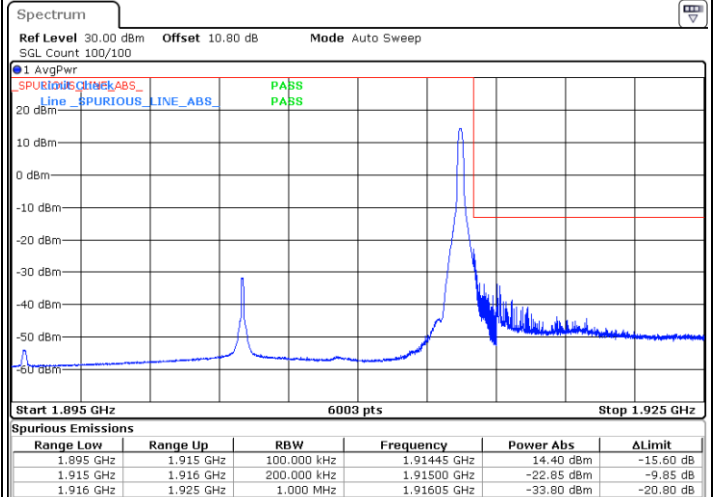
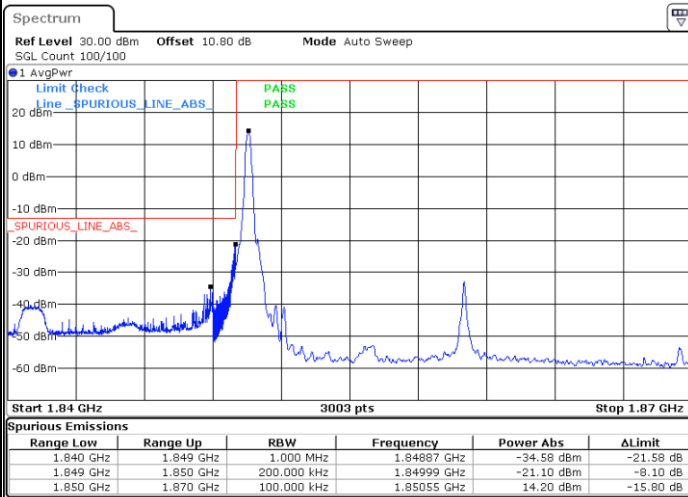




FR1 n25 / 20MHz / DFT-s-OFDM / 256QAM

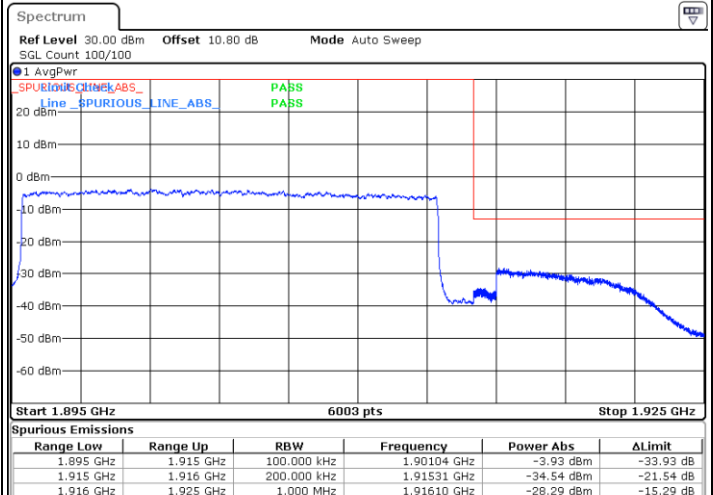
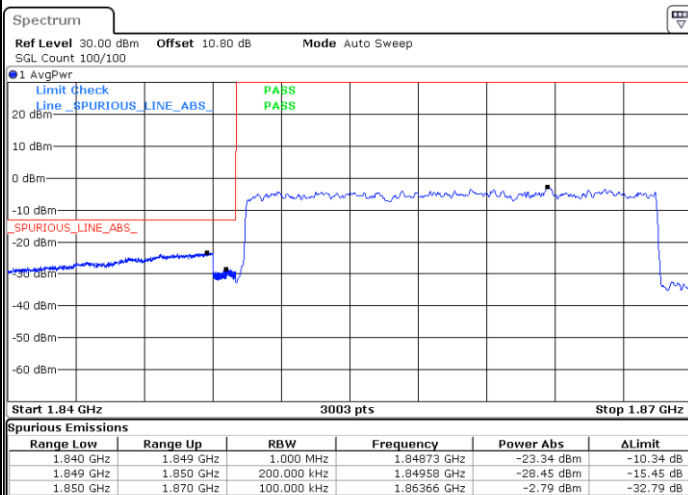
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

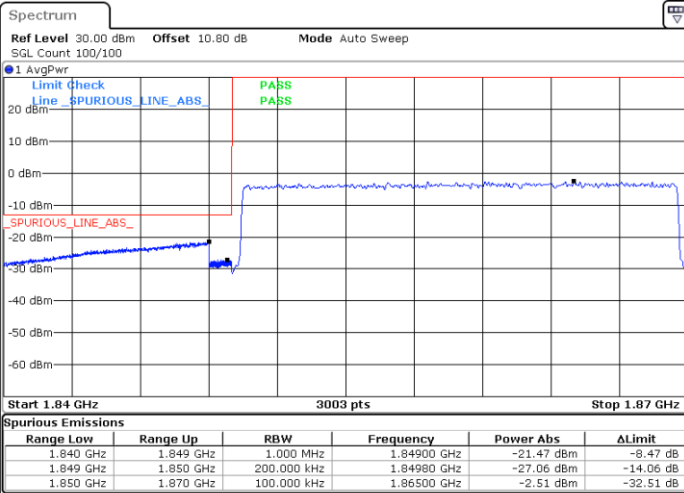
Highest Band Edge / Full RB





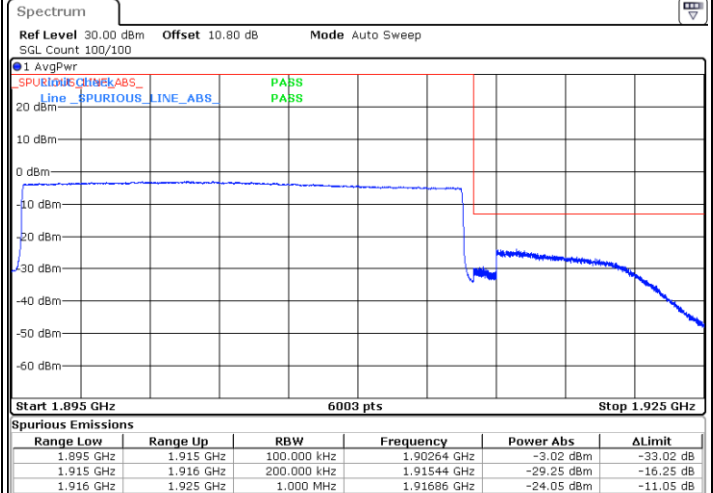
FR1 n25 / 20MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB



Date: 8.JUN.2020 17:32:11

Highest Band Edge / Full RB



Date: 8.JUN.2020 17:20:25

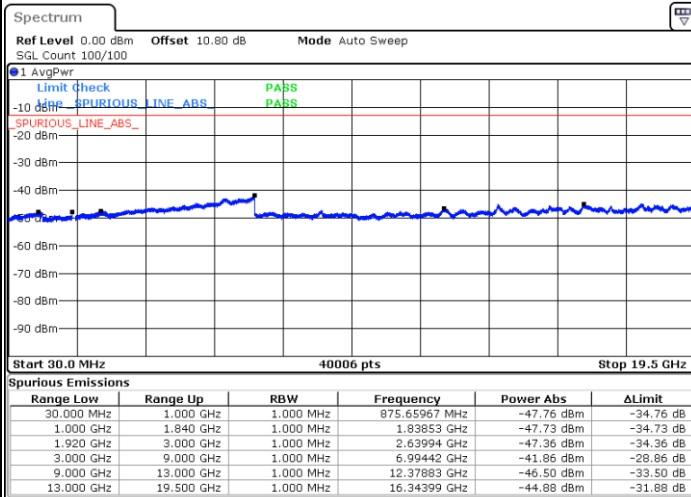


Conducted Spurious Emission

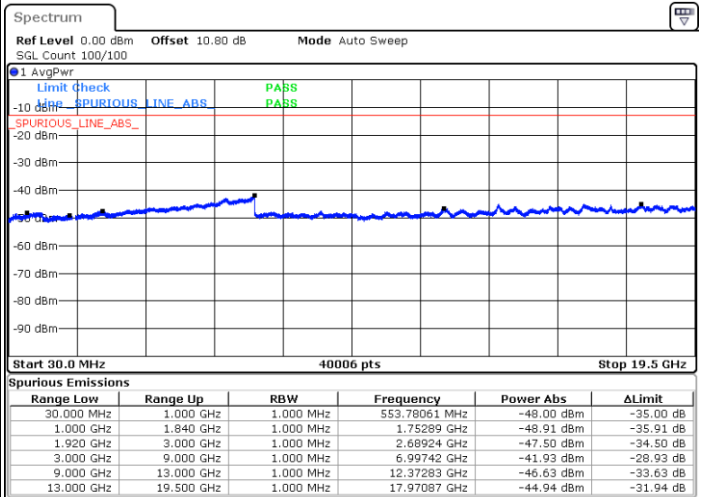
FR1 n25 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

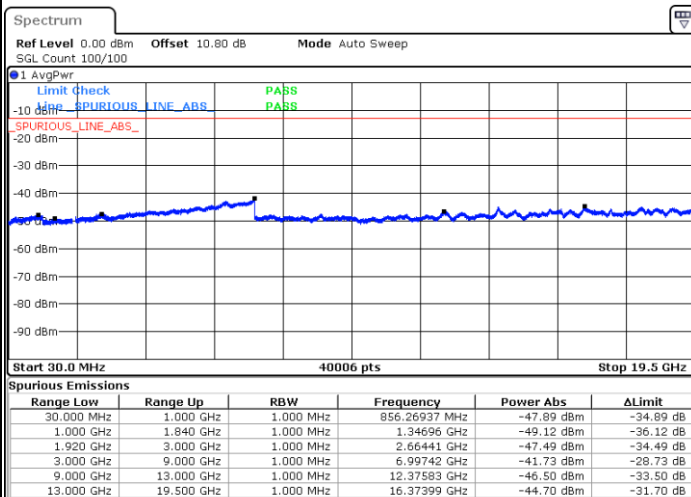


Date: 15.JUN.2020 14:51:31



Date: 15.JUN.2020 14:55:30

Highest Channel / 1RB1

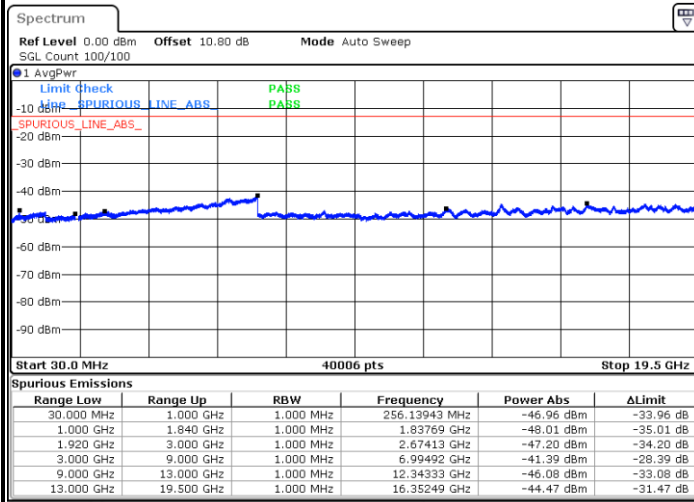


Date: 15.JUN.2020 14:54:07



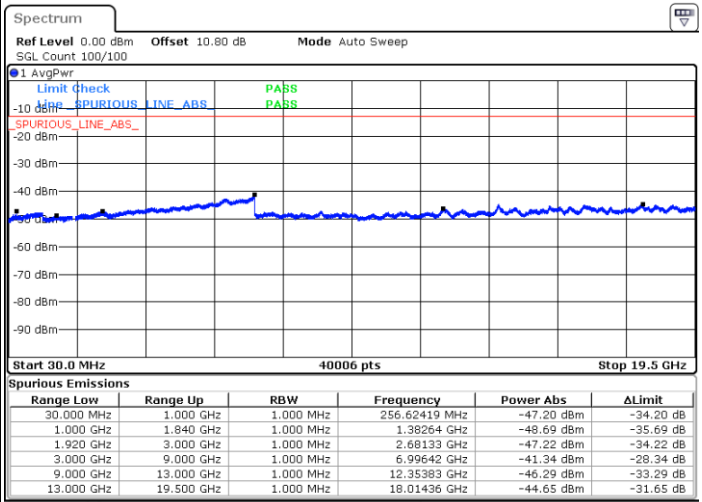
FR1 n25 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



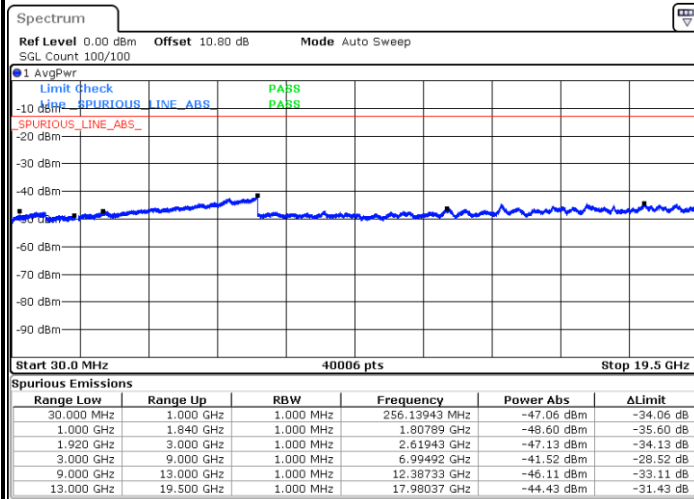
Date: 9 JUN. 2020 03:07:10

Middle Channel / 1RB1



Date: 9 JUN. 2020 02:07:24

Highest Channel / 1RB1

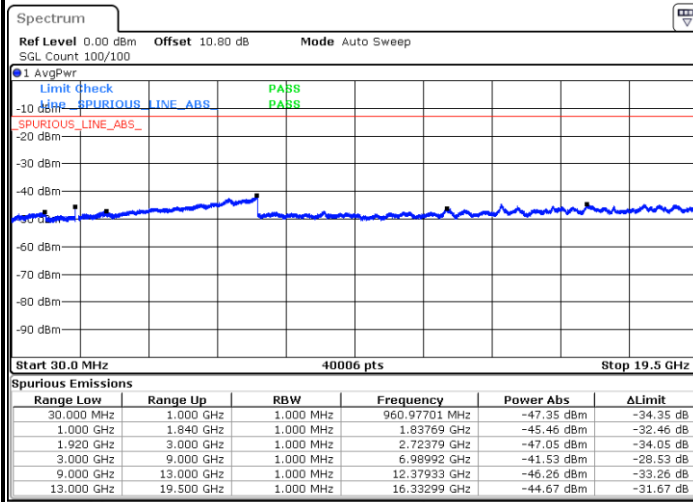


Date: 9 JUN. 2020 03:44:43



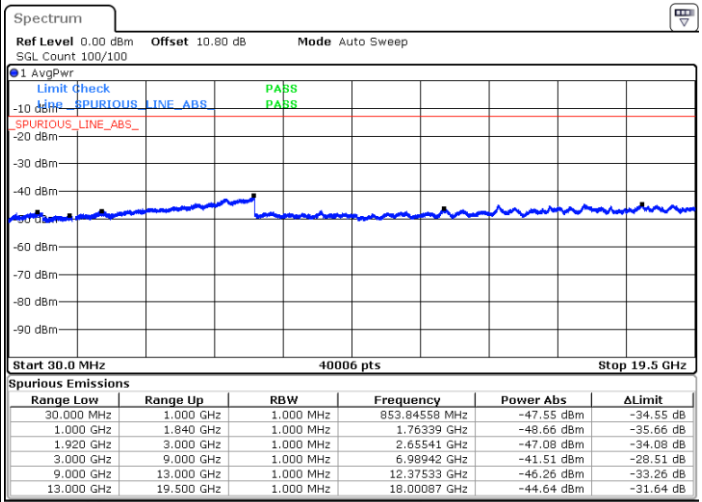
FR1 n25 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



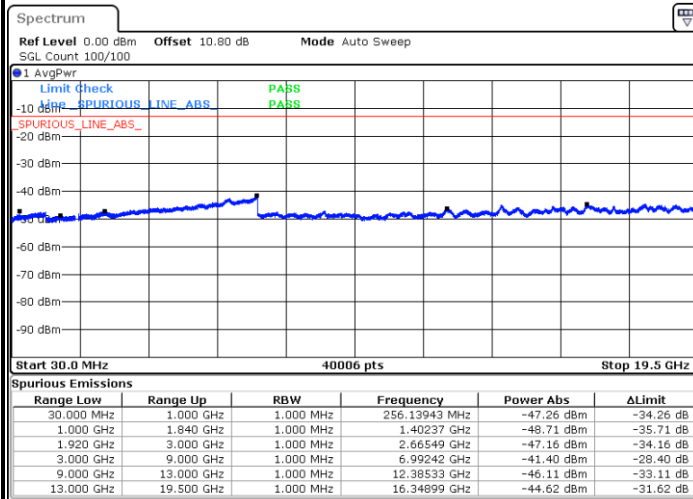
Date: 8.JUN.2020 20:14:45

Middle Channel / 1RB1



Date: 8.JUN.2020 20:06:23

Highest Channel / 1RB1

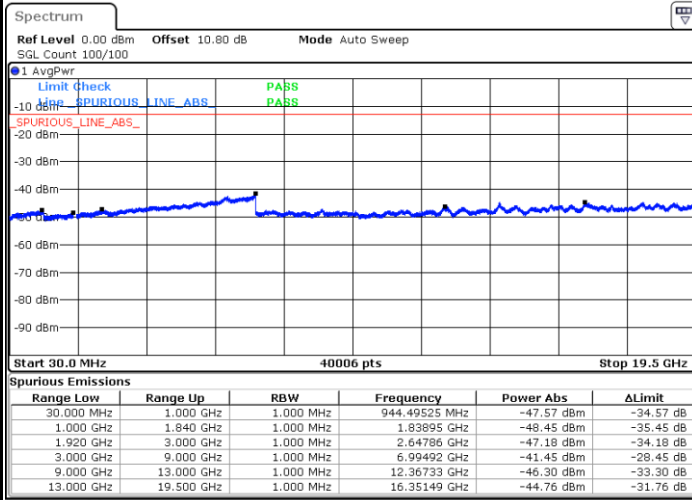


Date: 8.JUN.2020 19:37:00



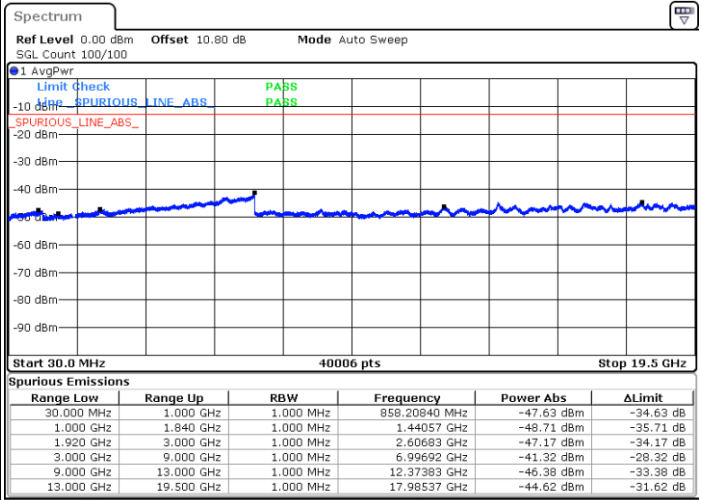
FR1 n25 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



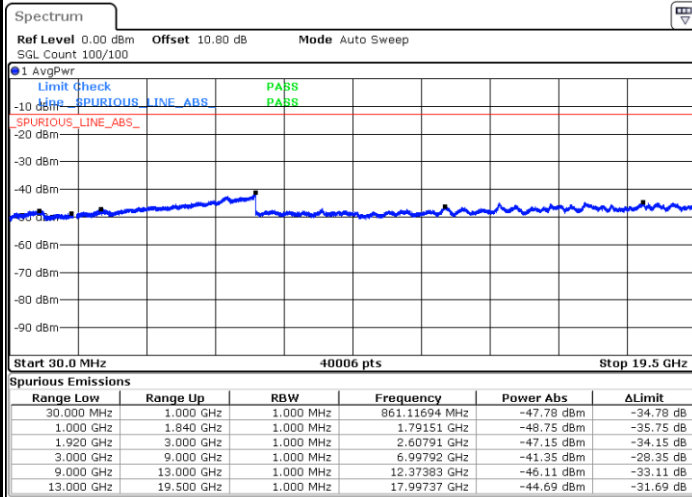
Date: 8.JUN.2020 14:36:29

Middle Channel / 1RB1



Date: 8.JUN.2020 11:03:42

Highest Channel / 1RB1



Date: 8.JUN.2020 17:16:03

Frequency Stability

Test Conditions		FR1 n25 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0089	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0065	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0036	
20	Maximum Voltage	0.0076	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.1 V. ; Maximum Voltage =3.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

FR1 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	3.45	4.17	5.45	5.88	PASS
Middle CH	3.97	4.41	5.54	5.97	
Highest CH	3.48	4.46	5.54	5.86	
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Lowest CH	6.46				PASS
Middle CH	6.32				
Highest CH	6.43				



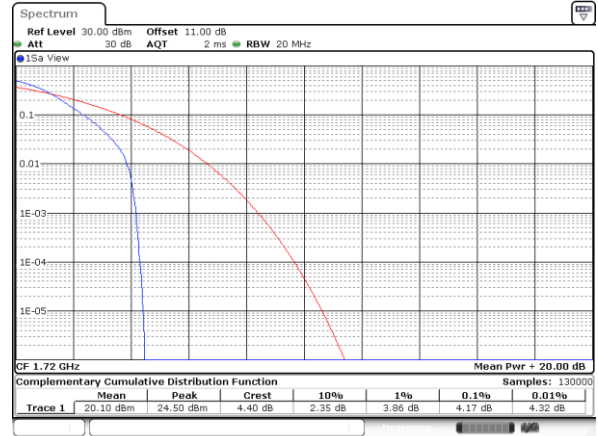
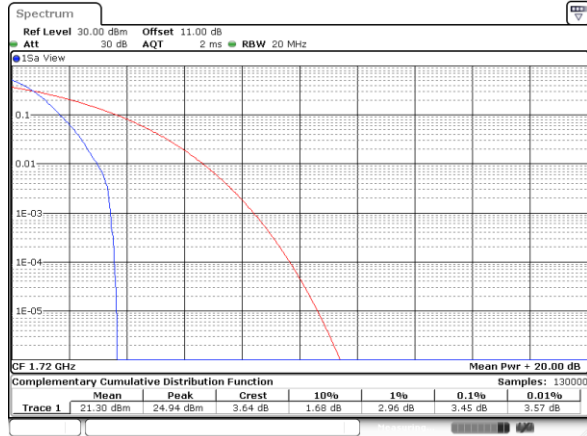
FR1 n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

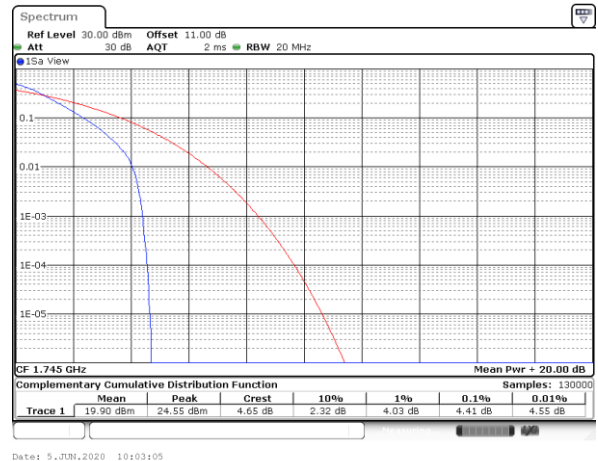
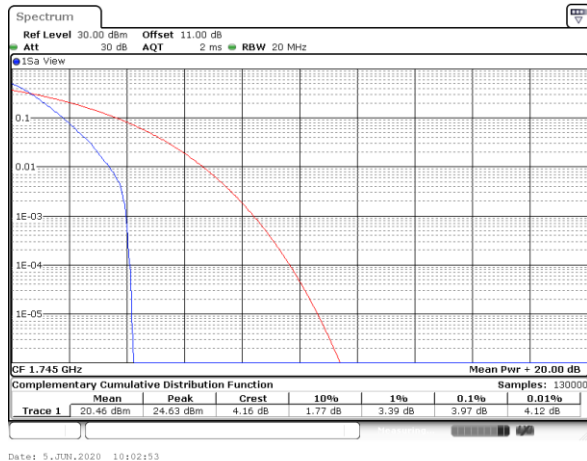
Lowest Channel / Full RB

Lowest Channel / Full RB



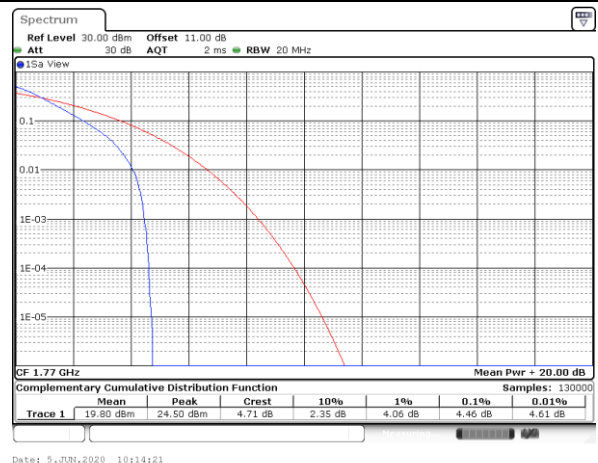
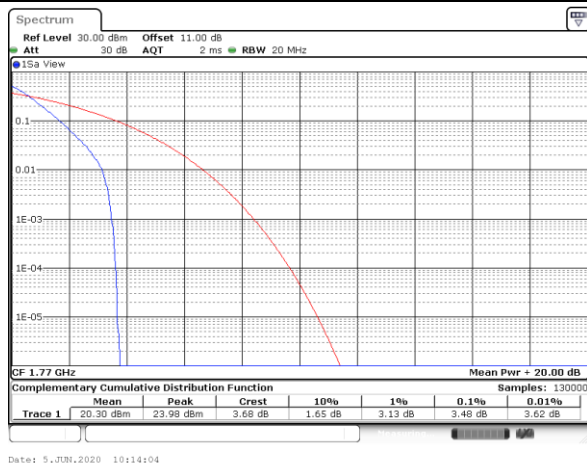
Middle Channel / Full RB

Middle Channel / Full RB



Highest Channel / Full RB

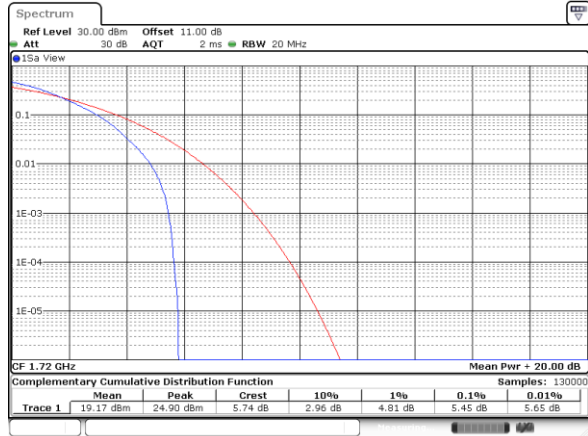
Highest Channel / Full RB



FR1 n66 / 20MHz / DFT-S OFDM

16QAM

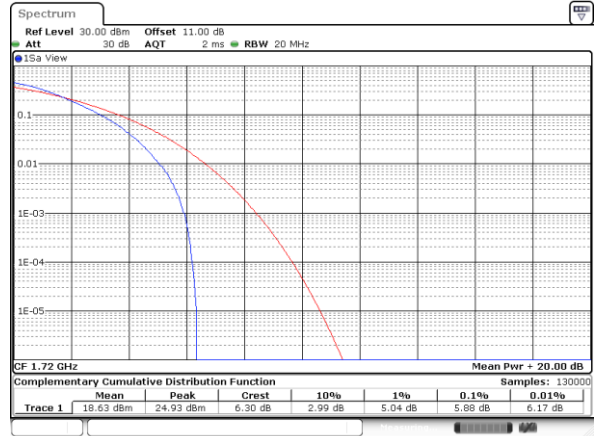
Lowest Channel / Full RB



Date: 5.JUN.2020 10:13:04

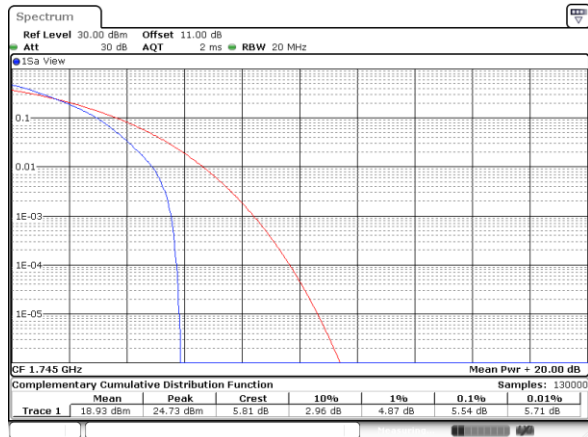
64QAM

Lowest Channel / Full RB



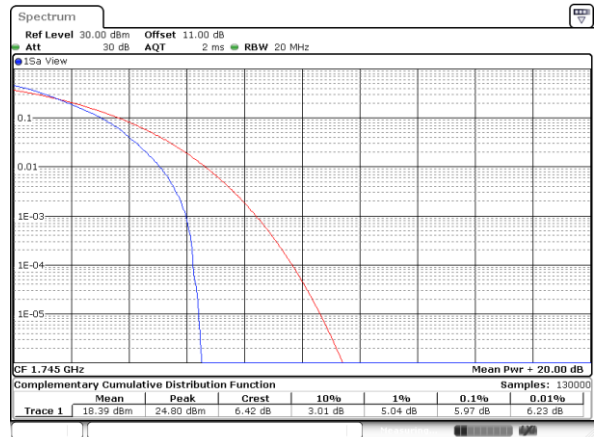
Date: 5.JUN.2020 10:12:51

Middle Channel / Full RB



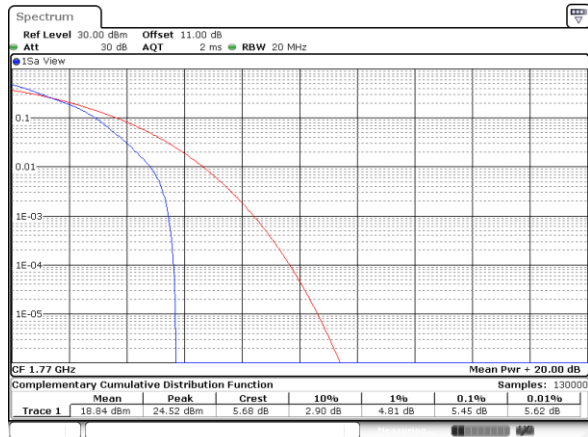
Date: 5.JUN.2020 10:03:21

Middle Channel / Full RB



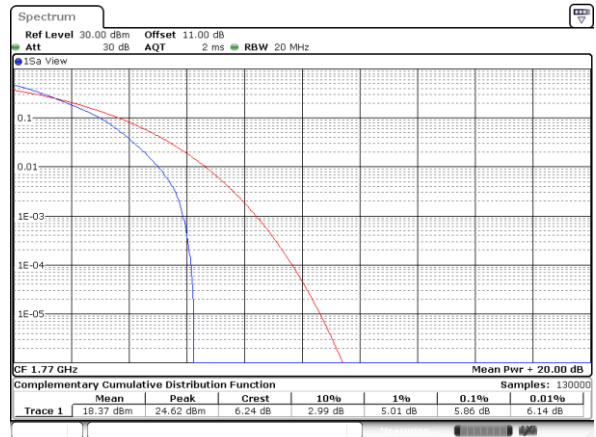
Date: 5.JUN.2020 10:03:36

Highest Channel / Full RB



Date: 5.JUN.2020 10:14:32

Highest Channel / Full RB

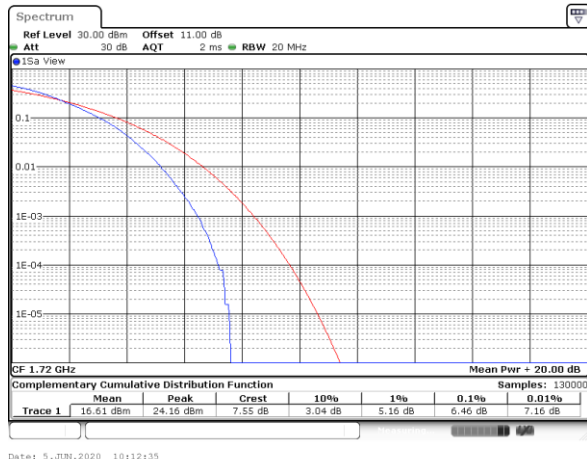


Date: 5.JUN.2020 10:14:44

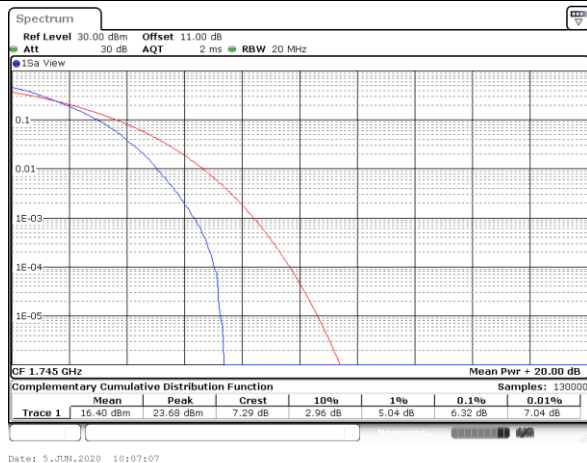
FR1 n66 / 20MHz / DFT-S OFDM

256QAM

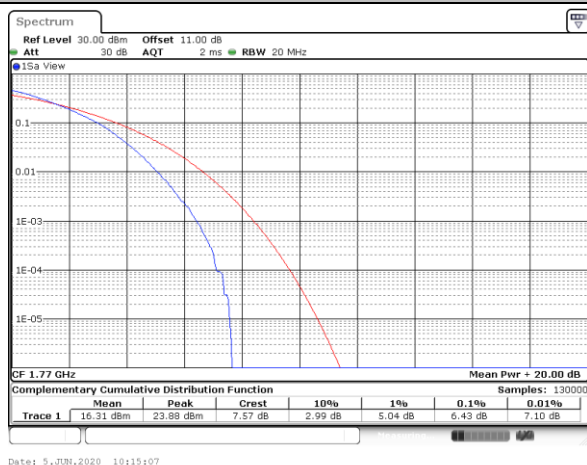
Lowest Channel / Full RB



Middle Channel / Full RB



Highest Channel / Full RB



**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	5.41		9.87		14.21		18.78	
Middle CH	5.40		9.67		14.15		18.78	
Highest CH	5.31		9.69		14.33		18.90	

Mode	FR1 n66 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	5.38	5.15	10.09	10.01	14.96	14.93	19.86	19.86
Middle CH	5.21	5.33	10.11	10.11	14.05	14.99	19.86	19.90
Highest CH	5.26	5.34	10.17	10.11	14.99	15.61	20.18	19.90

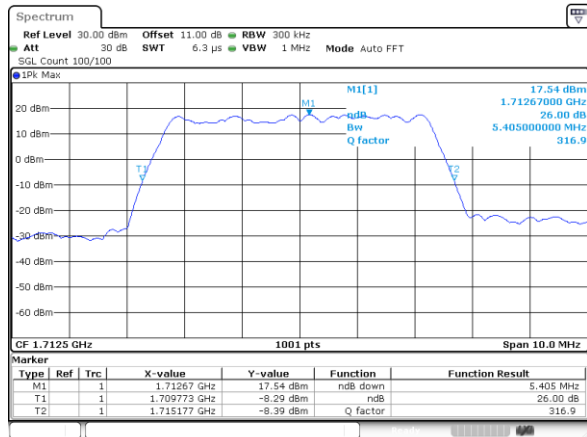
Mode	FR1 n66 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	5.31	5.23	10.11	10.13	15.12	14.87	19.74	19.98
Middle CH	5.19	5.36	10.17	10.15	14.93	14.96	19.90	19.90
Highest CH	5.36	5.28	10.09	10.21	14.93	15.05	19.90	19.90



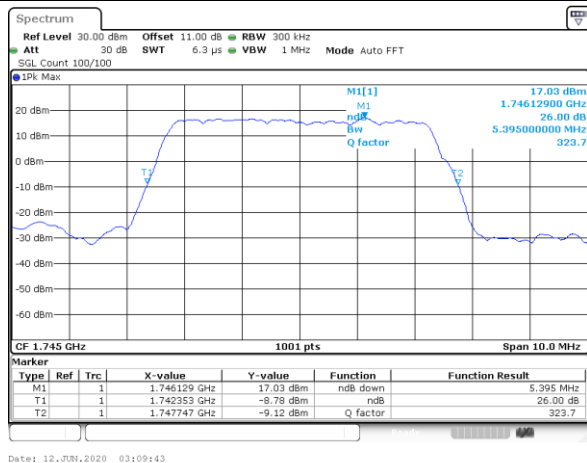
FR1 n66 / 5MHz / DFT-S OFDM

PI/2 BPSK

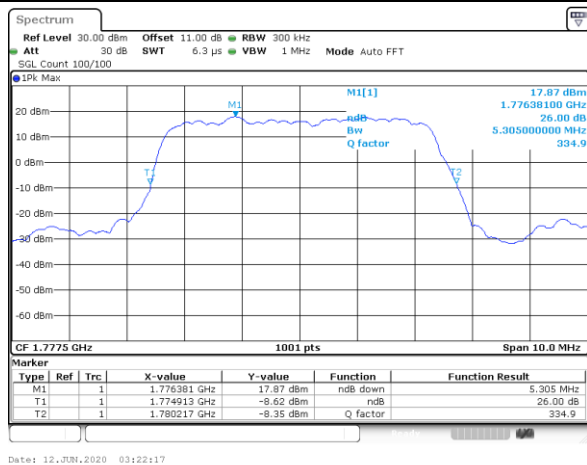
Lowest Channel



Middle Channel



Highest Channel





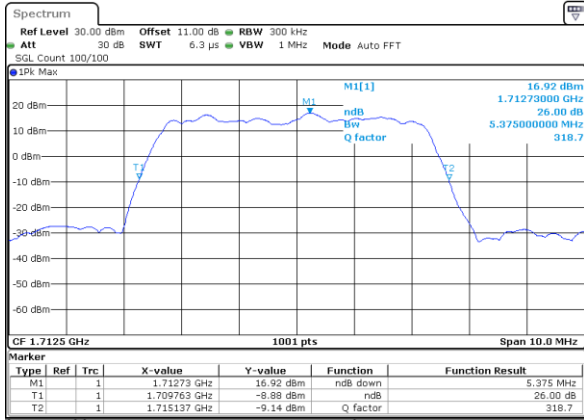
FR1 n66 / 5MHz / CP OFDM

QPSK

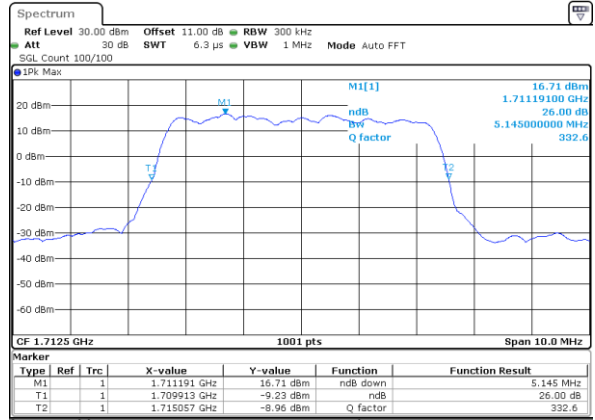
16QAM

Lowest Channel

Lowest Channel



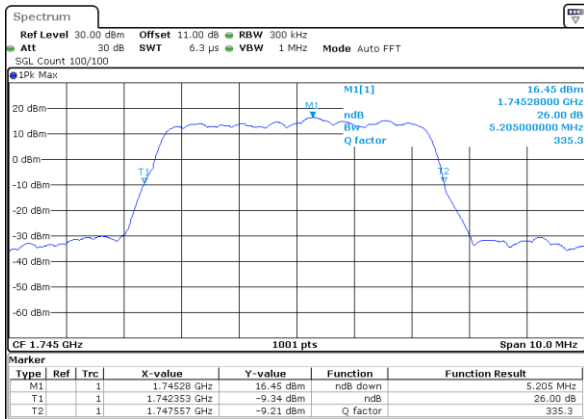
Date: 11 JUN 2020 18:47:58



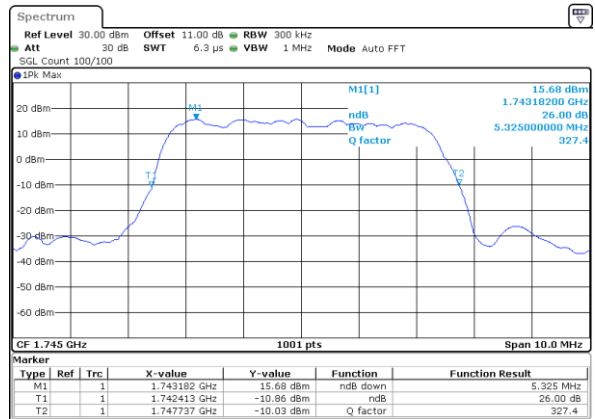
Date: 11 JUN 2020 18:47:39

Middle Channel

Middle Channel



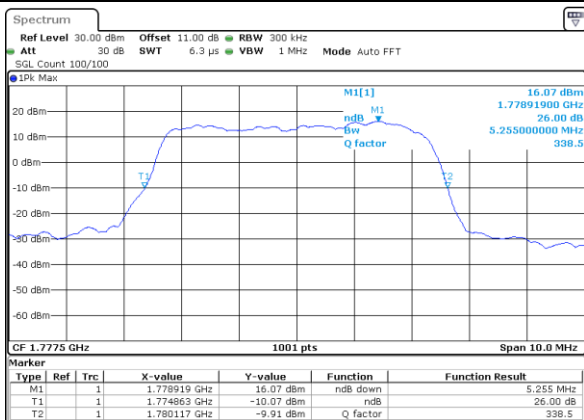
Date: 11 JUN 2020 18:44:59



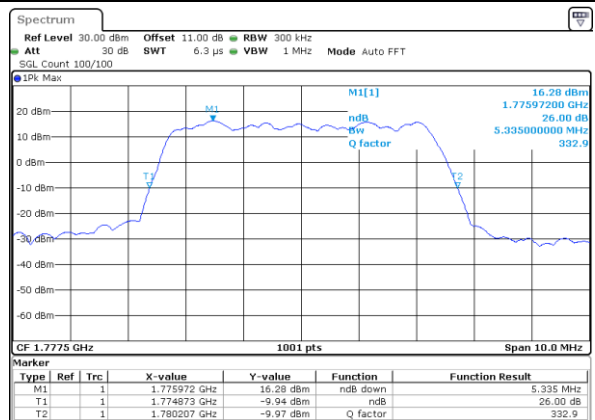
Date: 11 JUN 2020 18:45:25

Highest Channel

Highest Channel



Date: 11 JUN 2020 18:48:53



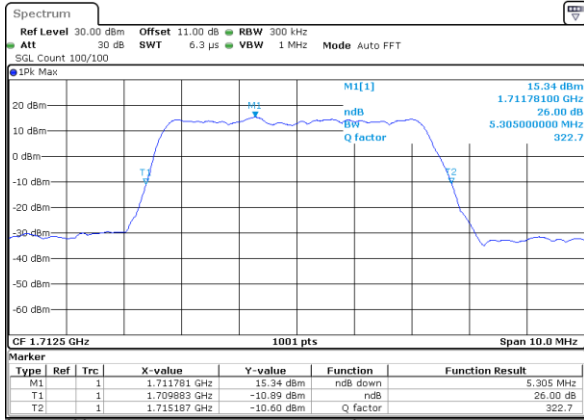
Date: 11 JUN 2020 18:49:26



FR1 n66 / 5MHz / CP OFDM

64QAM

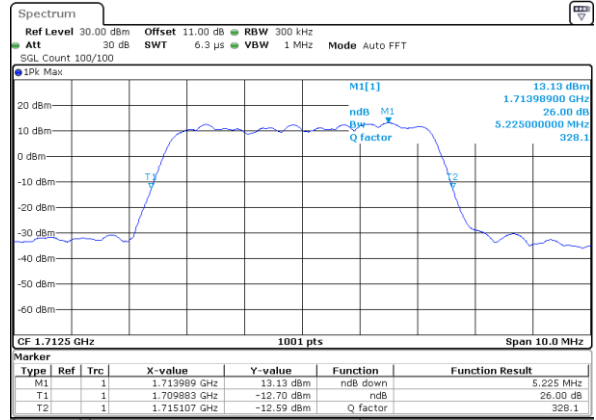
Lowest Channel



Date: 11 JUN 2020 18:47:21

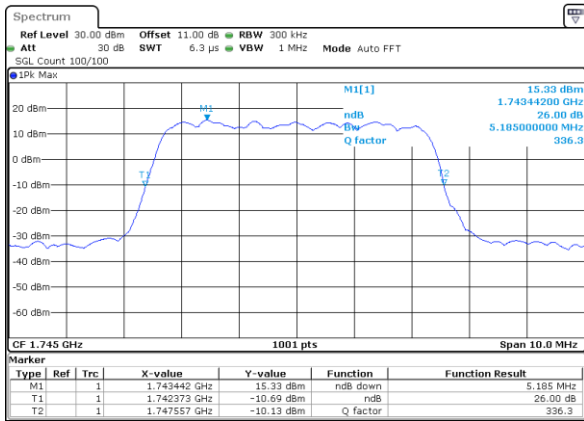
256QAM

Lowest Channel



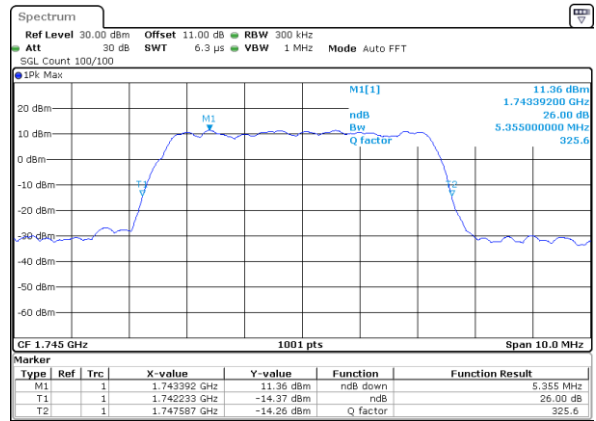
Date: 11 JUN 2020 18:46:57

Middle Channel



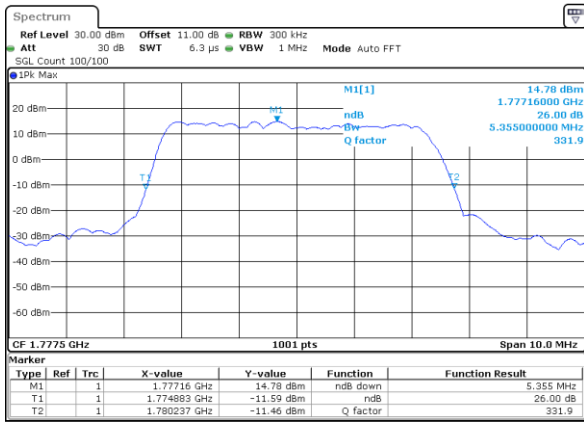
Date: 11 JUN 2020 18:45:51

Middle Channel



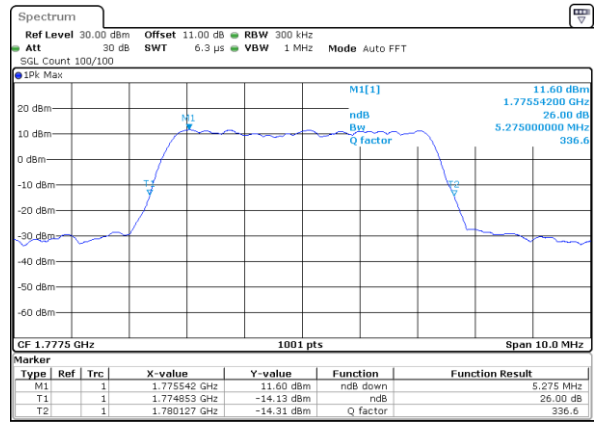
Date: 11 JUN 2020 18:46:06

Highest Channel



Date: 11 JUN 2020 18:49:54

Highest Channel



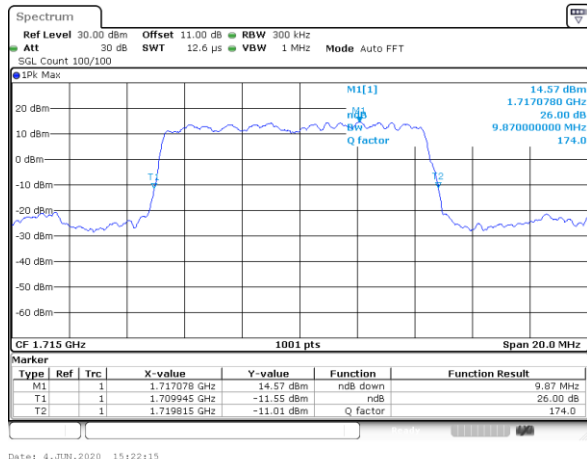
Date: 11 JUN 2020 18:50:12



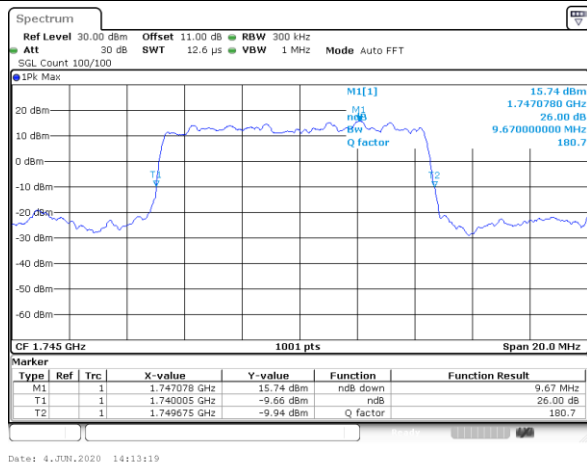
FR1 n66 / 10MHz / DFT-S OFDM

PI/2 BPSK

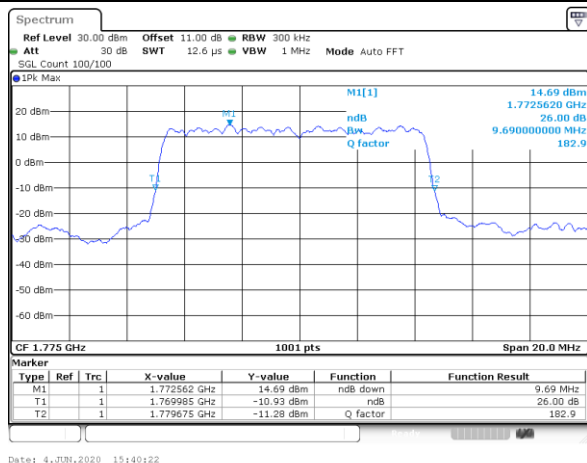
Lowest Channel



Middle Channel



Highest Channel





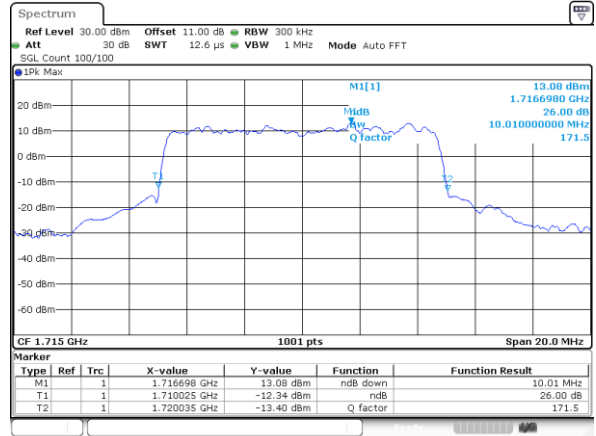
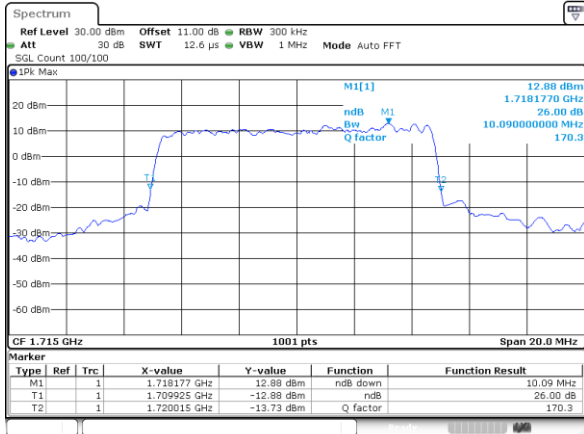
FR1 n66 / 10MHz / CP OFDM

QPSK

16QAM

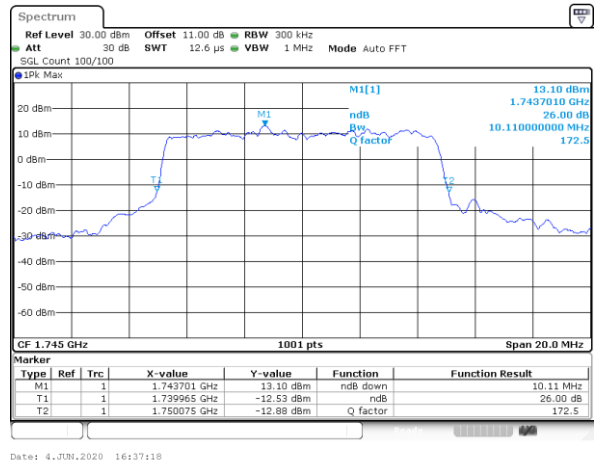
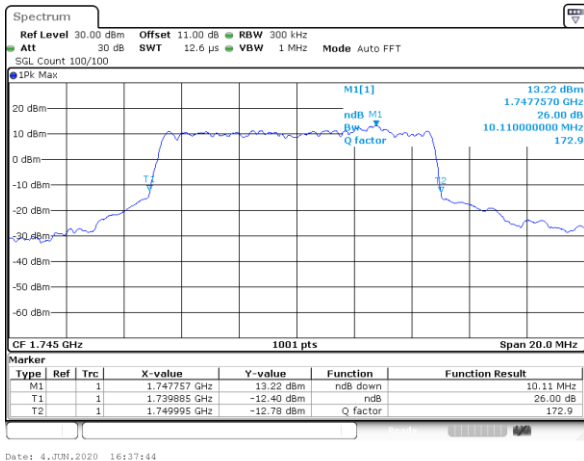
Lowest Channel

Lowest Channel



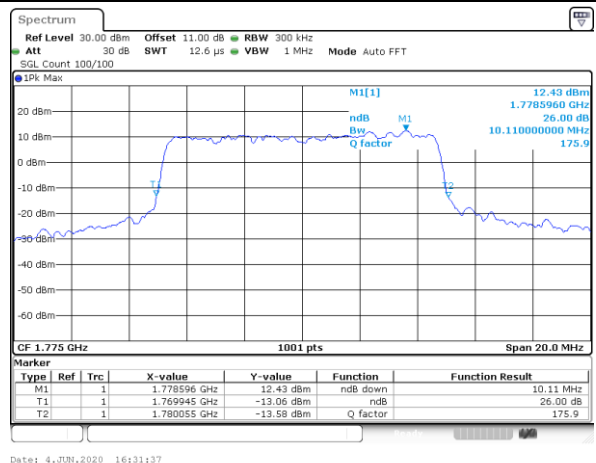
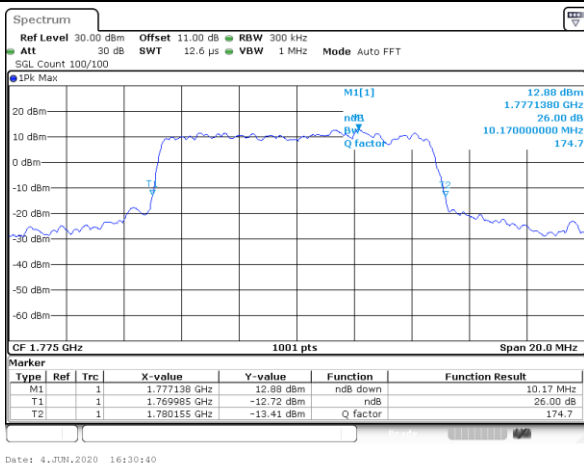
Middle Channel

Middle Channel



Highest Channel

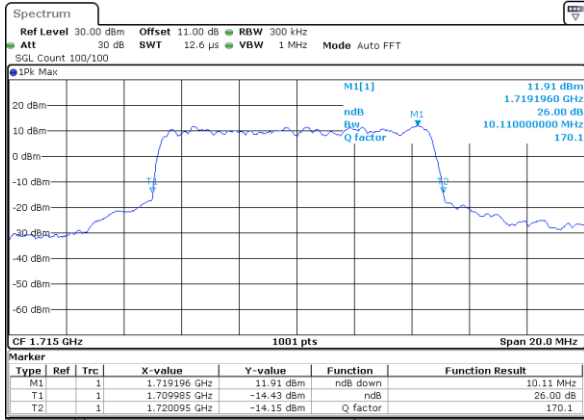
Highest Channel



FR1 n66 / 10MHz / CP OFDM

64QAM

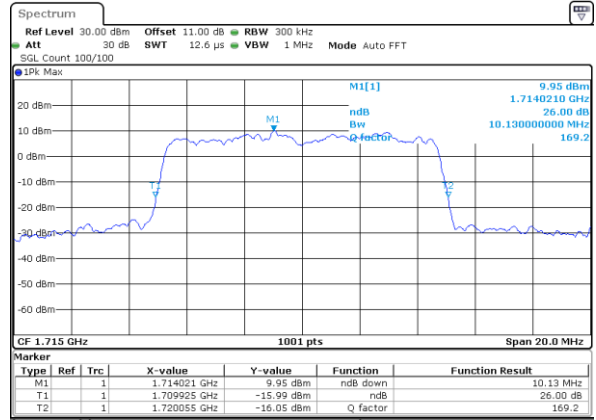
Lowest Channel



Date: 4.JUN.2020 16:39:16

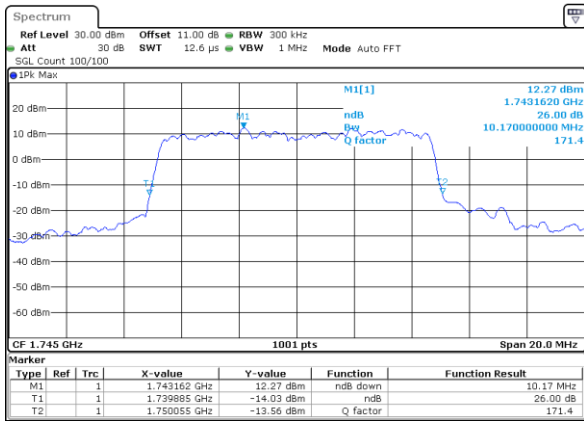
256QAM

Lowest Channel



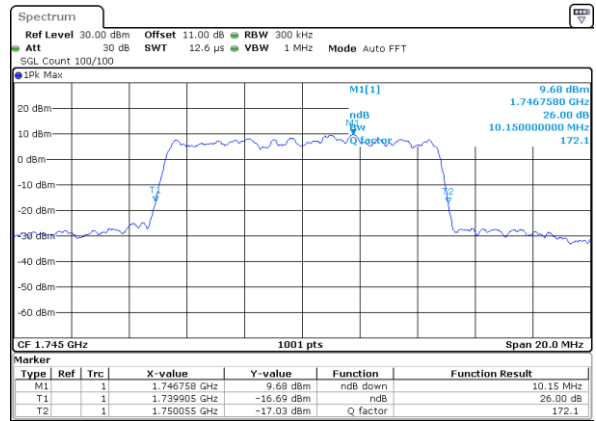
Date: 4.JUN.2020 16:39:40

Middle Channel



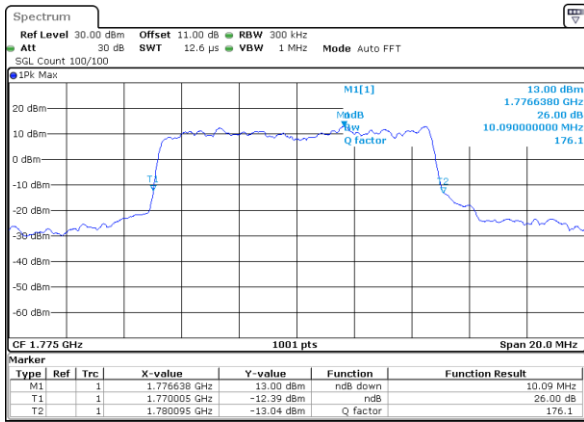
Date: 4.JUN.2020 16:36:57

Middle Channel



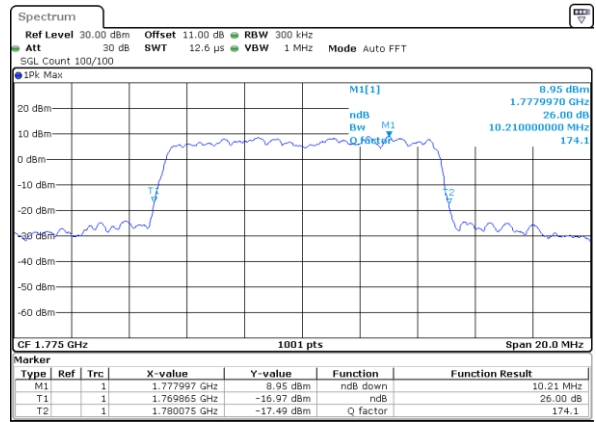
Date: 4.JUN.2020 16:36:31

Highest Channel



Date: 4.JUN.2020 16:33:31

Highest Channel



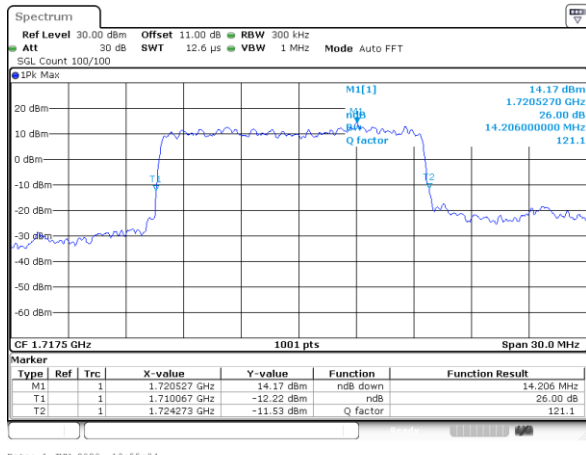
Date: 4.JUN.2020 16:34:08



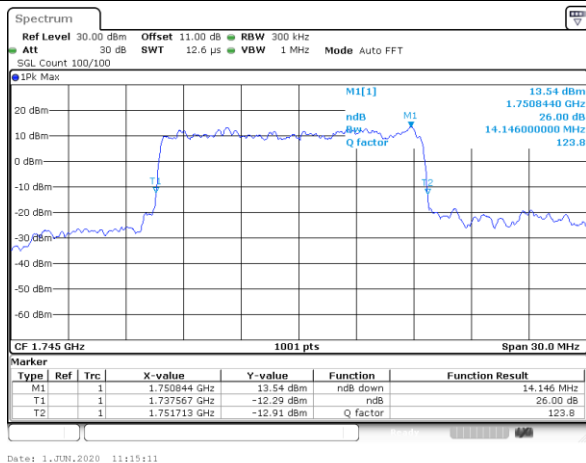
FR1 n66 / 15MHz / DFT-S OFDM

PI/2 BPSK

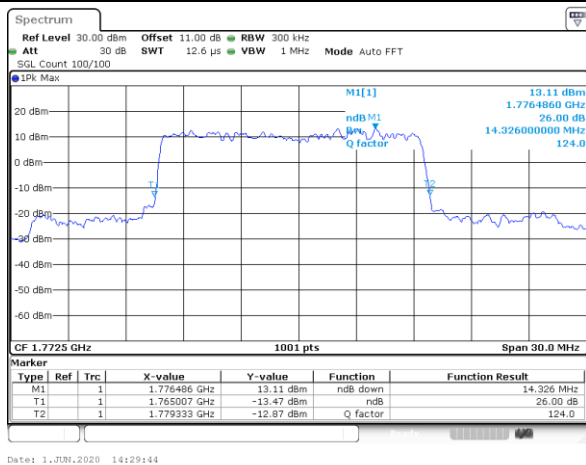
Lowest Channel



Middle Channel



Highest Channel





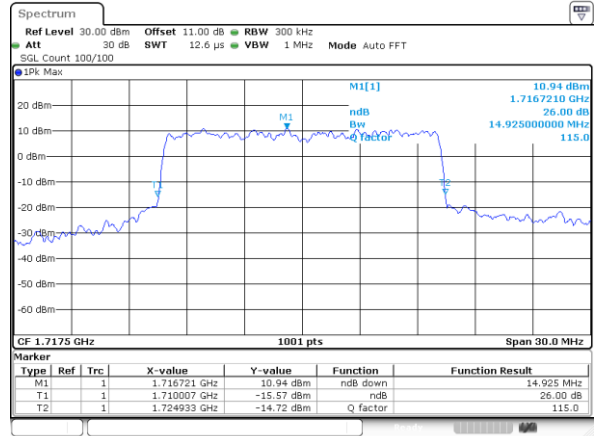
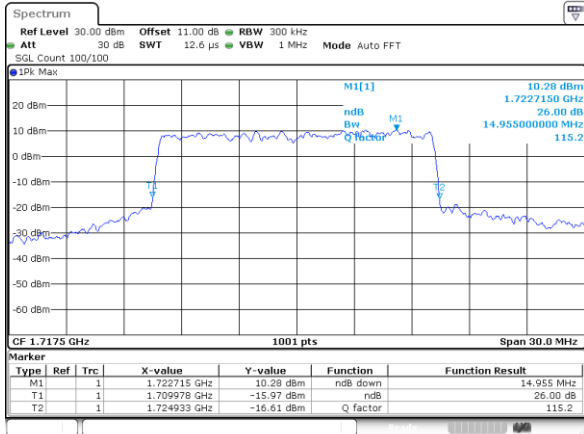
FR1 n66 / 15MHz / CP OFDM

QPSK

16QAM

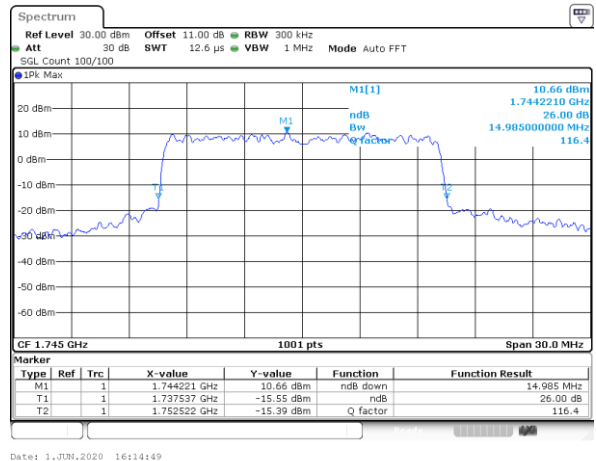
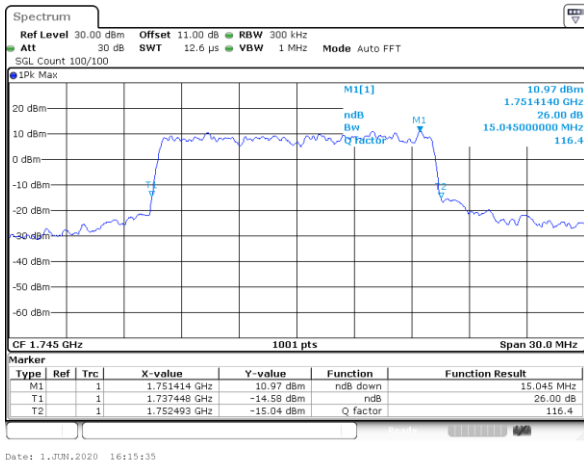
Lowest Channel

Lowest Channel



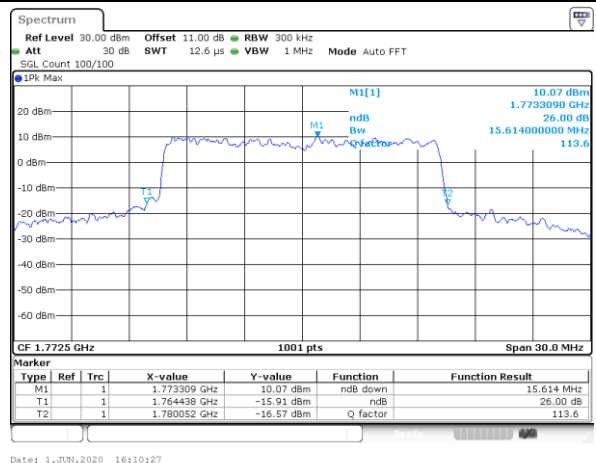
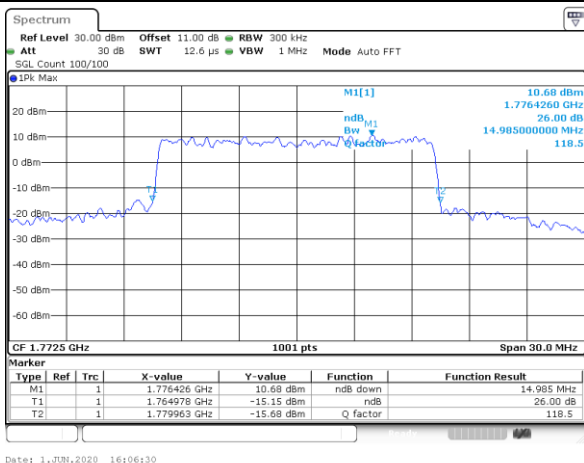
Middle Channel

Middle Channel



Highest Channel

Highest Channel

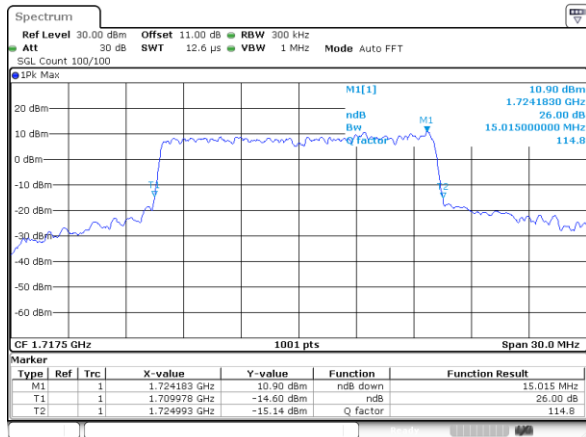




FR1 n66 / 15MHz / CP OFDM

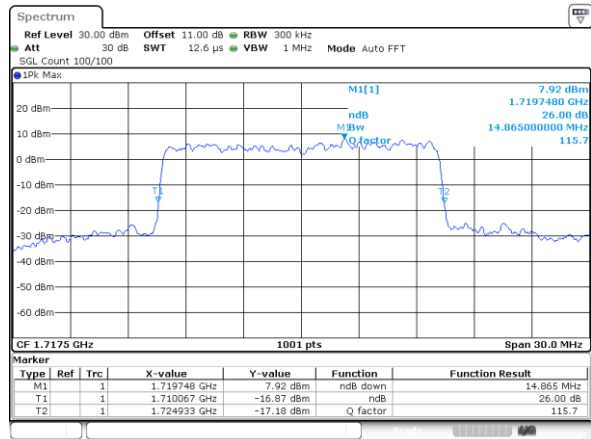
64QAM

Lowest Channel

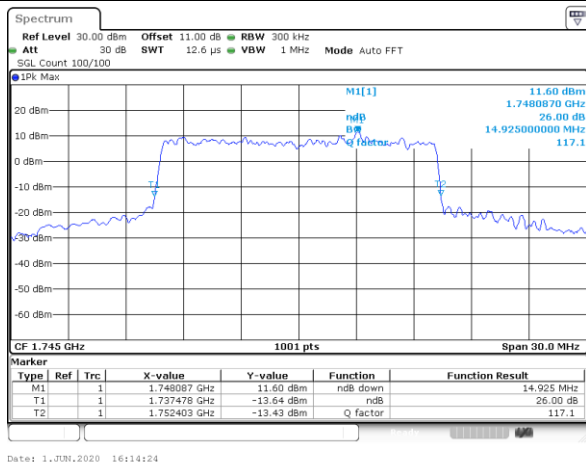


256QAM

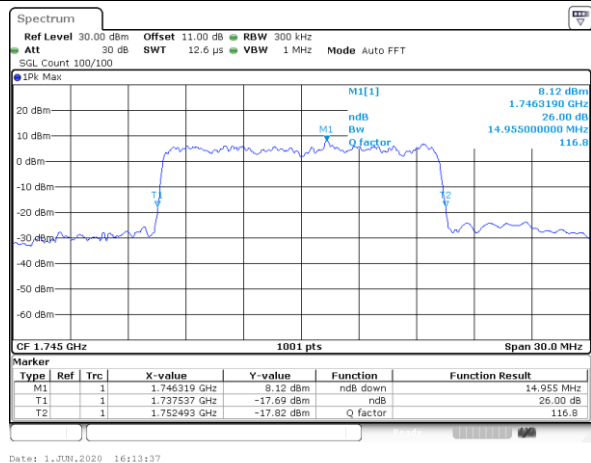
Lowest Channel



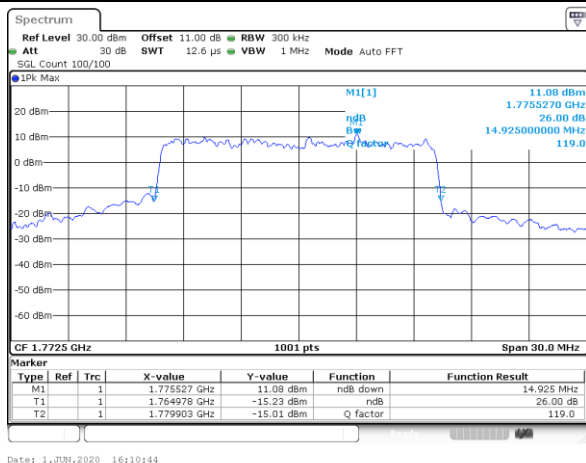
Middle Channel



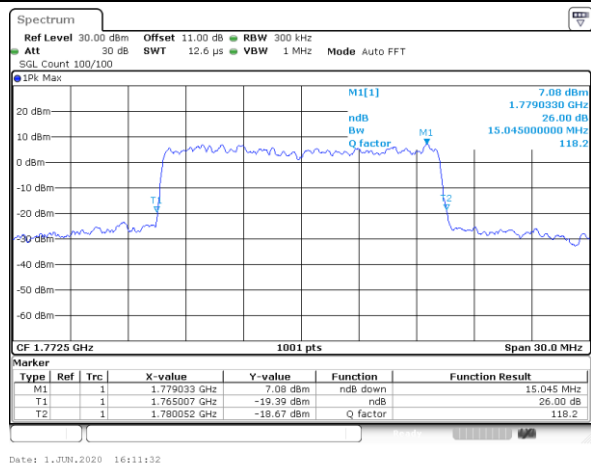
Middle Channel



Highest Channel



Highest Channel

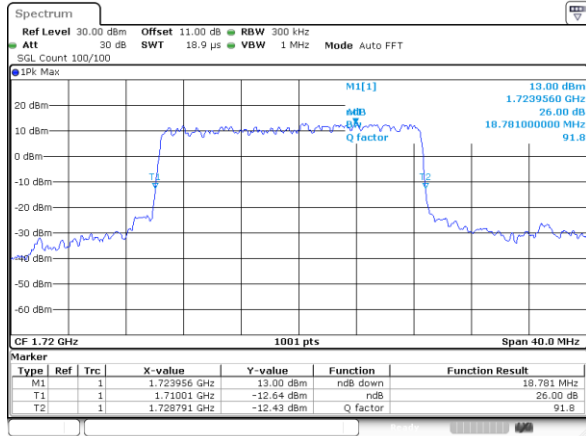




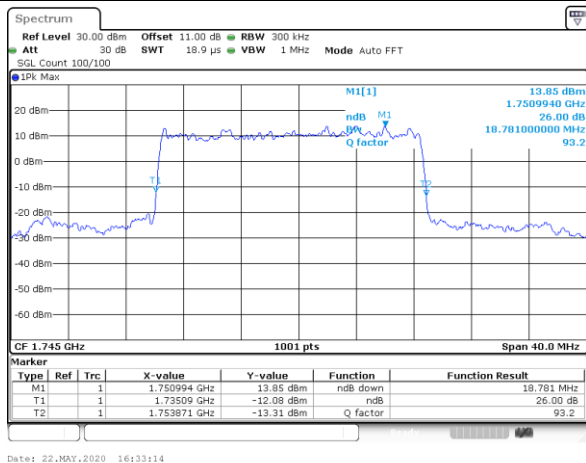
FR1 n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

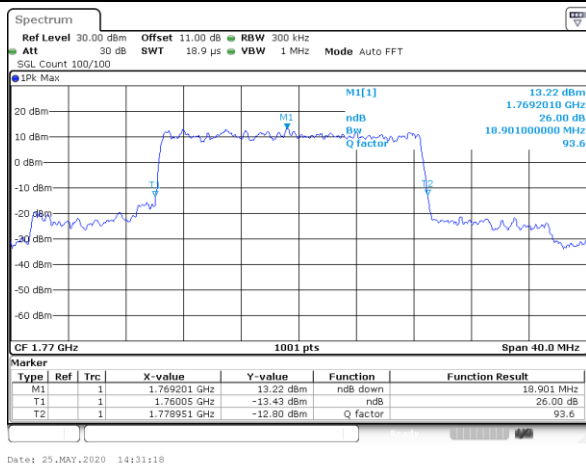
Lowest Channel



Middle Channel



Highest Channel

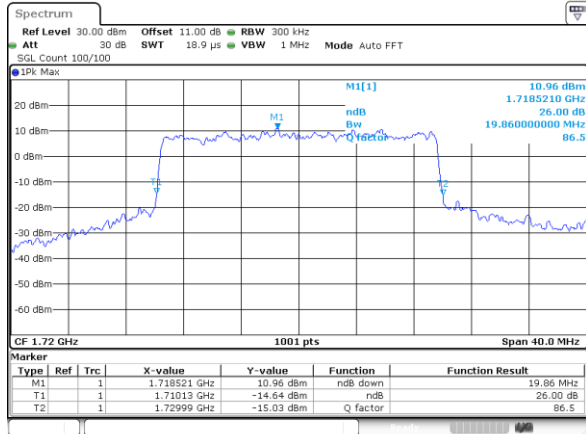




FR1 n66 / 20MHz / CP OFDM

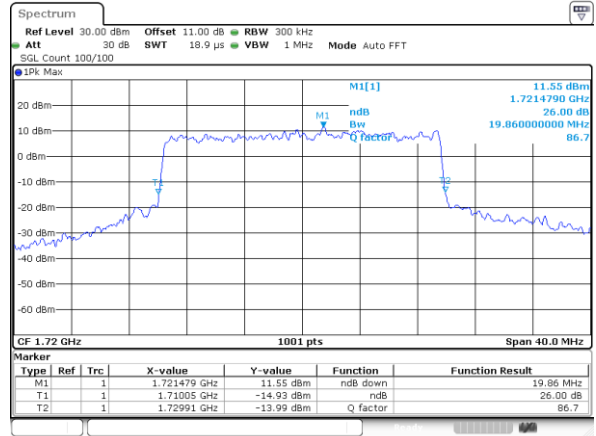
QPSK

Lowest Channel

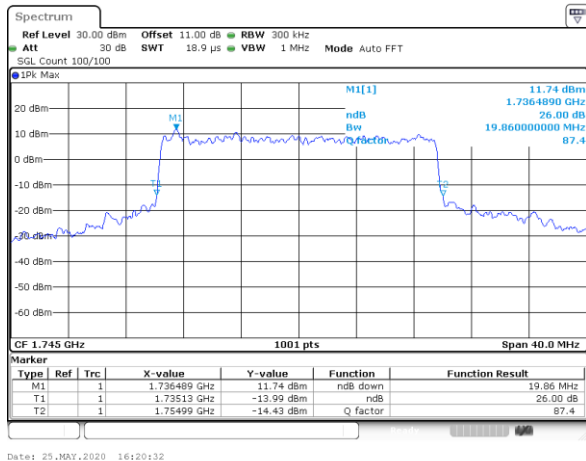


16QAM

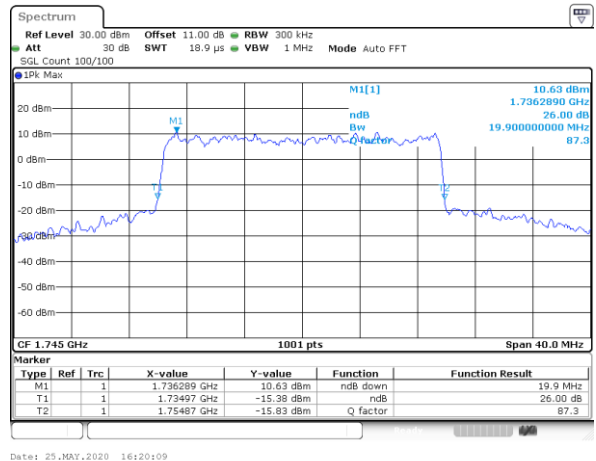
Lowest Channel



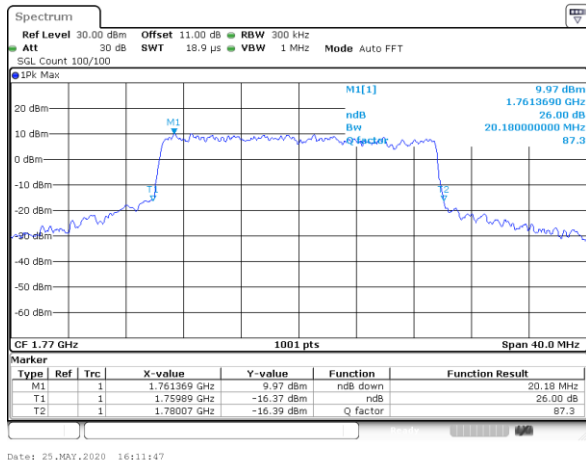
Middle Channel



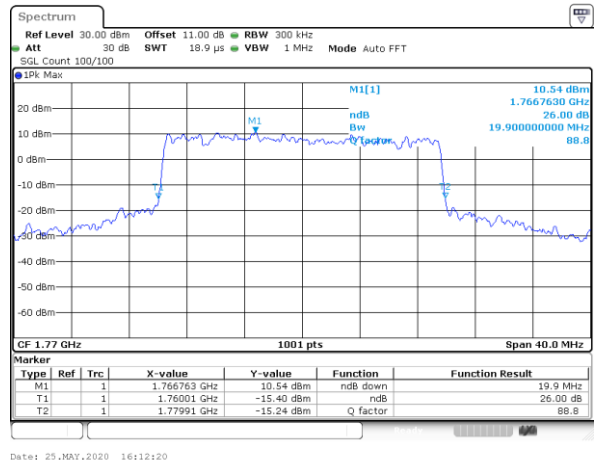
Middle Channel



Highest Channel



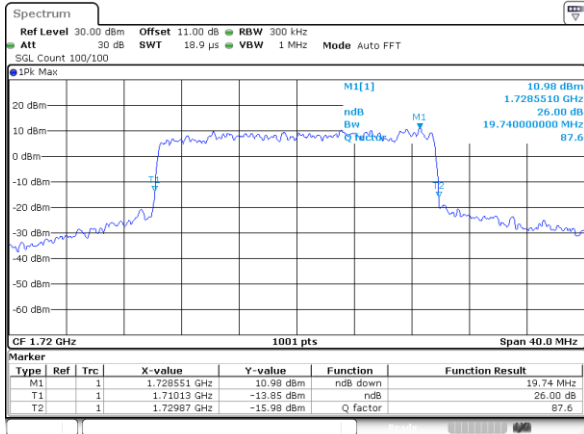
Highest Channel



FR1 n66 / 20MHz / CP OFDM

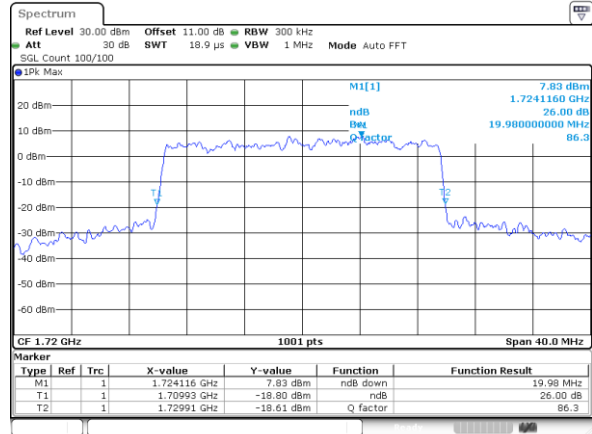
64QAM

Lowest Channel

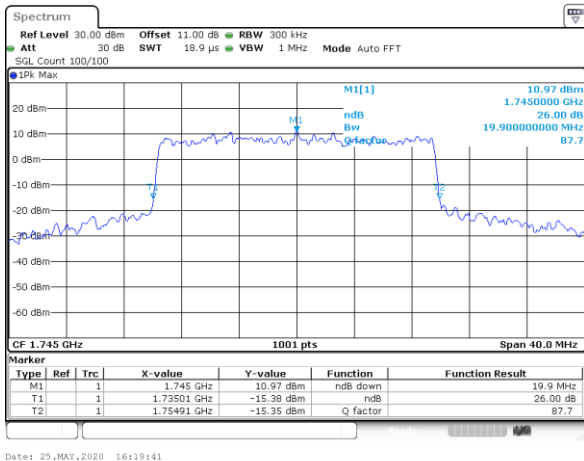


256QAM

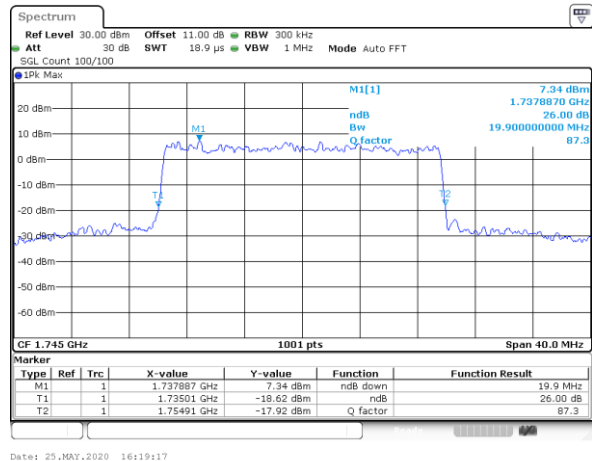
Lowest Channel



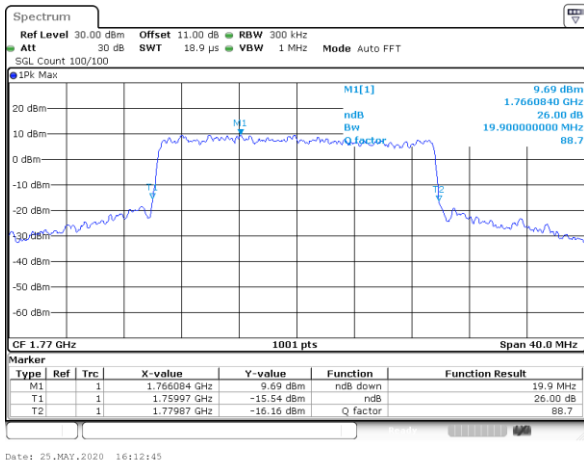
Middle Channel



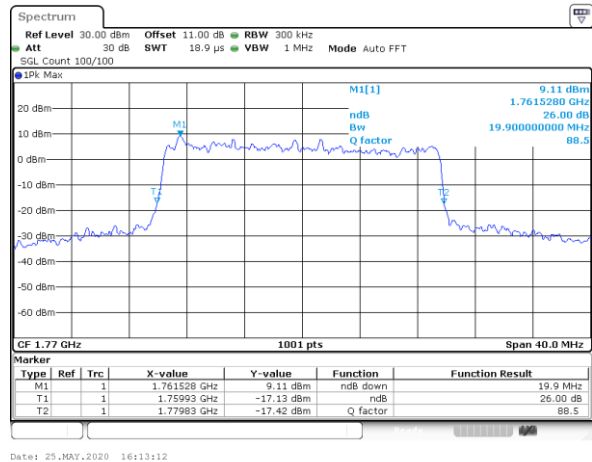
Middle Channel



Highest Channel



Highest Channel



**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	4.67		9.03		13.49		17.94	
Middle CH	4.67		9.07		13.46		17.94	
Highest CH	4.69		9.05		13.52		17.90	

Mode	FR1 n66 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.66	4.64	9.31	9.31	14.18	14.15	18.86	18.94
Middle CH	4.69	4.63	9.39	9.33	14.21	14.18	18.98	19.02
Highest CH	4.64	4.68	9.35	9.41	14.18	14.18	18.90	18.94

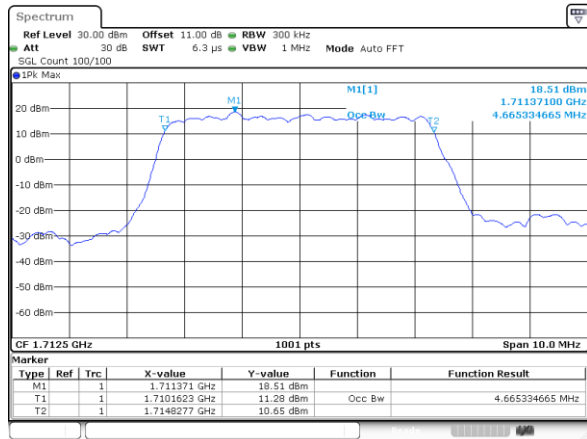
Mode	FR1 n66 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Lowest CH	4.70	4.63	9.33	9.35	14.12	14.18	18.82	18.94
Middle CH	4.62	4.66	9.37	9.31	14.15	14.21	19.02	18.98
Highest CH	4.68	4.67	9.39	9.39	14.27	14.21	18.94	18.98



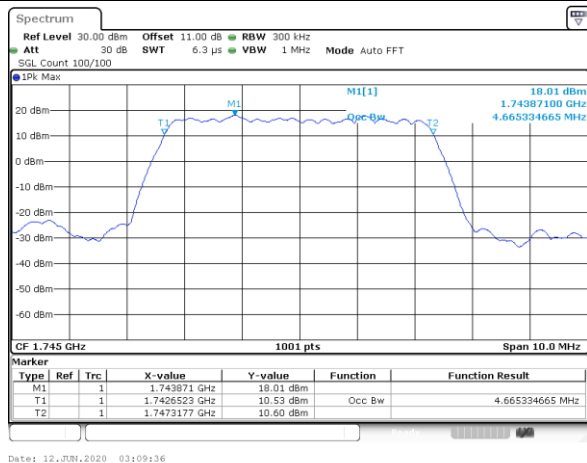
FR1 n66 / 5MHz / DFT-S OFDM

PI/2 BPSK

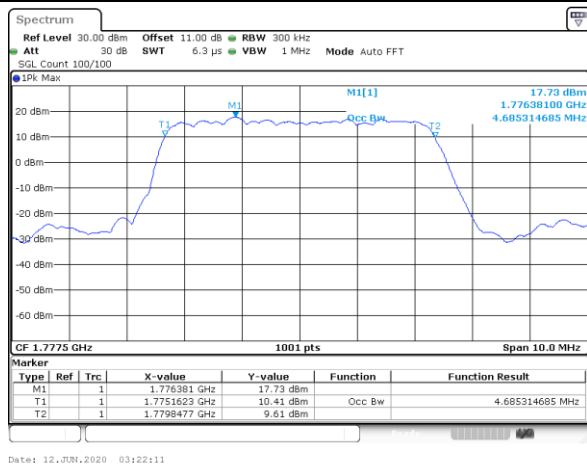
Lowest Channel



Middle Channel



Highest Channel

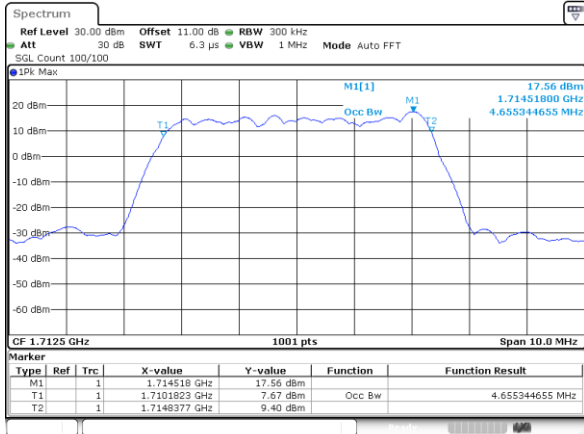




FR1 n66 / 5MHz / CP OFDM

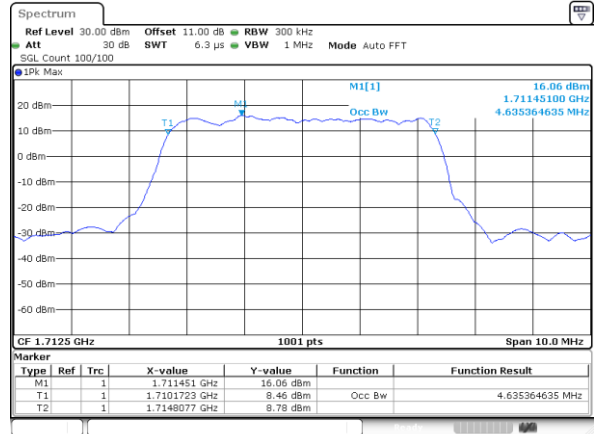
QPSK

Lowest Channel

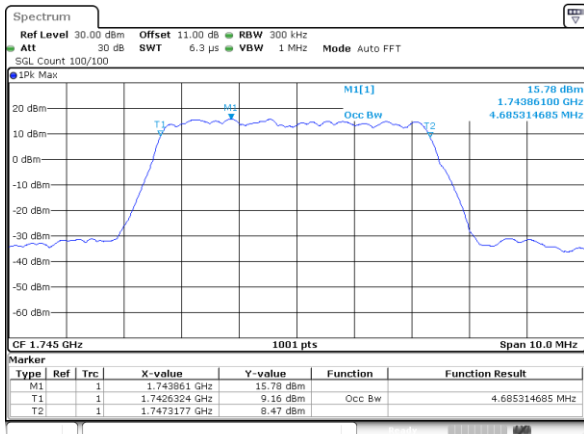


16QAM

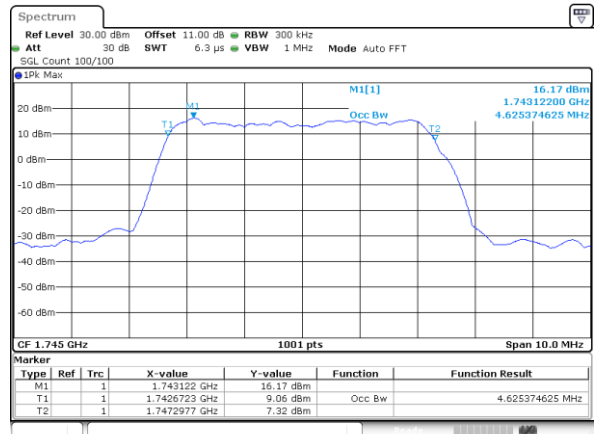
Lowest Channel



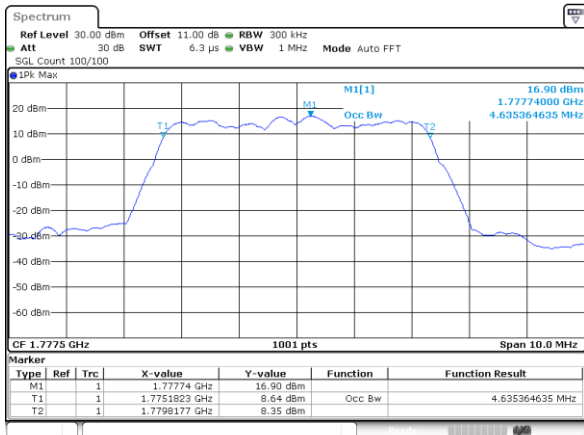
Middle Channel



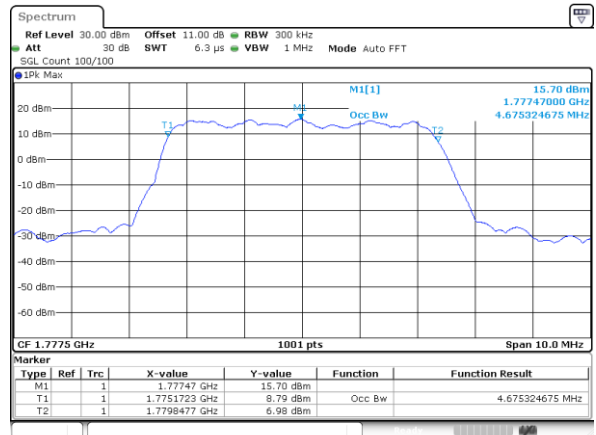
Middle Channel



Highest Channel



Highest Channel

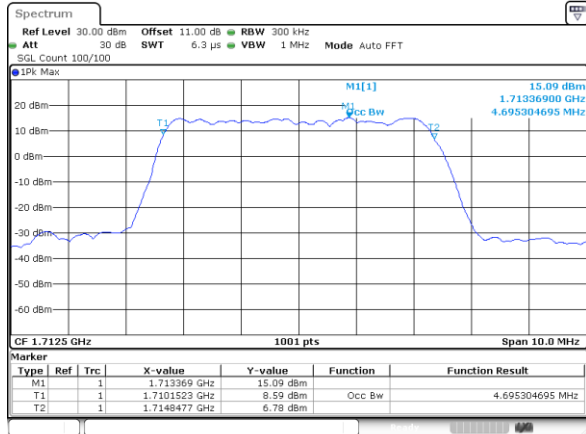




FR1 n66 / 5MHz / CP OFDM

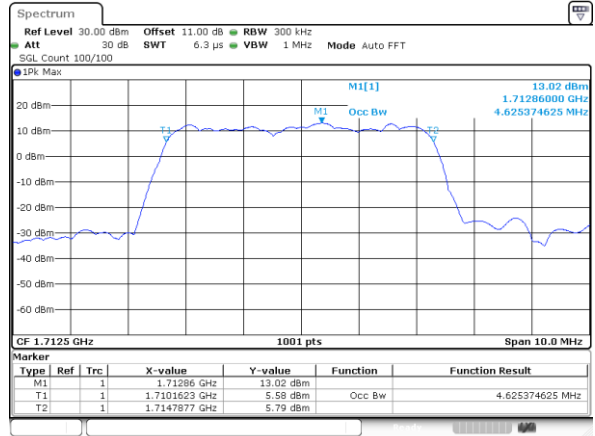
64QAM

Lowest Channel

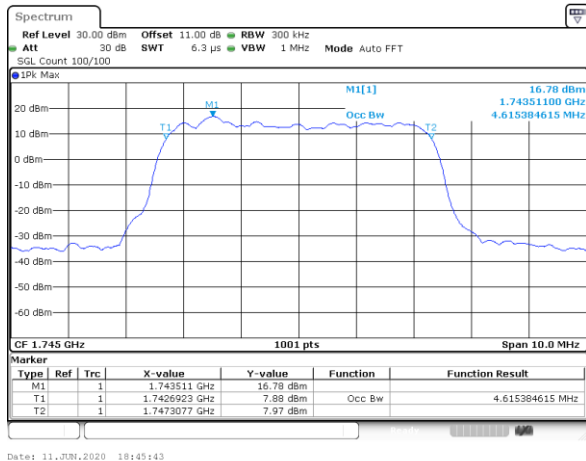


256QAM

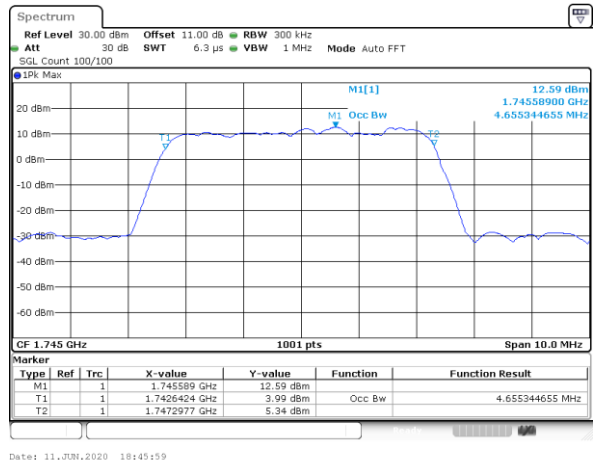
Lowest Channel



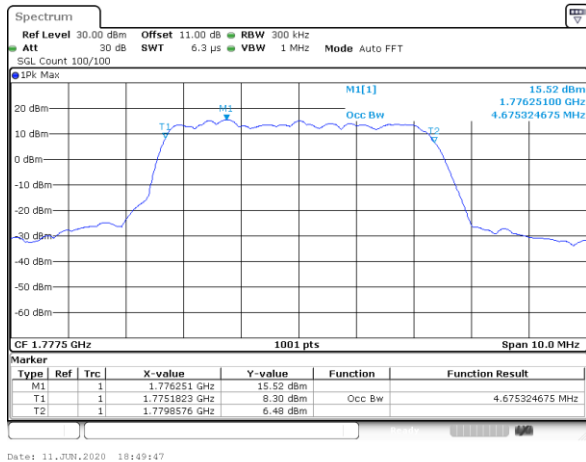
Middle Channel



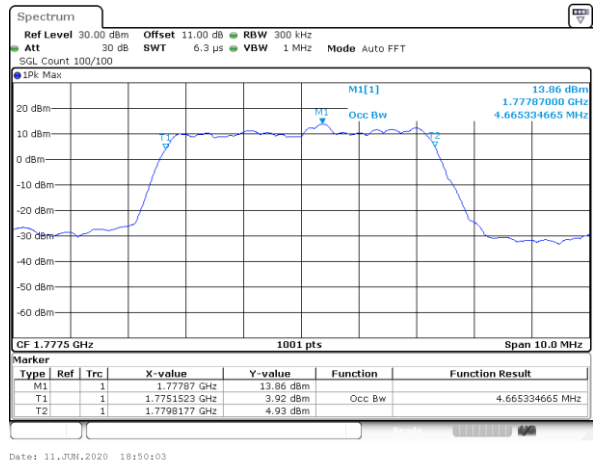
Middle Channel

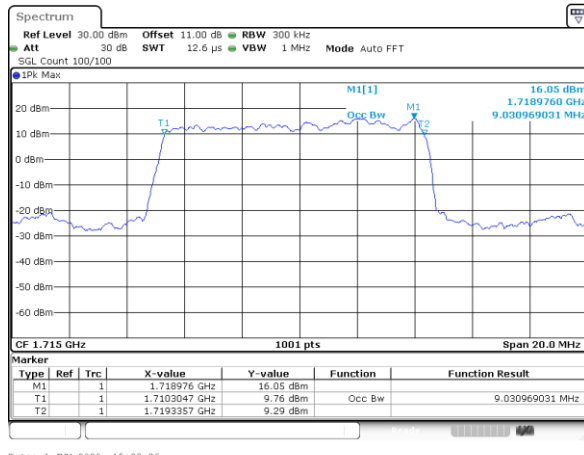
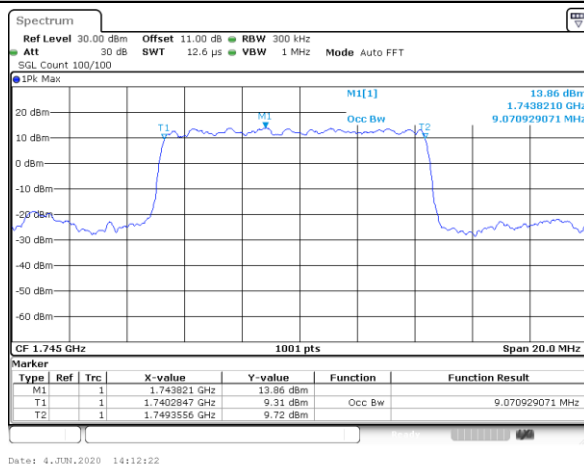


Highest Channel



Highest Channel



**FR1 n66 / 10MHz / DFT-S OFDM****PI/2 BPSK****Lowest Channel****Middle Channel****Highest Channel**