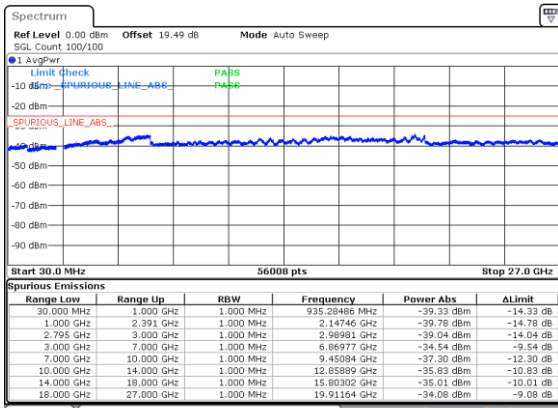


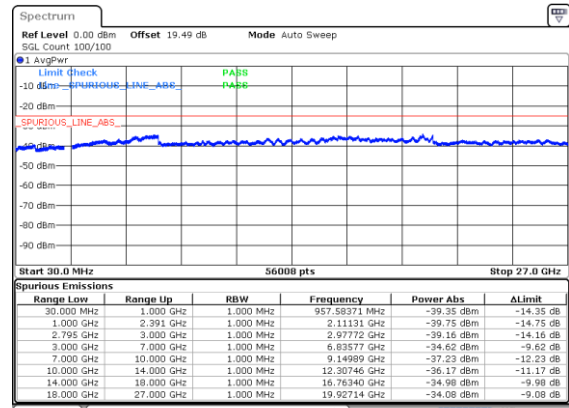


N41 90MHz

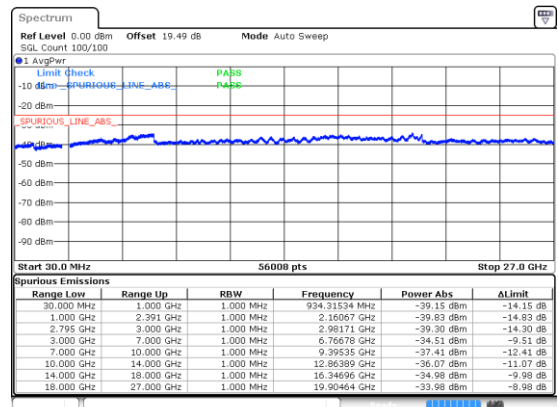
Lowest Channel / BPSK



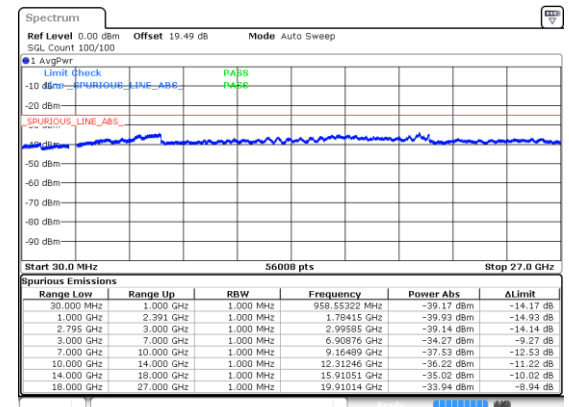
Lowest Channel / QPSK



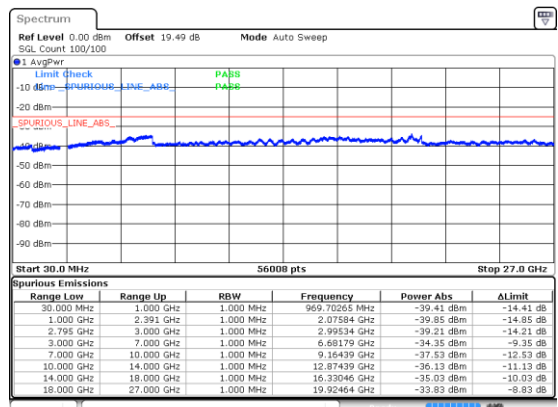
Middle Channel / BPSK



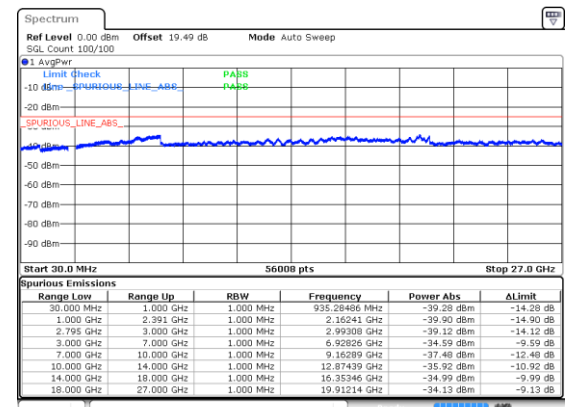
Middle Channel / QPSK



Highest Channel / BPSK



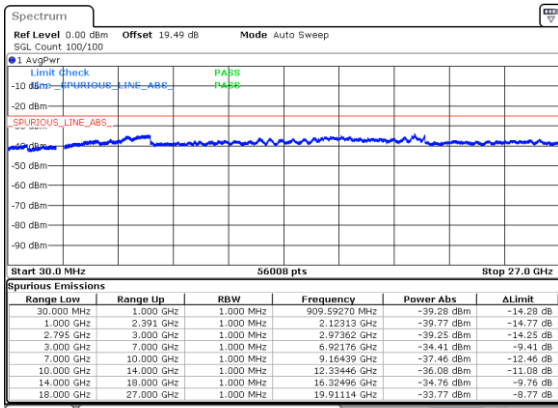
Highest Channel / QPSK



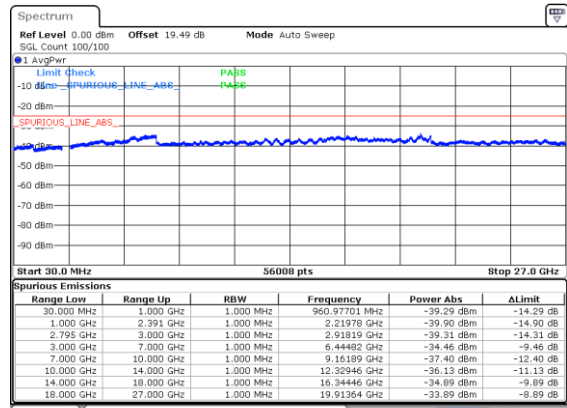


N41 90MHz

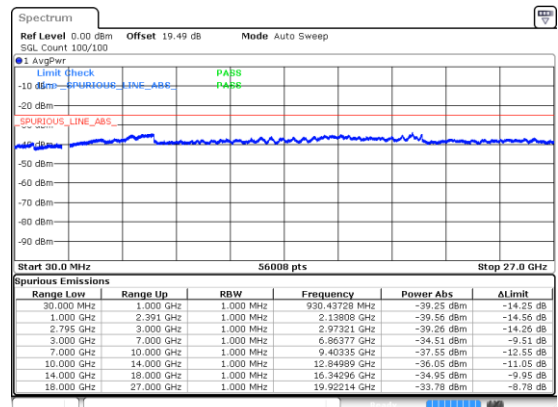
Lowest Channel / 16QAM



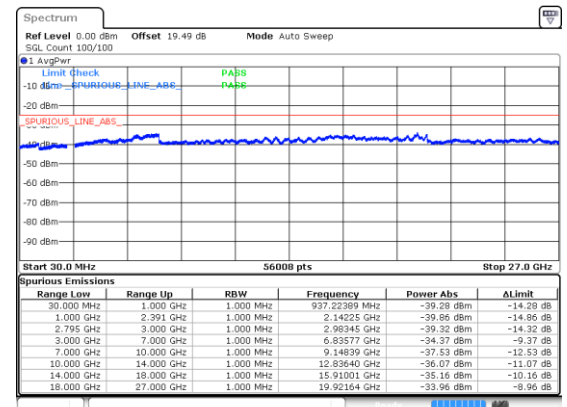
Lowest Channel / 64QAM



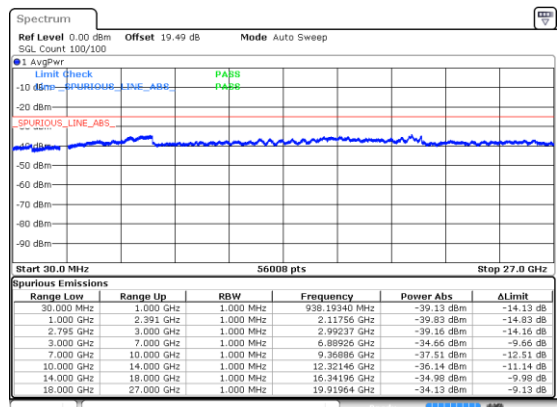
Middle Channel / 16QAM



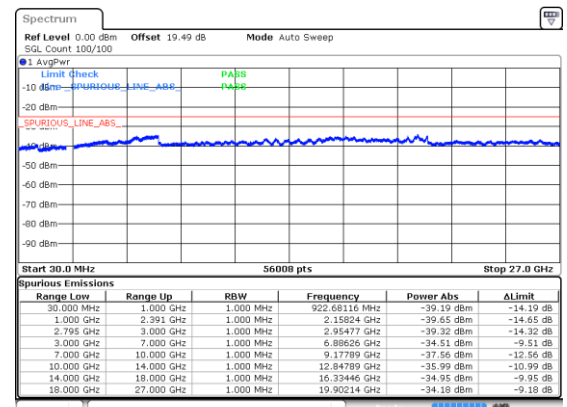
Middle Channel / 64QAM



Highest Channel / 16QAM



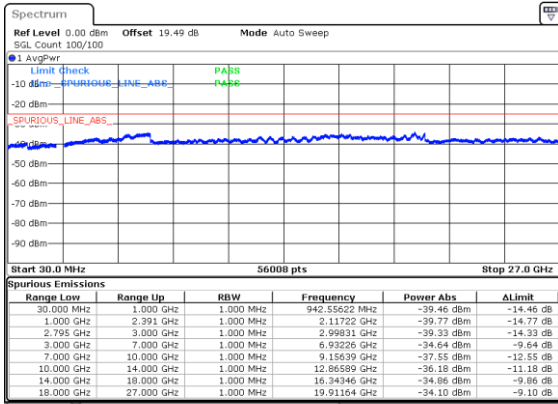
Highest Channel / 64QAM



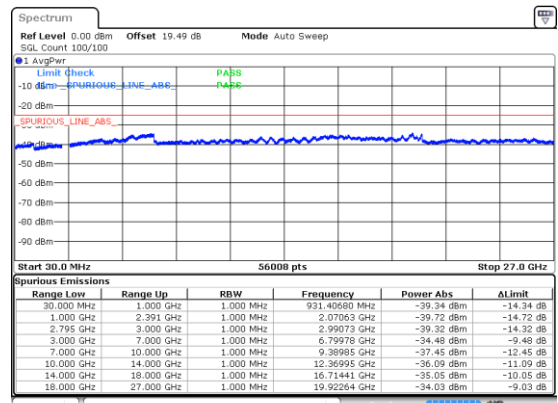


N41 90MHz

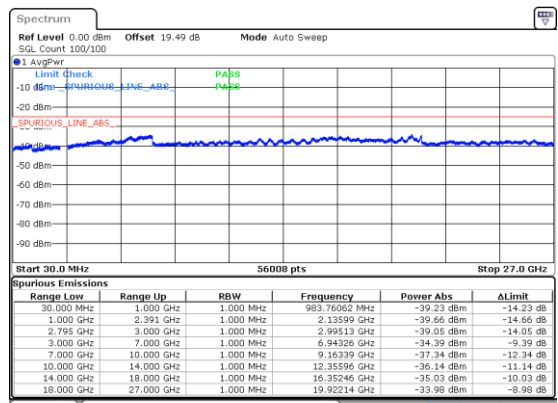
Lowest Channel / 256QAM



Middle Channel / 256QAM



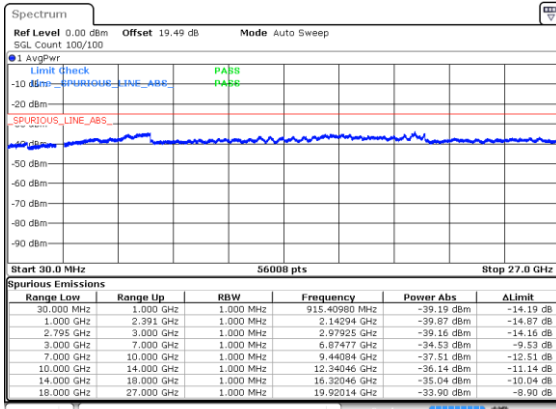
Highest Channel / 256QAM



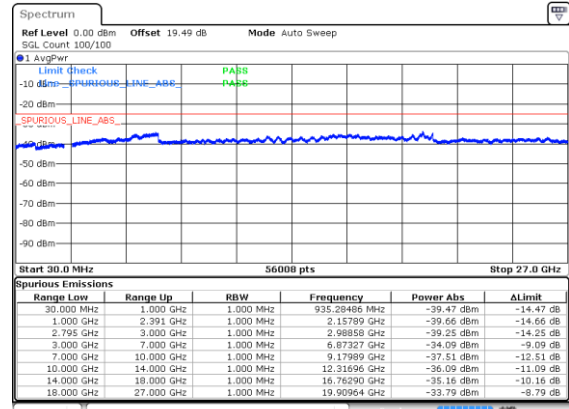


N41 100MHz

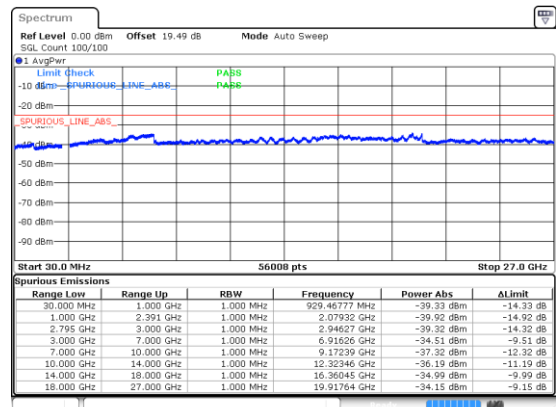
Lowest Channel / BPSK



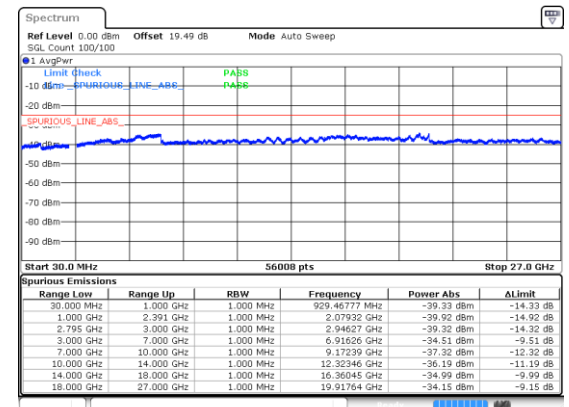
Lowest Channel / QPSK



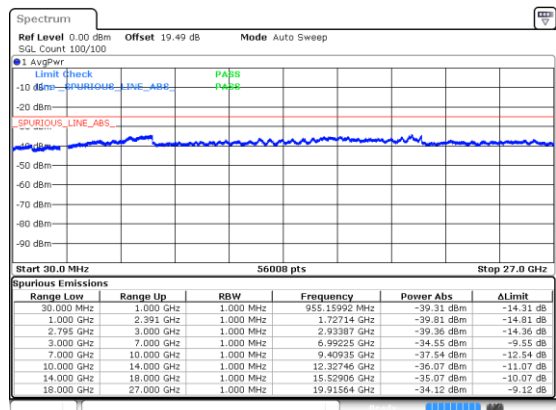
Middle Channel / BPSK



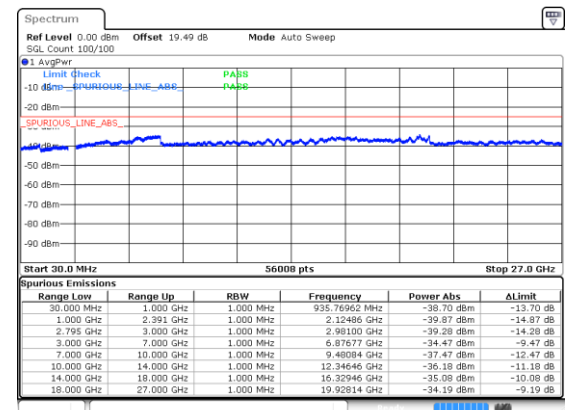
Middle Channel / QPSK



Highest Channel / BPSK



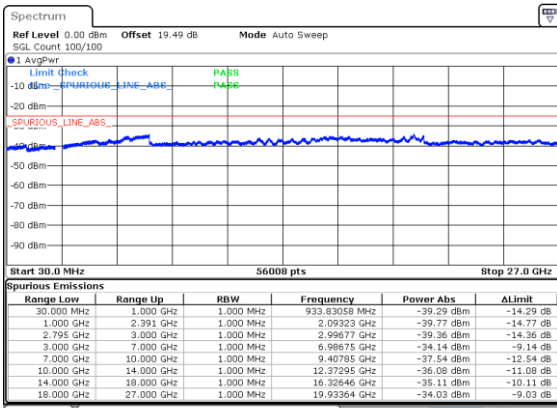
Highest Channel / QPSK



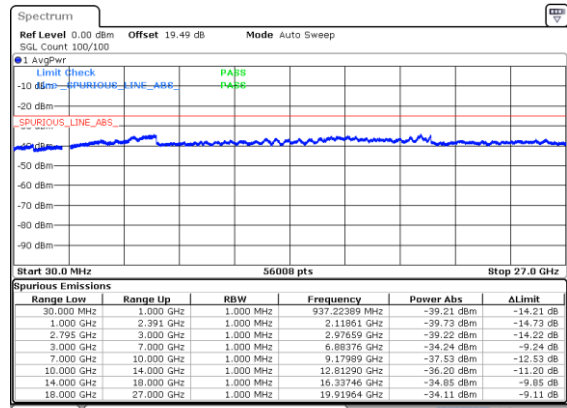


N41 100MHz

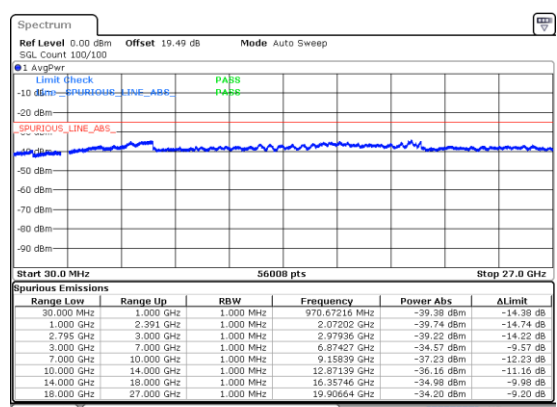
Lowest Channel / 16QAM



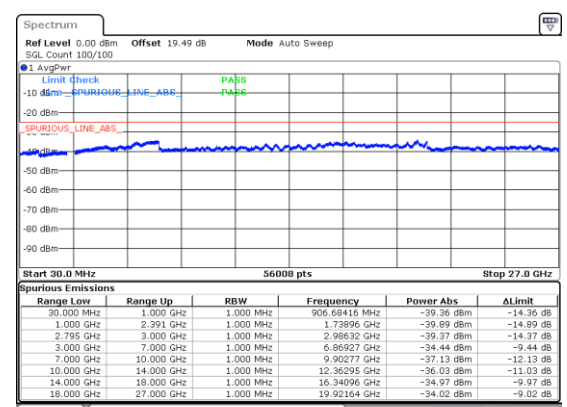
Lowest Channel / 64QAM



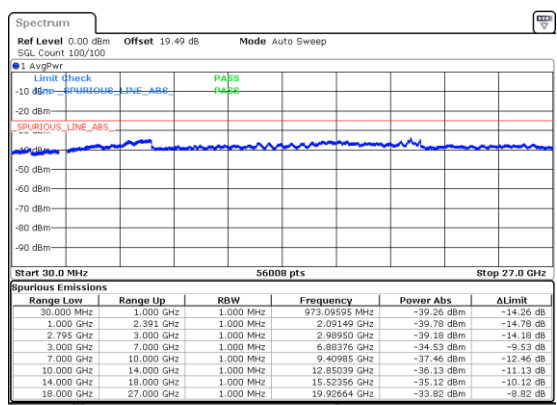
Middle Channel / 16QAM



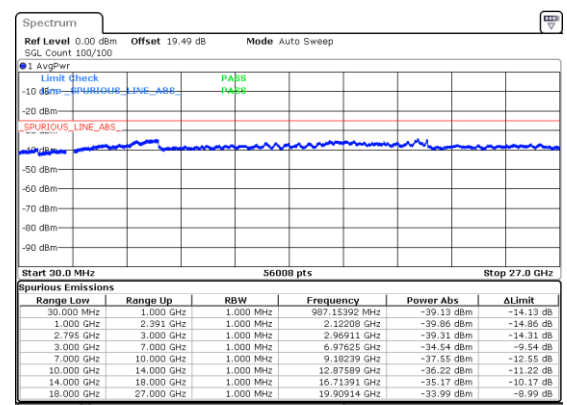
Middle Channel / 64QAM



Highest Channel / 16QAM



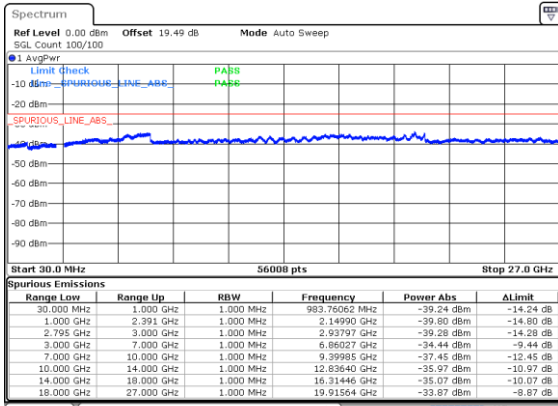
Highest Channel / 64QAM



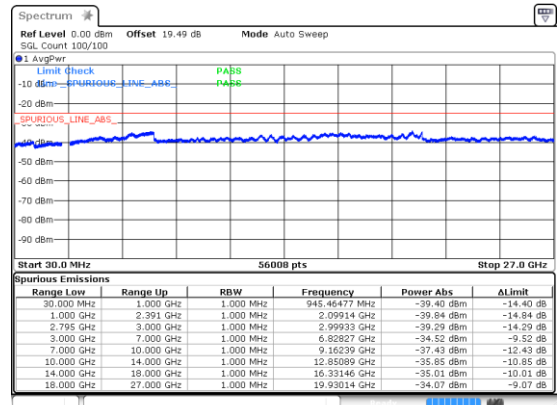


N41 100MHz

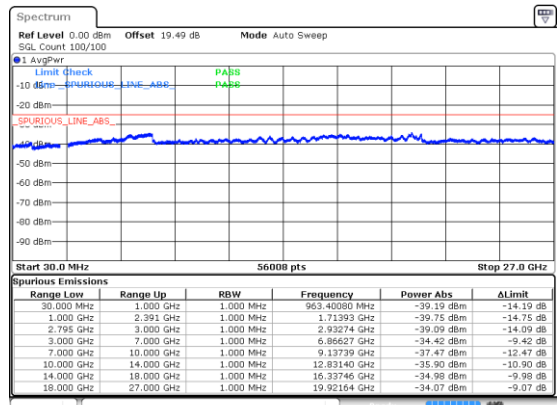
Lowest Channel / 256QAM



Middle Channel / 256QAM



Highest Channel / 256QAM





Frequency Stability

Test Conditions		n41 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0018	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0013	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0008	

Note:

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



# 5G NR n66

## Peak-to-Average Ratio

Mode	N66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.70	5.30	5.54	6.43	PASS
Middle CH	4.87	5.28	6.03	6.41	
Highest CH	4.81	5.36	5.77	6.49	
Mode	N66 / 20MHz				
Mod.	64QAM		256QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	6.32	6.90	6.96	7.36	PASS
Middle CH	6.55	6.87	6.84	7.48	
Highest CH	6.41	6.90	7.16	7.39	
Mode	N66 / 20MHz				
Mod.	BPSK				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	4.99	4.75			PASS
Middle CH	5.19	4.52			
Highest CH	5.07	4.72			





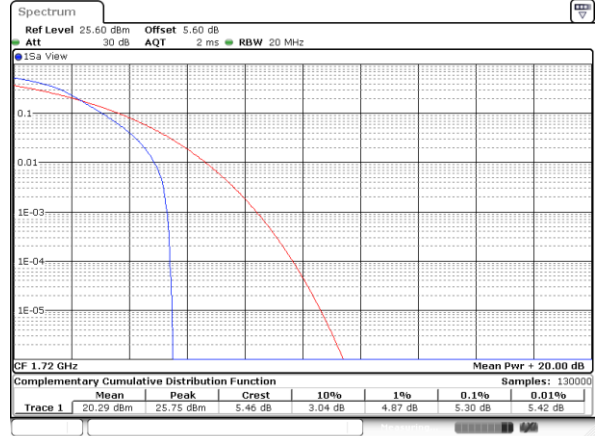
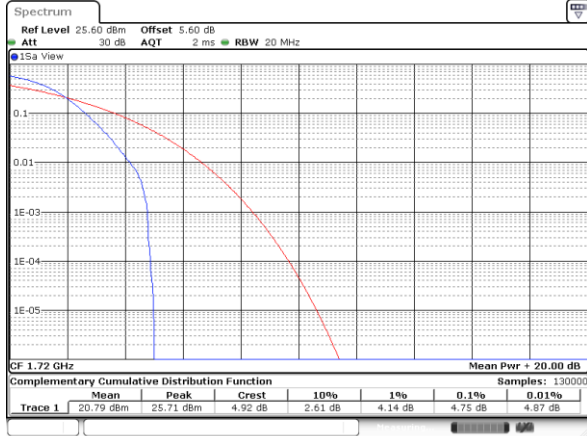
5G NR n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

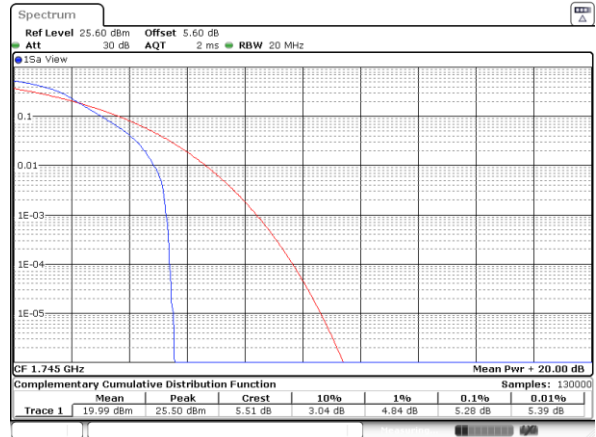
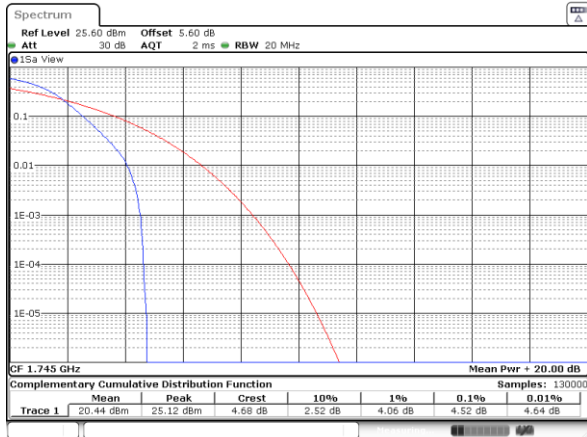


Date: 29 JUN 2020 00:36:22

Date: 29 JUN 2020 00:36:52

Middle Channel / Full RB

Middle Channel / Full RB

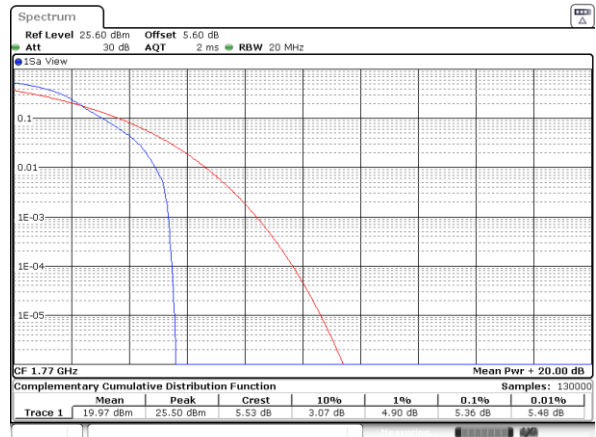
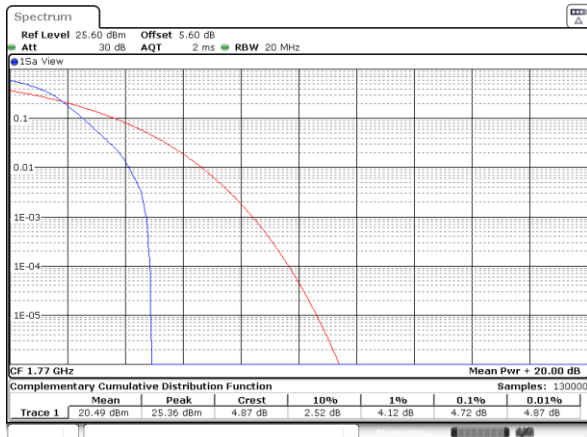


Date: 29 JUN 2020 01:03:45

Date: 29 JUN 2020 01:04:08

Highest Channel / Full RB

Highest Channel / Full RB



Date: 29 JUN 2020 01:11:07

Date: 29 JUN 2020 01:11:43



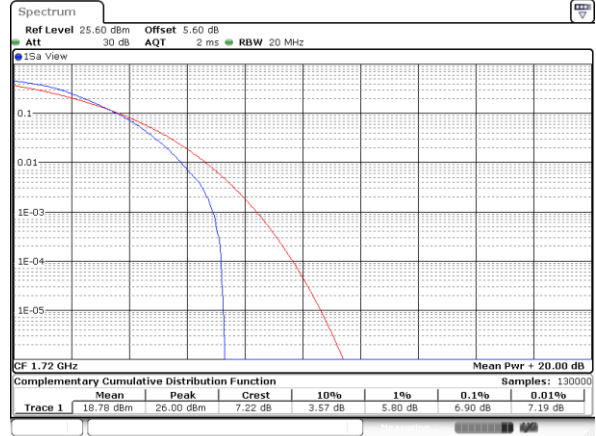
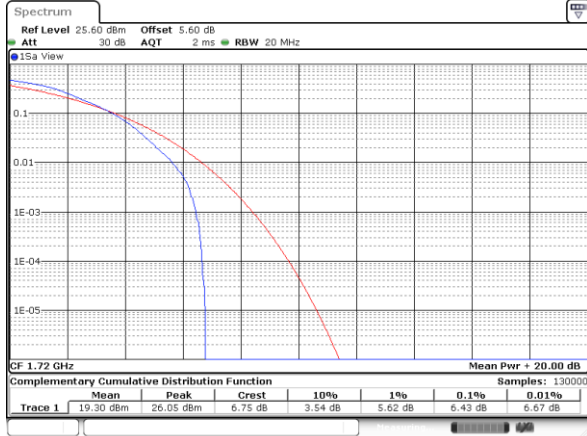
5G NR n66 / 20MHz / DFT-S OFDM

16QAM

64QAM

Lowest Channel / Full RB

Lowest Channel / Full RB

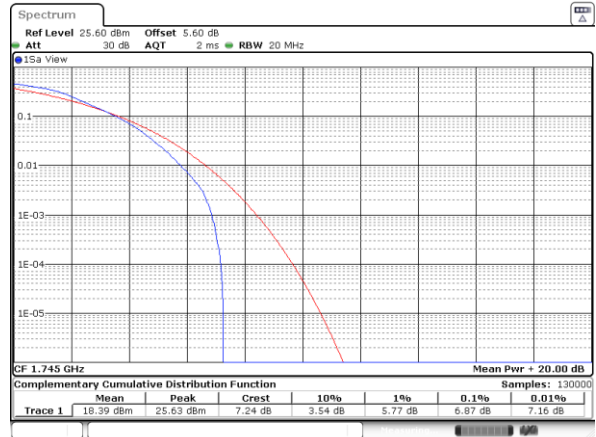
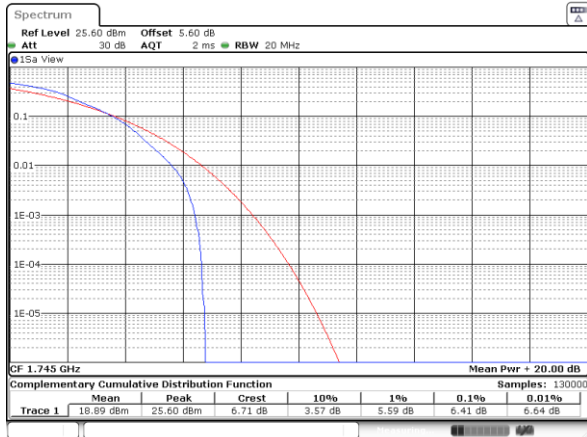


Date: 29 JUN 2020 00:39:36

Date: 29 JUN 2020 00:40:17

Middle Channel / Full RB

Middle Channel / Full RB

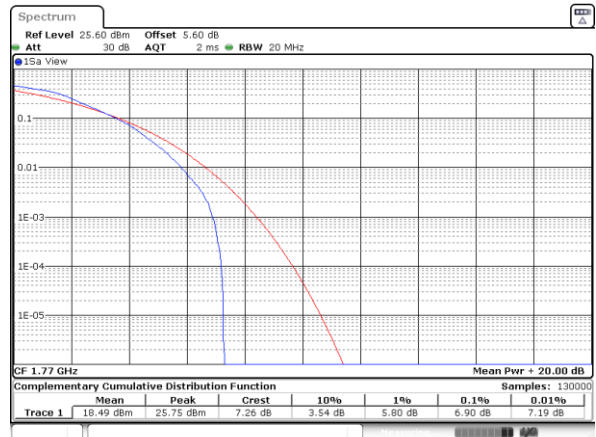
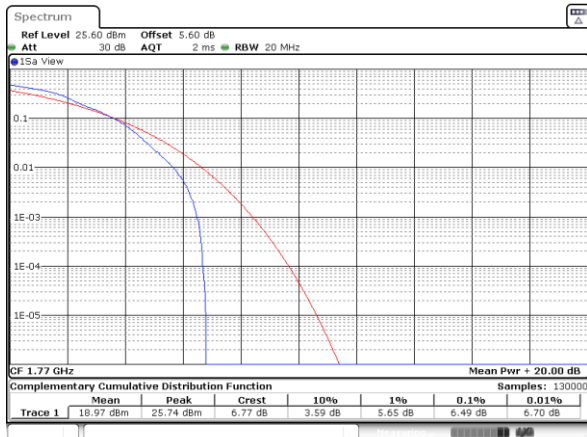


Date: 29 JUN 2020 01:04:34

Date: 29 JUN 2020 01:05:01

Highest Channel / Full RB

Highest Channel / Full RB



Date: 29 JUN 2020 01:12:22

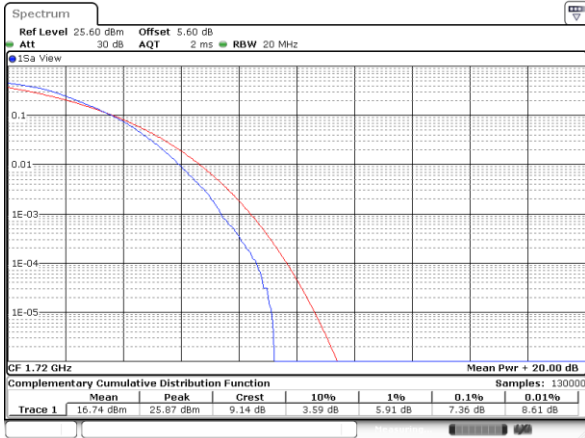
Date: 29 JUN 2020 01:12:59

5G NR n66 / 20MHz / DFT-S OFDM



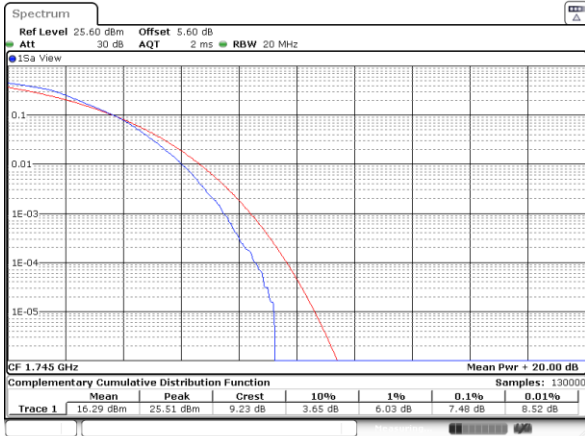
256QAM

Lowest Channel / 1RB0



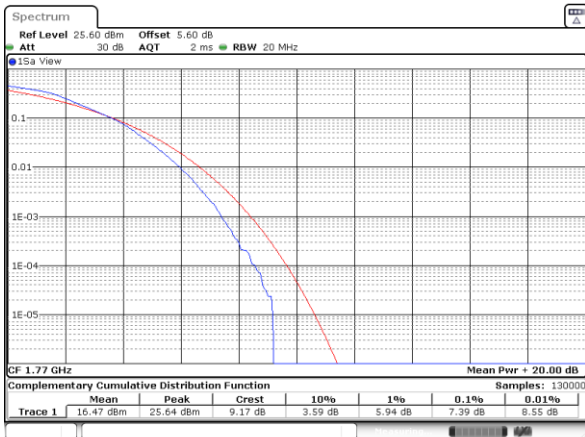
Date: 29 JUN 2020 00:41:11

Middle Channel / 1RB0



Date: 29 JUN 2020 01:06:11

Highest Channel / 1RB0



Date: 29 JUN 2020 01:13:38



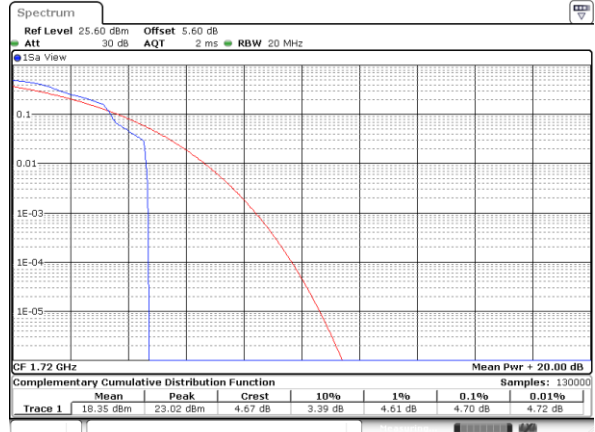
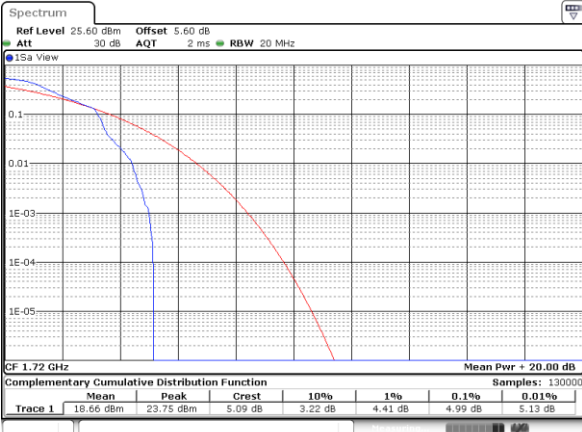
5G NR n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / 1RB0

Lowest Channel / 1RB0

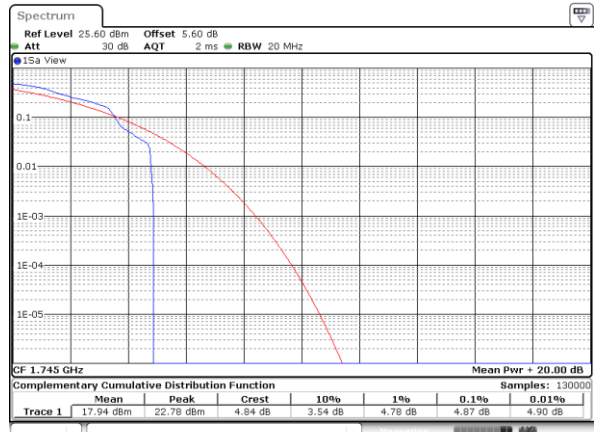
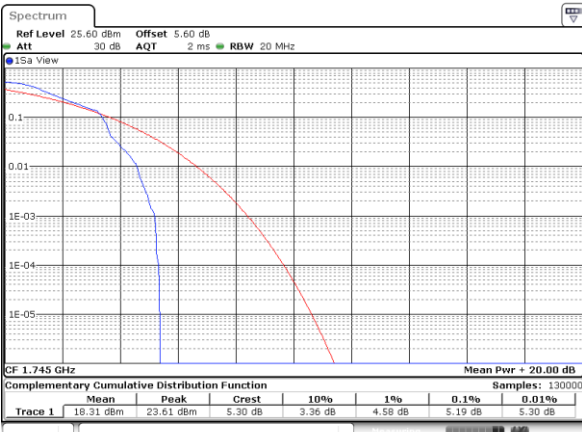


Date: 29 JUN 2020 00:42:10

Date: 29 JUN 2020 00:43:48

Middle Channel / 1RB0

Middle Channel / 1RB0

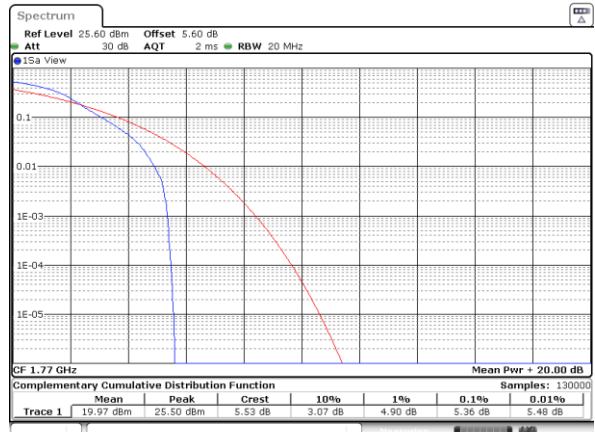
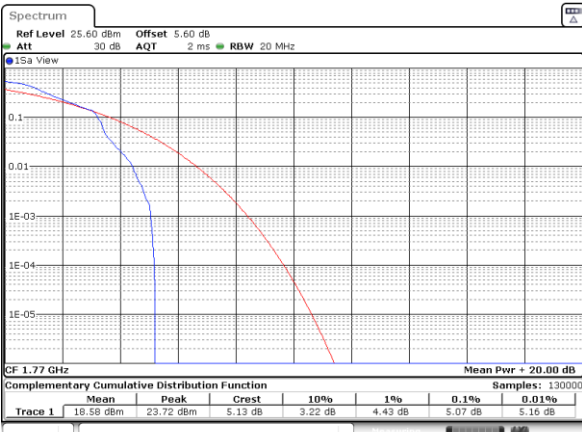


Date: 29 JUN 2020 00:49:01

Date: 29 JUN 2020 00:49:47

Highest Channel / 1RB0

Highest Channel / 1RB0



Date: 29 JUN 2020 01:50:19

Date: 29 JUN 2020 01:11:43



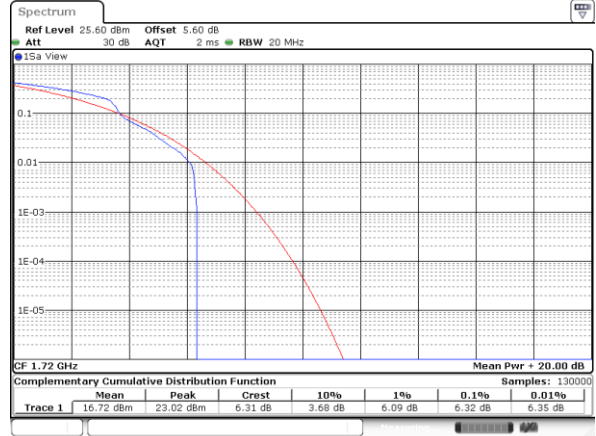
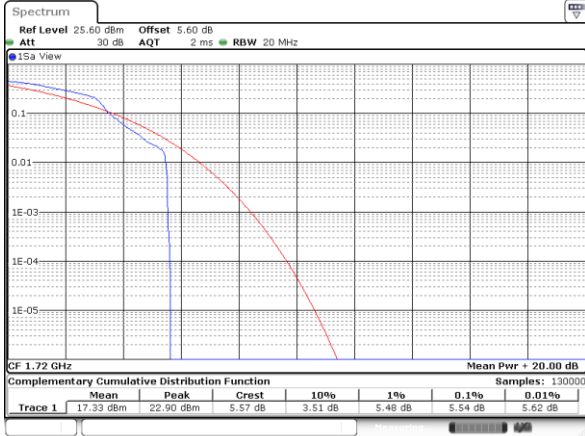
5G NR n66 / 20MHz / DFT-S OFDM

16QAM

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RB0

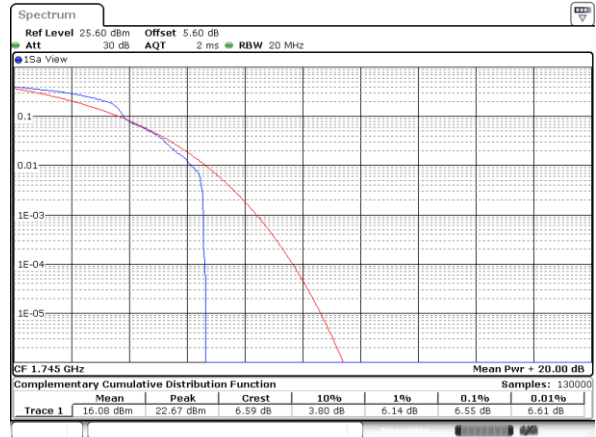
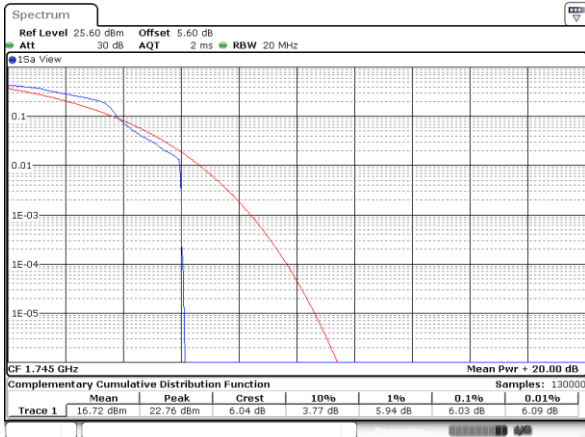


Date: 29 JUN 2020 00:44:50

Date: 29 JUN 2020 00:46:41

Middle Channel / 1RB0

Middle Channel / 1RB0

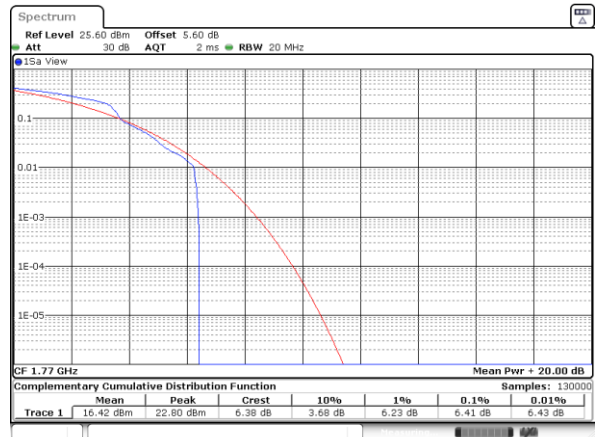
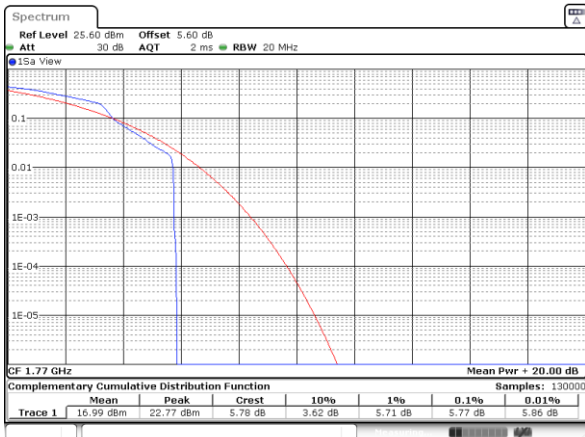


Date: 29 JUN 2020 00:50:39

Date: 29 JUN 2020 00:51:24

Highest Channel / 1RB0

Highest Channel / 1RB0



Date: 29 JUN 2020 01:49:58

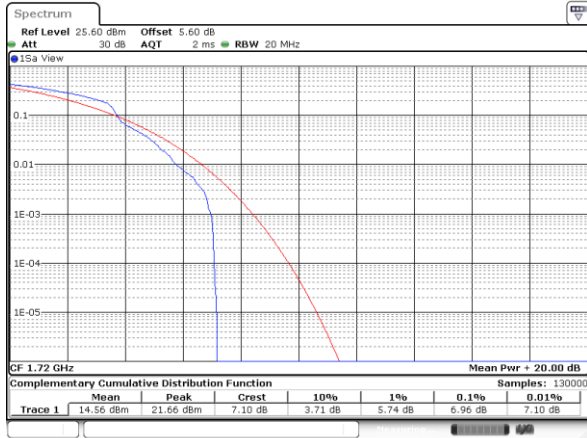
Date: 29 JUN 2020 01:49:45



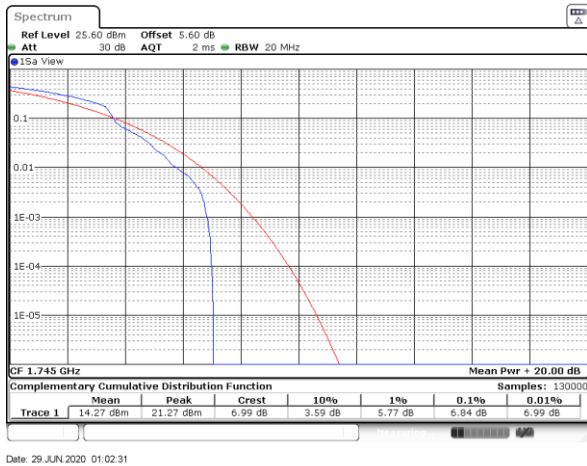
5G NR n66 / 20MHz / DFT-S OFDM

256QAM

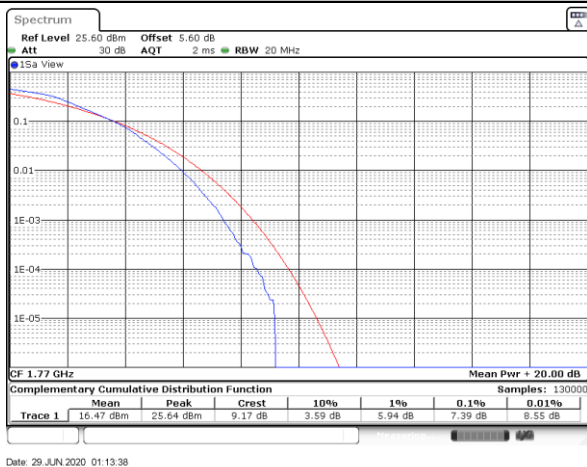
Lowest Channel / 1RB0



Middle Channel / 1RB0



Highest Channel / 1RB0







**26dB Bandwidth**

Mode	5G NR n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI / BPSK		PI / BPSK		PI / BPSK		PI / BPSK	
Lowest CH	5.16		9.75		14.30		20.18	
Middle CH	5.12		9.77		14.18		20.18	
Highest CH	5.08		9.65		14.21		20.26	

Mode	5G NR n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	5.12	5.21	9.67	9.87	14.30	14.42	20.10	20.22
Middle CH	5.04	5.21	10.23	9.89	14.18	14.39	20.26	20.18
Highest CH	5.04	5.24	9.79	9.93	14.33	14.45	20.06	20.22

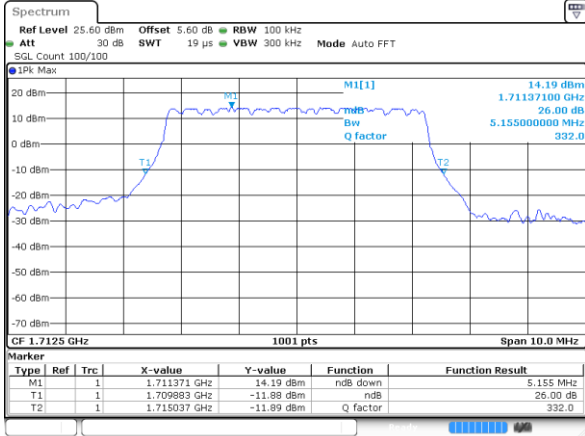
Mode	5G NR n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	5.17	5.09	10.07	9.79	14.45	14.54	20.10	20.14
Middle CH	5.05	5.13	9.87	9.65	14.21	14.21	20.18	20.10
Highest CH	5.21	5.05	9.71	9.99	14.54	14.27	20.14	20.26



5G NR n66 / 5MHz / DFT-S OFDM

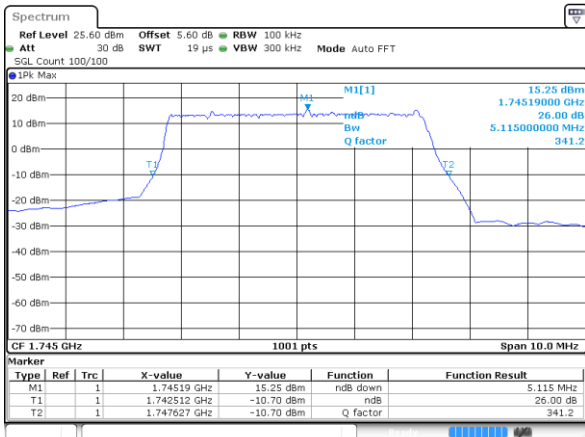
PI / BPSK

Lowest Channel



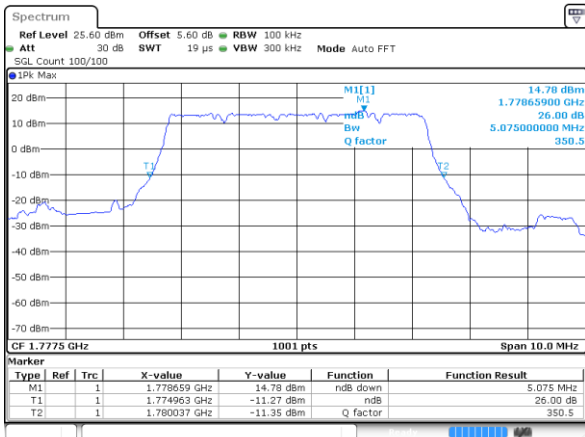
Date: 28 JUN 2020 22:56:09

Middle Channel



Date: 28 JUN 2020 23:21:15

Highest Channel



Date: 28 JUN 2020 23:22:13





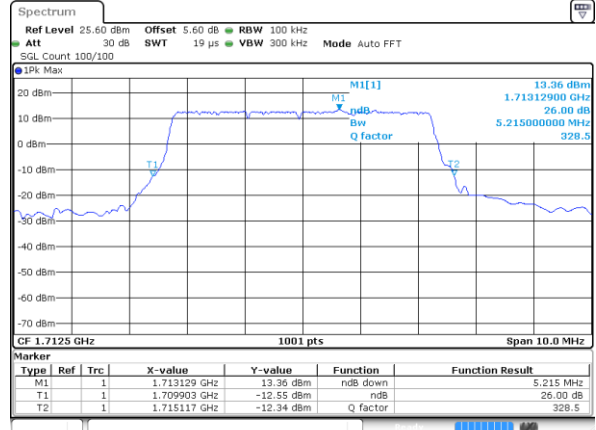
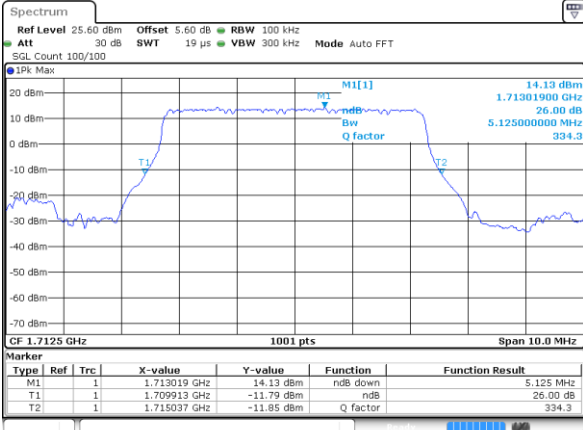
5G NR n66 / 5MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

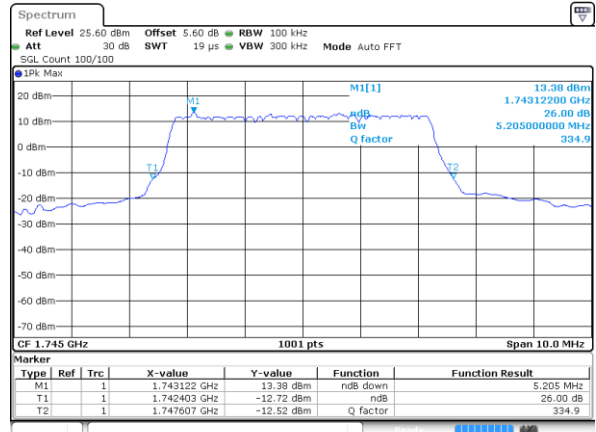
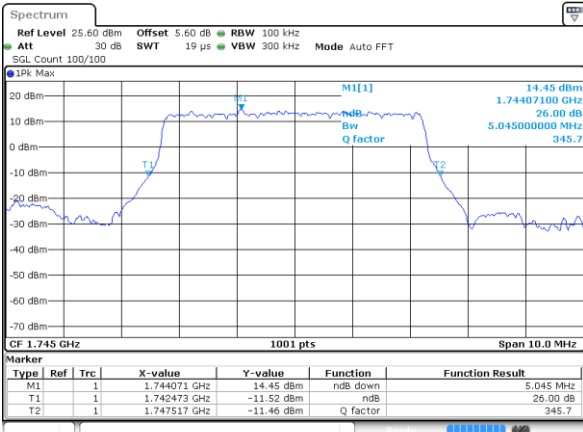


Date: 28 JUN 2020 22:56:56

Date: 28 JUN 2020 23:01:06

Middle Channel

Middle Channel

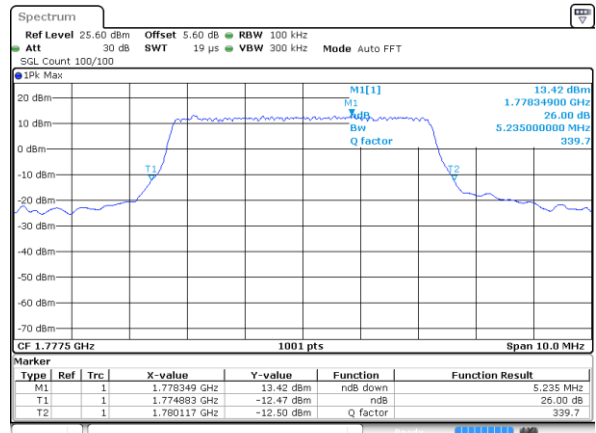
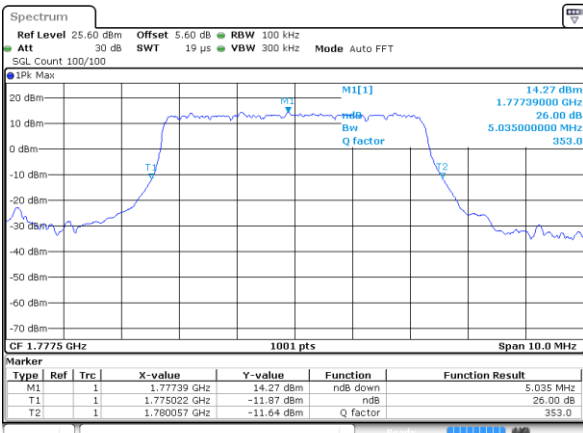


Date: 28 JUN 2020 23:20:58

Date: 28 JUN 2020 23:20:41

Highest Channel

Highest Channel



Date: 28 JUN 2020 23:22:52

Date: 28 JUN 2020 23:23:38



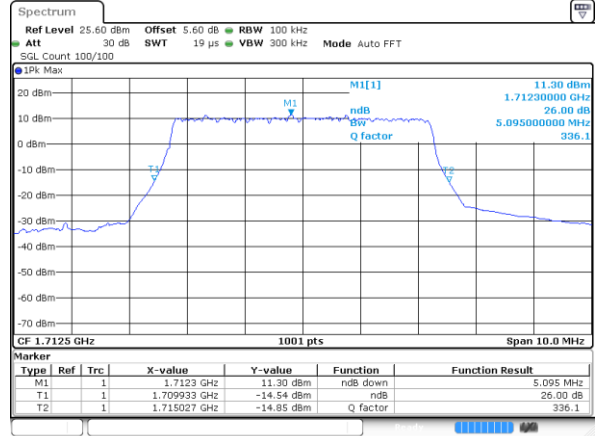
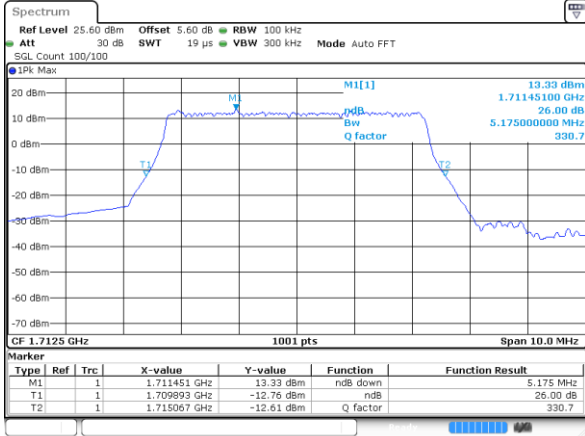
5G NR n66 / 5MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

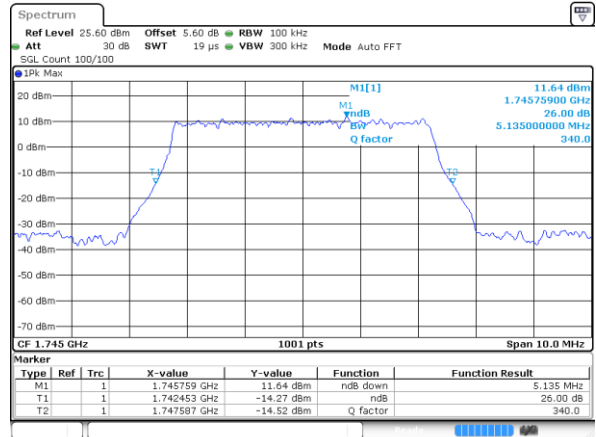
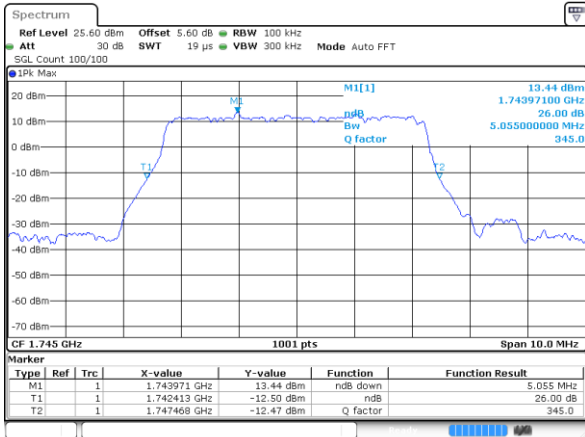


Date: 28 JUN 2020 23 01 40

Date: 28 JUN 2020 23 02 21

Middle Channel

Middle Channel

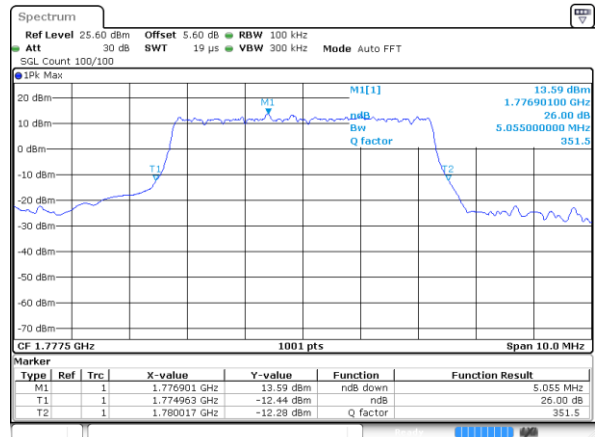
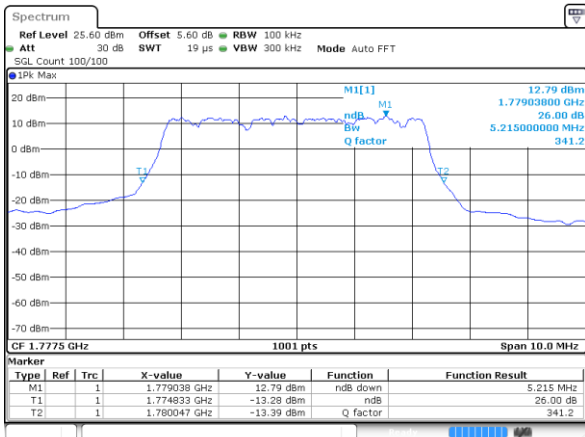


Date: 28 JUN 2020 23 20 23

Date: 28 JUN 2020 23 20 03

Highest Channel

Highest Channel



Date: 28 JUN 2020 23 24 16

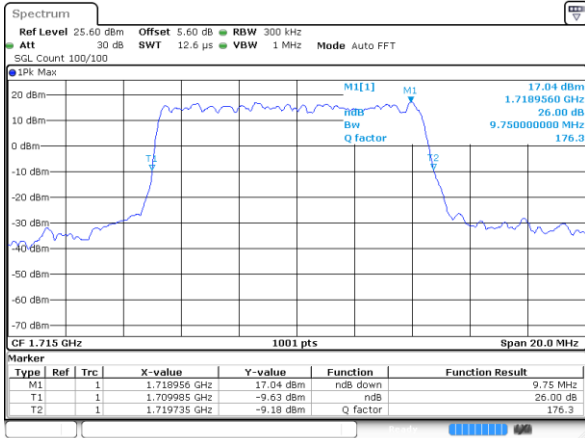
Date: 28 JUN 2020 23 26 22



5G NR n66 / 10MHz / DFT-S OFDM

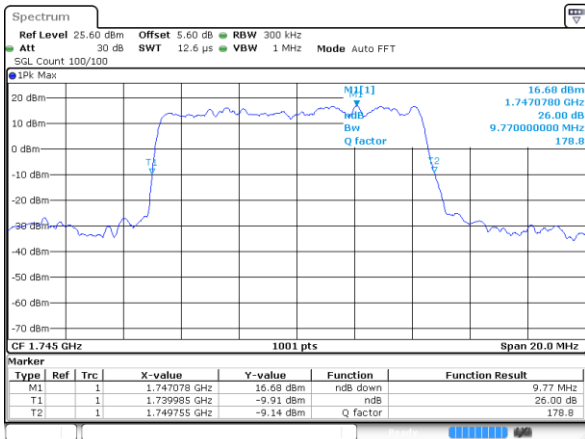
PI / BPSK

Lowest Channel



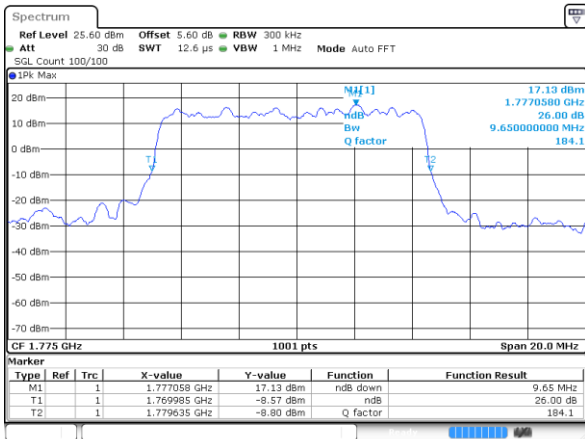
Date: 28 JUN 2020 23:39:36

Middle Channel



Date: 28 JUN 2020 23:55:48

Highest Channel



Date: 28 JUN 2020 23:57:50



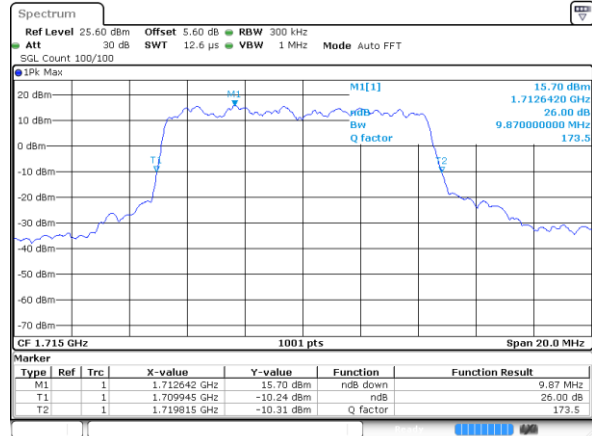
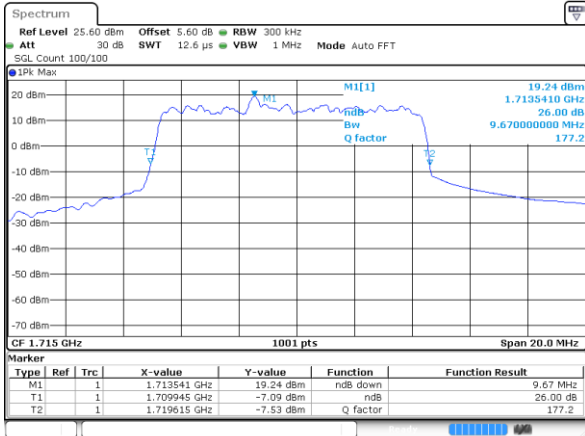
5G NR n66 / 10MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

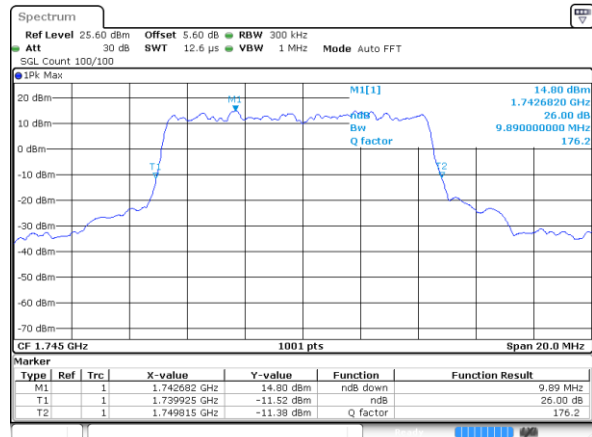
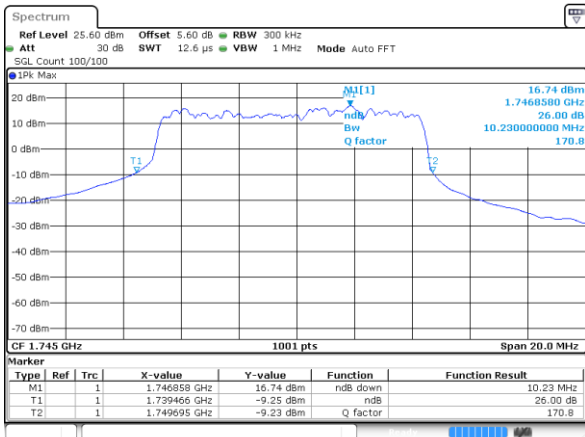


Date: 28 JUN 2020 23:39:02

Date: 28 JUN 2020 23:37:58

Middle Channel

Middle Channel

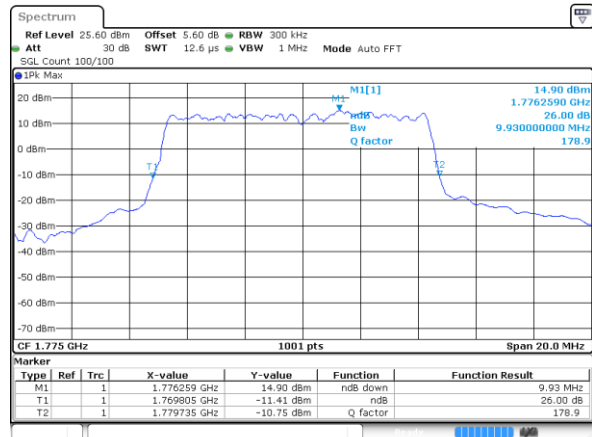
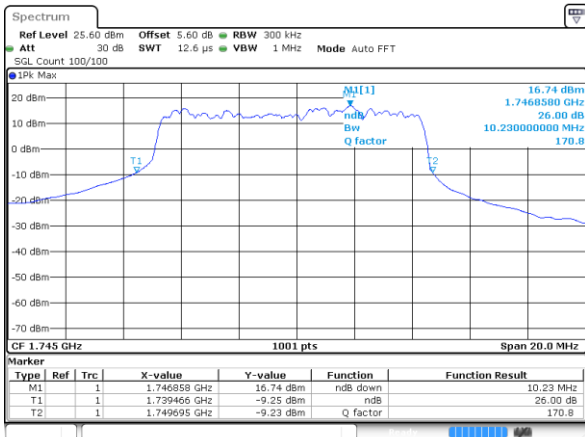


Date: 28 JUN 2020 23:56:05

Date: 28 JUN 2020 23:56:24

Highest Channel

Highest Channel



Date: 28 JUN 2020 23:56:05

Date: 28 JUN 2020 23:58:53



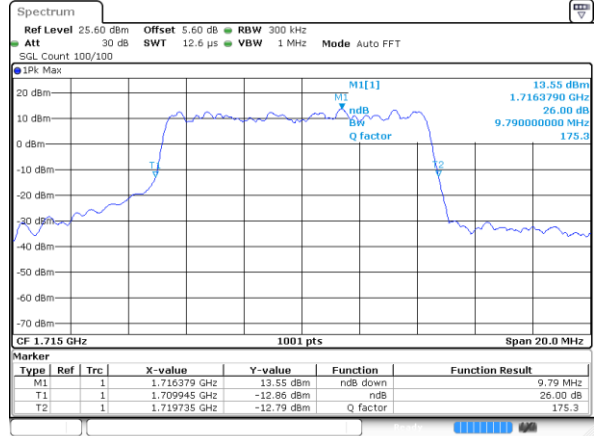
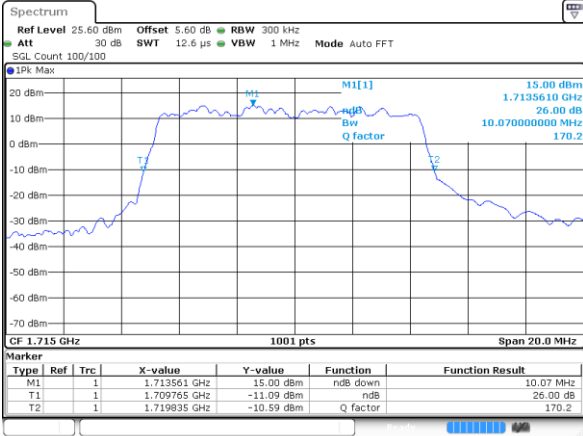
5G NR n66 / 10MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

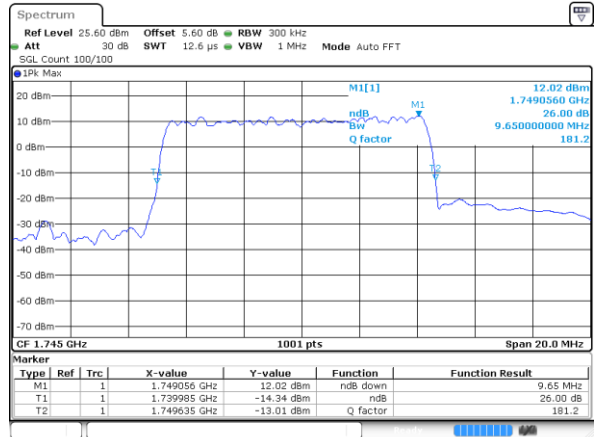
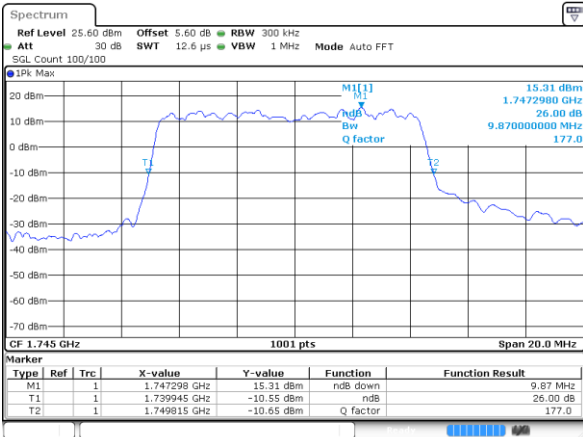


Date: 28 JUN 2020 23:37:27

Date: 28 JUN 2020 23:36:37

Middle Channel

Middle Channel

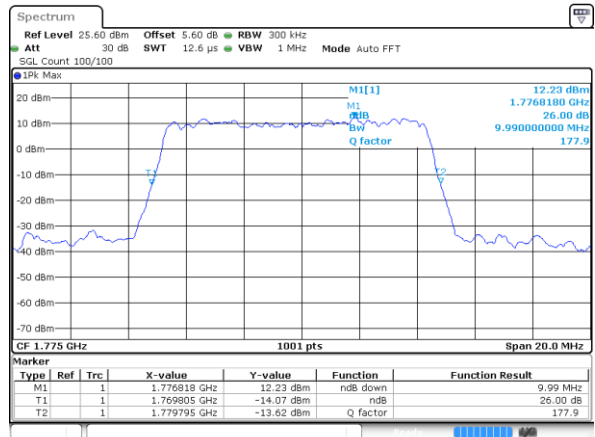
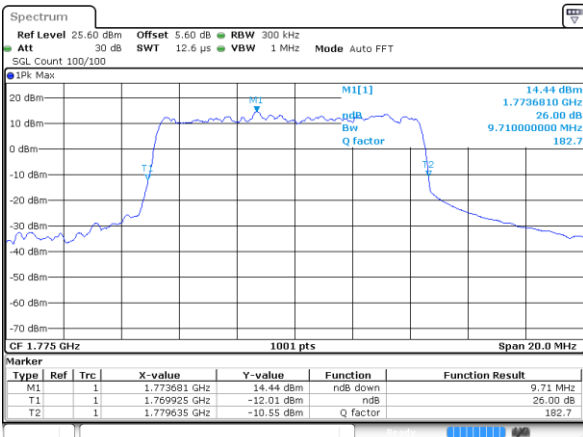


Date: 28 JUN 2020 23:56:40

Date: 28 JUN 2020 23:57:00

Highest Channel

Highest Channel



Date: 28 JUN 2020 23:59:34

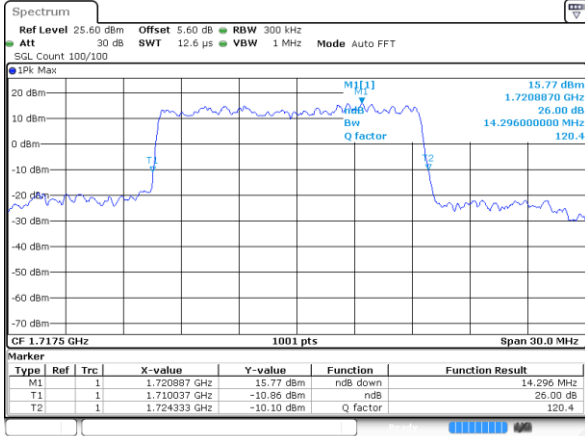
Date: 29 JUN 2020 00:00:24



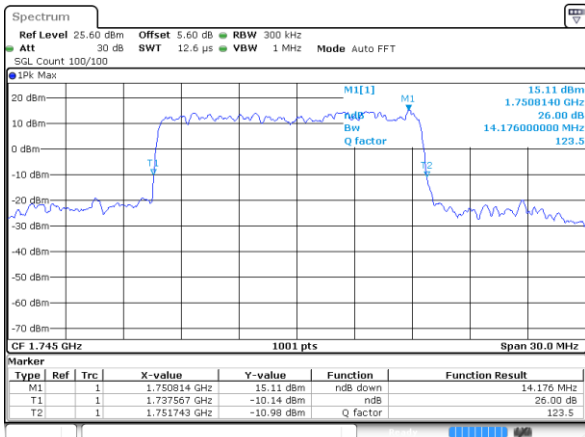
5G NR n66 / 15MHz / DFT-S OFDM

PI / BPSK

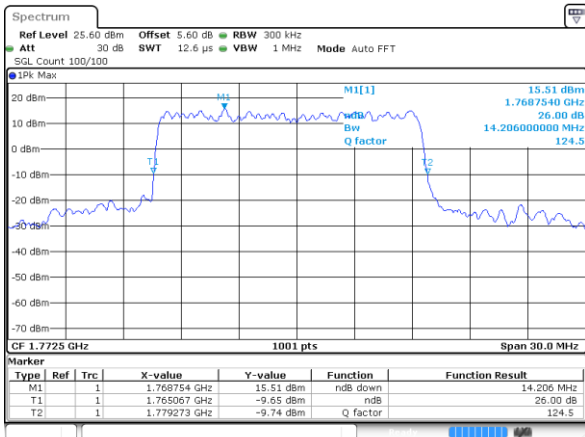
Lowest Channel



Middle Channel



Highest Channel





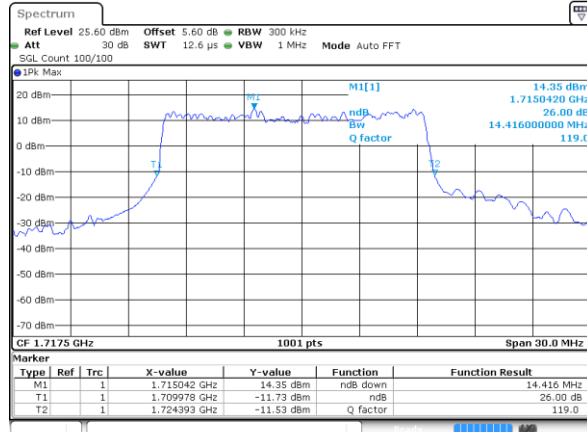
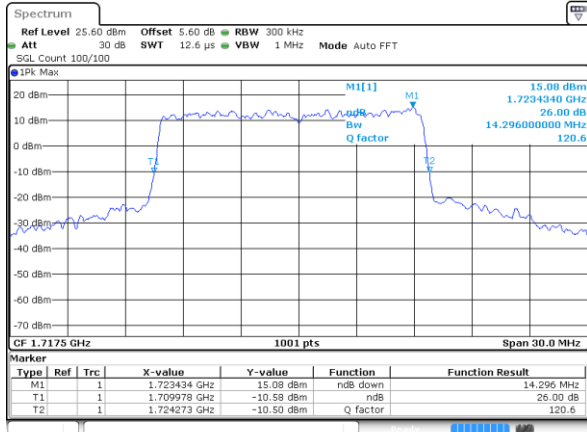
5G NR n66 / 15MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

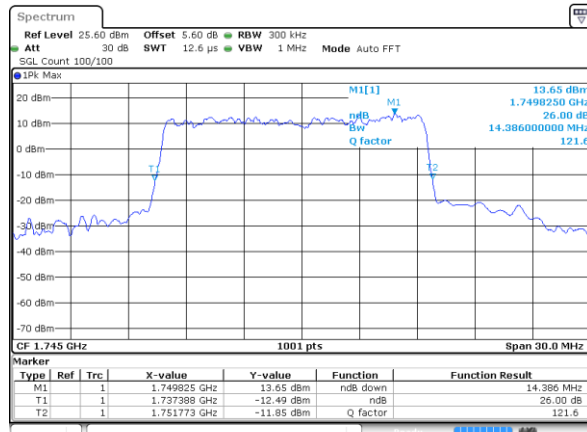
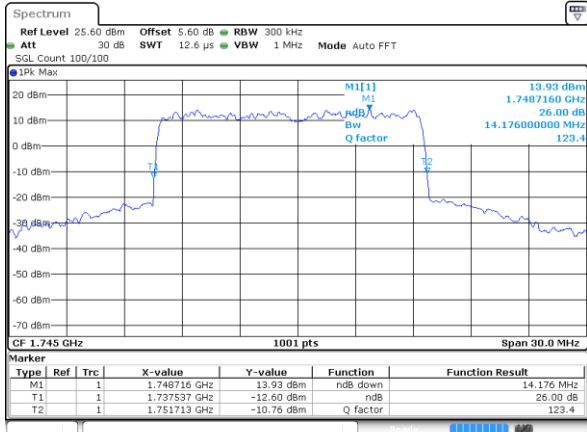


Date: 29 JUN 2020 00:09:23

Date: 29 JUN 2020 00:09:53

Middle Channel

Middle Channel

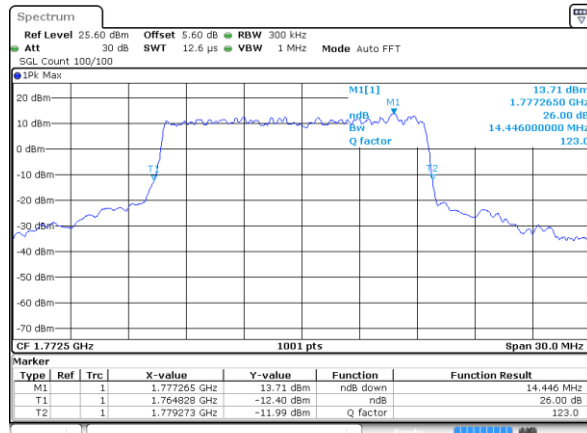
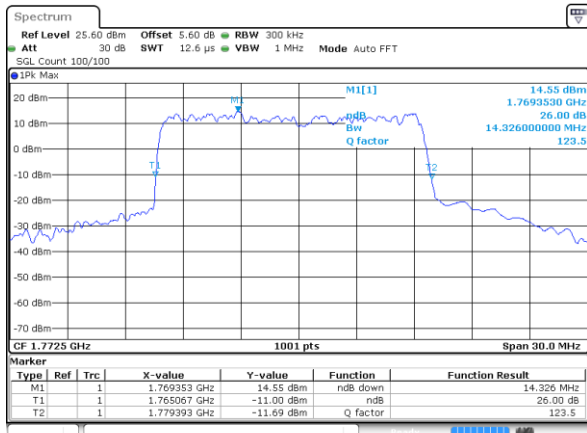


Date: 29 JUN 2020 00:27:14

Date: 29 JUN 2020 00:27:34

Highest Channel

Highest Channel



Date: 29 JUN 2020 00:29:32

Date: 29 JUN 2020 00:29:58



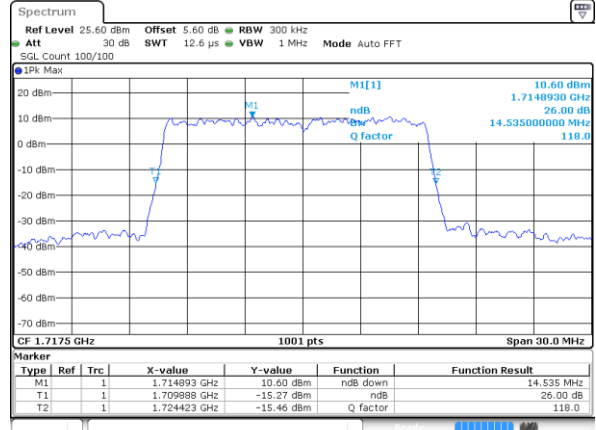
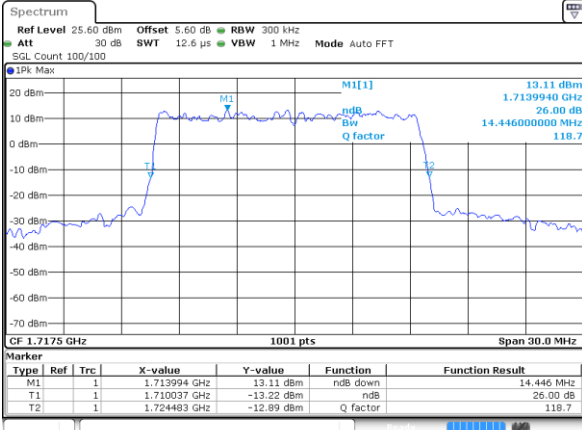
5G NR n66 / 15MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

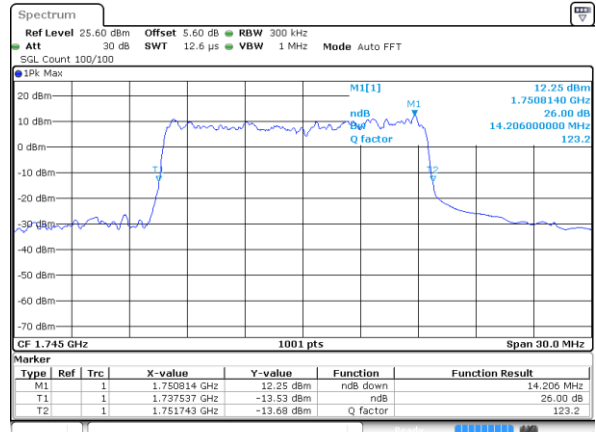
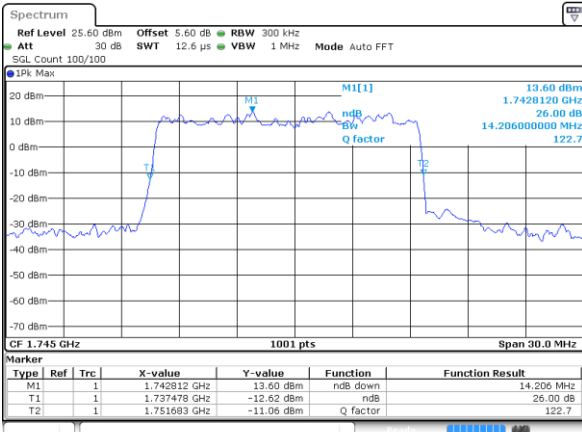


Date: 29 JUN 2020 00:10:34

Date: 29 JUN 2020 00:11:05

Middle Channel

Middle Channel

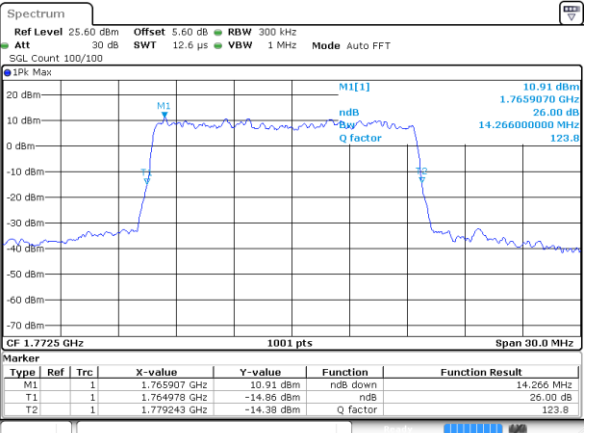
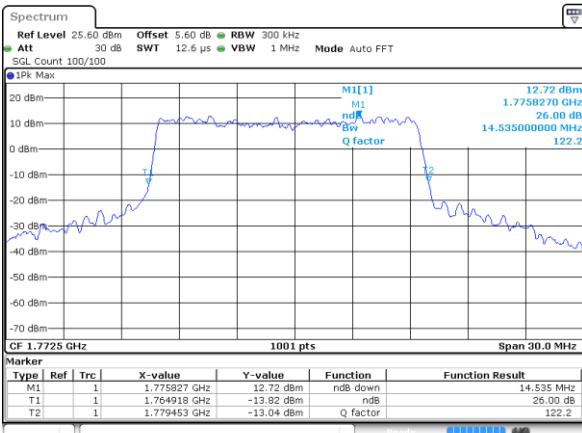


Date: 29 JUN 2020 00:27:54

Date: 29 JUN 2020 00:28:16

Highest Channel

Highest Channel



Date: 29 JUN 2020 00:30:24

Date: 29 JUN 2020 00:30:52

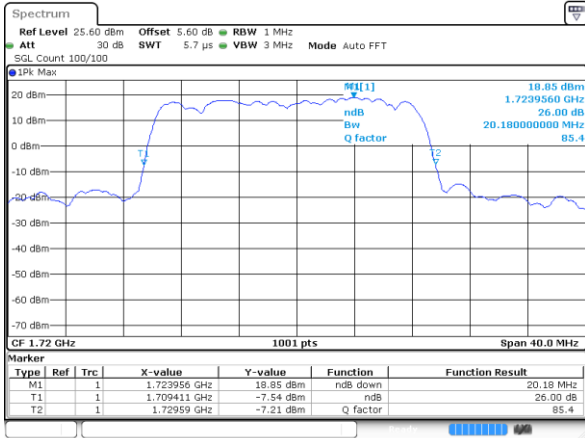




5G NR n66 / 20MHz / DFT-S OFDM

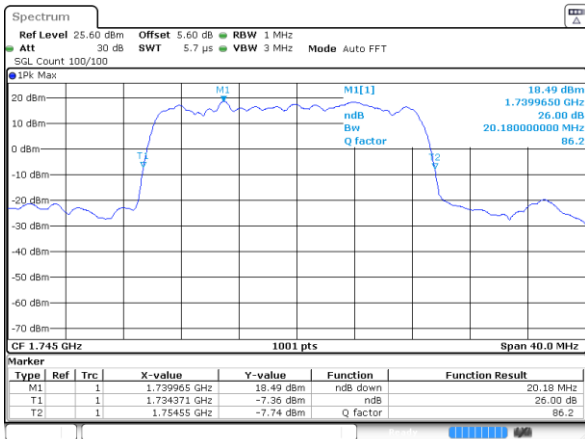
PI / BPSK

Lowest Channel



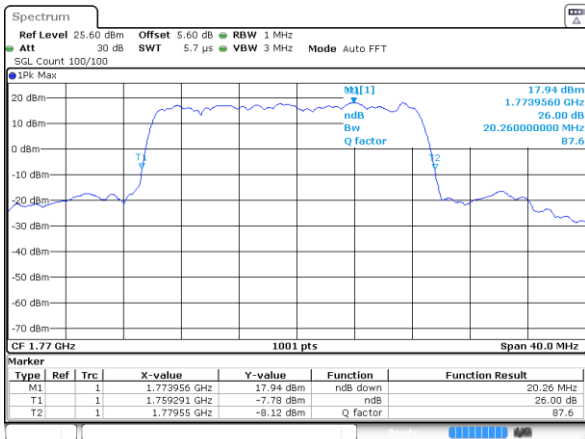
Date: 29 JUN 2020 00:36:31

Middle Channel



Date: 29 JUN 2020 01:03:58

Highest Channel



Date: 29 JUN 2020 01:11:20



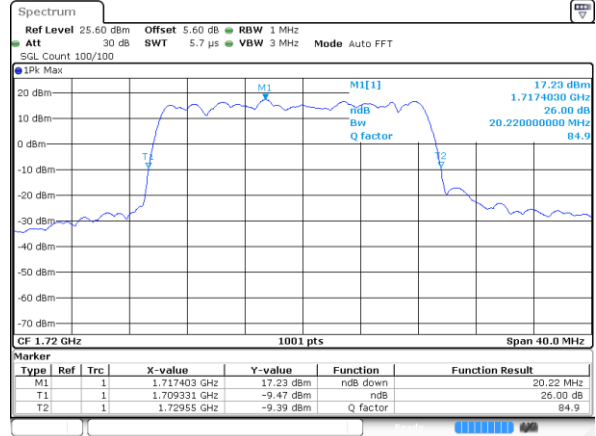
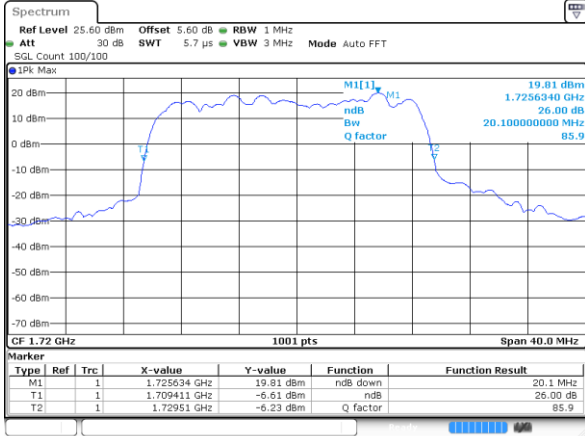
5G NR n66 / 20MHz / DFT-S OFDM

QPSK

16QAM

Lowest Channel

Lowest Channel

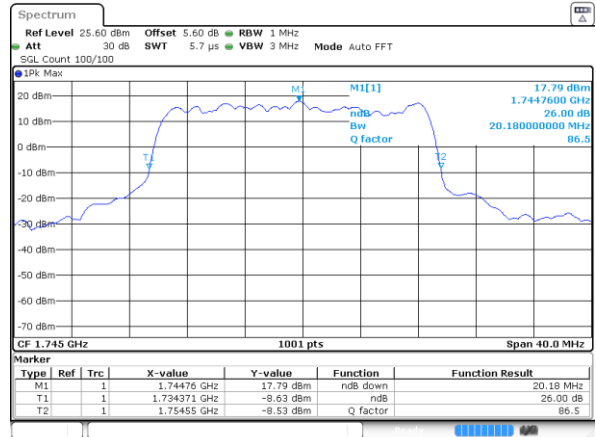
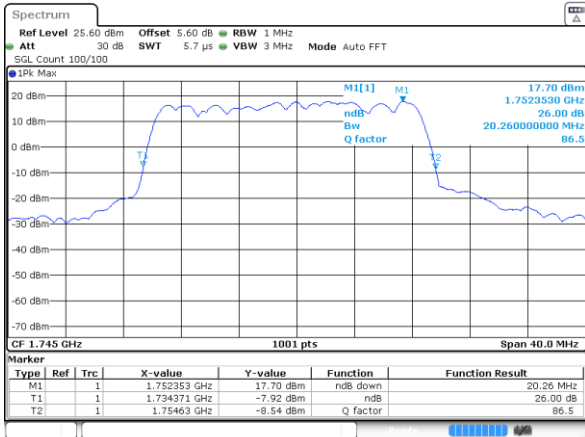


Date: 29 JUN 2020 00:39:06

Date: 29 JUN 2020 00:39:55

Middle Channel

Middle Channel

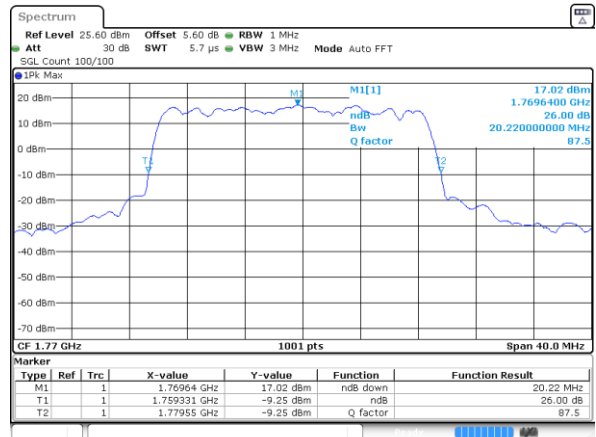
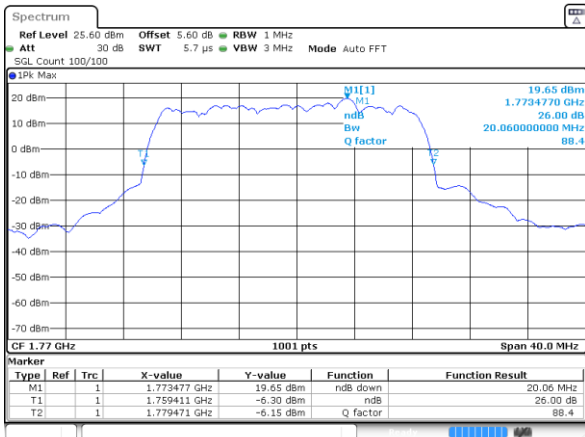


Date: 29 JUN 2020 01:04:22

Date: 29 JUN 2020 01:04:47

Highest Channel

Highest Channel



Date: 29 JUN 2020 01:12:00

Date: 29 JUN 2020 01:12:37



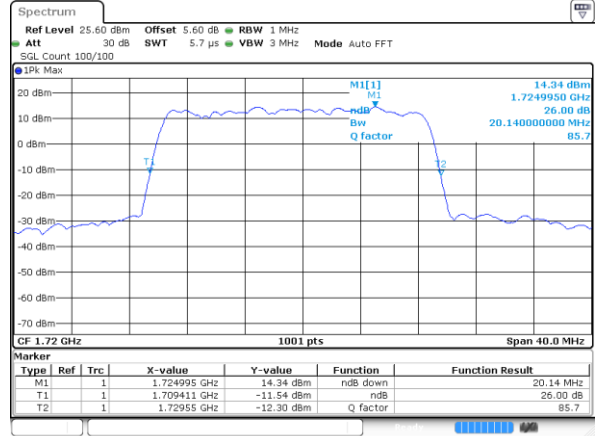
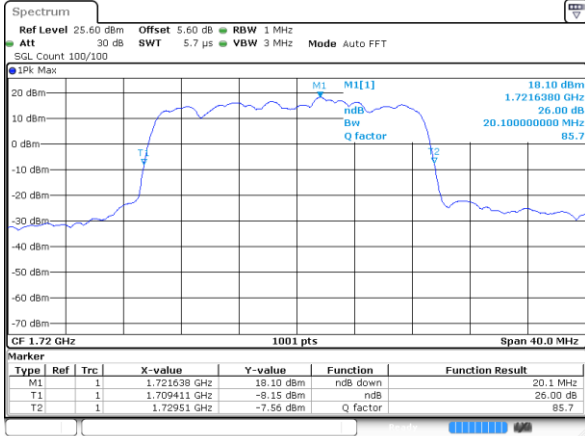
5G NR n66 / 20MHz / DFT-S OFDM

64QAM

256QAM

Lowest Channel

Lowest Channel

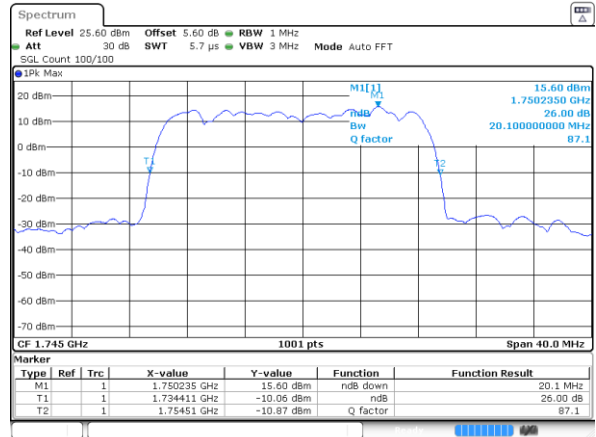
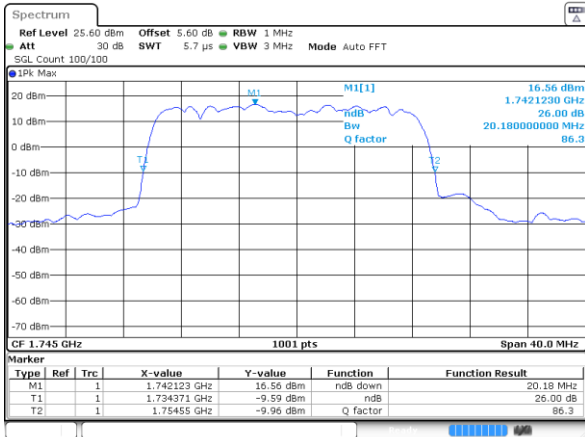


Date: 29 JUN 2020 00:40:33

Date: 29 JUN 2020 00:41:26

Middle Channel

Middle Channel

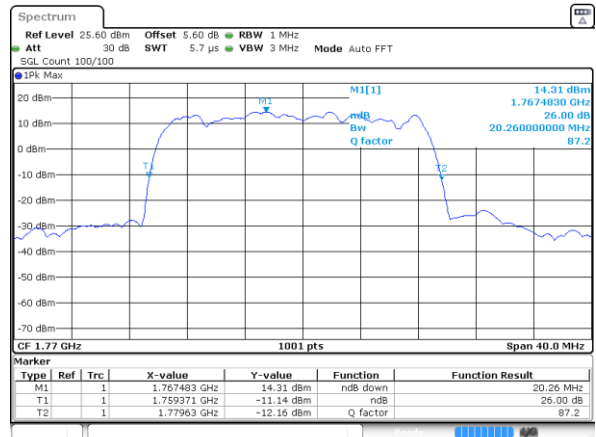
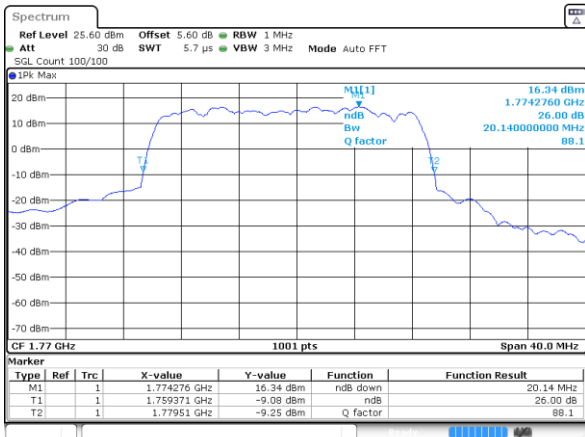


Date: 29 JUN 2020 01:05:16

Date: 29 JUN 2020 01:06:26

Highest Channel

Highest Channel



Date: 29 JUN 2020 01:13:14

Date: 29 JUN 2020 01:13:51



## Occupied Bandwidth

Mode	5G NR n66 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI / BPSK		PI / BPSK		PI / BPSK		PI / BPSK	
Lowest CH	4.51		9.09		13.49		18.38	
Middle CH	4.48		9.05		13.49		18.50	
Highest CH	4.50		9.03		13.52		18.38	

Mode	5G NR n66 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.51	4.49	9.01	9.07	13.55	13.55	18.34	18.42
Middle CH	4.48	4.49	9.03	9.07	13.52	13.52	18.42	18.42
Highest CH	4.52	4.50	9.05	9.05	13.40	13.52	18.38	18.46

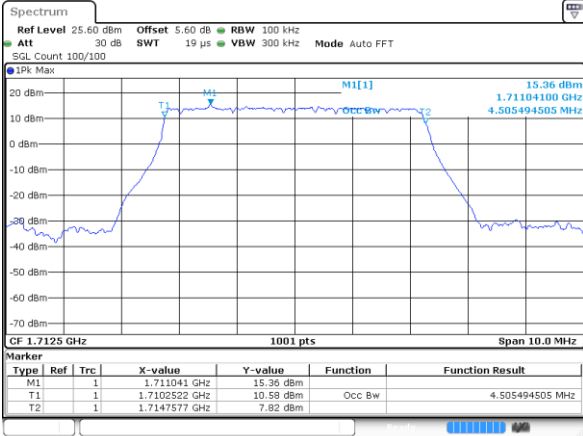
Mode	5G NR n66 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	4.52	4.50	9.03	9.03	13.52	13.49	18.34	18.42
Middle CH	4.47	4.49	9.03	9.01	13.49	13.46	18.34	18.34
Highest CH	4.48	4.51	9.05	9.05	13.49	13.43	18.34	18.30



5G NR n66 / 5MHz / DFT-S OFDM

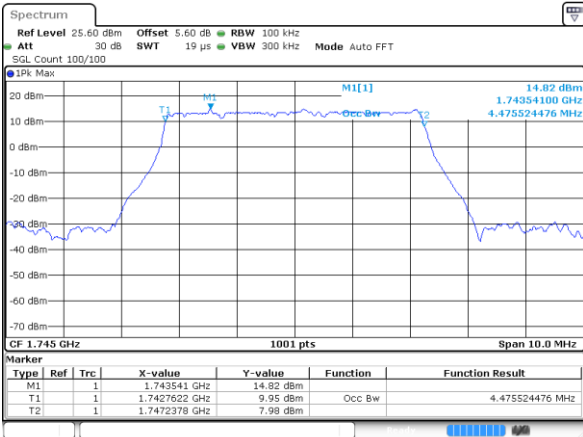
PI / BPSK

Lowest Channel



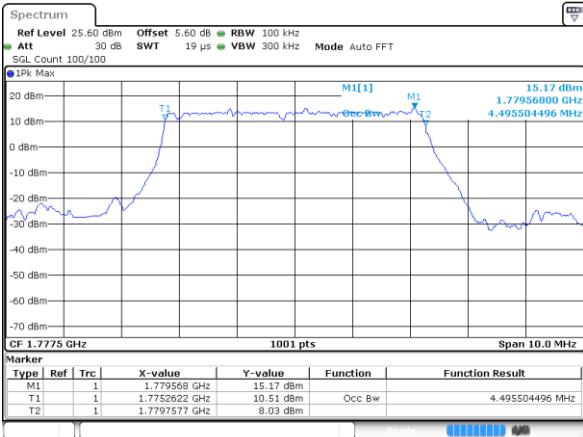
Date: 28 JUN 2020 22:56:02

Middle Channel



Date: 28 JUN 2020 23:21:08

Highest Channel



Date: 28 JUN 2020 23:22:07