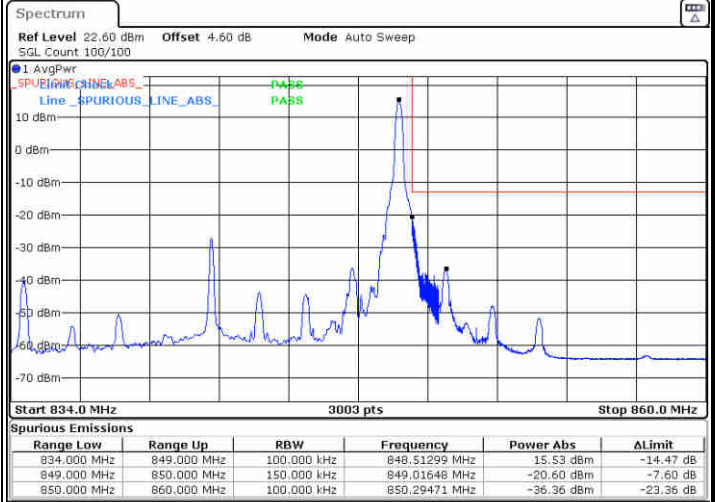
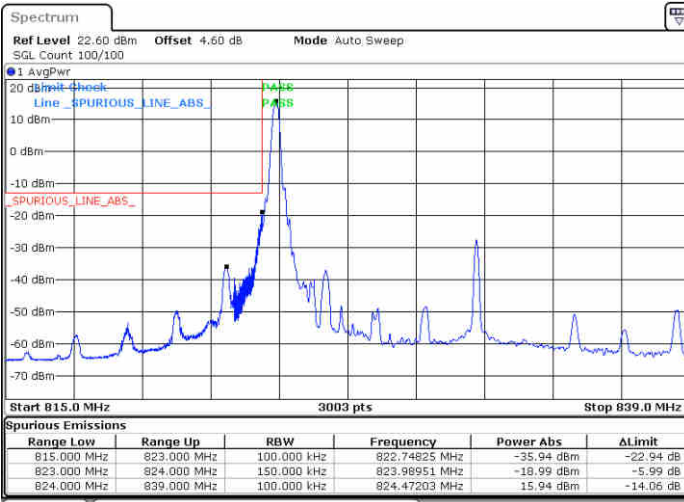
Date: 7 JUL 2020 14:45:50



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

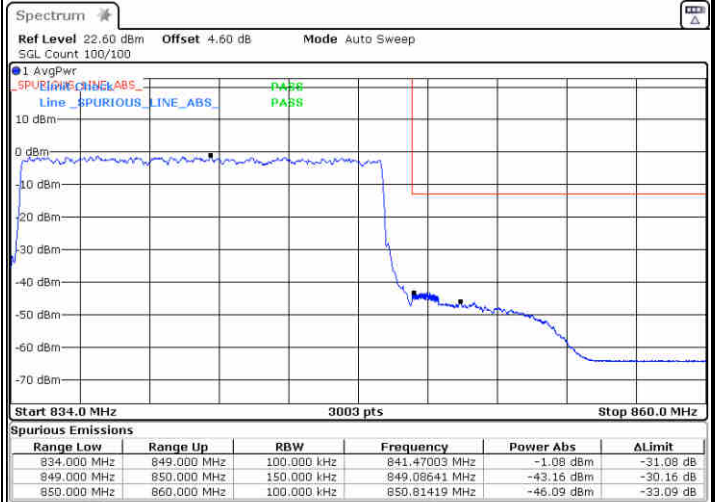
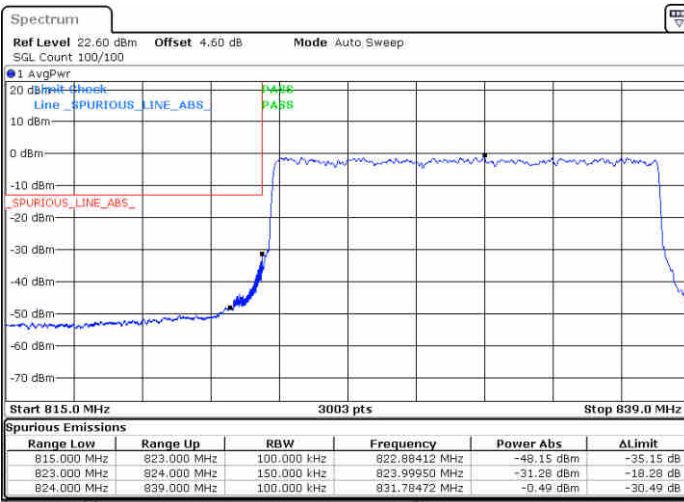


Date: 7.JUL.2020 15:13:57

Date: 7.JUL.2020 16:18:03

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7.JUL.2020 15:13:14

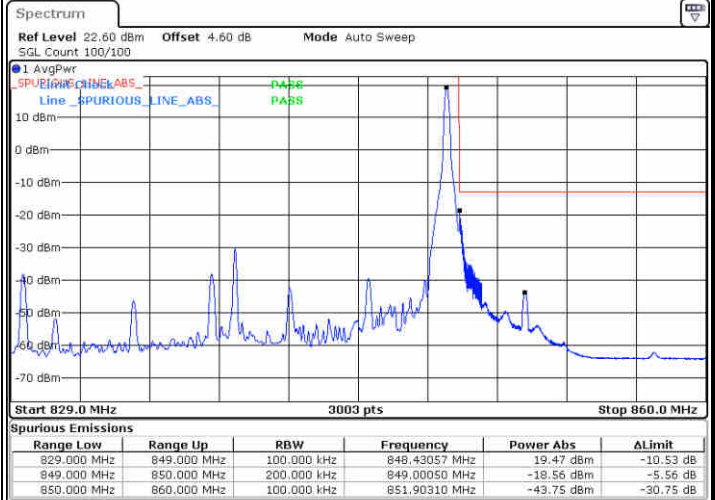
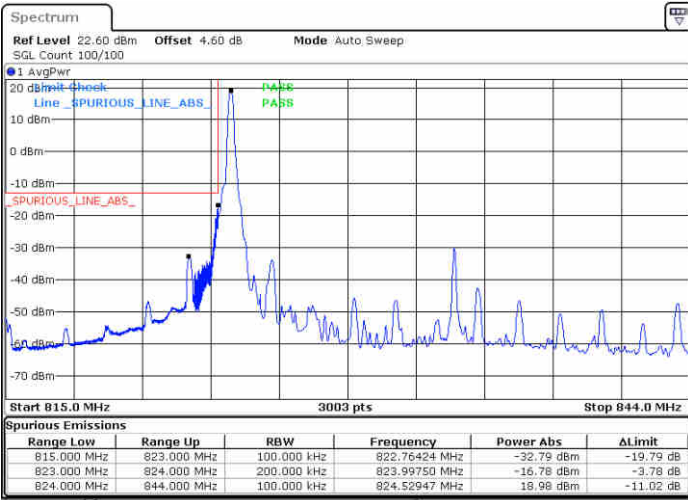
Date: 7.JUL.2020 14:47:07



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

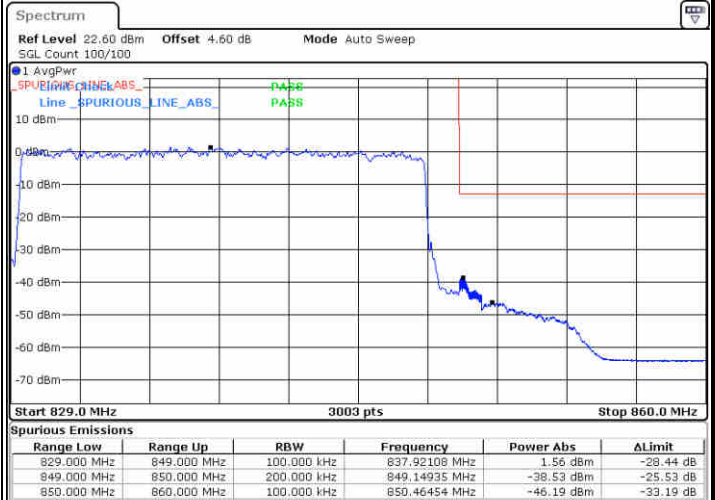
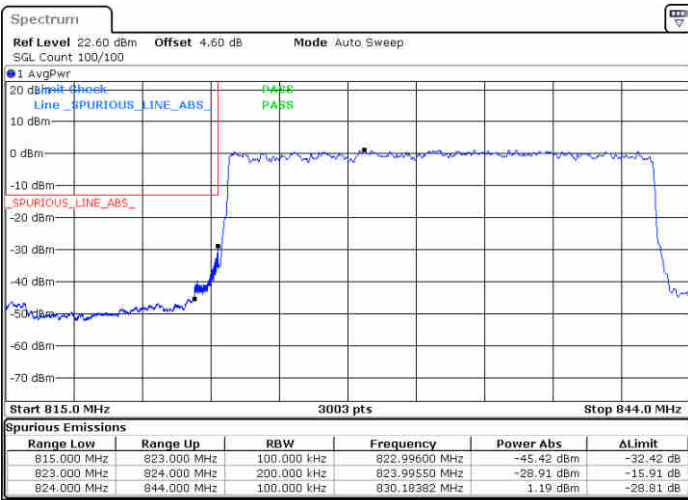


Date: 3.JUL.2020 16:28:13

Date: 3.JUL.2020 16:51:33

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 3.JUL.2020 15:57:44

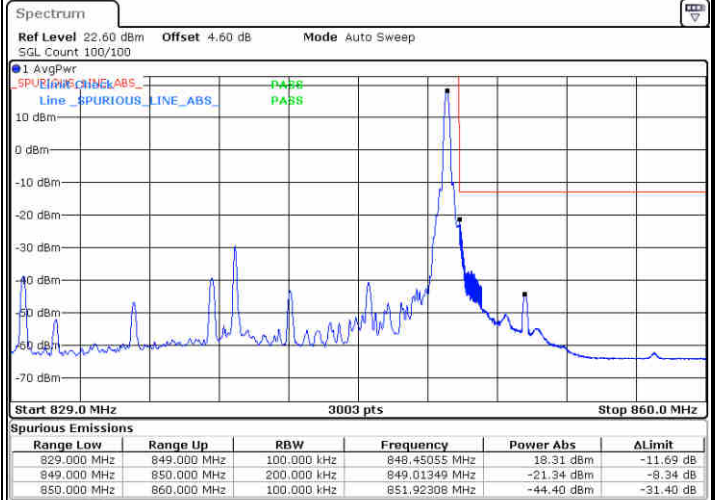
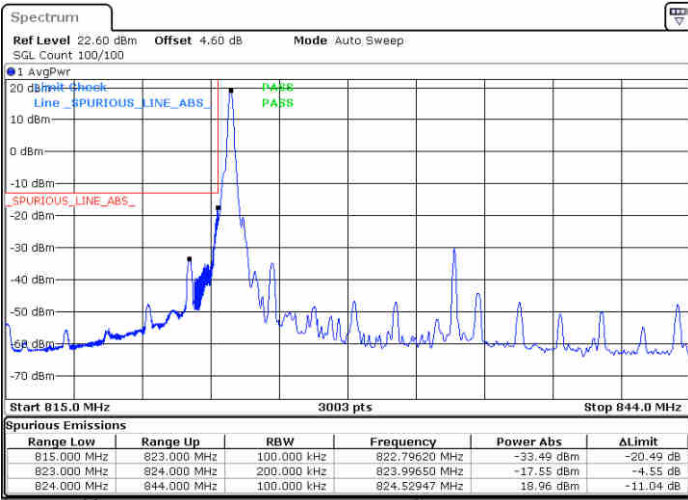
Date: 3.JUL.2020 16:40:18



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

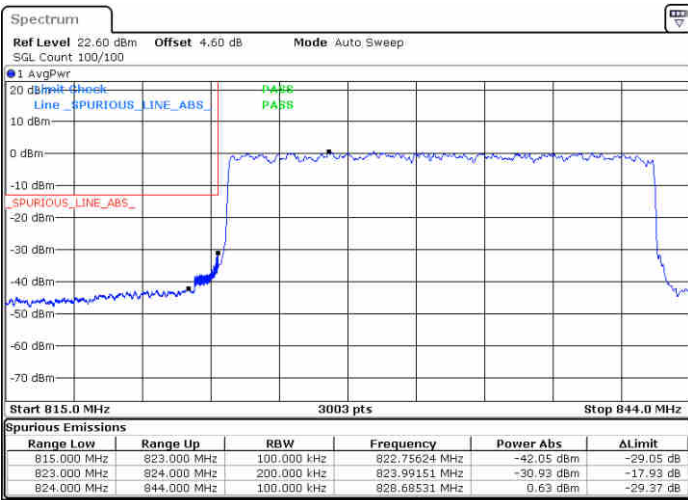


Date: 3.JUL.2020 16:30:41

Date: 3.JUL.2020 16:52:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 3.JUL.2020 15:58:38

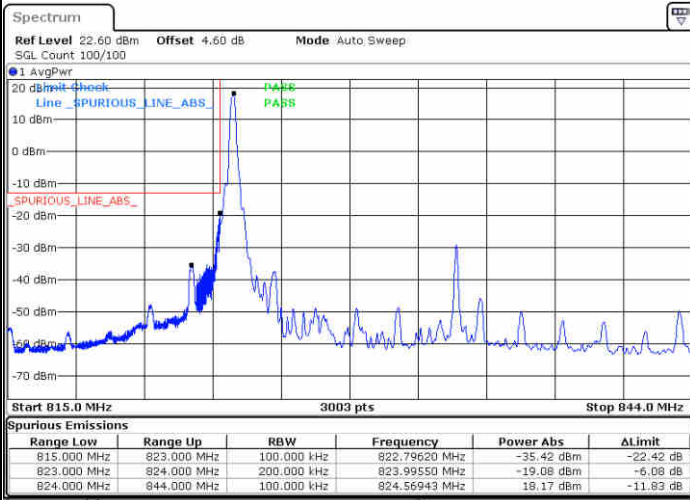
Date: 3.JUL.2020 16:41:21



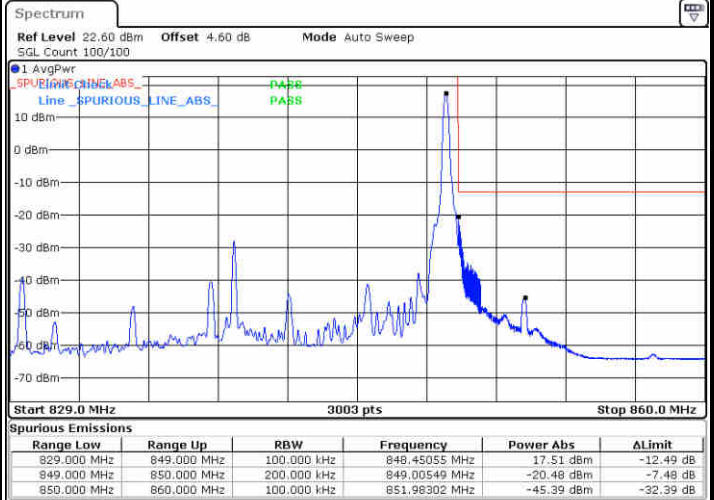
FR1 n5 / 20MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



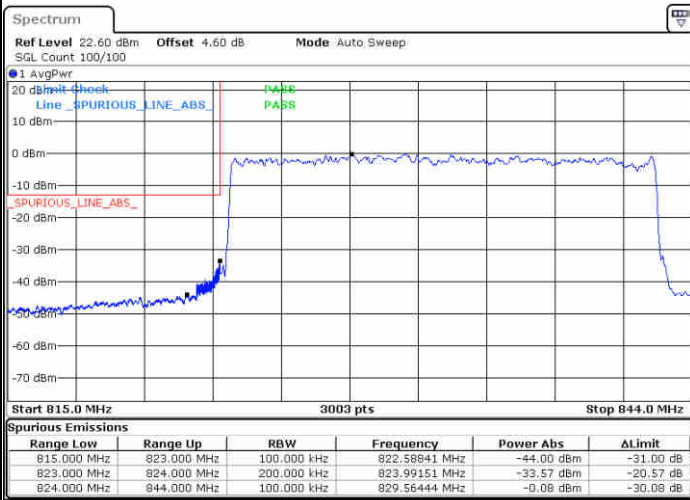
Date: 3.JUL.2020 16:07:03



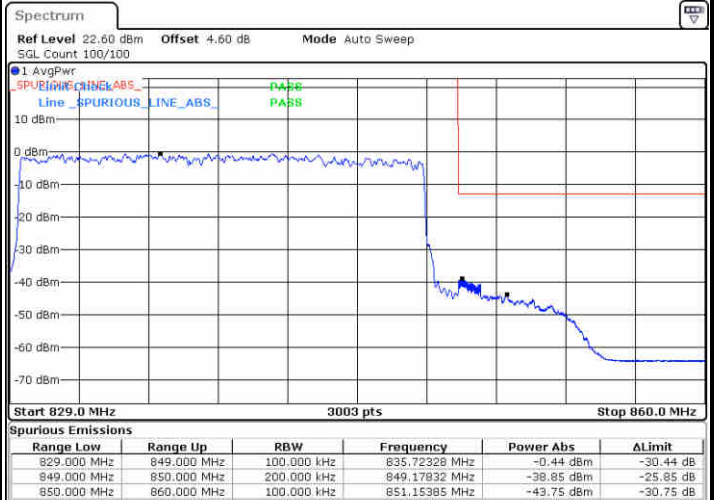
Date: 3.JUL.2020 16:52:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 3.JUL.2020 15:59:59



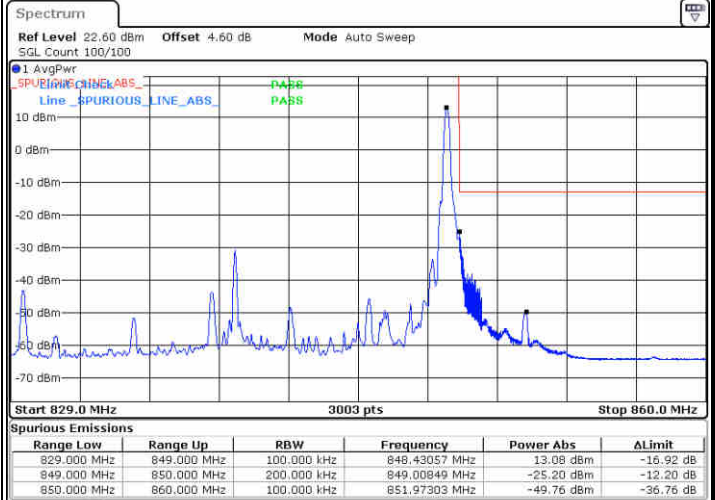
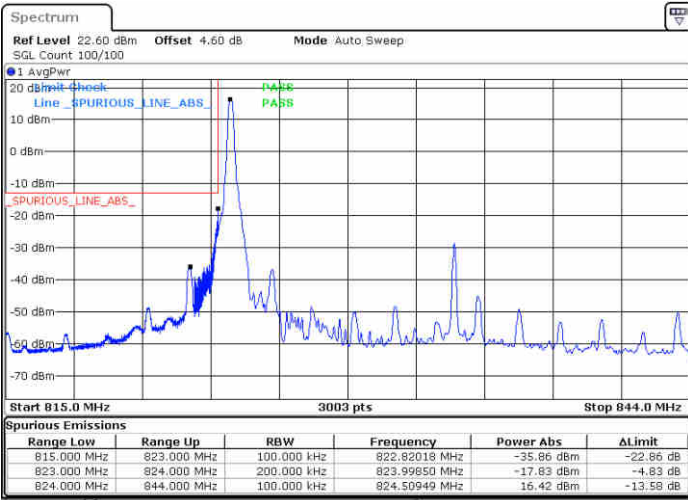
Date: 3.JUL.2020 16:43:53



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

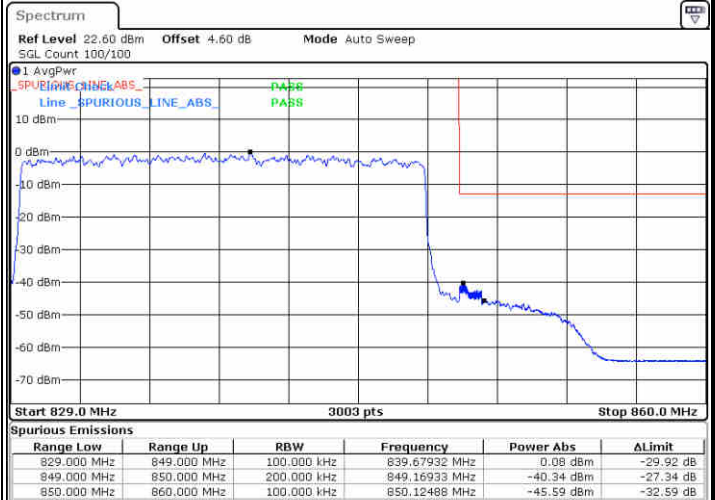
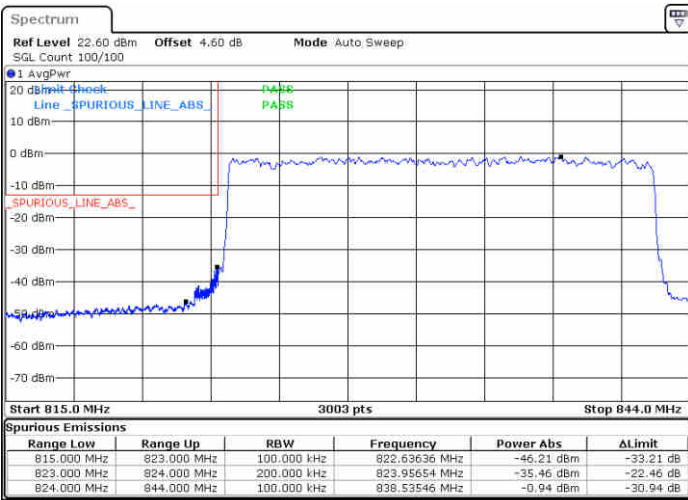


Date: 3.JUL.2020 16:05:56

Date: 3.JUL.2020 16:53:51

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 3.JUL.2020 16:01:03

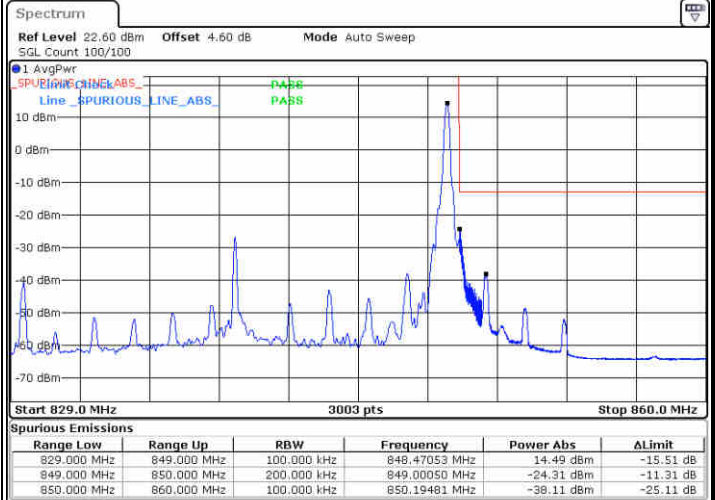
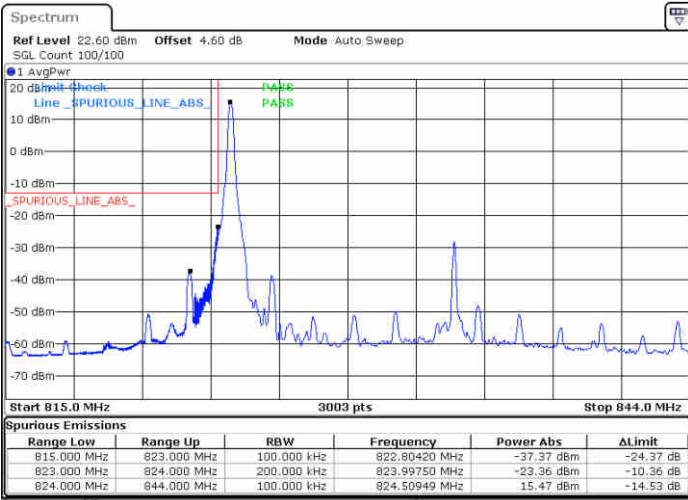
Date: 3.JUL.2020 16:45:00



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

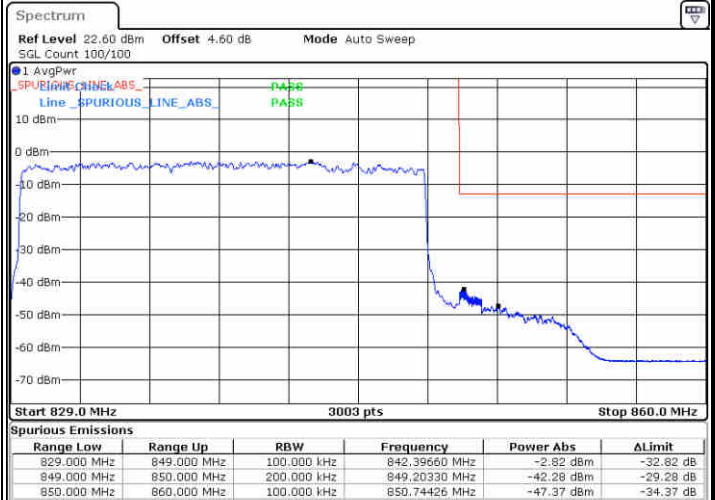
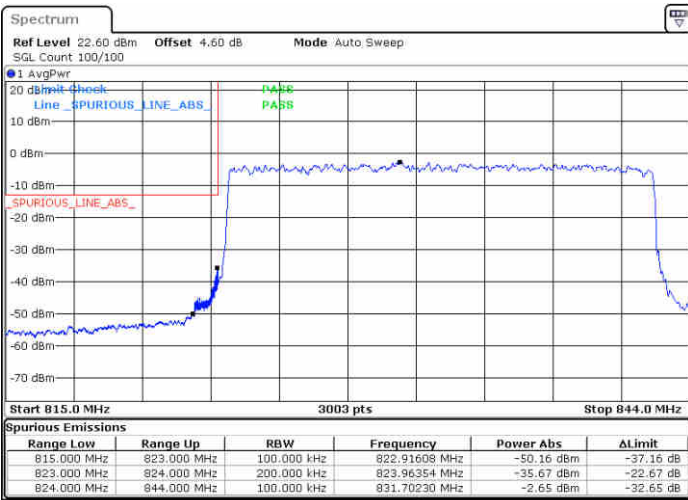


Date: 3.JUL.2020 16:03:08

Date: 3.JUL.2020 17:03:02

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 3.JUL.2020 16:02:06

Date: 3.JUL.2020 16:46:10

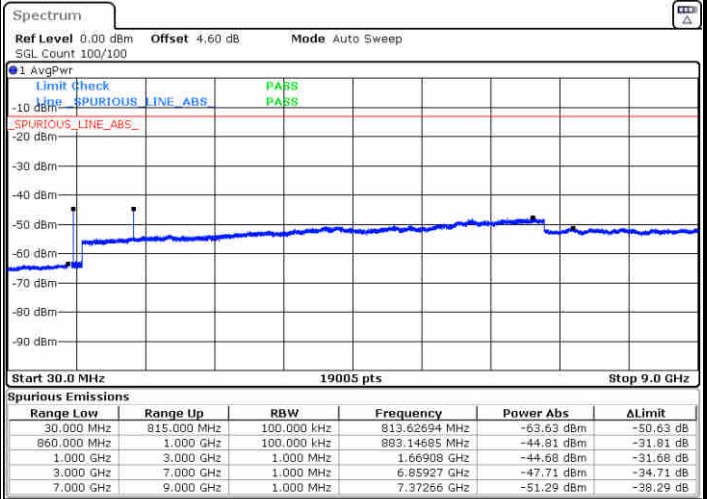
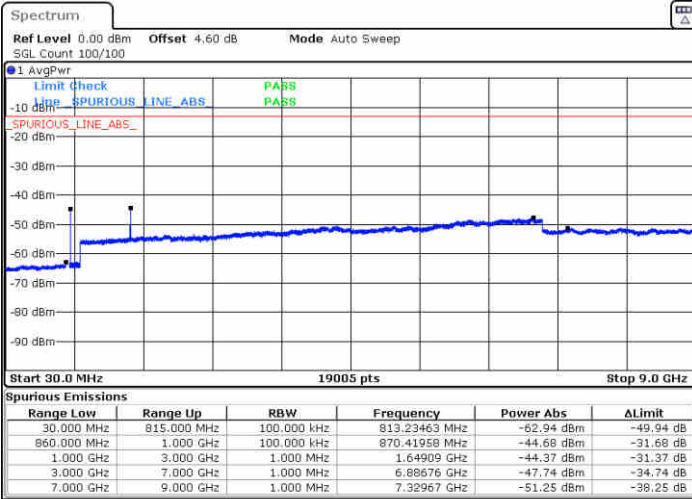


Conducted Spurious Emission

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

Lowest Channel / 1RB1

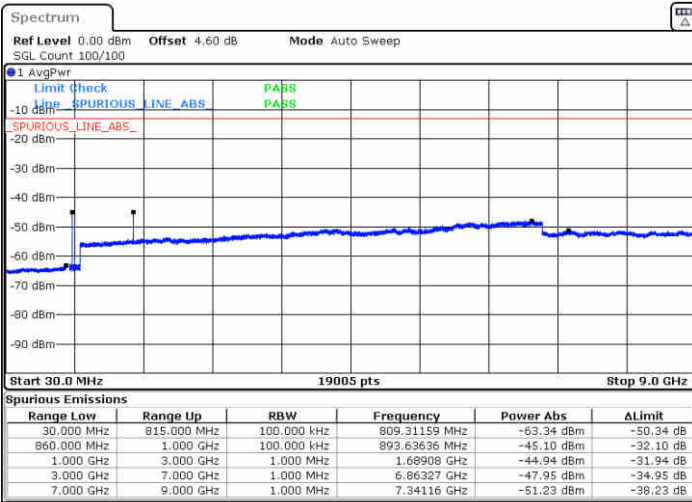
Middle Channel / 1RB1



Date: 7.JUL.2020 15:55:11

Date: 7.JUL.2020 15:58:32

Highest Channel / 1RB1



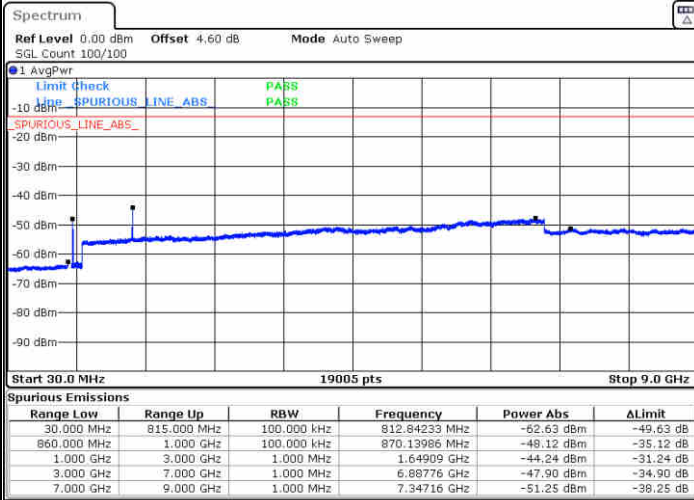
Date: 7.JUL.2020 16:11:40



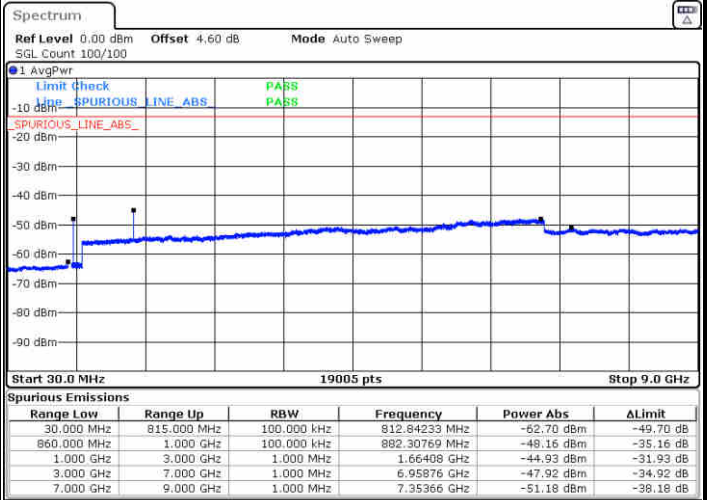
FR1 n5 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

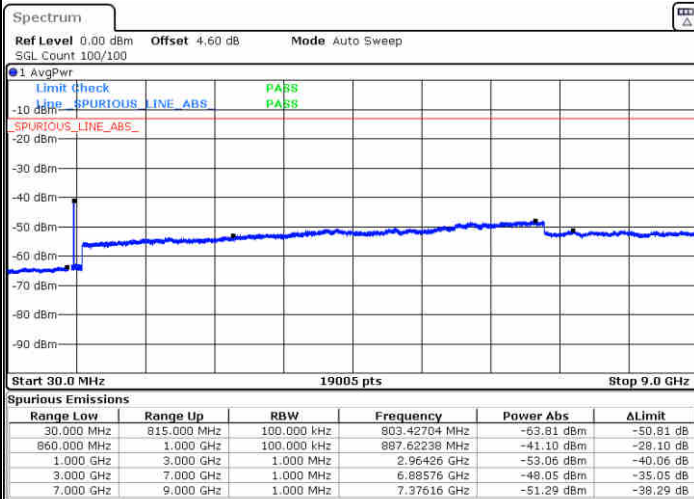


Date: 7.JUL.2020 15:10:12



Date: 7.JUL.2020 15:12:43

Highest Channel / 1RB1



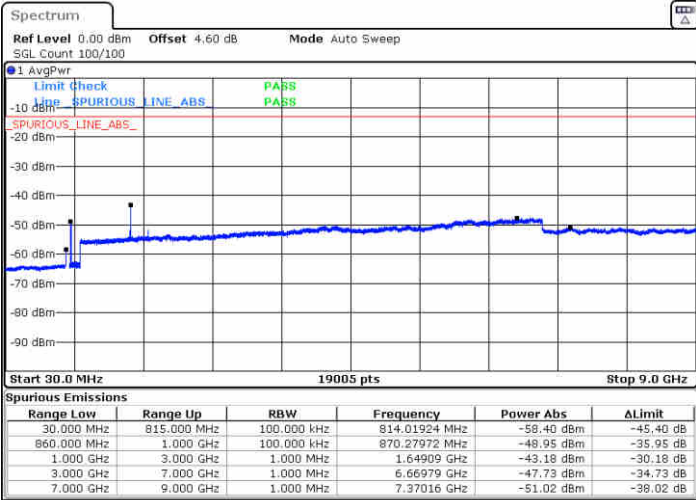
Date: 7.JUL.2020 15:34:47



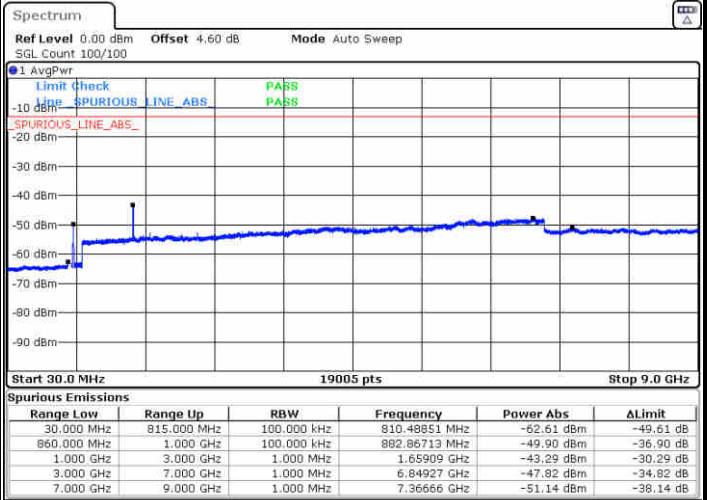
FR1 n5 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

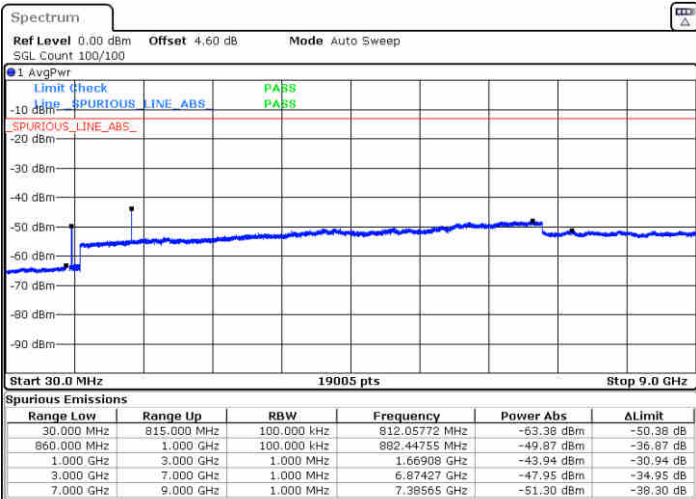


Date: 7.JUL.2020 14:18:17



Date: 7.JUL.2020 14:21:41

Highest Channel / 1RB1



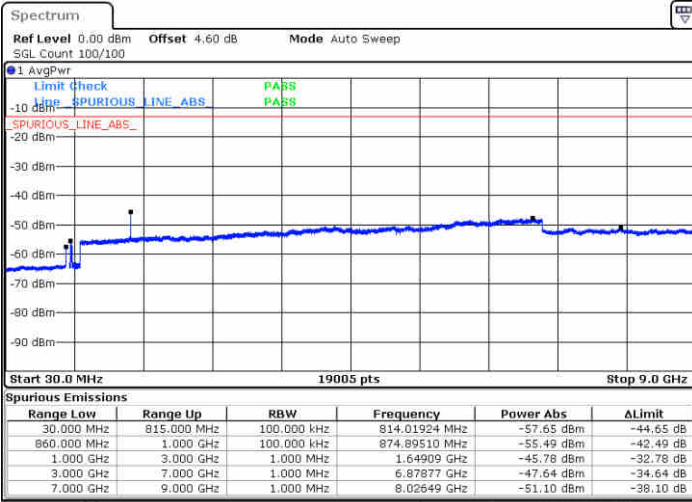
Date: 7.JUL.2020 14:50:55



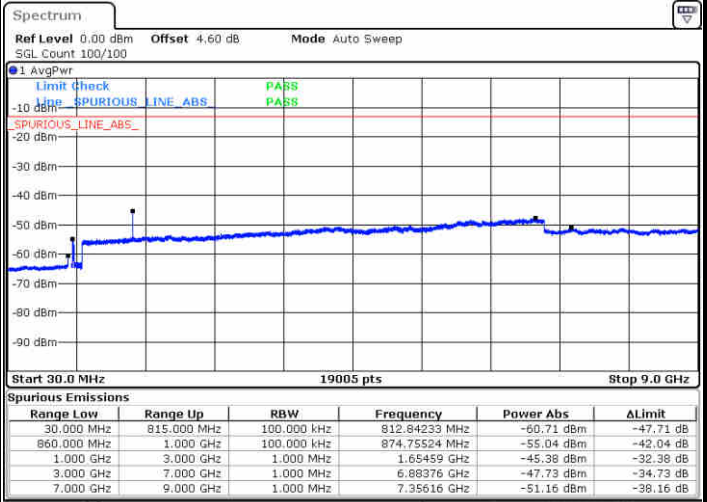
FR1 n5 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

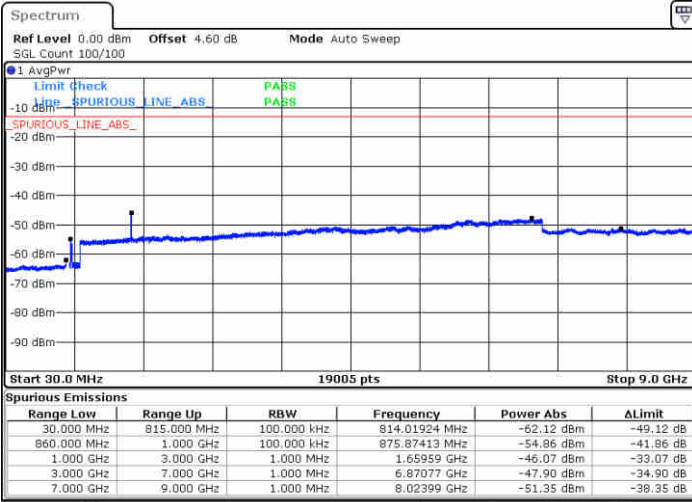


Date: 3.JUL.2020 16:31:05



Date: 3.JUL.2020 16:33:54

Highest Channel / 1RB1



Date: 3.JUL.2020 16:49:58



Frequency Stability

Test Conditions		FR1 n5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0025	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0036	
20	Battery End Point	0.0033	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



5G NR n66

Peak-to-Average Ratio

Mode	FR1 n66 / 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	3.97	5.19	8.32	6.38	PASS
Middle CH	4.12	5.25	6.38	6.46	
Highest CH	6.96	5.48	6.38	6.52	
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Lowest CH	8.20				PASS
Middle CH	6.58				
Highest CH	6.70				
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	1 RB0	1 RB0	1 RB0	1 RB0	Result
Lowest CH	6.52	7.07	6.06	5.59	PASS
Middle CH	7.28	5.62	6.20	5.77	
Highest CH	4.75	6.14	5.16	5.36	
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	1 RB0				Result
Lowest CH	5.91				PASS
Middle CH	6.17				
Highest CH	6.35				



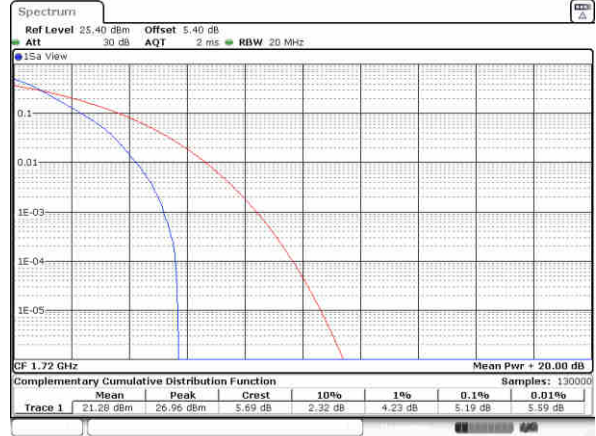
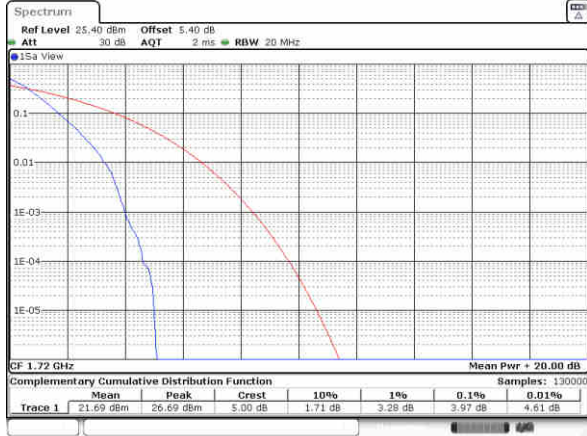
FR1 n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

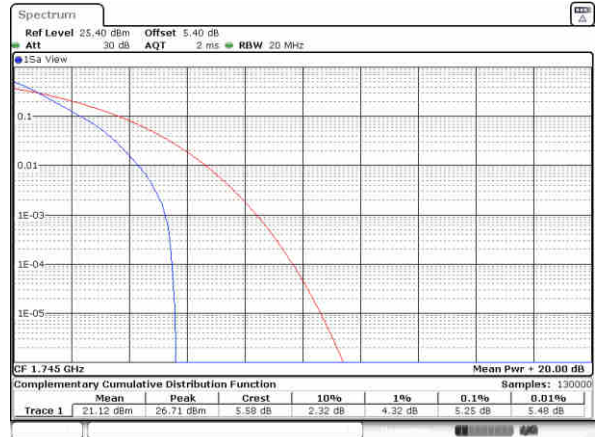
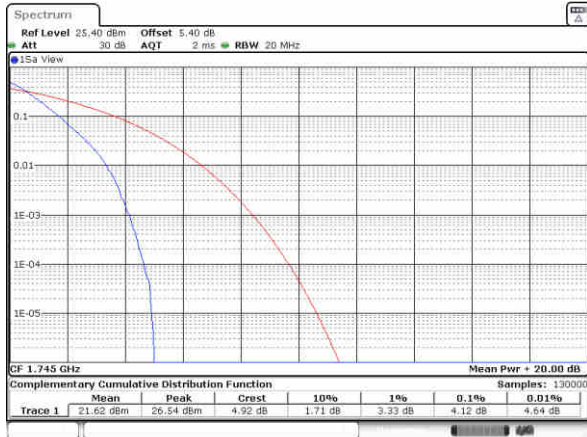


Date: 29_JUN.2020 00:52:15

Date: 29_JUN.2020 00:52:24

Middle Channel / Full RB

Middle Channel / Full RB

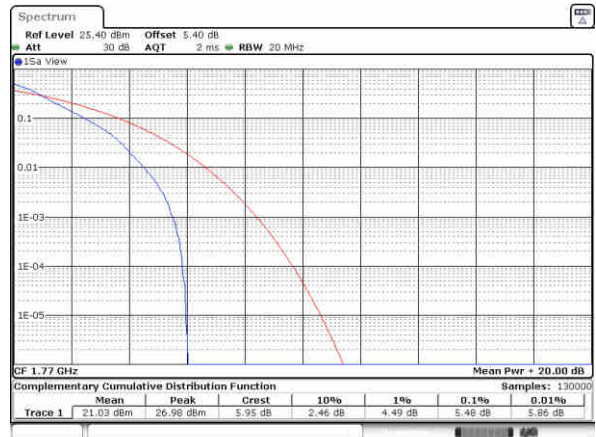
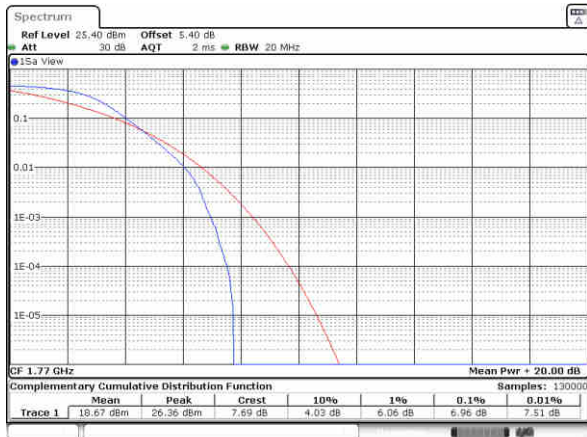


Date: 29_JUN.2020 00:48:42

Date: 29_JUN.2020 00:49:10

Highest Channel / Full RB

Highest Channel / Full RB



Date: 29_JUN.2020 00:42:39

Date: 29_JUN.2020 00:43:44



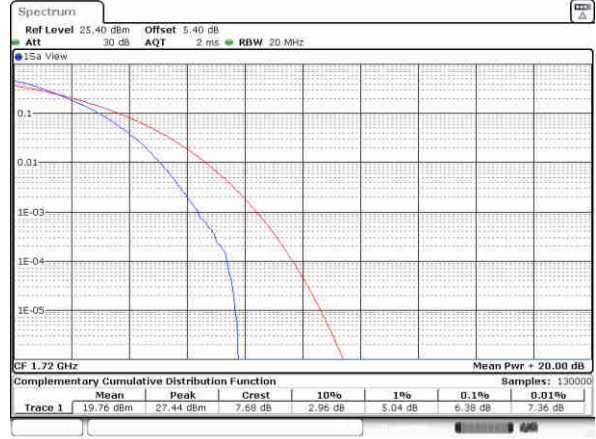
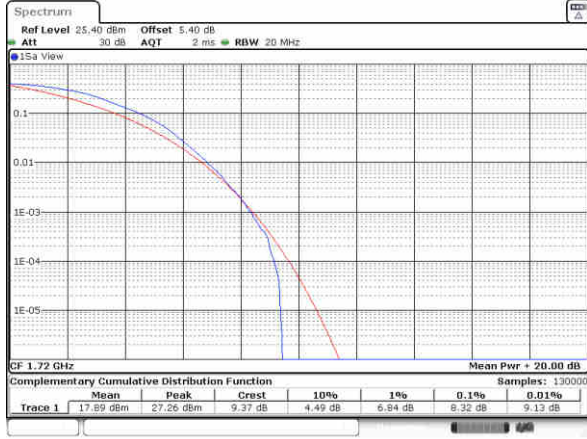
FR1 n66 / 20MHz / DFT-S OFDM

16QAM

64QAM

Lowest Channel / Full RB

Lowest Channel / Full RB

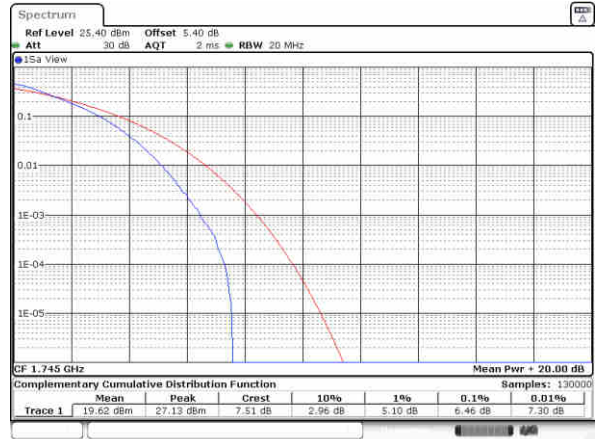
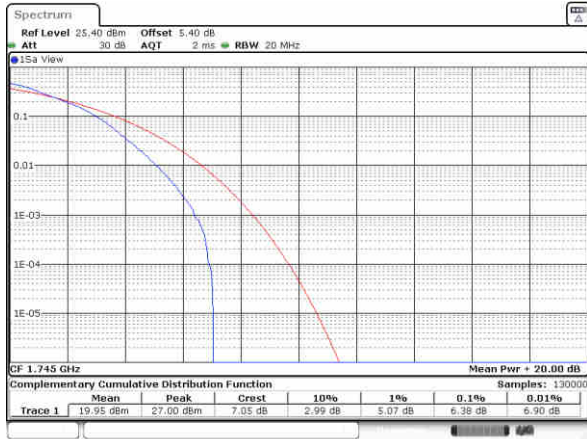


Date: 29_JUN,2020 00:52:54

Date: 29_JUN,2020 00:53:04

Middle Channel / Full RB

Middle Channel / Full RB

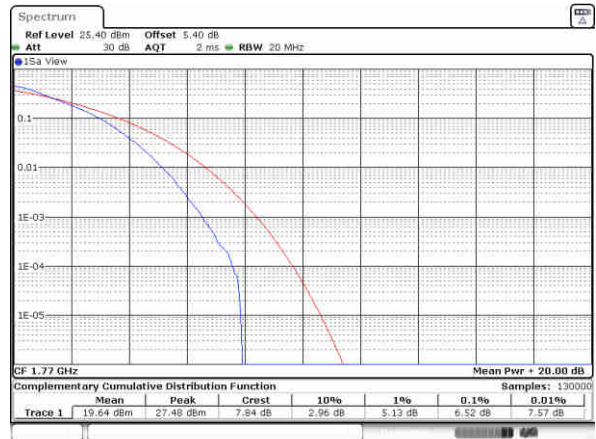
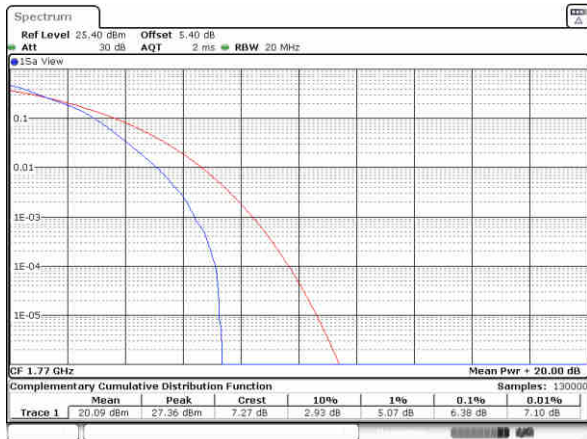


Date: 29_JUN,2020 00:49:20

Date: 29_JUN,2020 00:49:50

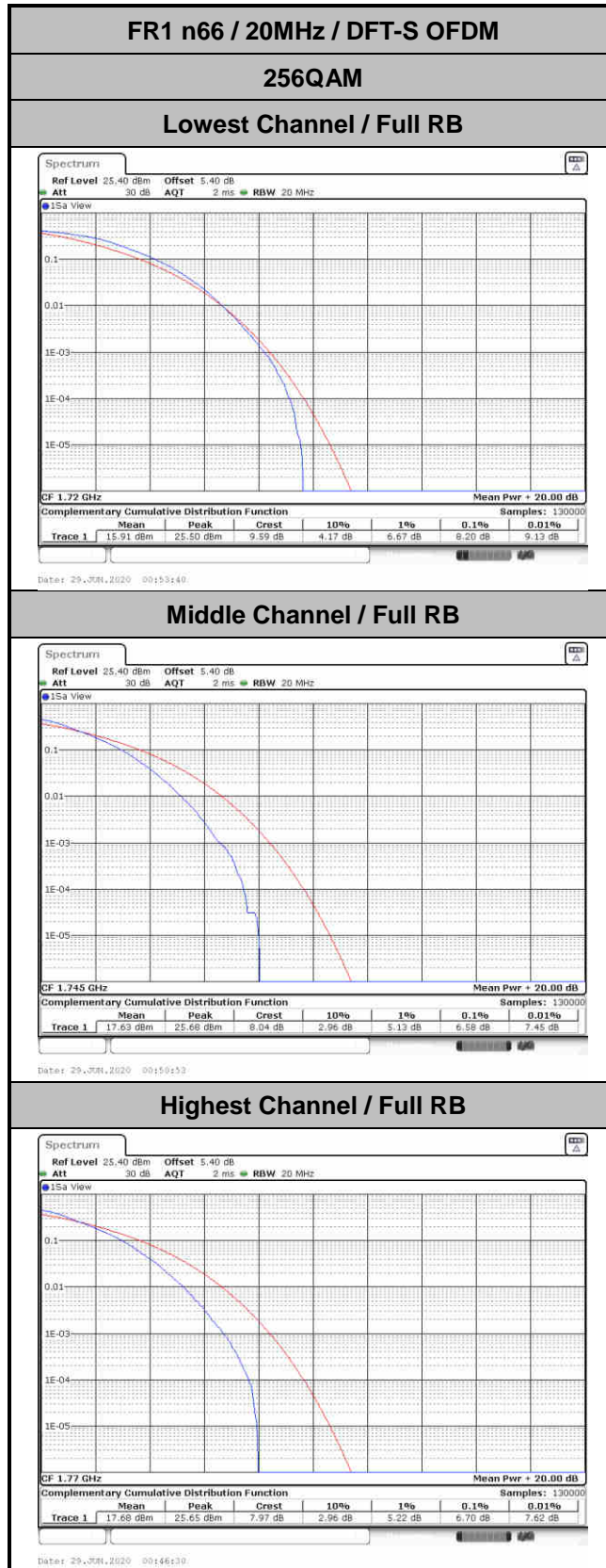
Highest Channel / Full RB

Highest Channel / Full RB



Date: 29_JUN,2020 00:44:48

Date: 29_JUN,2020 00:46:12





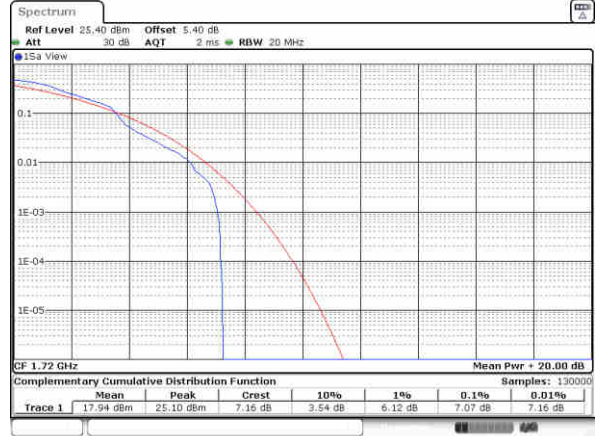
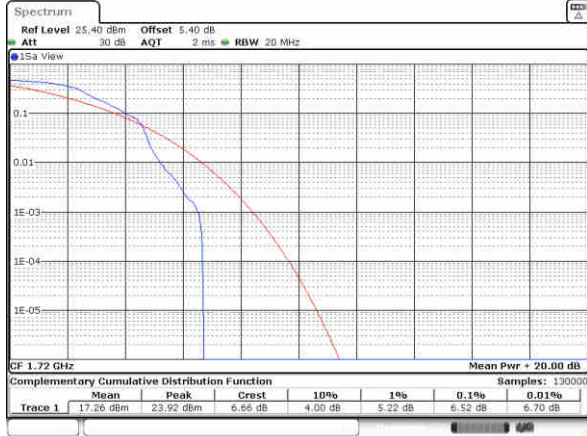
FR1 n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / 1RB0

Lowest Channel / 1RB0

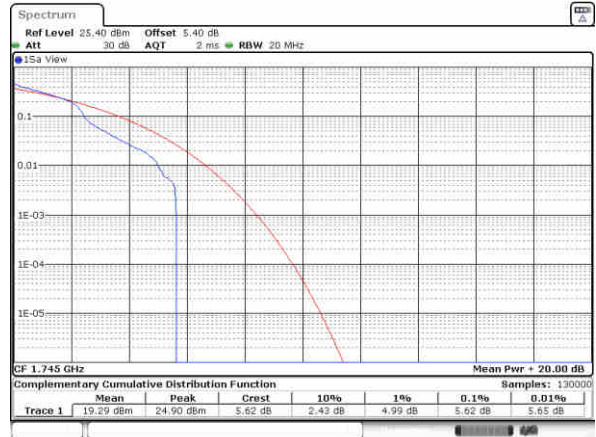
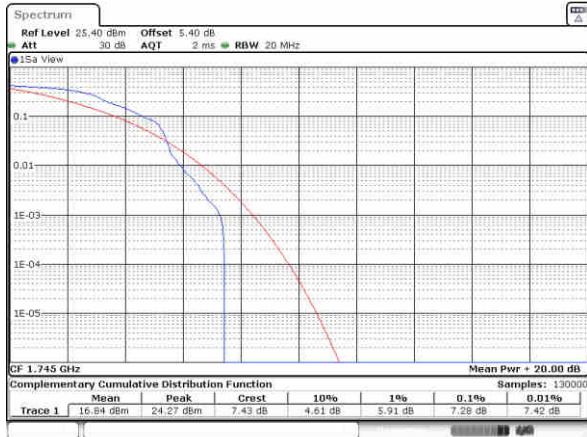


Date: 29_JUN.2020 00:52:04

Date: 29_JUN.2020 00:52:33

Middle Channel / 1RB0

Middle Channel / 1RB0

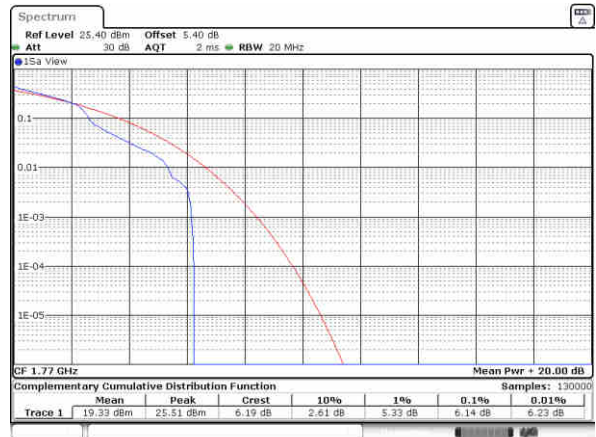
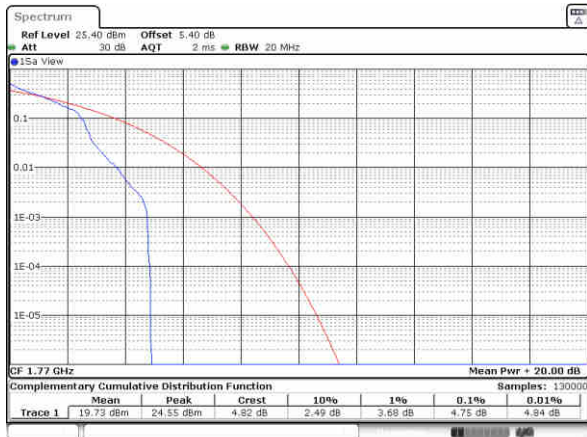


Date: 29_JUN.2020 00:48:52

Date: 29_JUN.2020 00:49:01

Highest Channel / 1RB0

Highest Channel / 1RB0



Date: 29_JUN.2020 00:42:48

Date: 29_JUN.2020 00:43:34



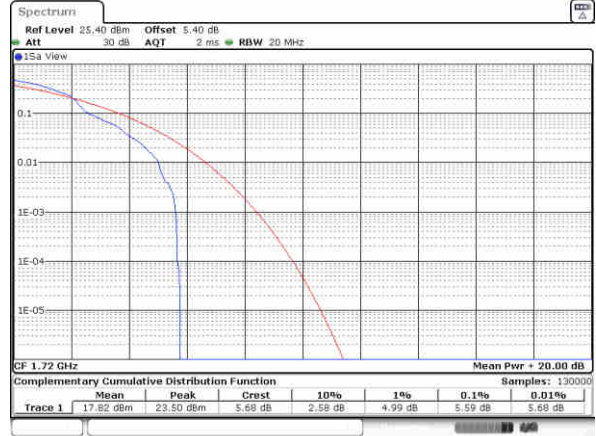
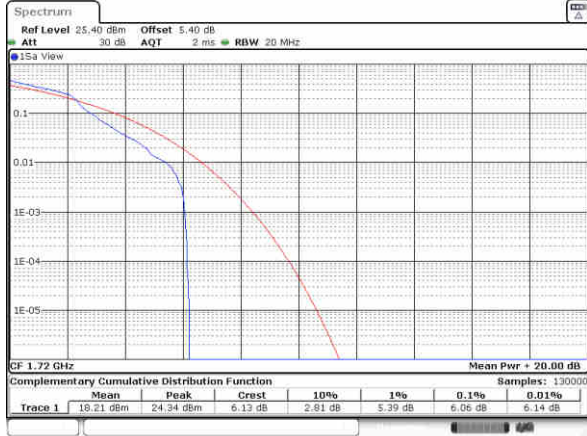
FR1 n66 / 20MHz / DFT-S OFDM

16QAM

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RB0

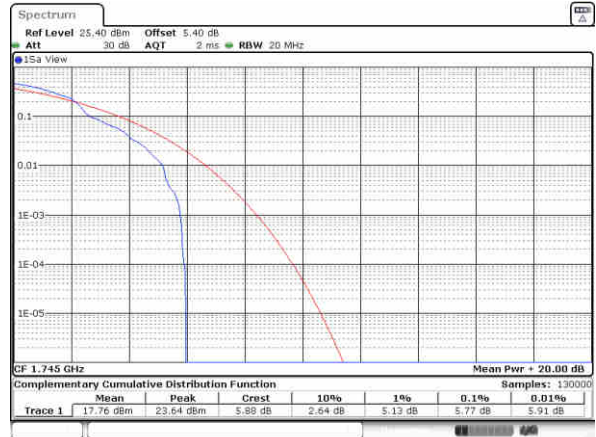
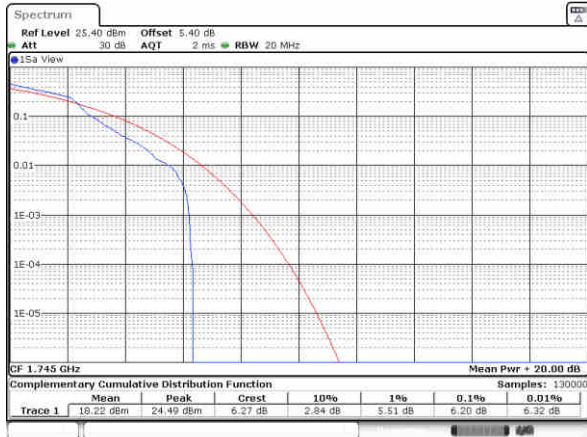


Date: 29_JUN,2020 00:52:45

Date: 29_JUN,2020 00:53:13

Middle Channel / 1RB0

Middle Channel / 1RB0

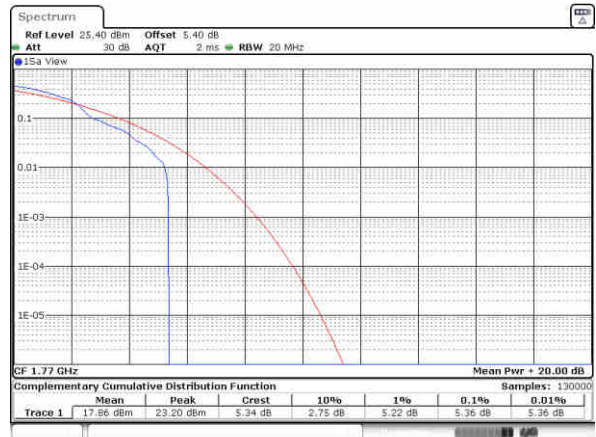
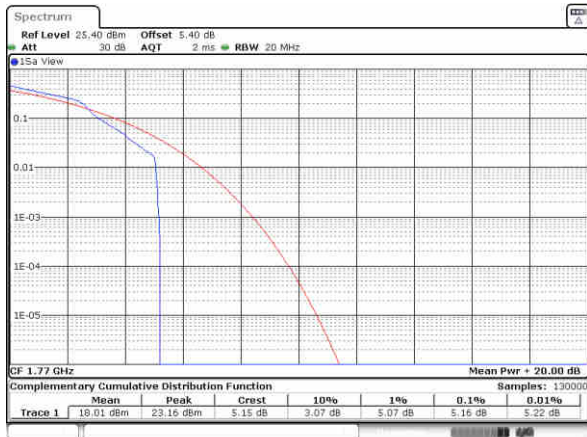


Date: 29_JUN,2020 00:49:30

Date: 29_JUN,2020 00:49:39

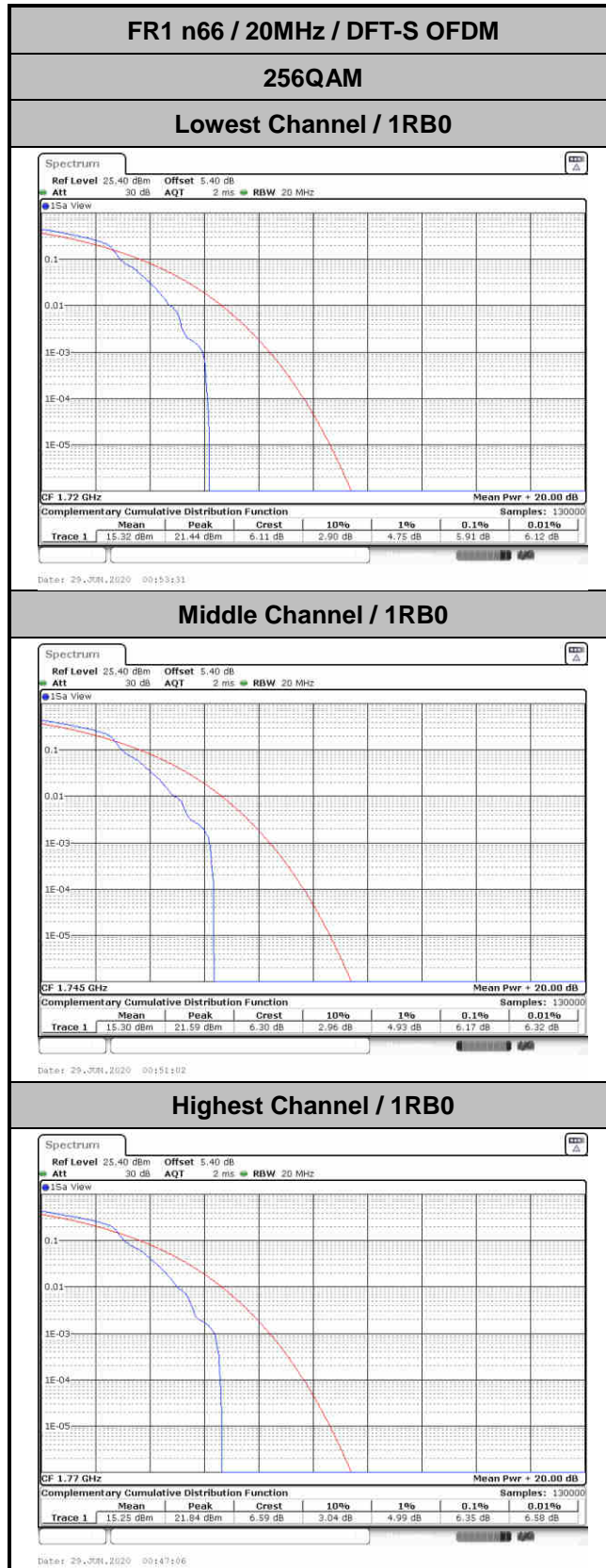
Highest Channel / 1RB0

Highest Channel / 1RB0



Date: 29_JUN,2020 00:44:56

Date: 29_JUN,2020 00:45:39





26dB Bandwidth

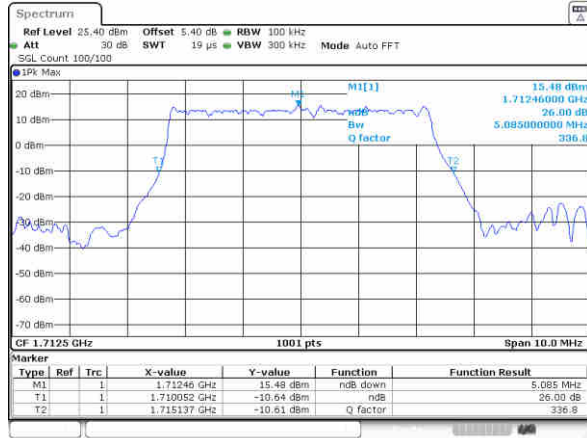
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Lowest CH	5.08		9.57		14.36		20.02	
Middle CH	5.04		9.41		14.54		20.22	
Highest CH	5.16		9.53		14.39		20.18	
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	5.17	5.30	9.51	9.55	14.27	14.18	20.22	20.30
Middle CH	5.14	4.92	9.55	9.67	14.51	14.30	20.18	20.18
Highest CH	5.22	5.17	9.53	9.61	14.42	14.27	20.14	20.14
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	5.04	5.16	9.55	9.67	14.24	14.30	20.02	20.22
Middle CH	5.05	5.21	9.51	9.53	14.24	14.33	20.14	20.22
Highest CH	5.11	5.08	9.53	9.63	14.42	14.42	20.18	20.18



FR1 n66 / 5MHz / DFT-S OFDM

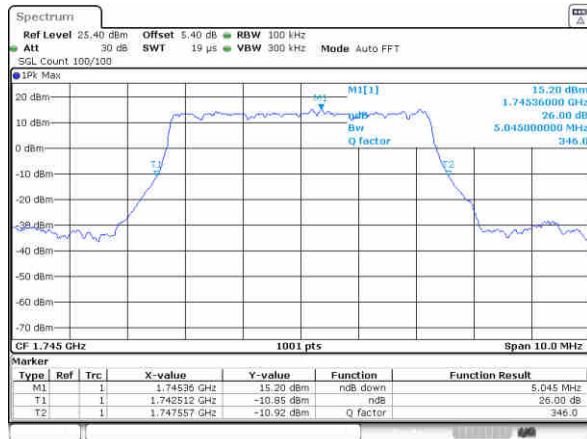
PI/2 BPSK

Lowest Channel



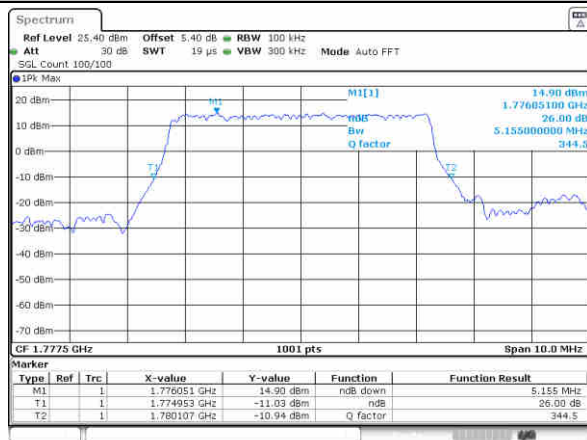
Date: 28-Jul-2020 22:46:30

Middle Channel



Date: 28-Jul-2020 22:52:19

Highest Channel



Date: 28-Jul-2020 22:55:23



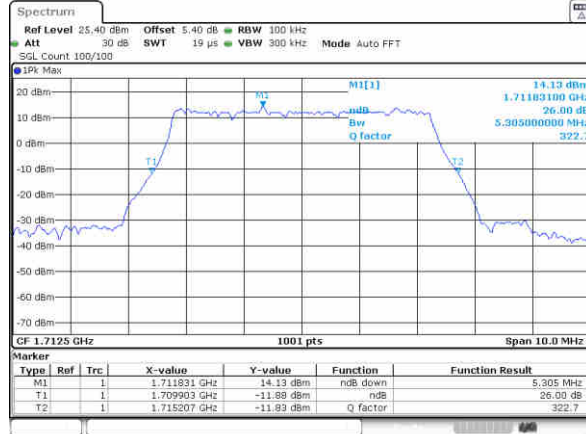
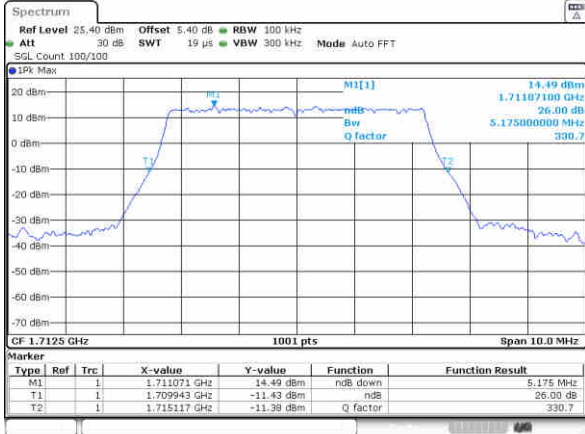
FR1 n66 / 5MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

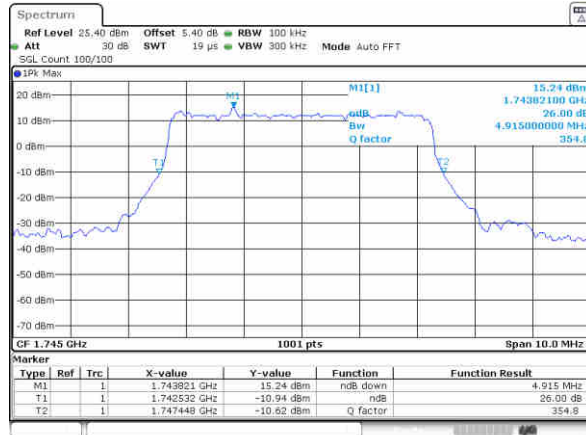
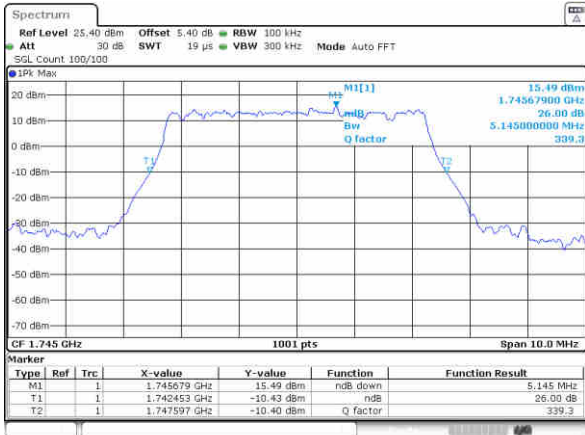


Date: 28_JUN,2020 22:14:37

Date: 28_JUN,2020 22:14:01

Middle Channel

Middle Channel

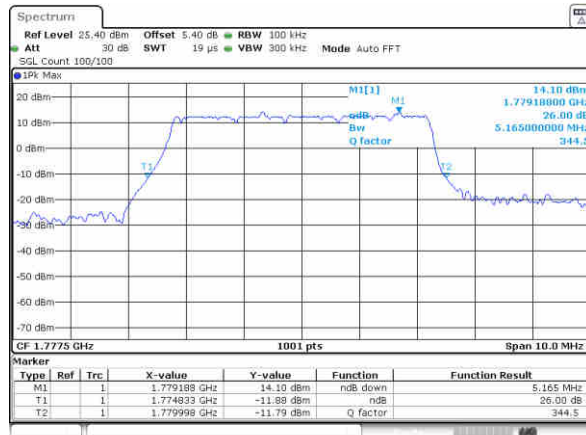
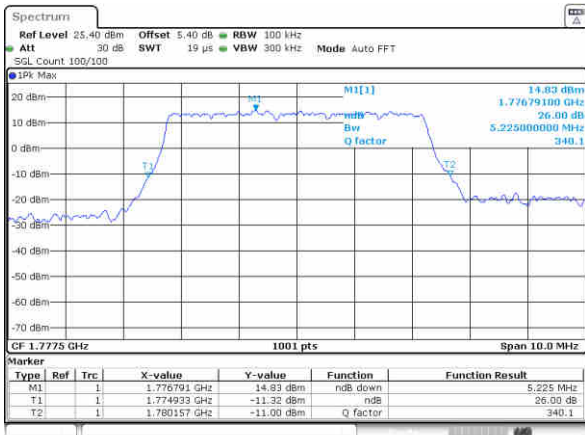


Date: 28_JUN,2020 22:52:42

Date: 28_JUN,2020 22:52:55

Highest Channel

Highest Channel



Date: 28_JUN,2020 22:57:01

Date: 28_JUN,2020 22:57:27



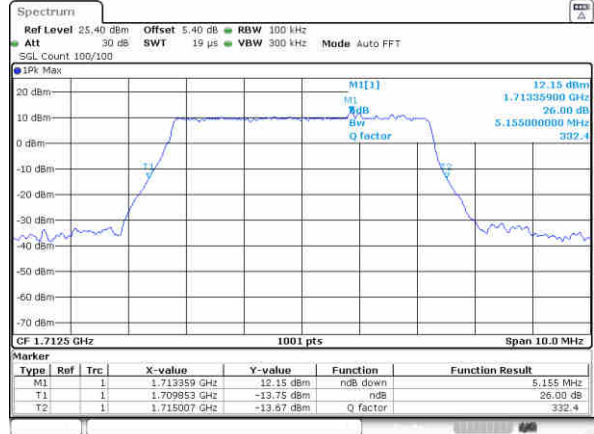
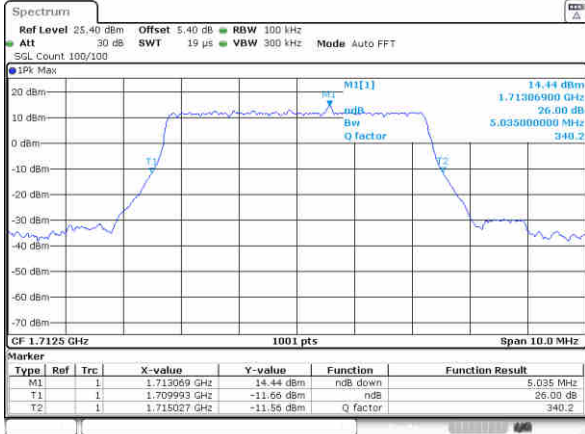
FR1 n66 / 5MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

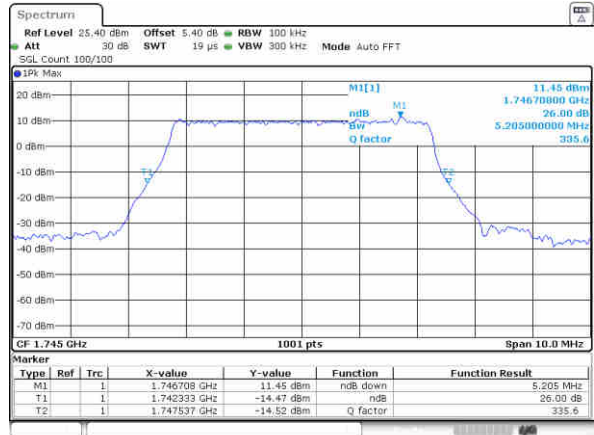
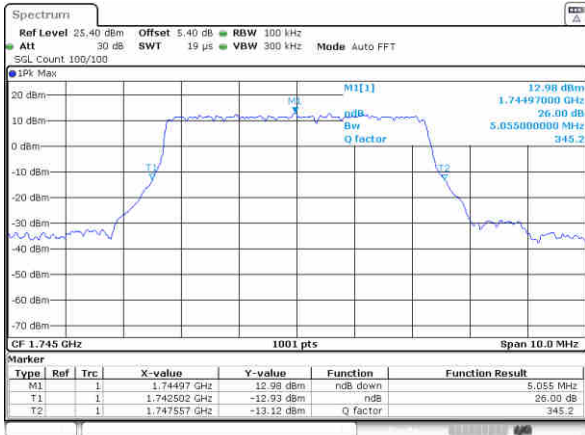


Date: 28_JUN,2020 22:14:18

Date: 28_JUN,2020 22:15:18

Middle Channel

Middle Channel

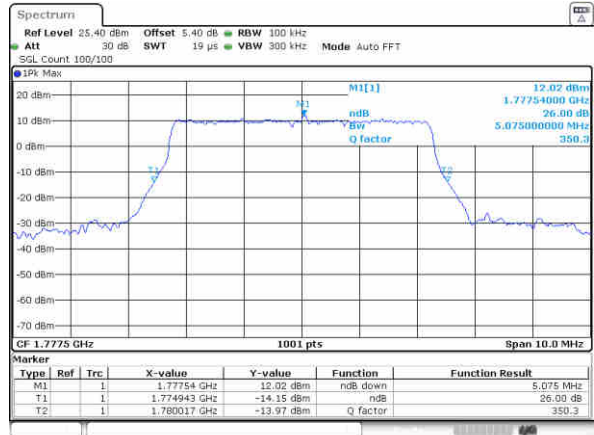
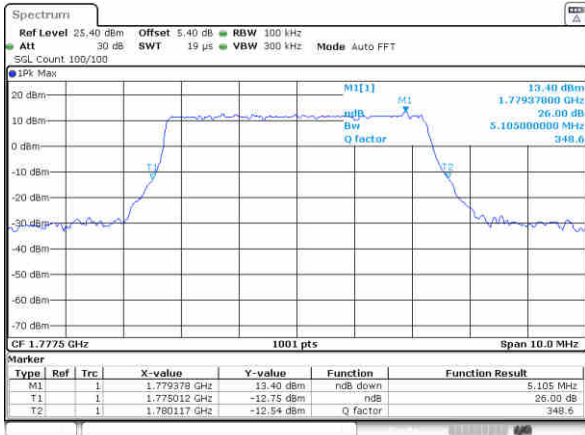


Date: 28_JUN,2020 22:53:22

Date: 28_JUN,2020 22:53:55

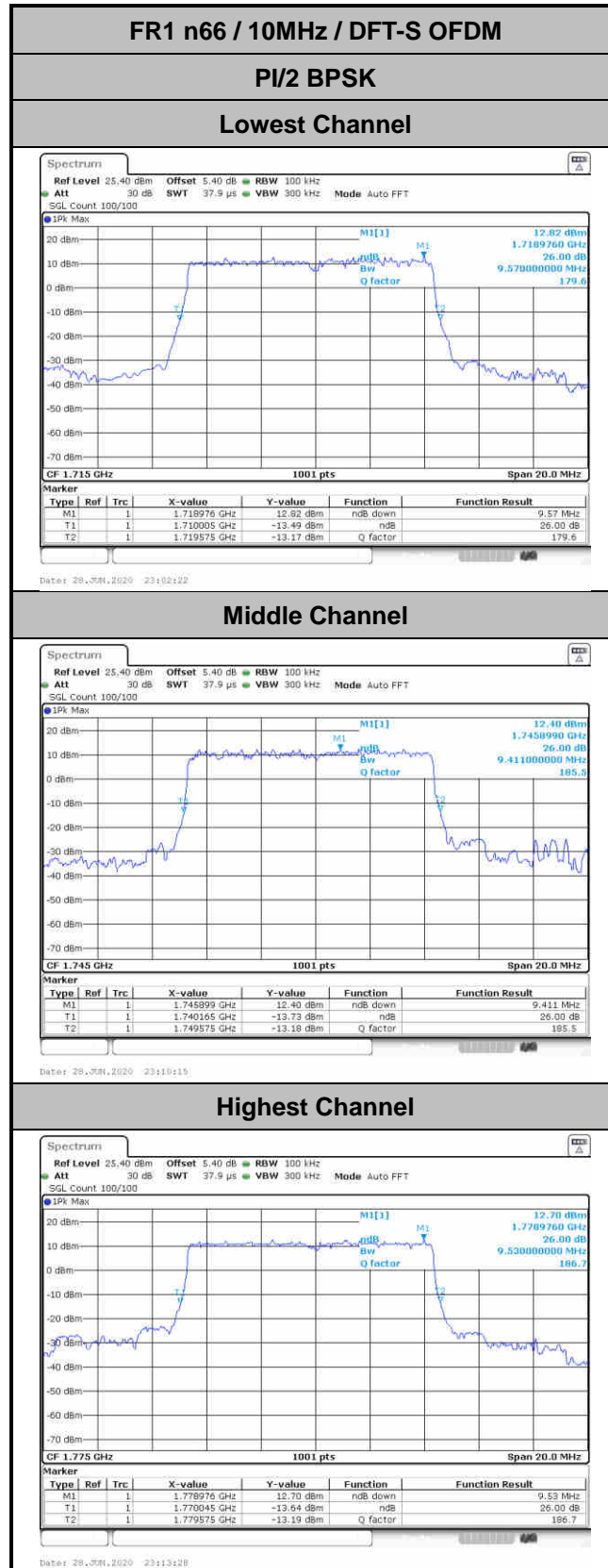
Highest Channel

Highest Channel



Date: 28_JUN,2020 22:59:21

Date: 28_JUN,2020 23:00:02





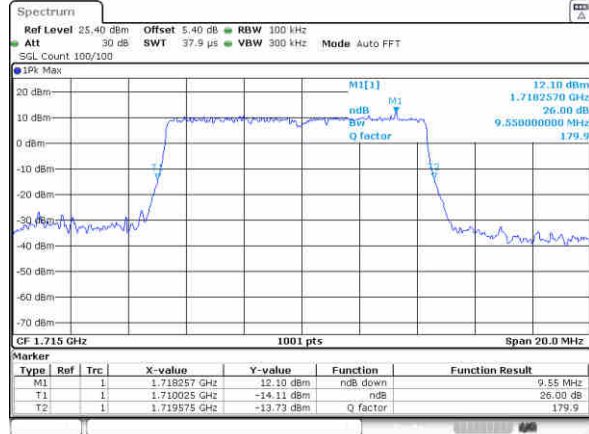
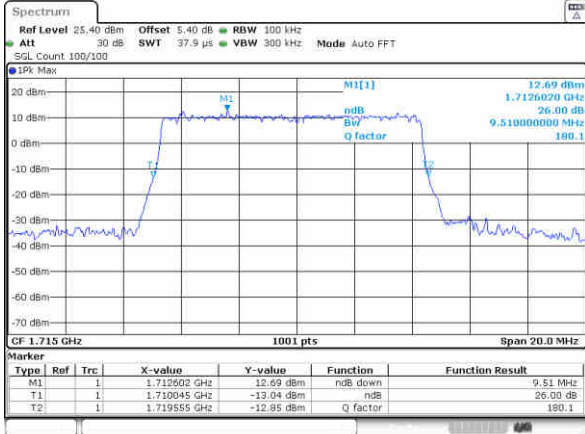
FR1 n66 / 10MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

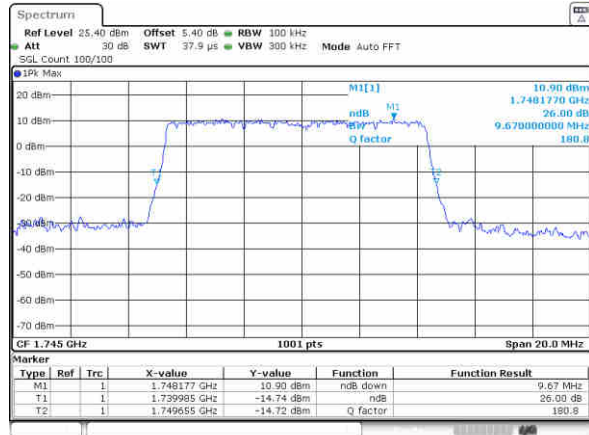
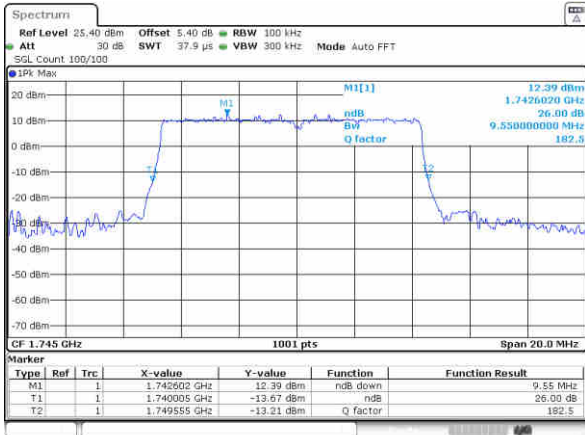


Date: 28_JUN,2020 23:10:17

Date: 28_JUN,2020 23:10:12

Middle Channel

Middle Channel

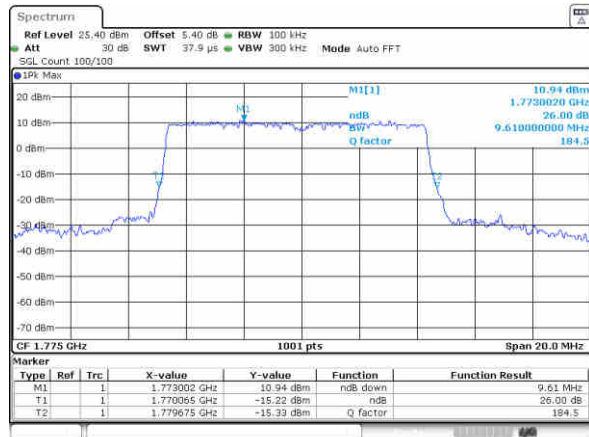
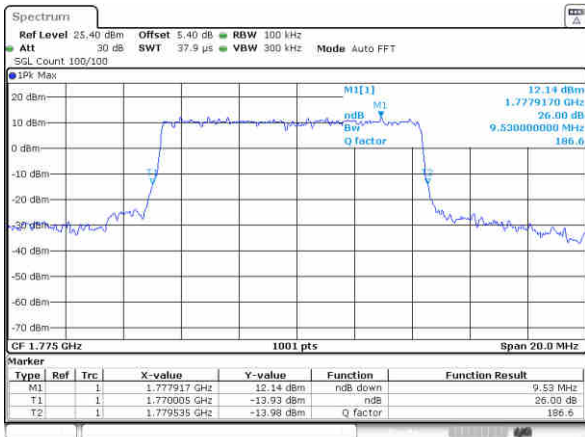


Date: 28_JUN,2020 23:10:30

Date: 28_JUN,2020 23:10:14

Highest Channel

Highest Channel



Date: 28_JUN,2020 23:11:57

Date: 28_JUN,2020 23:11:22



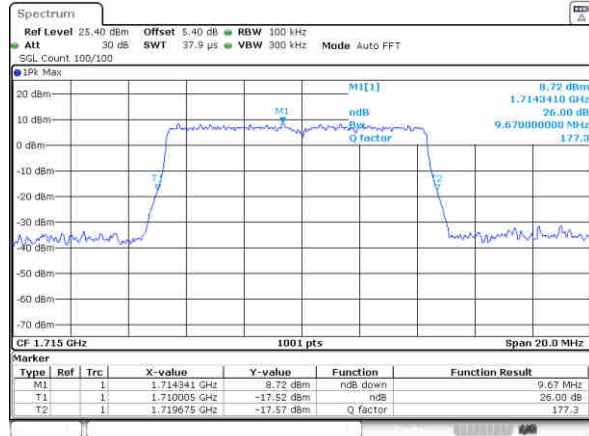
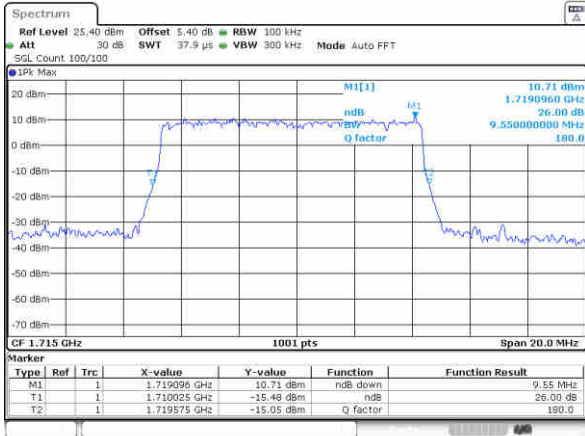
FR1 n66 / 10MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

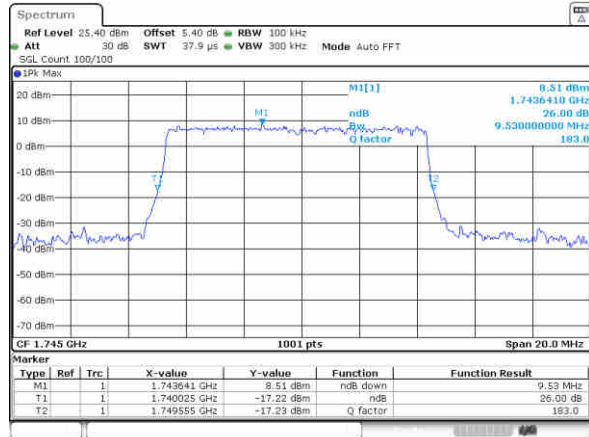
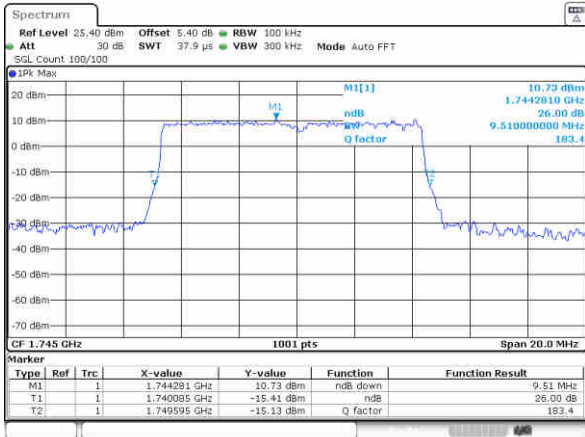


Date: 28_JUN,2020 23:04:55

Date: 28_JUN,2020 23:05:29

Middle Channel

Middle Channel

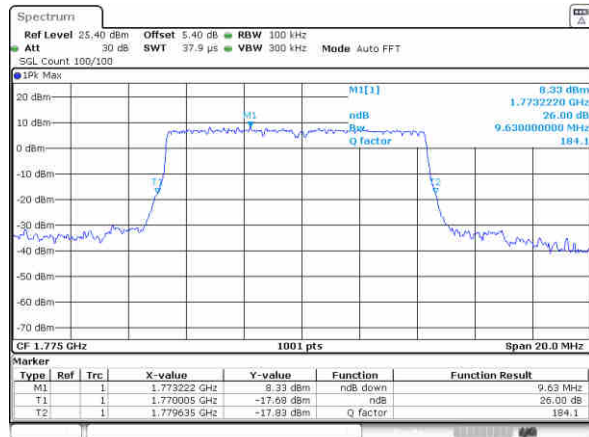
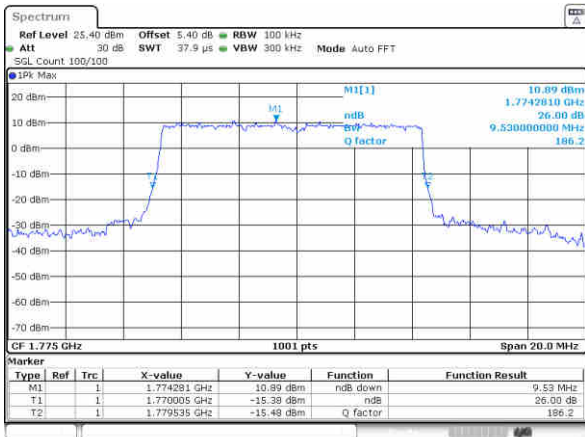


Date: 28_JUN,2020 23:10:59

Date: 28_JUN,2020 23:11:24

Highest Channel

Highest Channel



Date: 28_JUN,2020 23:16:28

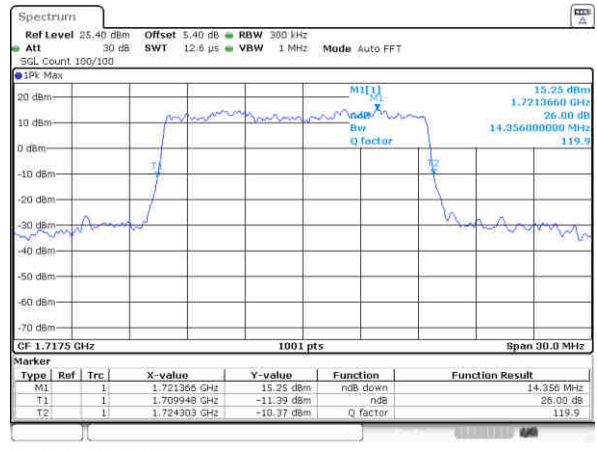
Date: 28_JUN,2020 23:17:03



FR1 n66 / 15MHz / DFT-S OFDM

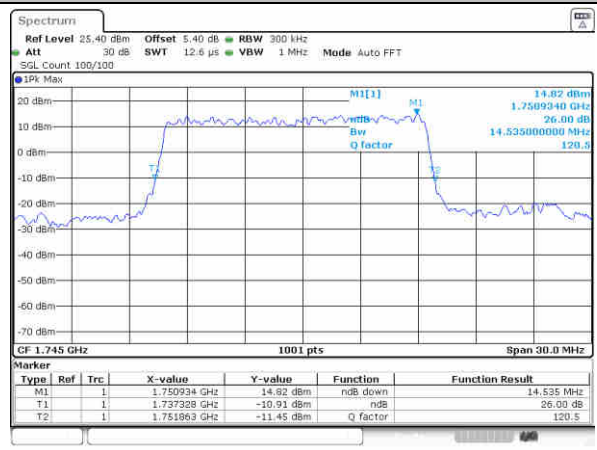
PI/2 BPSK

Lowest Channel



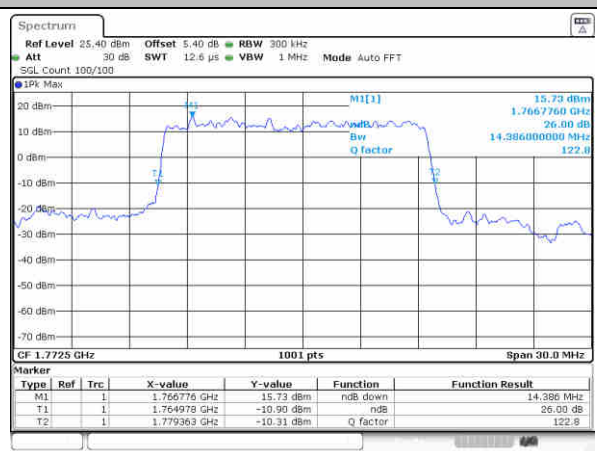
Date: 28-Jul-2020 23:19:42

Middle Channel



Date: 28-Jul-2020 23:24:34

Highest Channel



Date: 28-Jul-2020 23:27:09



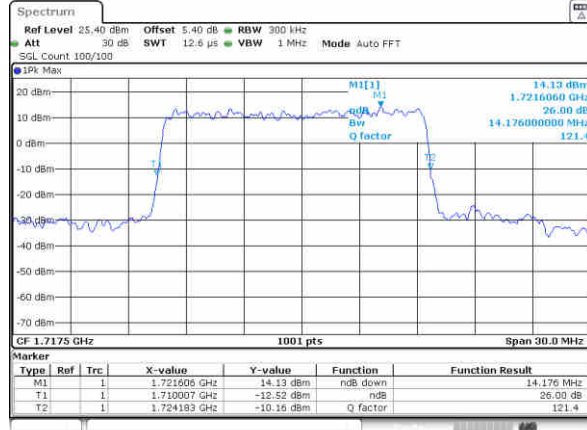
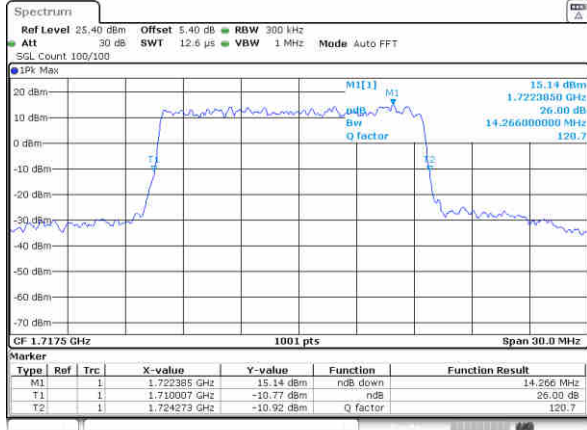
FR1 n66 / 15MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

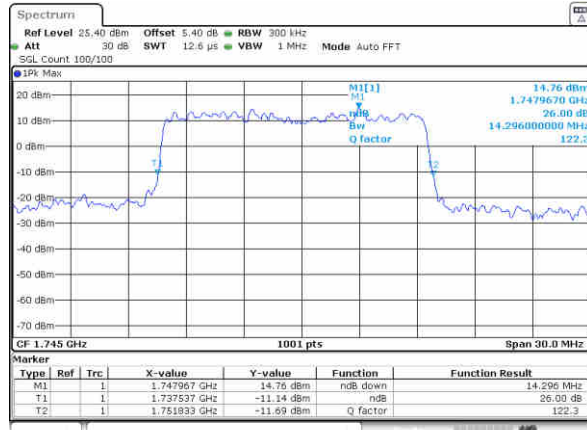
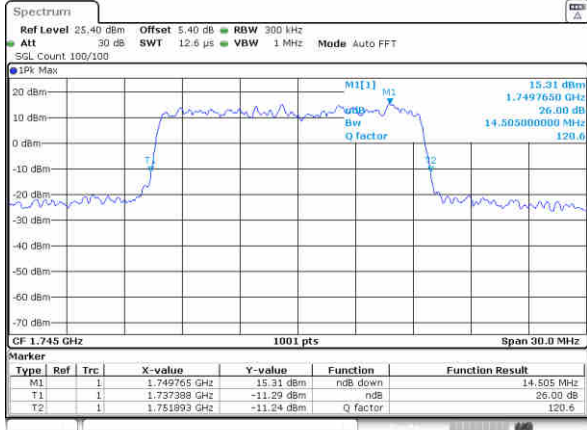


Date: 28_JUN,2020 23:28:18

Date: 28_JUN,2020 23:21:02

Middle Channel

Middle Channel



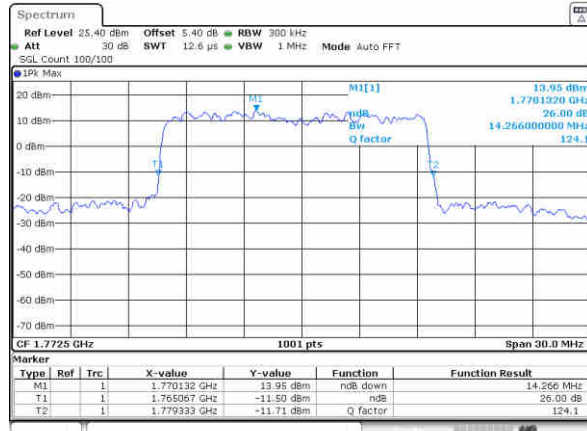
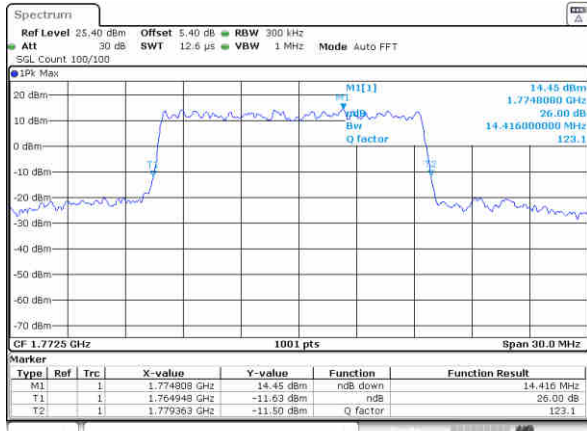
Date: 28_JUN,2020 23:24:51

Date: 28_JUN,2020 23:25:04

K

Highest Channel

Highest Channel



Date: 28_JUN,2020 23:29:23

Date: 28_JUN,2020 23:30:49



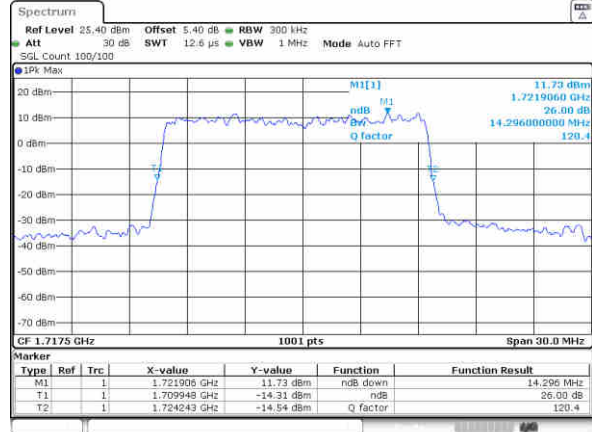
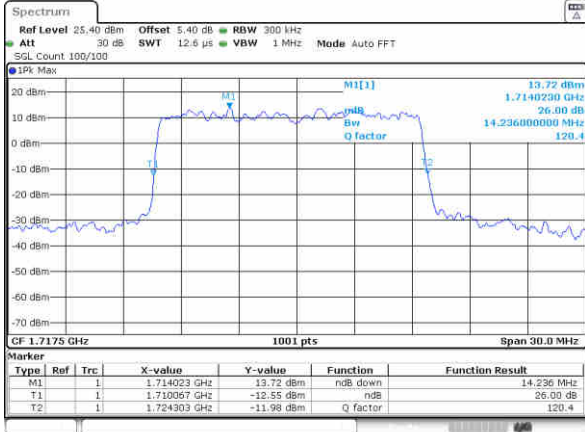
FR1 n66 / 15MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

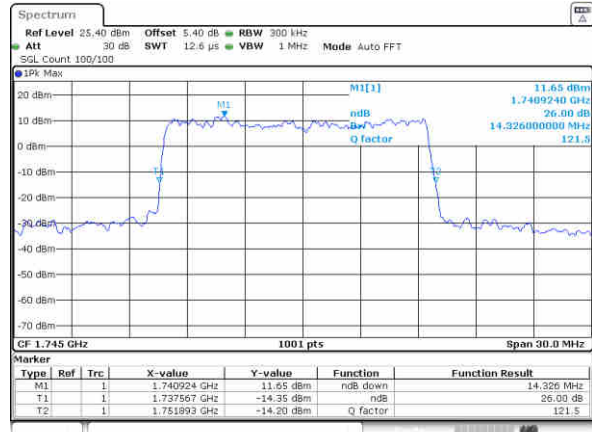
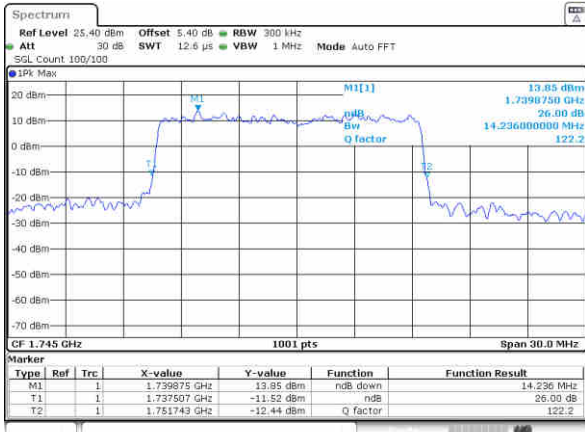


Date: 28_JUN,2020 23:21:58

Date: 28_JUN,2020 23:22:30

Middle Channel

Middle Channel

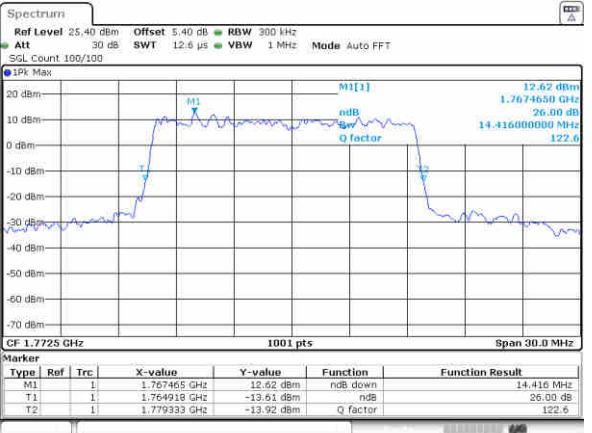
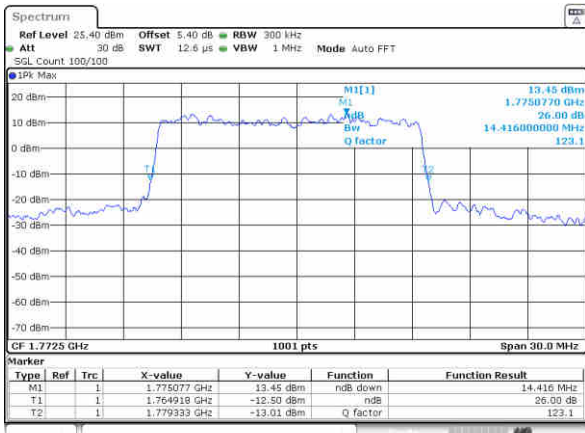


Date: 28_JUN,2020 23:25:21

Date: 28_JUN,2020 23:25:58

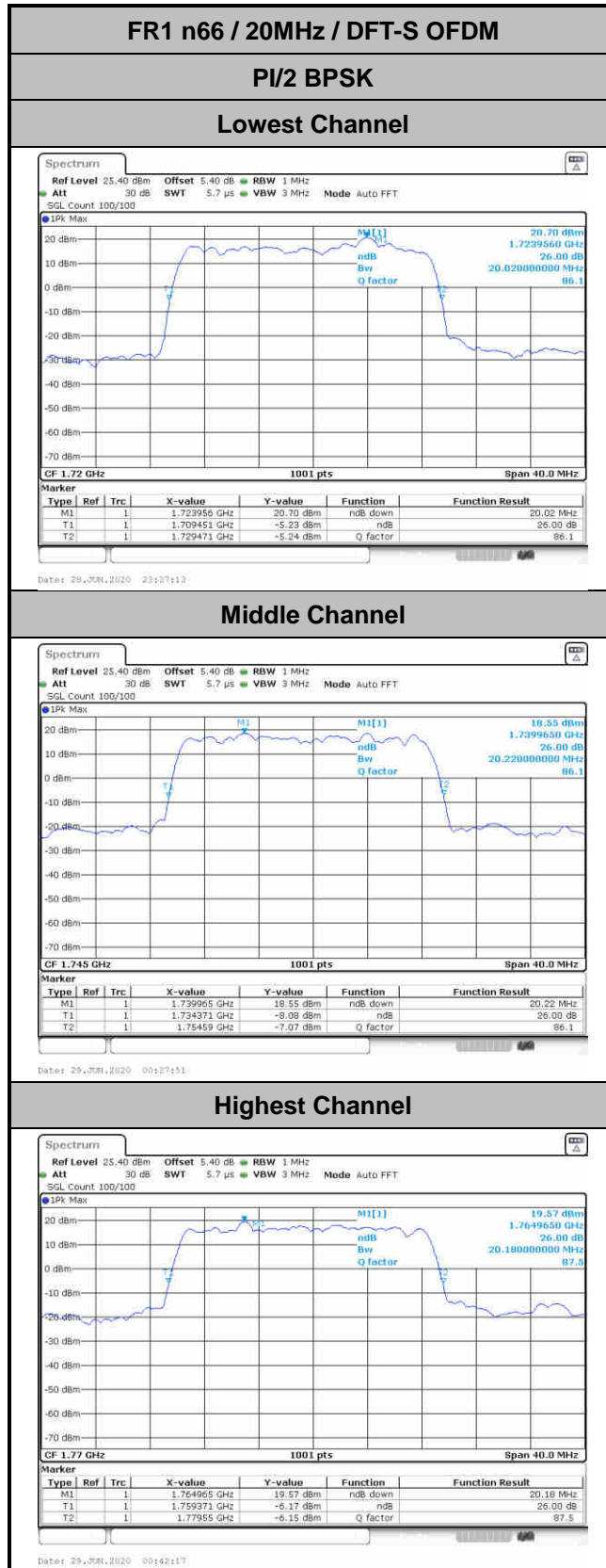
Highest Channel

Highest Channel



Date: 28_JUN,2020 23:32:50

Date: 28_JUN,2020 23:33:28





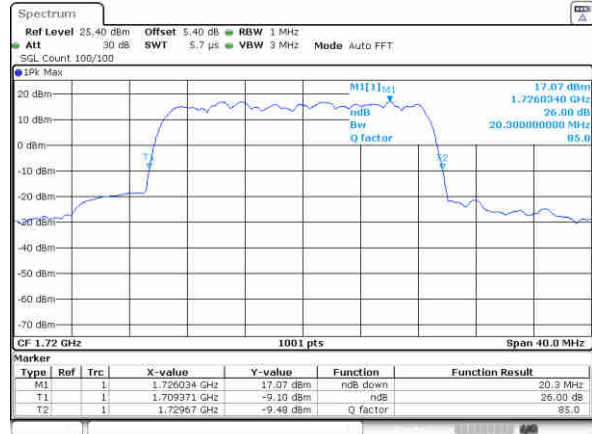
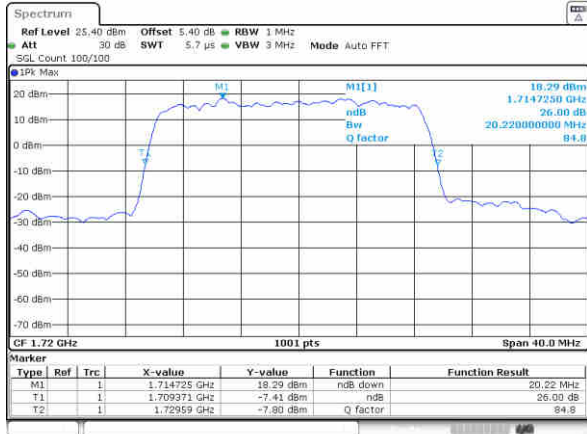
FR1 n66 / 20MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

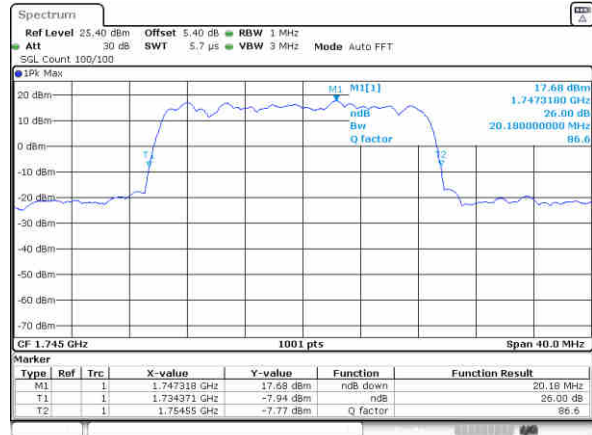
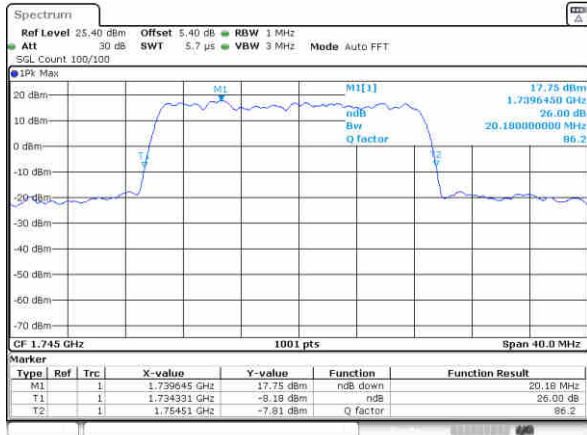


Date: 29_JUN,2020 23:14:25

Date: 29_JUN,2020 23:41:05

Middle Channel

Middle Channel

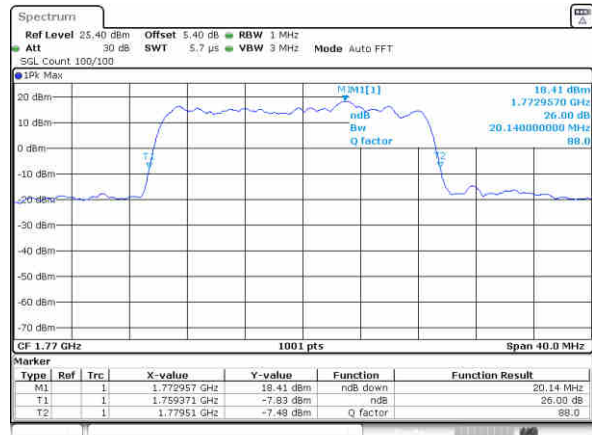
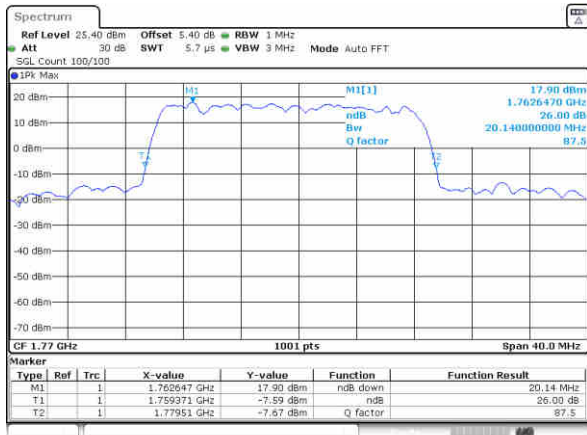


Date: 29_JUN,2020 00:38:07

Date: 29_JUN,2020 00:38:23

Highest Channel

Highest Channel



Date: 29_JUN,2020 00:43:59

Date: 29_JUN,2020 00:44:33



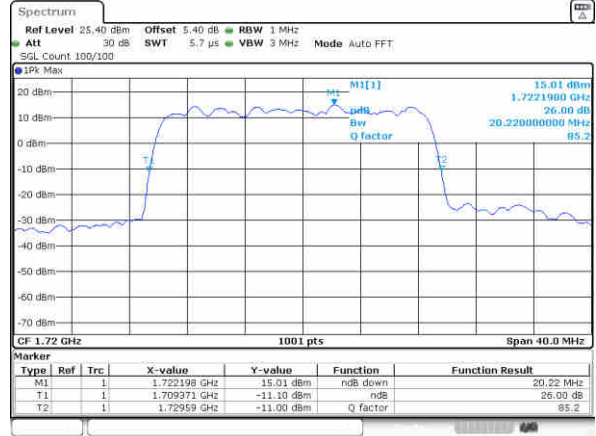
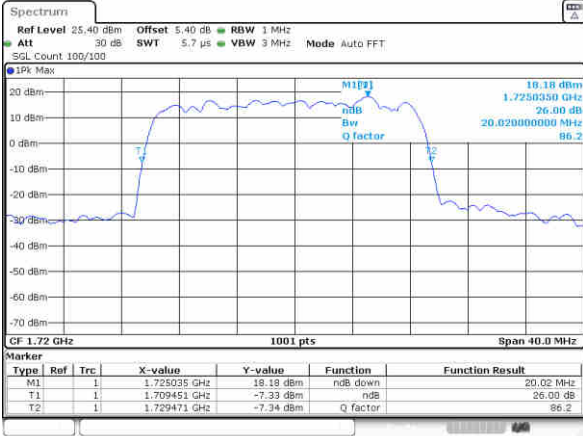
FR1 n66 / 20MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

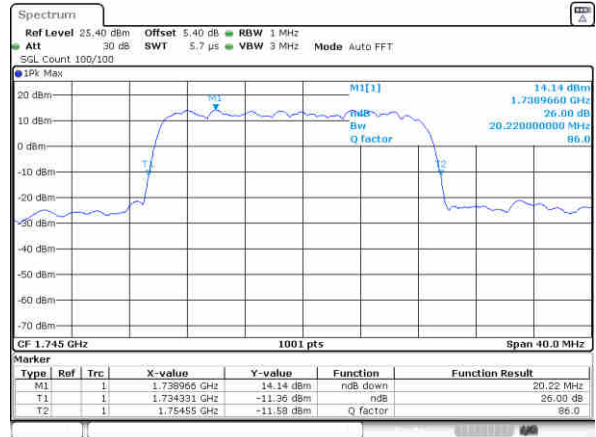
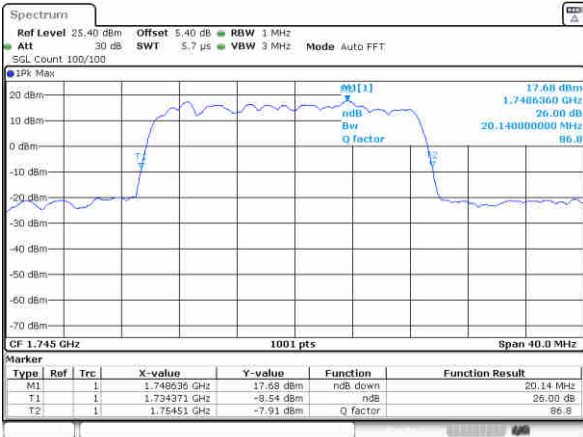


Date: 29_JUN,2020 23:47:33

Date: 29_JUN,2020 23:49:04

Middle Channel

Middle Channel

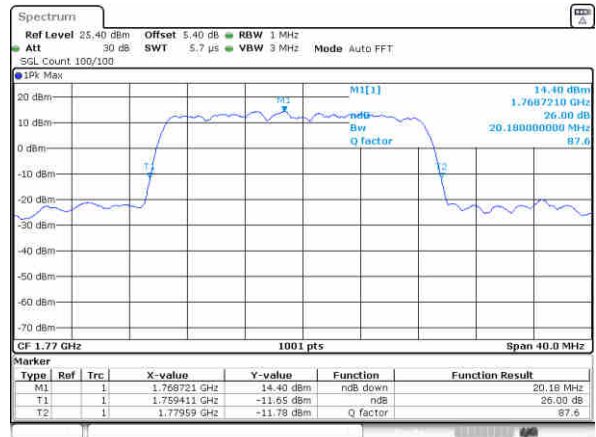
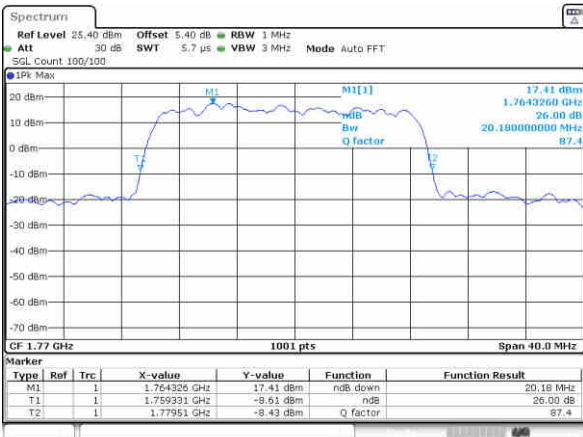


Date: 29_JUN,2020 00:38:58

Date: 29_JUN,2020 00:39:28

Highest Channel

Highest Channel



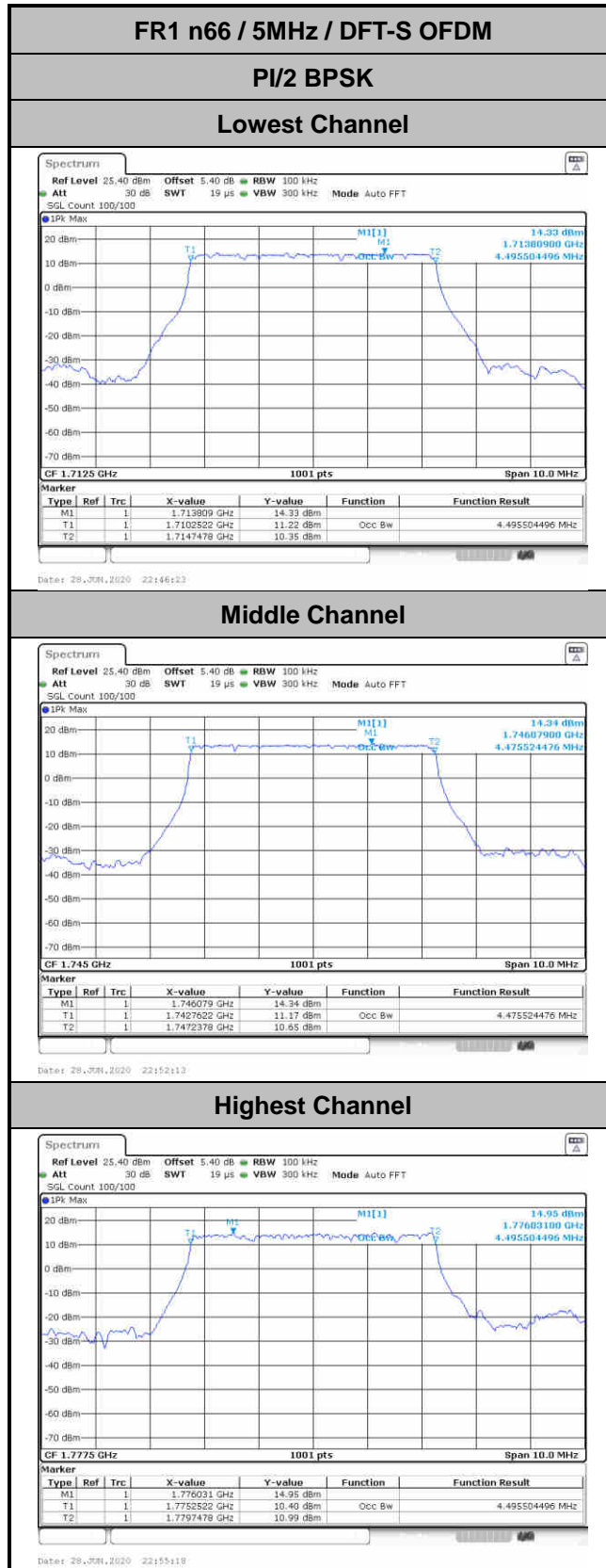
Date: 29_JUN,2020 00:45:57

Date: 29_JUN,2020 00:46:43



Occupied Bandwidth

Mode	FR1 n66 : 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	4.50		8.89		13.52		18.30	
Middle CH	4.48		8.91		13.52		18.38	
Highest CH	4.50		8.91		13.49		18.34	
Mode	FR1 n66 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.50	4.49	8.89	8.89	13.49	13.52	18.34	18.22
Middle CH	4.50	4.50	8.91	8.93	13.52	13.49	18.30	18.38
Highest CH	4.50	4.50	8.91	8.89	13.49	13.49	18.38	18.34
Mode	FR1 n66 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	4.50	4.48	8.95	8.93	13.49	13.43	18.26	18.46
Middle CH	4.50	4.47	8.93	8.93	13.49	13.49	18.34	18.38
Highest CH	4.51	4.49	8.93	8.91	13.52	13.49	18.38	18.34





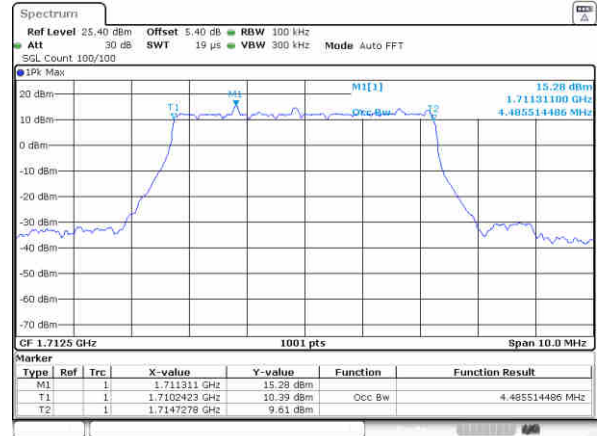
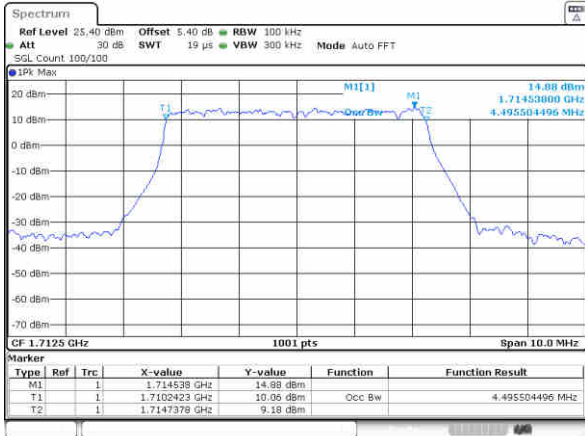
FR1 n66 / 5MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

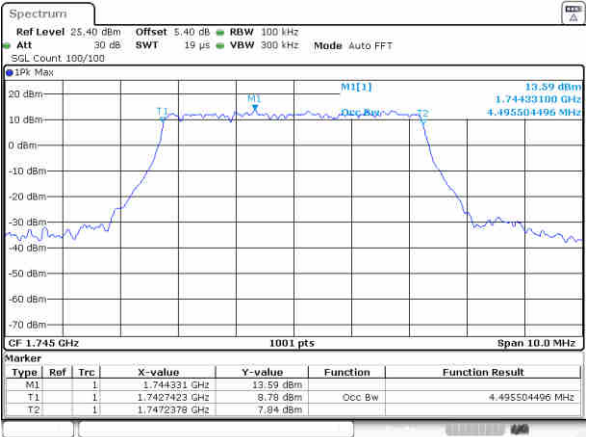
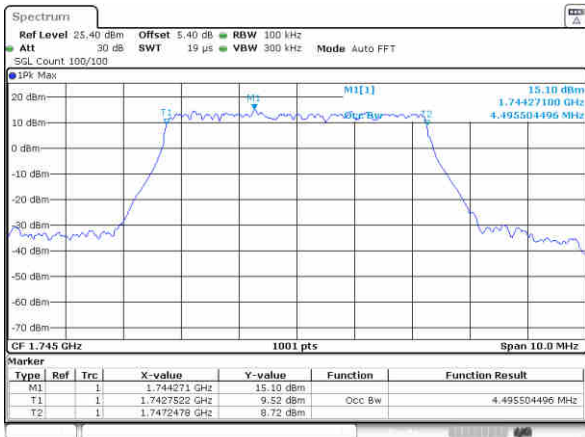


Date: 29_JUN.2020 22:47:42

Date: 29_JUN.2020 22:47:55

Middle Channel

Middle Channel

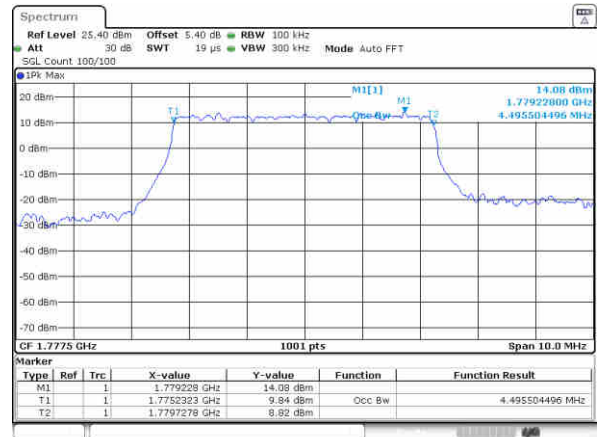
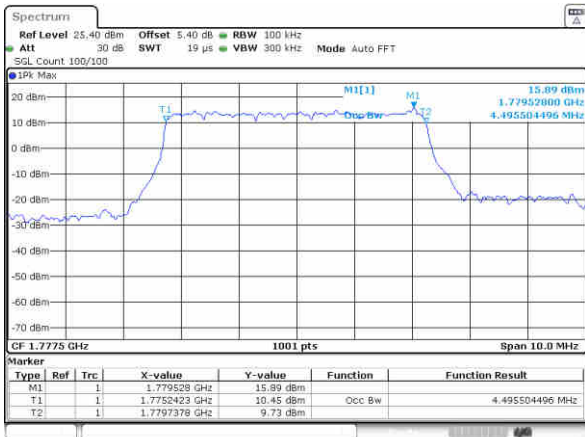


Date: 29_JUN.2020 22:52:36

Date: 29_JUN.2020 22:53:02

Highest Channel

Highest Channel



Date: 29_JUN.2020 22:57:08

Date: 29_JUN.2020 22:57:20



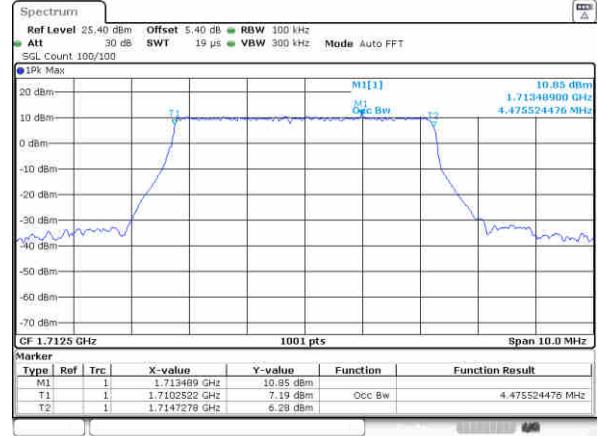
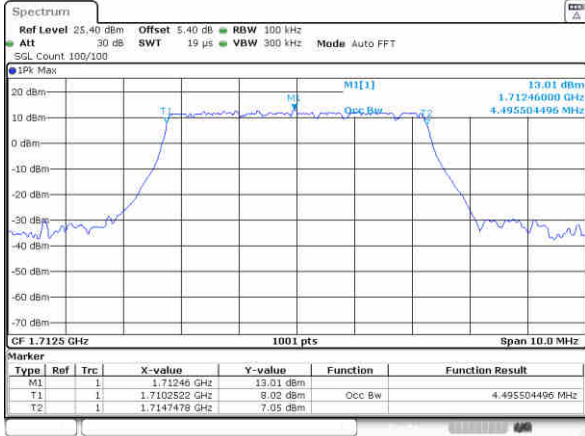
FR1 n66 / 5MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

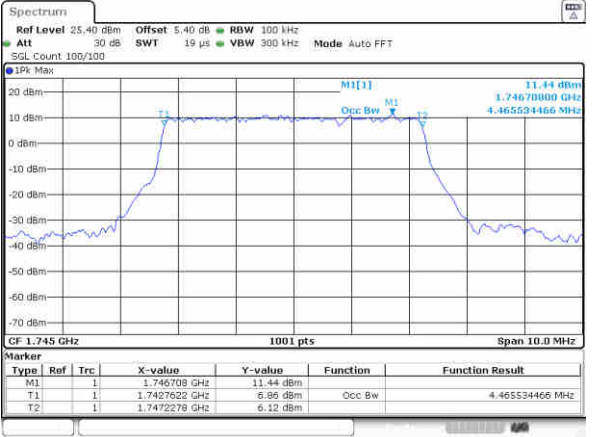
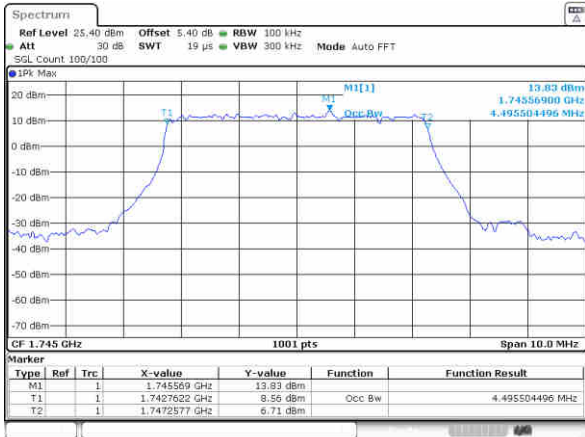


Date: 29_JUN,2020 22:14:48

Date: 29_JUN,2020 22:15:11

Middle Channel

Middle Channel

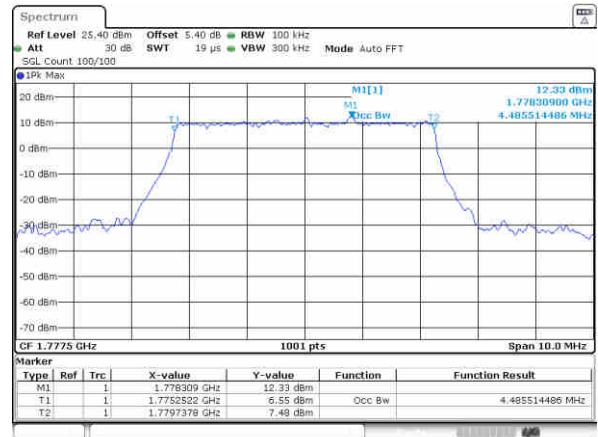
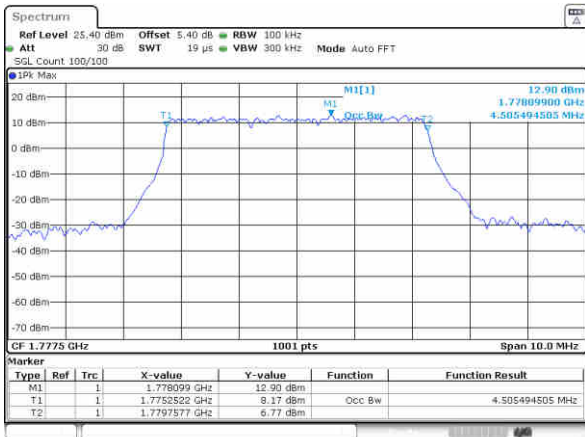


Date: 29_JUN,2020 22:53:14

Date: 29_JUN,2020 22:53:49

Highest Channel

Highest Channel



Date: 29_JUN,2020 22:15:28

Date: 29_JUN,2020 22:15:55

