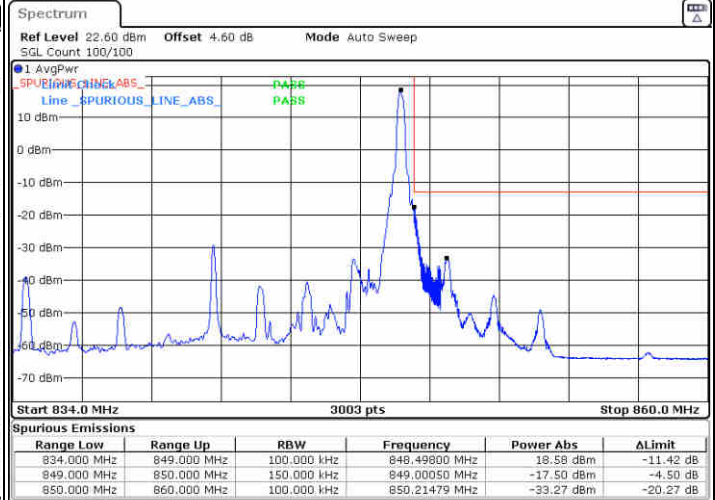
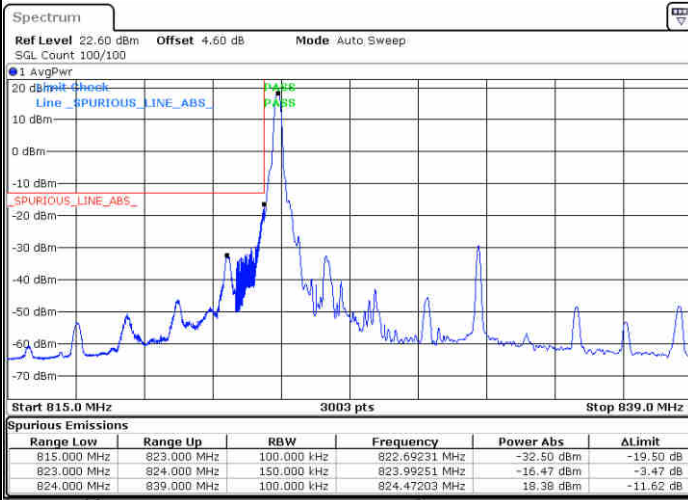




FR1 n5 / 15MHz / DFT-s-OFDM / 16QAM

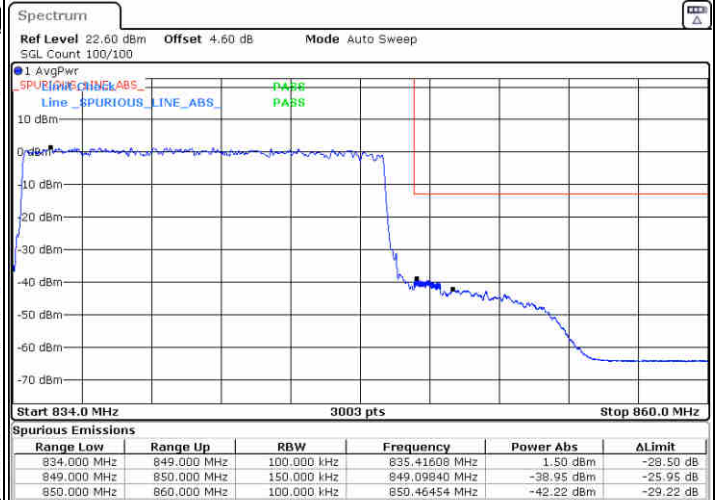
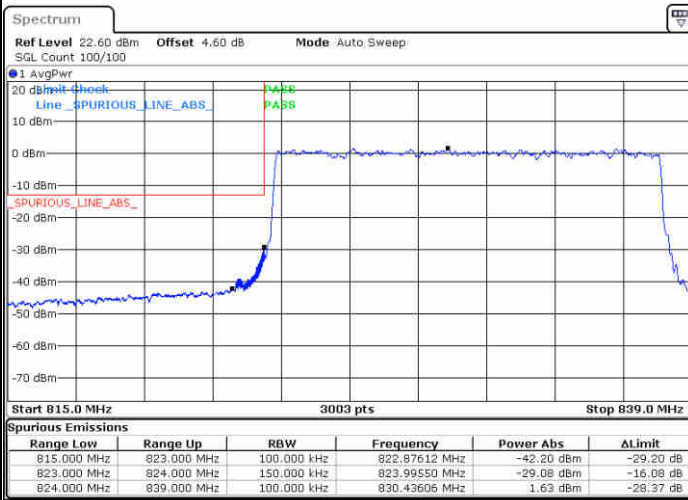
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

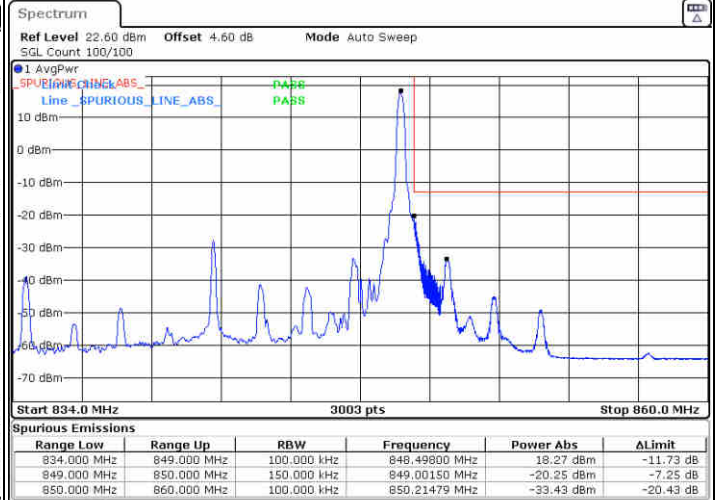
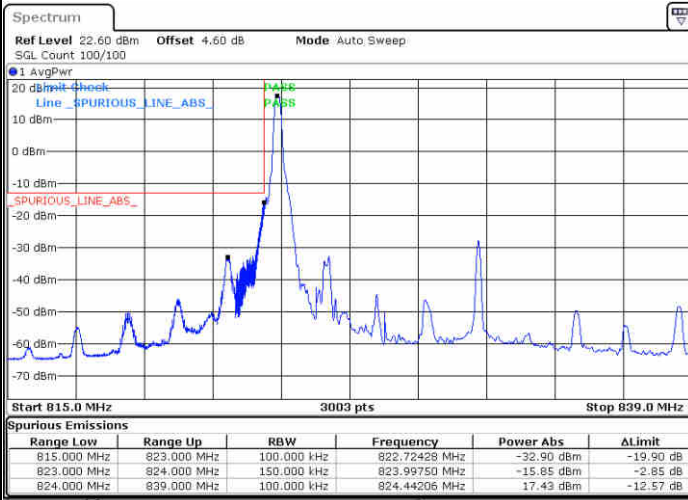




FR1 n5 / 15MHz / DFT-s-OFDM / 64QAM

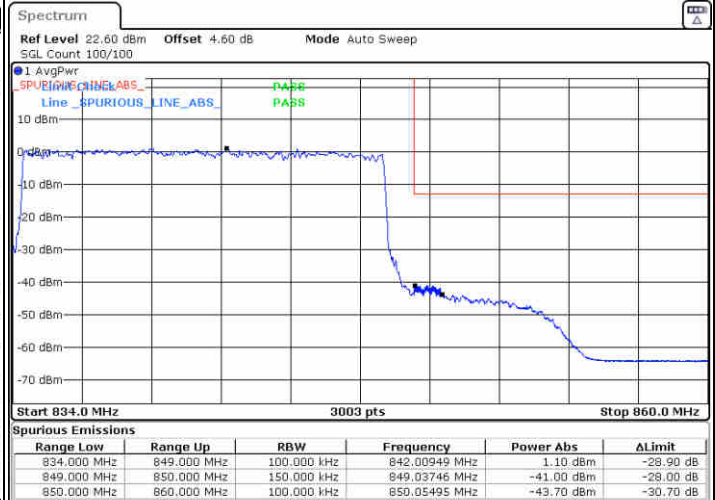
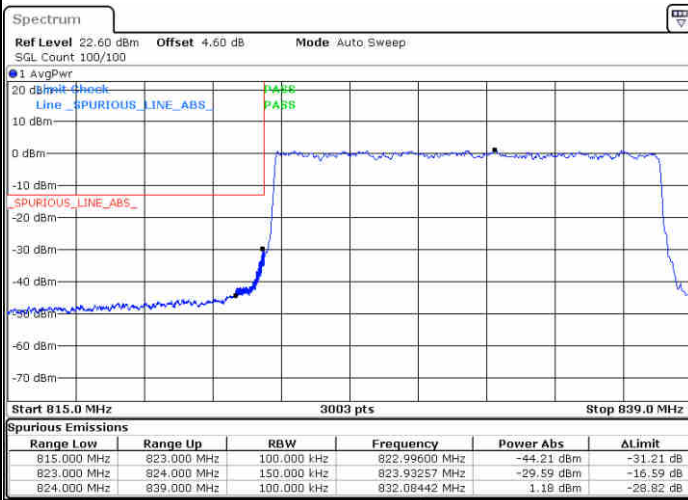
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

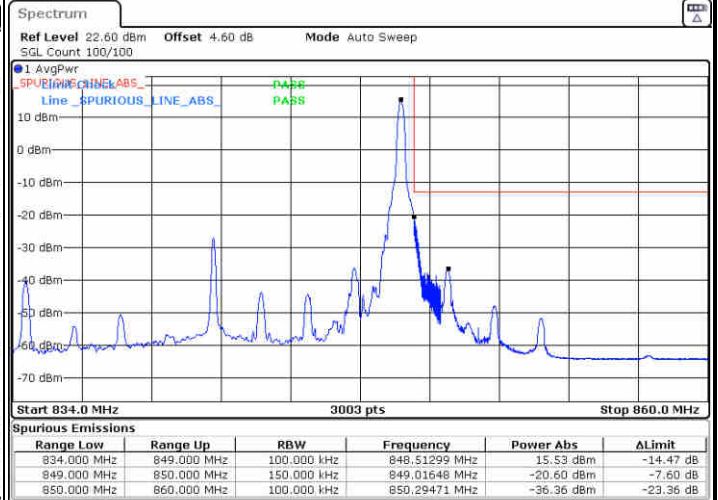
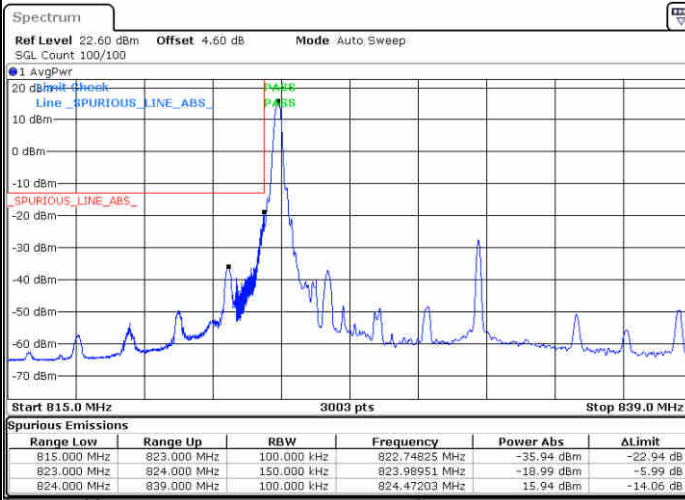




FR1 n5 / 15MHz / DFT-s-OFDM / 256QAM

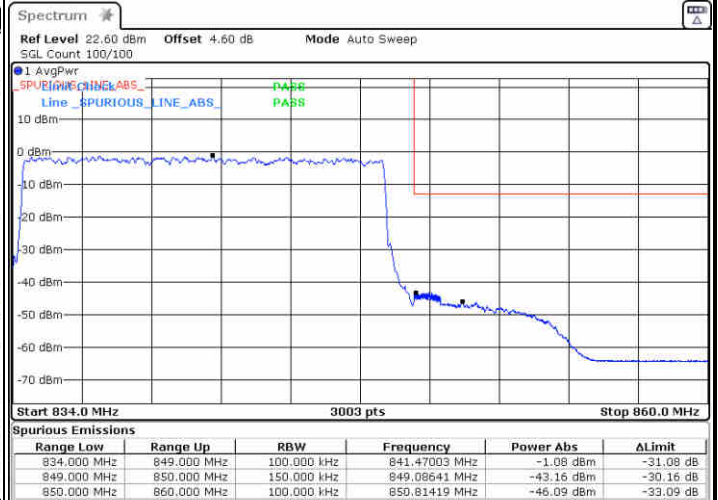
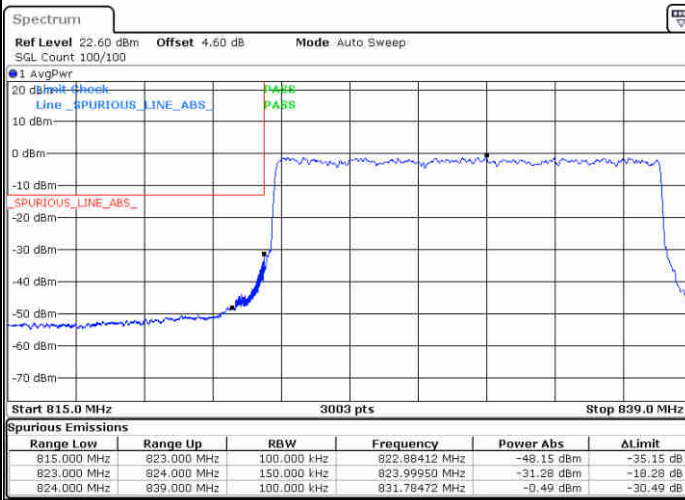
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

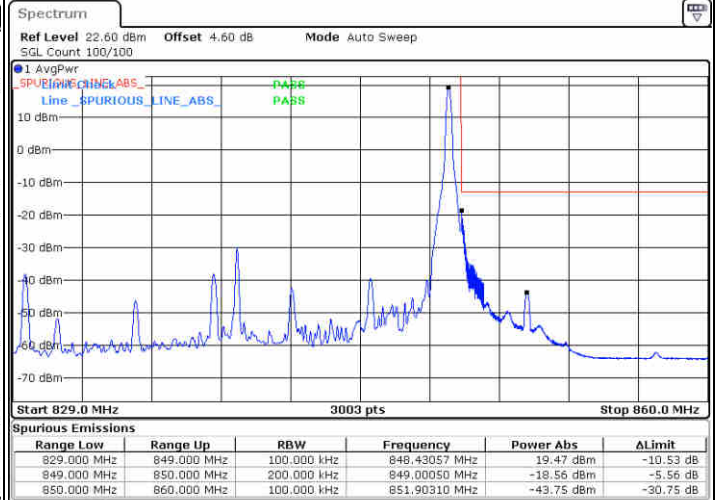
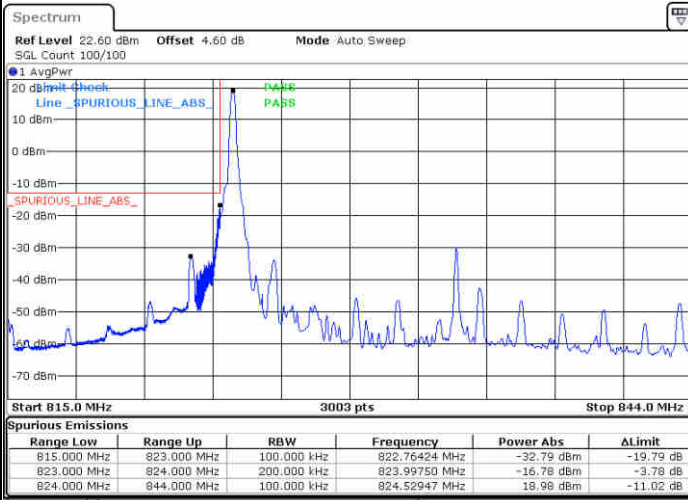




FR1 n5 / 20MHz / DFT-s-OFDM / PI/2 BPSK

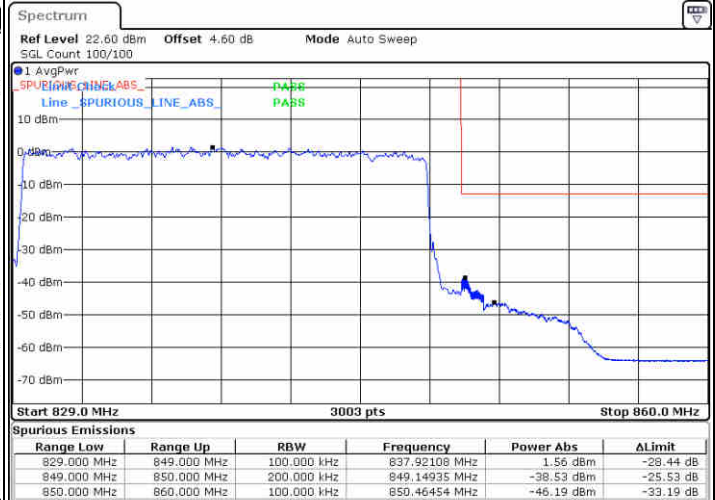
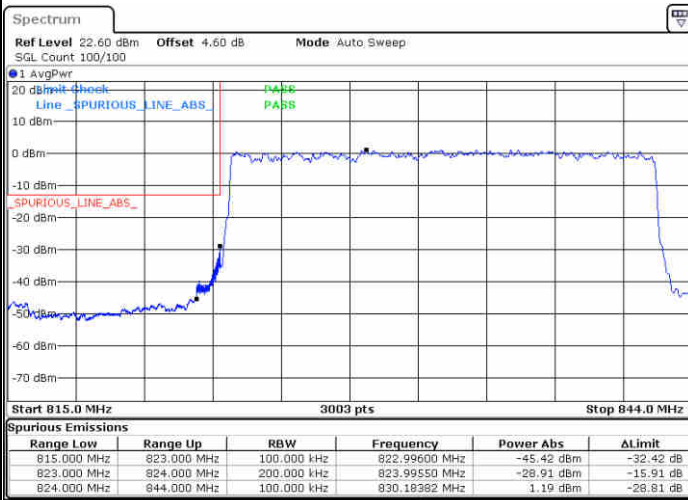
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

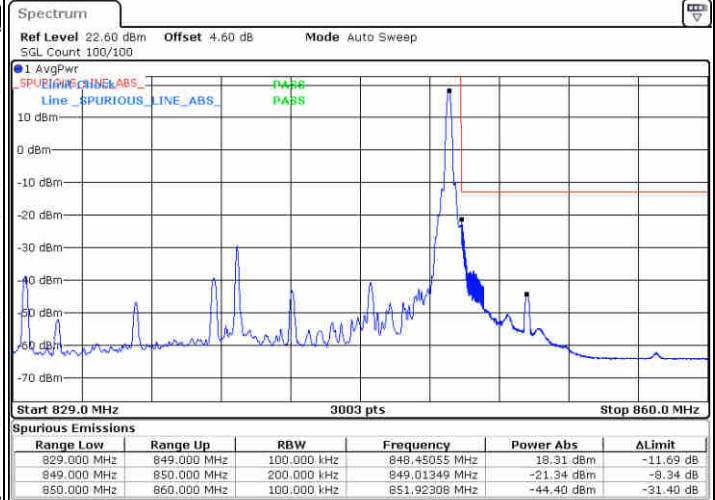
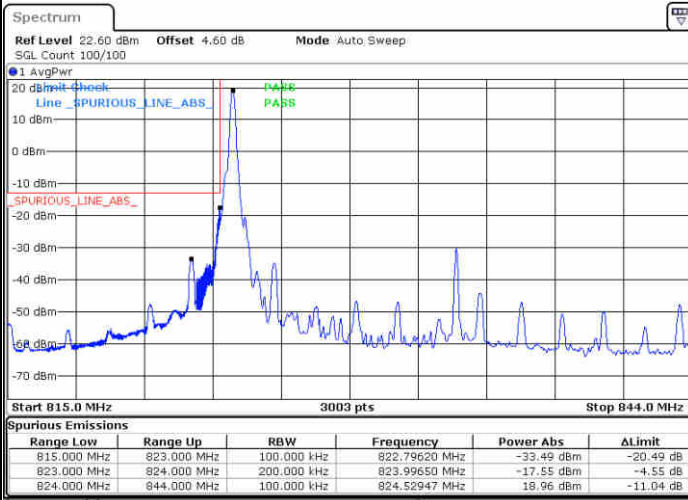




FR1 n5 / 20MHz / DFT-s-OFDM / QPSK

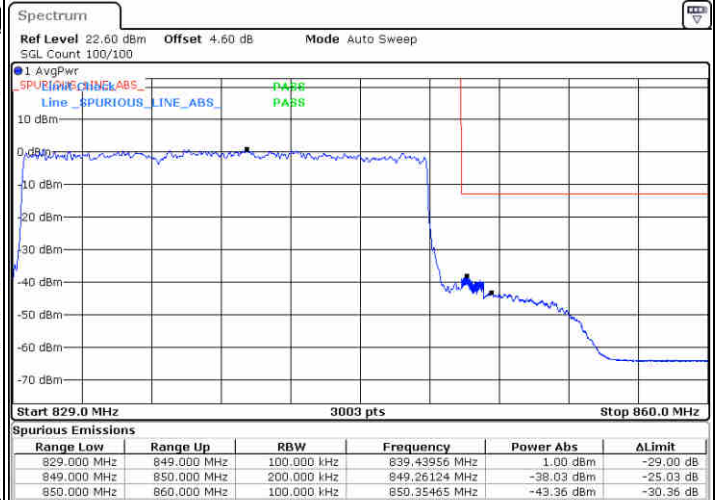
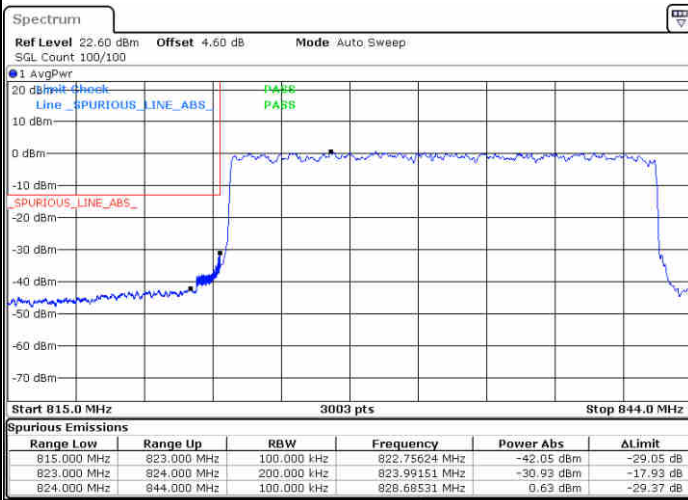
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

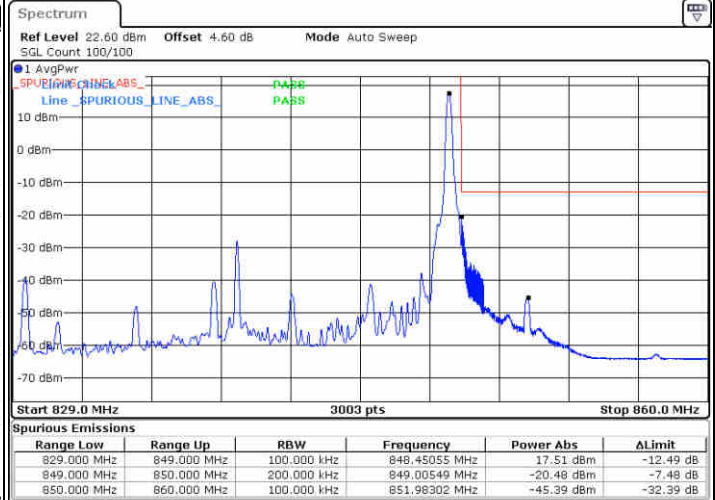
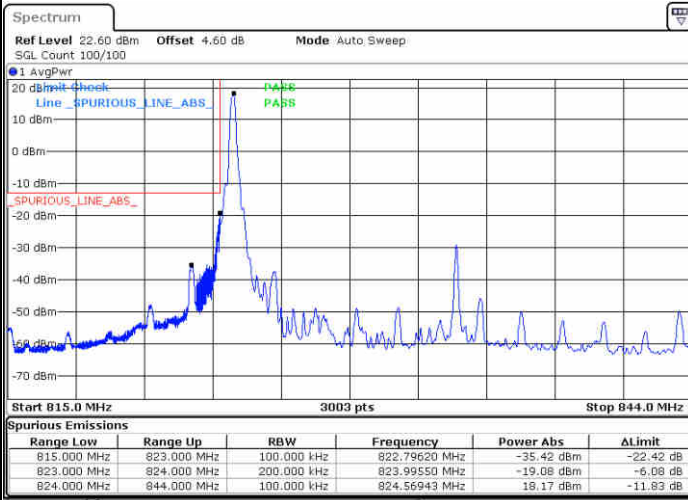




FR1 n5 / 20MHz / DFT-s-OFDM / 16QAM

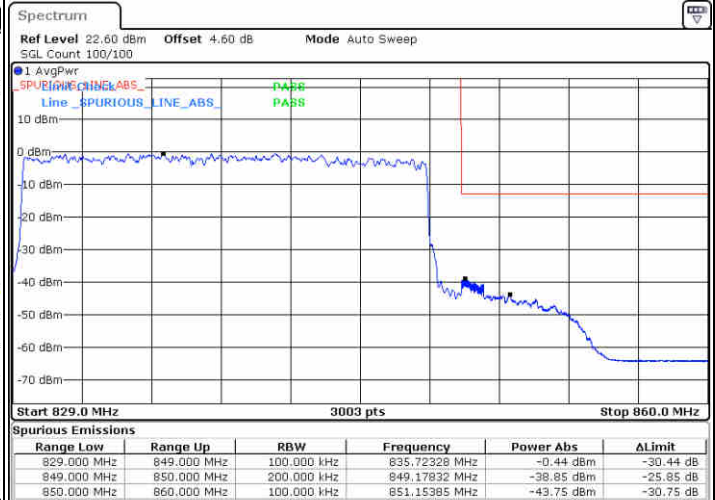
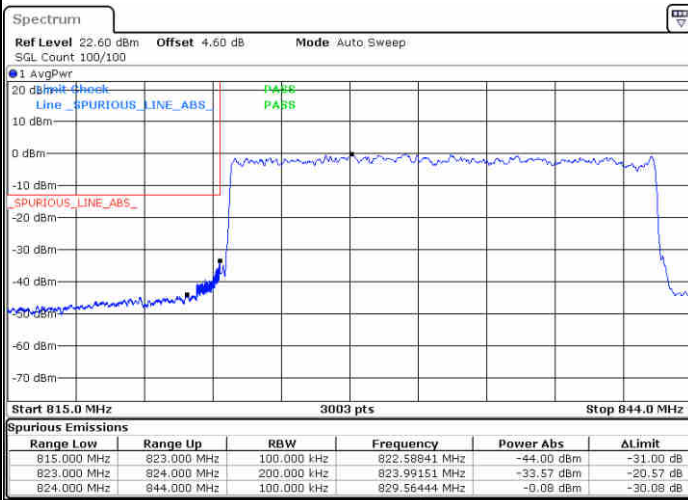
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

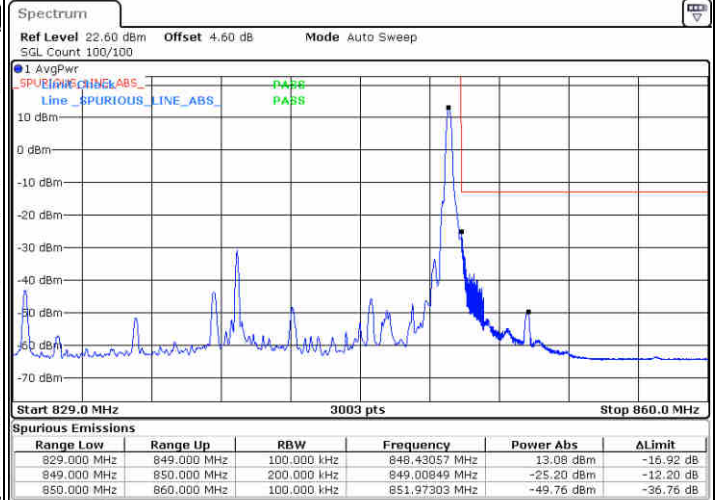
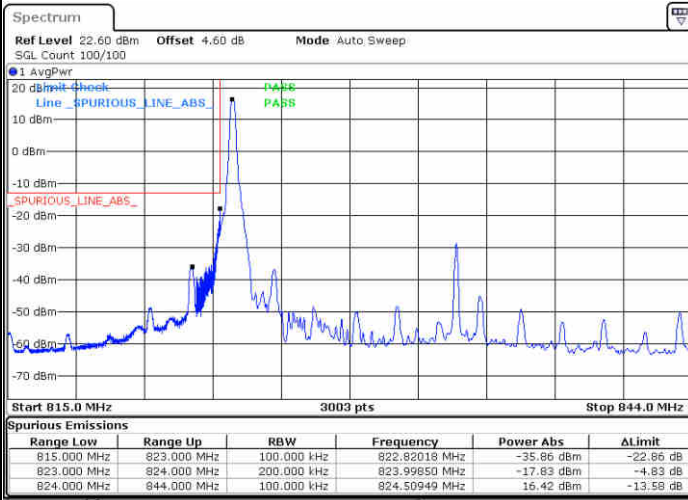




FR1 n5 / 20MHz / DFT-s-OFDM / 64QAM

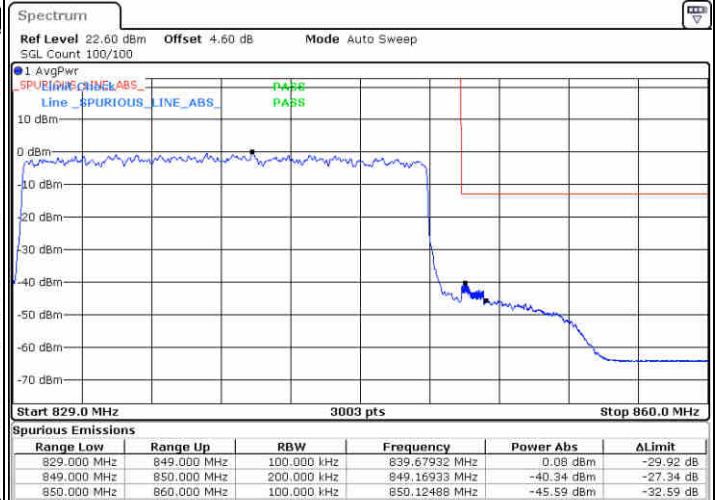
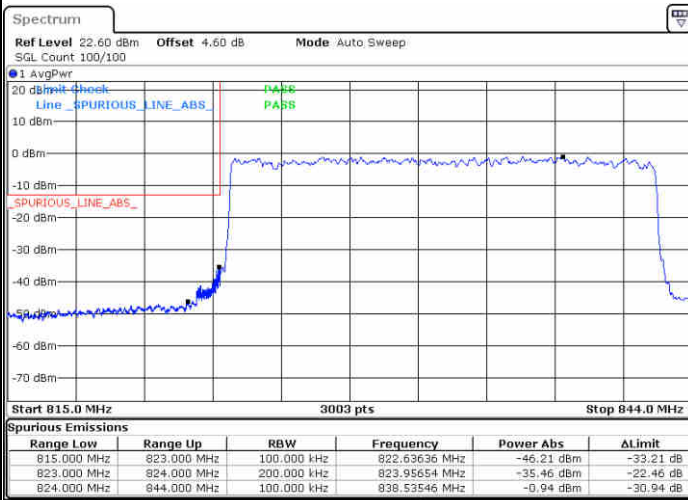
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

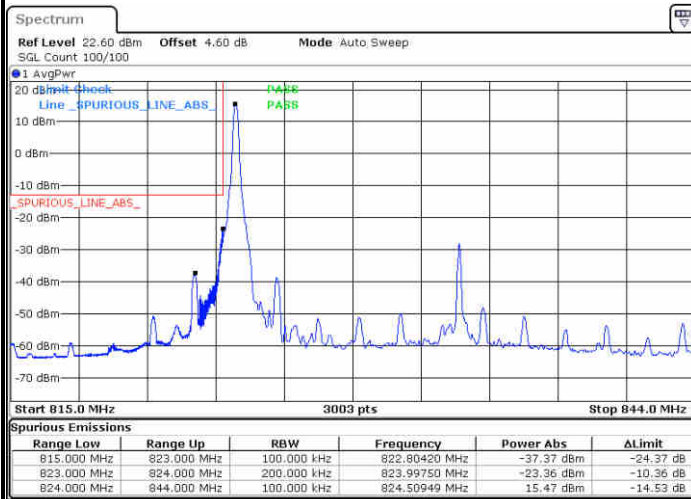
Highest Band Edge / Full RB



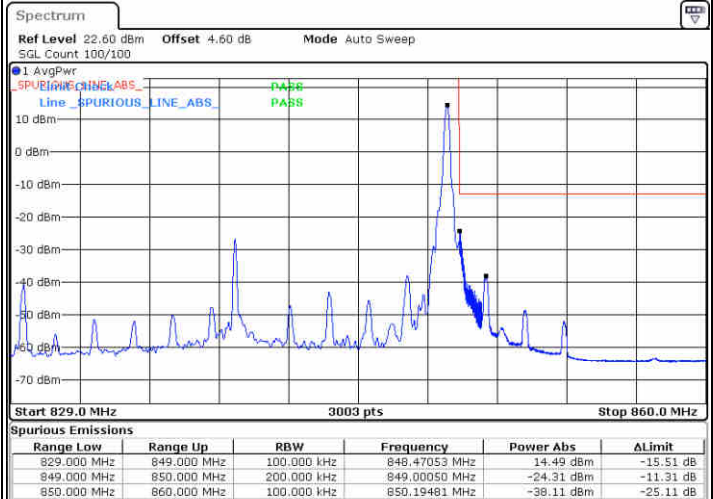


FR1 n5 / 20MHz / DFT-s-OFDM / 256QAM

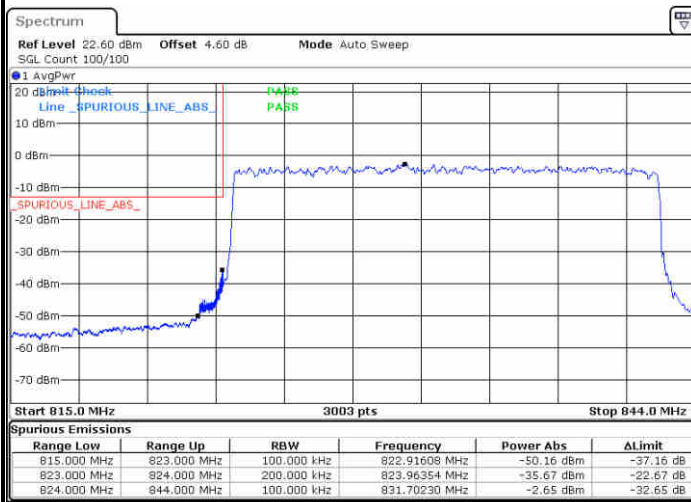
Lowest Band Edge / 1RB0



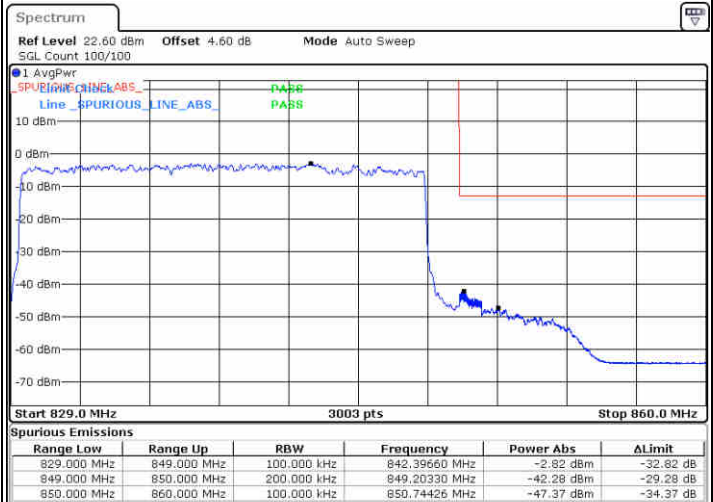
Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



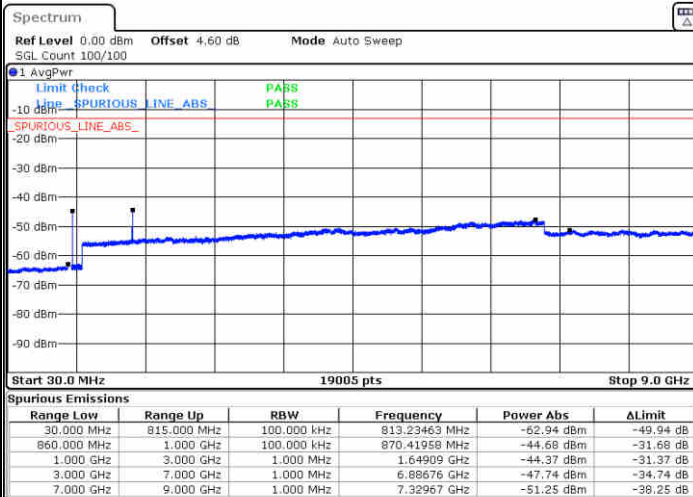


Conducted Spurious Emission

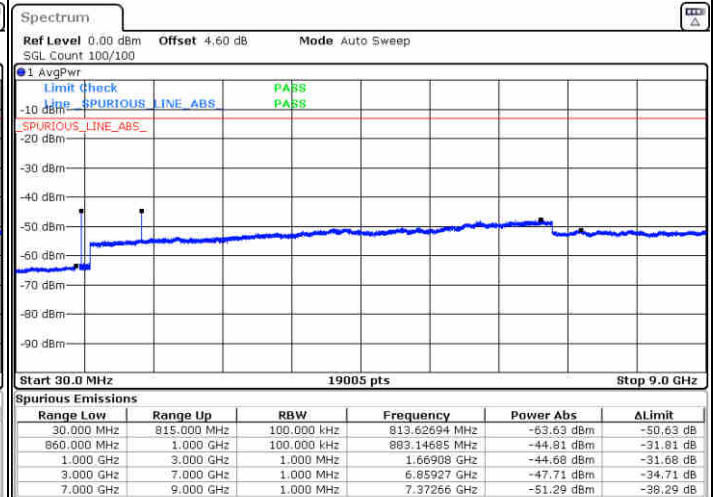
FR1 n5 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

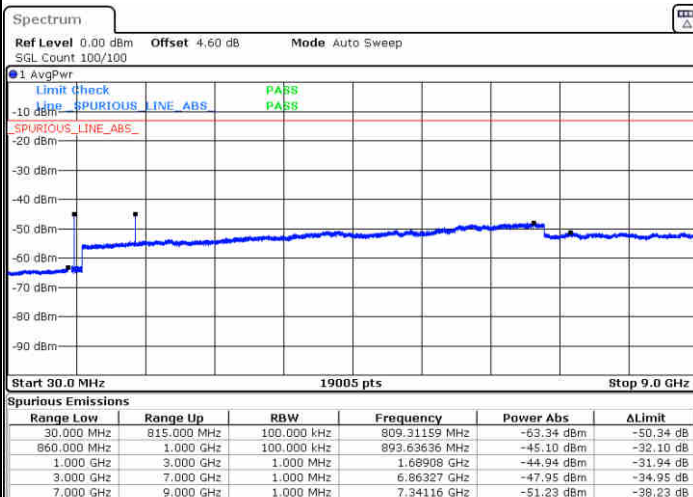


Date: 7.JUL.2020 15:55:11



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

Highest Channel / 1RB1

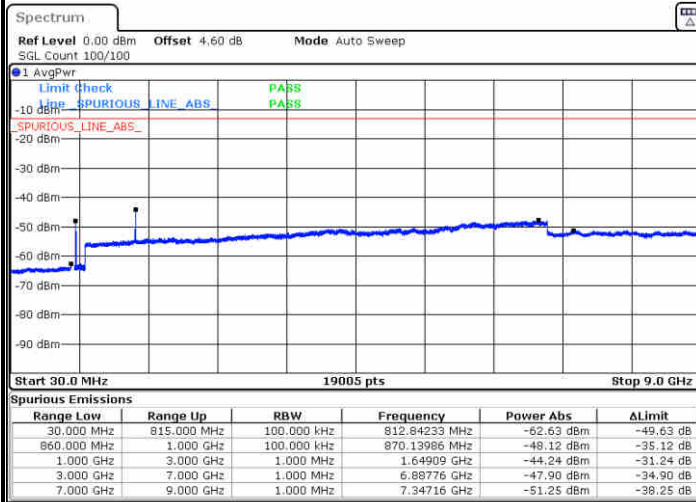


Date: 7.JUL.2020 16:11:40



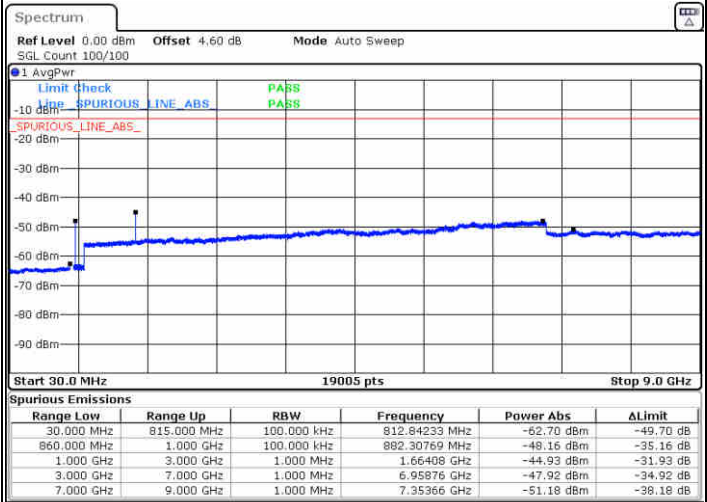
FR1 n5 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



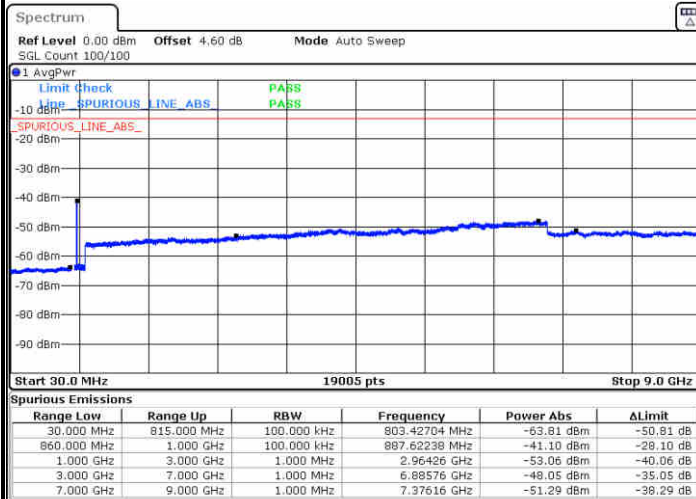
Date: 7.JUL.2020 15:10:12

Middle Channel / 1RB1



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

Highest Channel / 1RB1

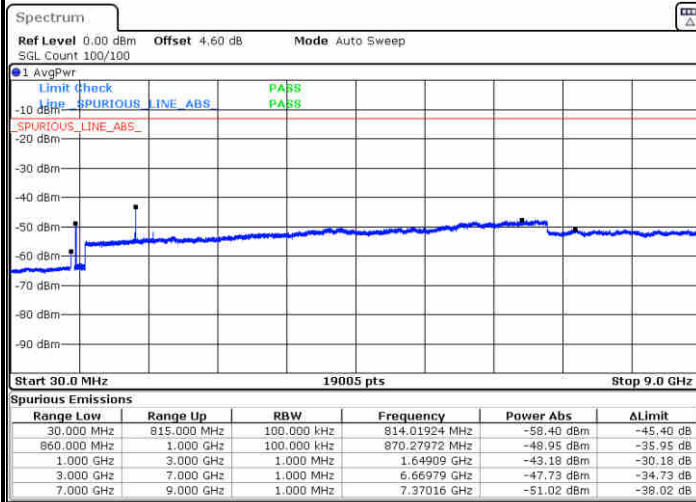


Date: 7.JUL.2020 15:34:47



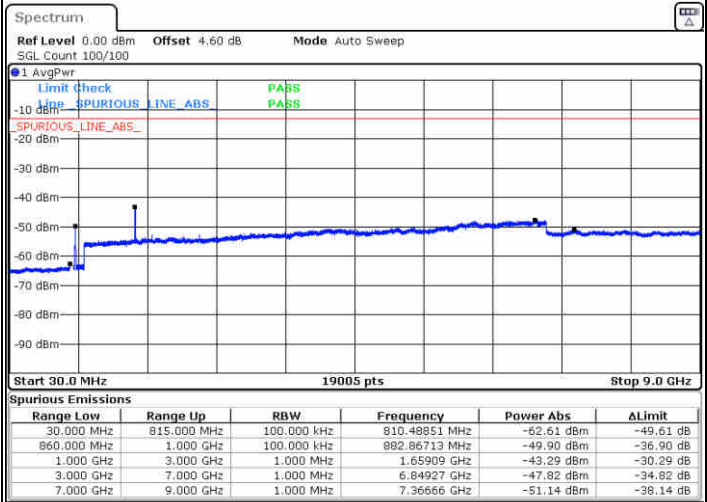
FR1 n5 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



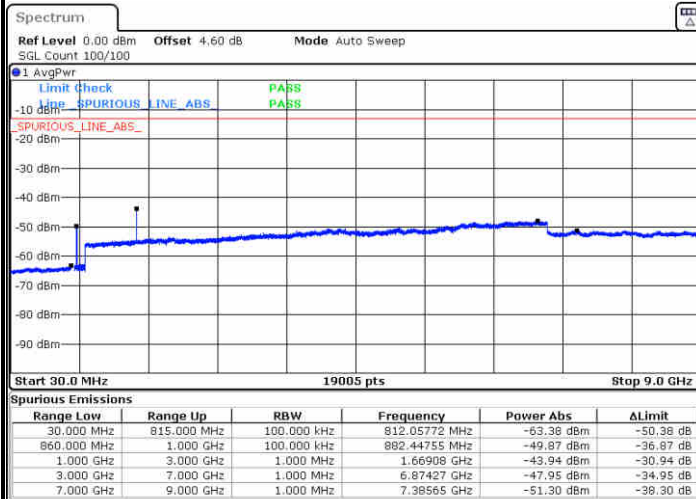
Date: 7.JUL.2020 14:18:17

Middle Channel / 1RB1



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

Highest Channel / 1RB1

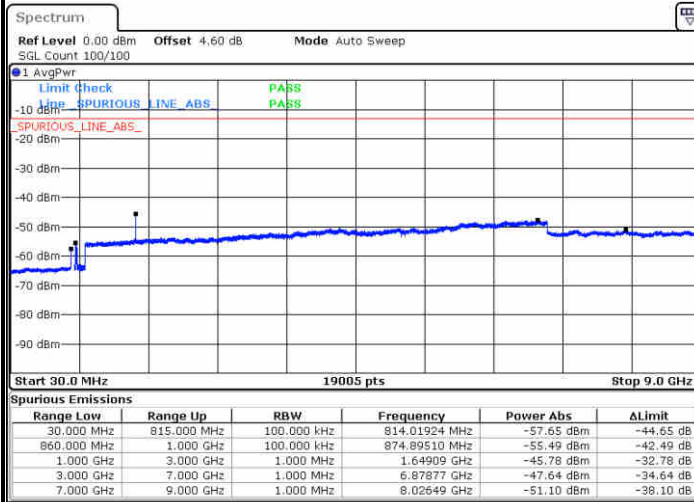


Date: 7.JUL.2020 14:50:55



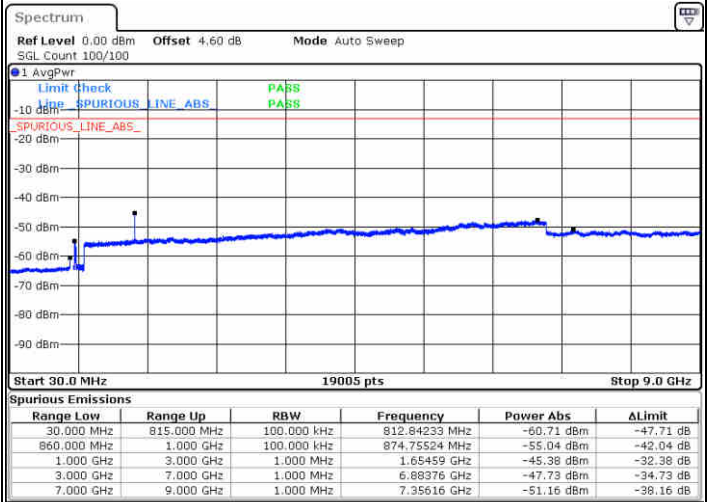
FR1 n5 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



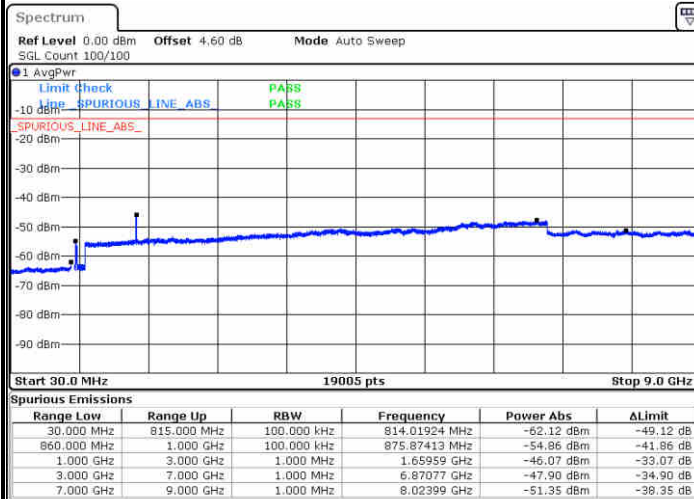
Date: 3.JUL.2020 16:31:05

Middle Channel / 1RB1



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				



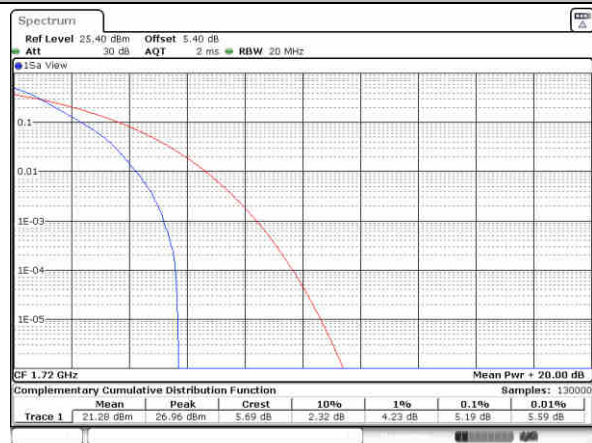
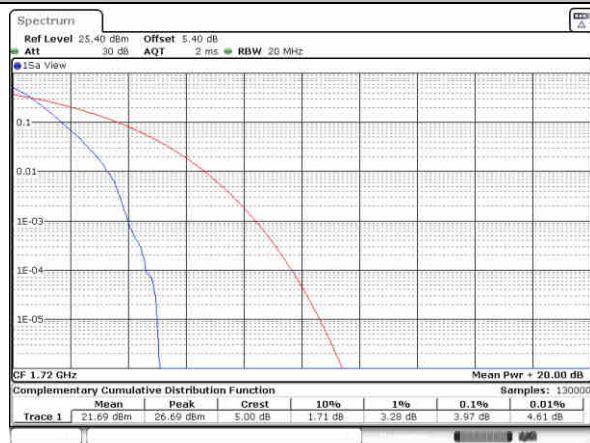
FR1 n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

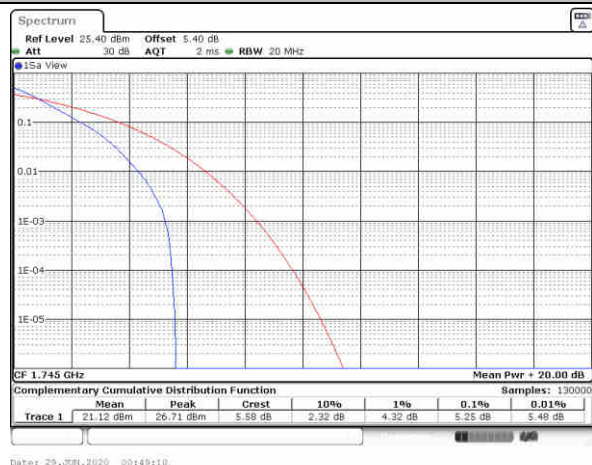
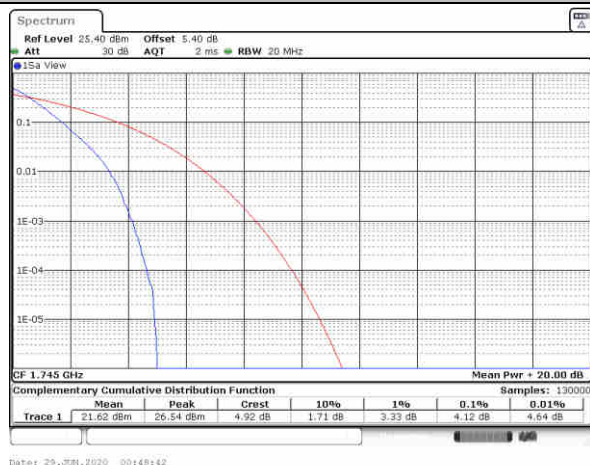
Lowest Channel / Full RB

Lowest Channel / Full RB



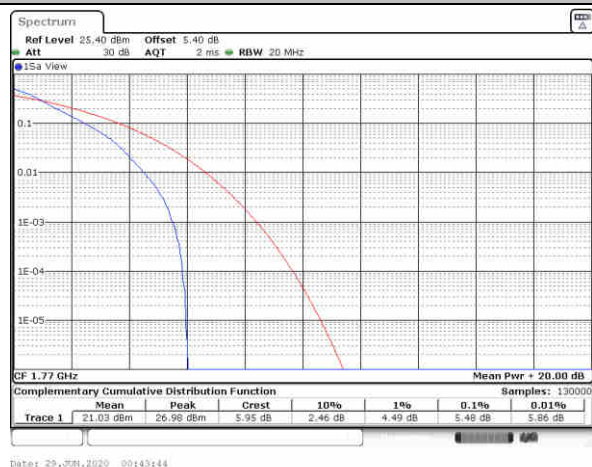
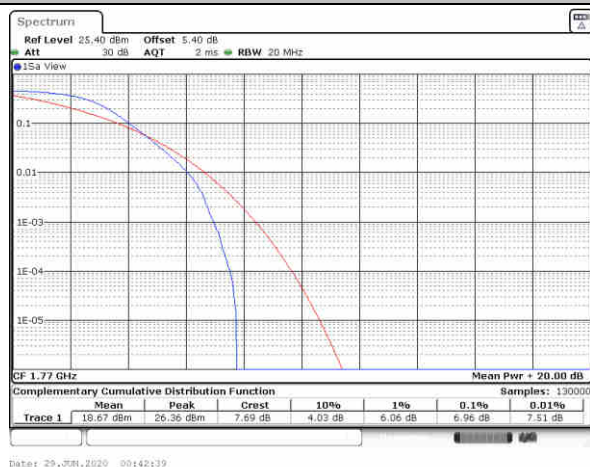
Middle Channel / Full RB

Middle Channel / Full RB



Highest Channel / Full RB

Highest Channel / Full RB





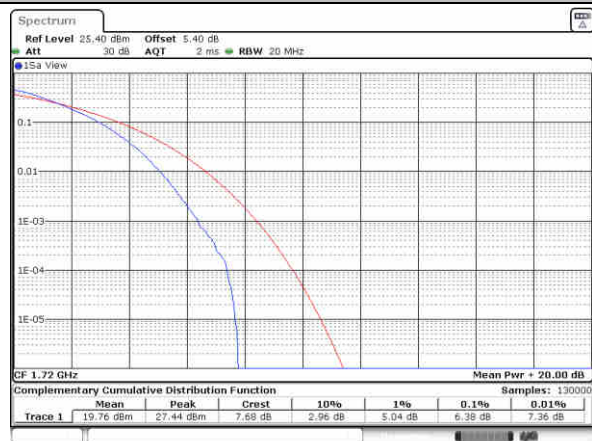
FR1 n66 / 20MHz / DFT-S OFDM

16QAM

64QAM

Lowest Channel / Full RB

Lowest Channel / Full RB



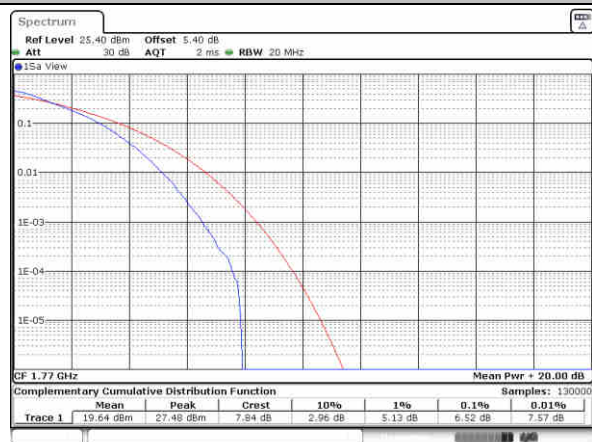
Middle Channel / Full RB

Middle Channel / Full RB



Highest Channel / Full RB

Highest Channel / Full RB

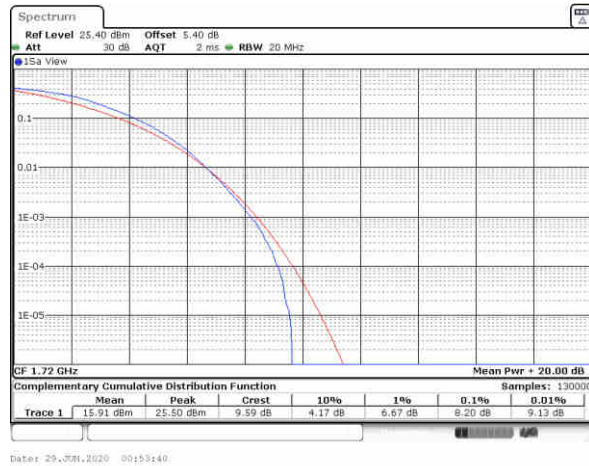




FR1 n66 / 20MHz / DFT-S OFDM

256QAM

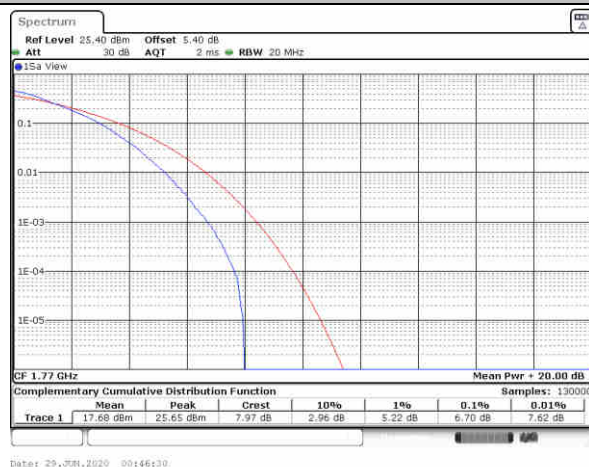
Lowest Channel / Full RB



Middle Channel / Full RB



Highest Channel / Full RB





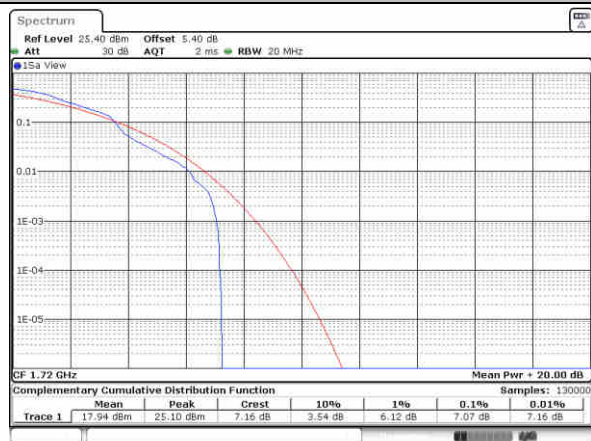
FR1 n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / 1RB0

Lowest Channel / 1RB0



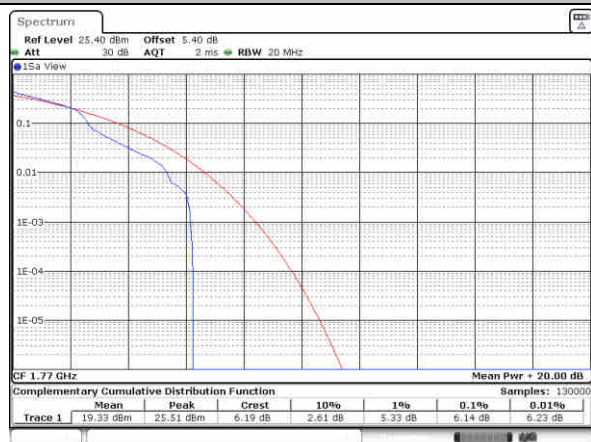
Middle Channel / 1RB0

Middle Channel / 1RB0



Highest Channel / 1RB0

Highest Channel / 1RB0





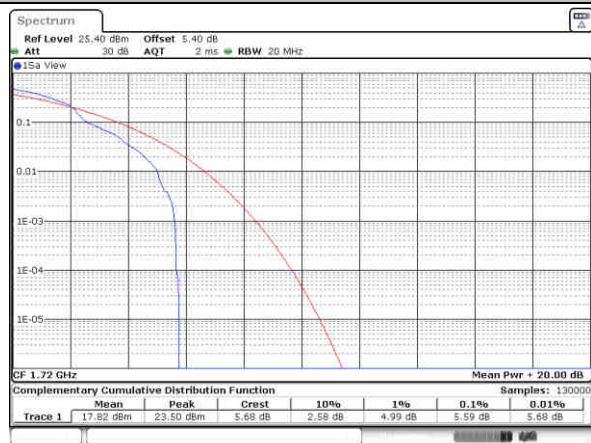
FR1 n66 / 20MHz / DFT-S OFDM

16QAM

64QAM

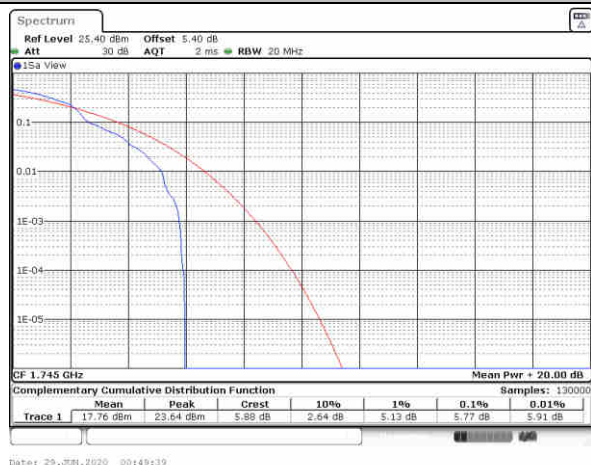
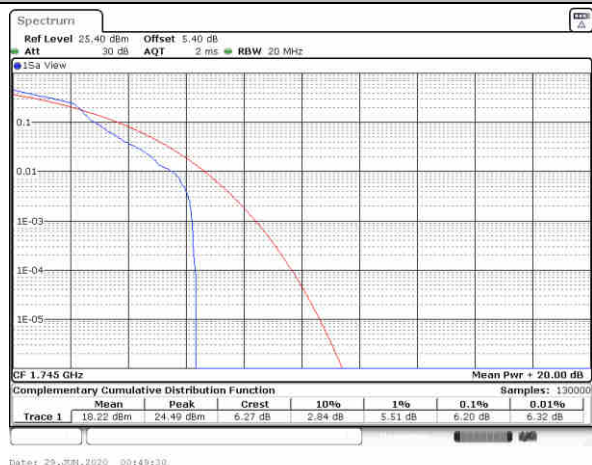
Lowest Channel / 1RB0

Lowest Channel / 1RB0



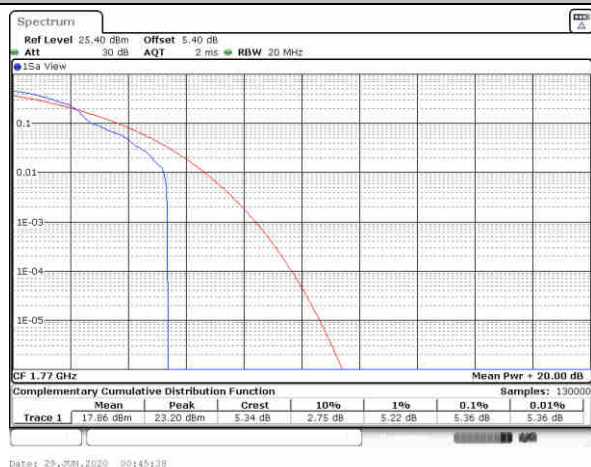
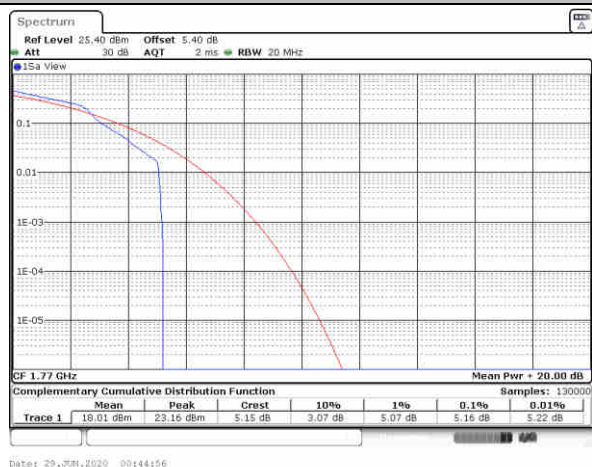
Middle Channel / 1RB0

Middle Channel / 1RB0



Highest Channel / 1RB0

Highest Channel / 1RB0

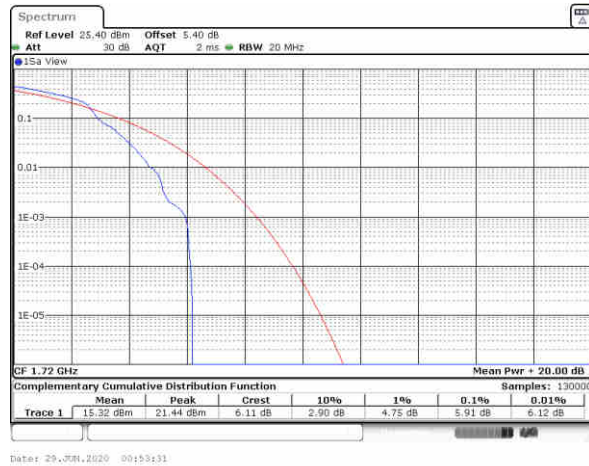




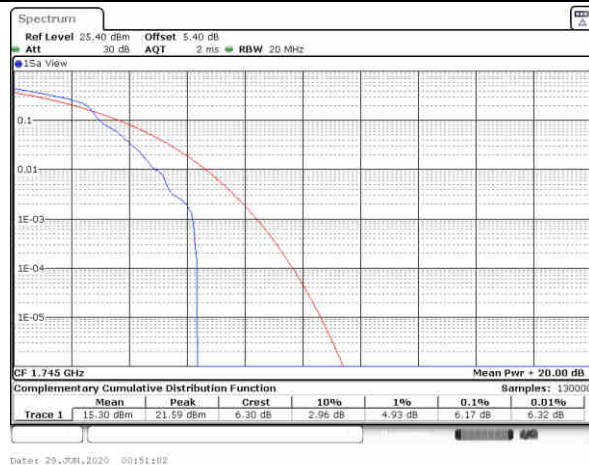
FR1 n66 / 20MHz / DFT-S OFDM

256QAM

Lowest Channel / 1RB0



Middle Channel / 1RB0



Highest Channel / 1RB0



**26dB Bandwidth**

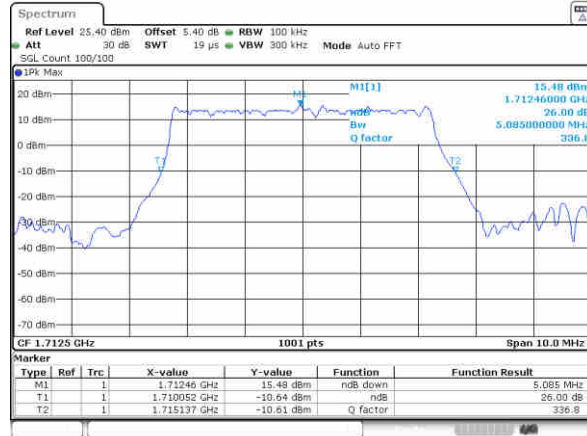
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Lowest CH	5.08		9.57		14.36		20.02	
Middle CH	5.04		9.41		14.54		20.22	
Highest CH	5.16		9.53		14.39		20.18	
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		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



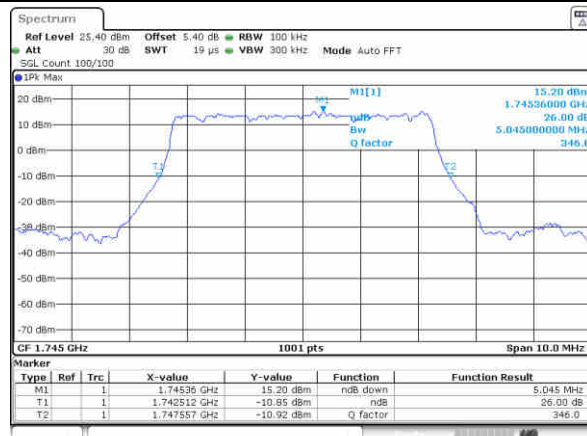
FR1 n66 / 5MHz / DFT-S OFDM

PI/2 BPSK

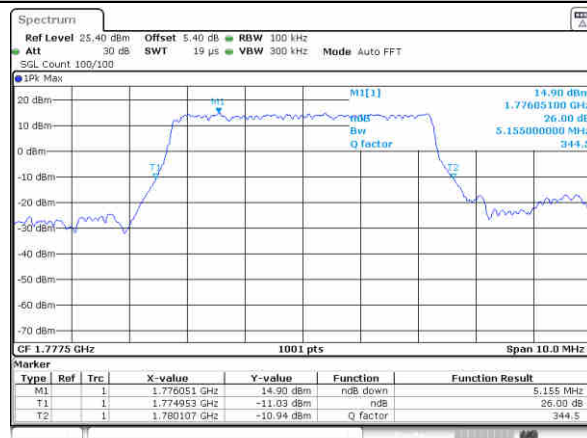
Lowest Channel



Middle Channel



Highest Channel

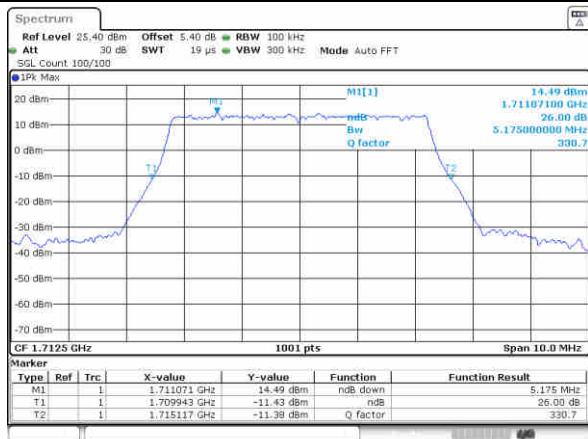




FR1 n66 / 5MHz / DFT-S OFDM

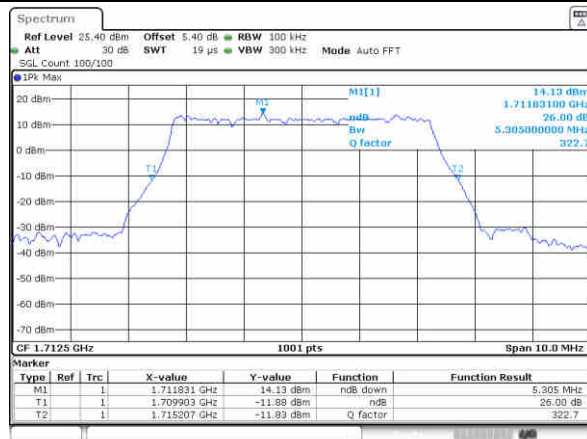
QPSK

Lowest Channel

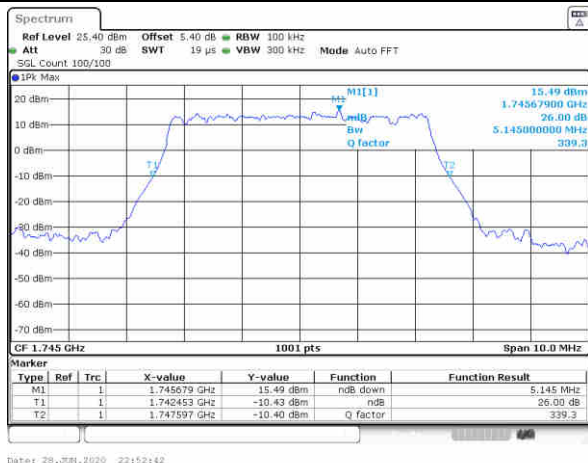


16QAM

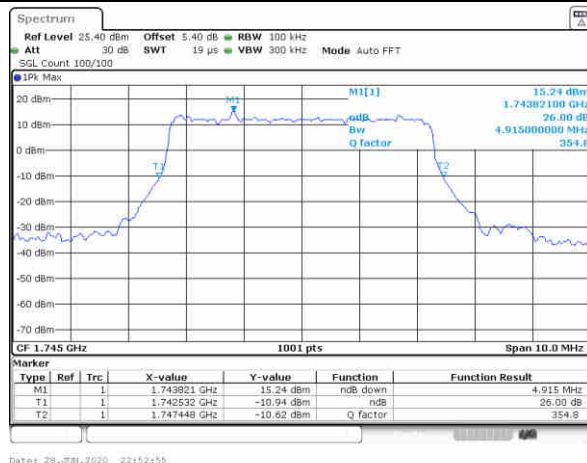
Lowest Channel



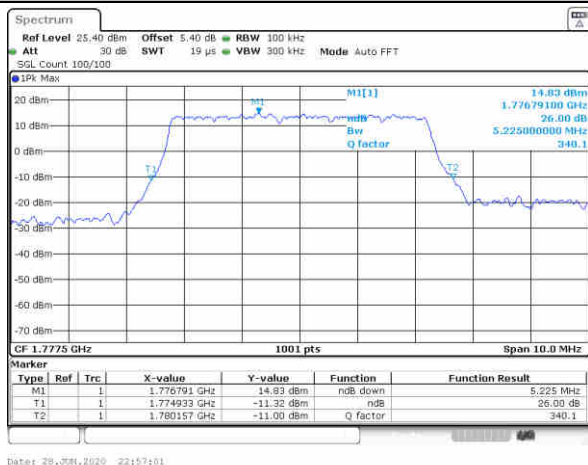
Middle Channel



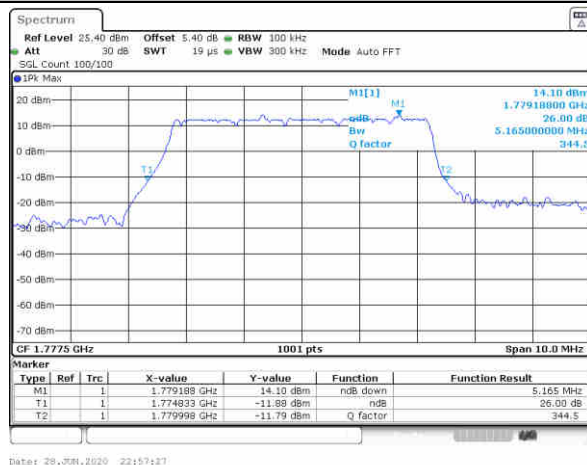
Middle Channel



Highest Channel



Highest Channel





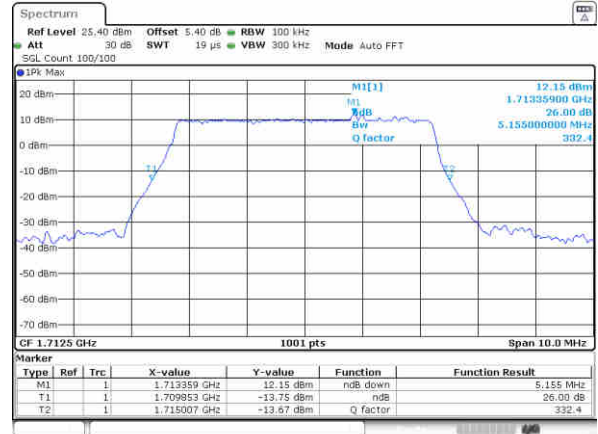
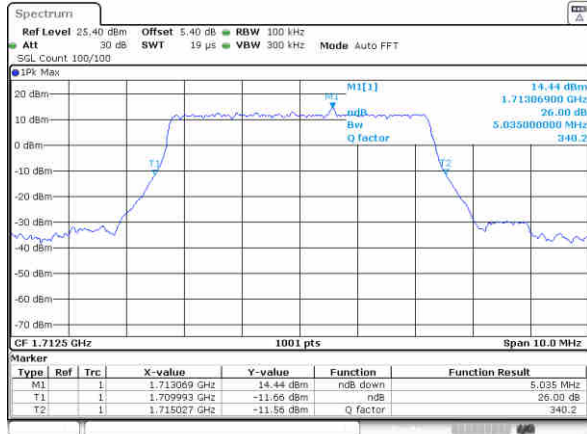
FR1 n66 / 5MHz / DFT-S OFDM

64QAM

256QAM

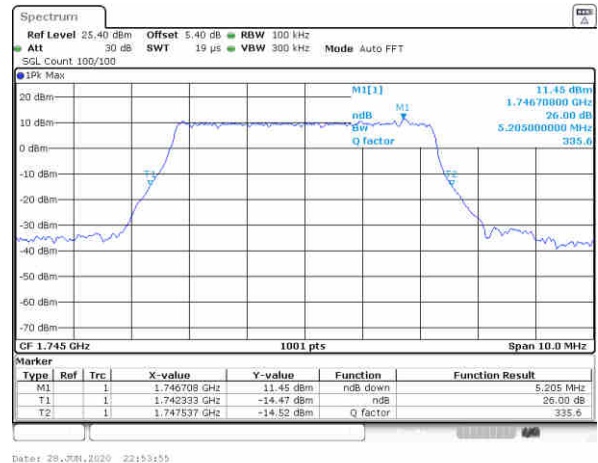
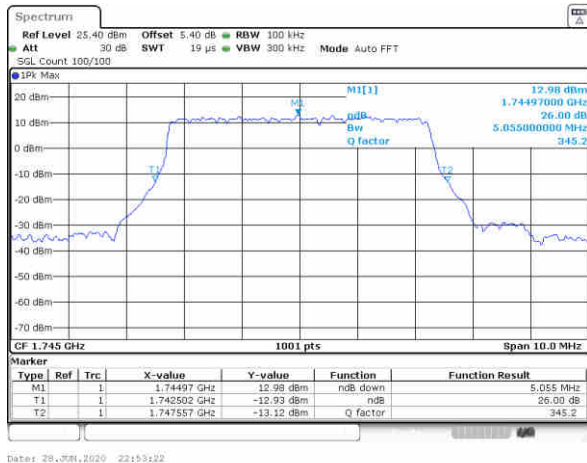
Lowest Channel

Lowest Channel



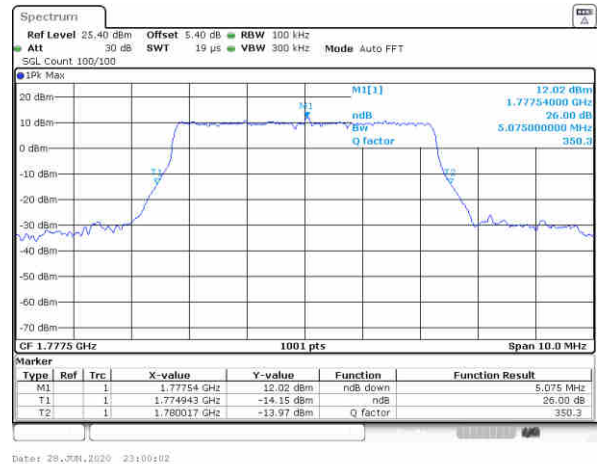
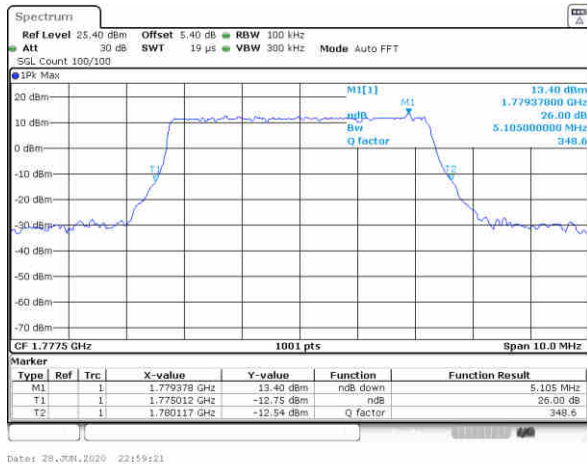
Middle Channel

Middle Channel



Highest Channel

Highest Channel

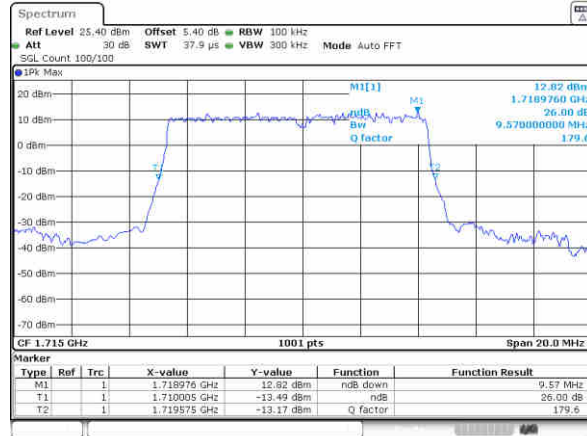




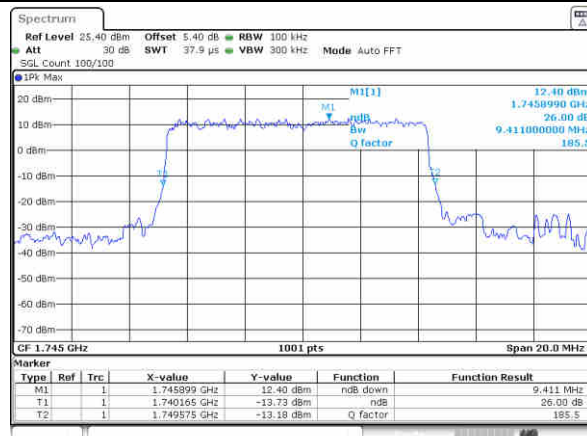
FR1 n66 / 10MHz / DFT-S OFDM

PI/2 BPSK

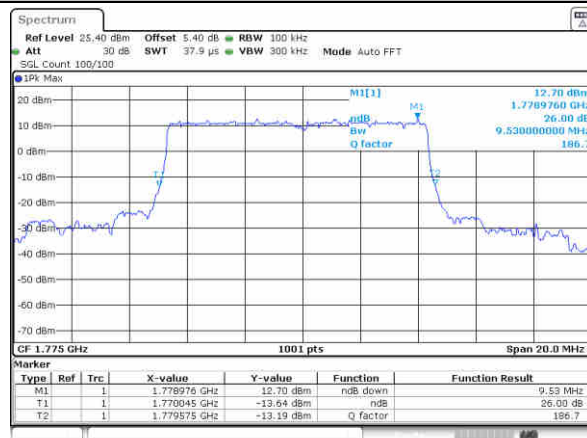
Lowest Channel



Middle Channel



Highest Channel

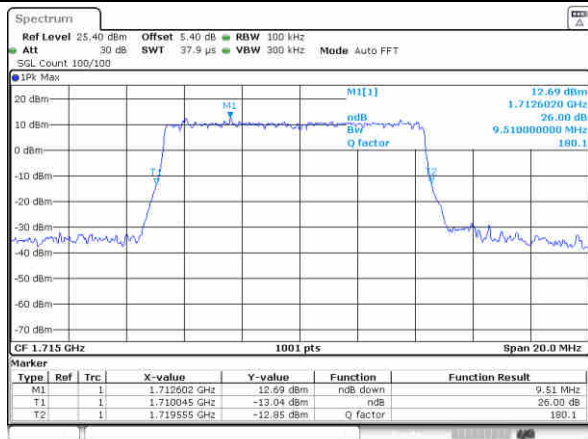




FR1 n66 / 10MHz / DFT-S OFDM

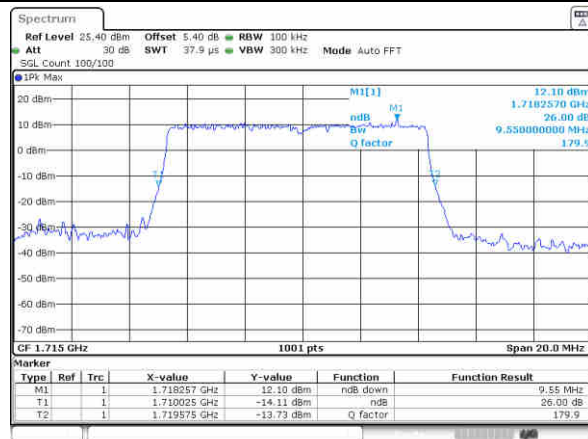
QPSK

Lowest Channel

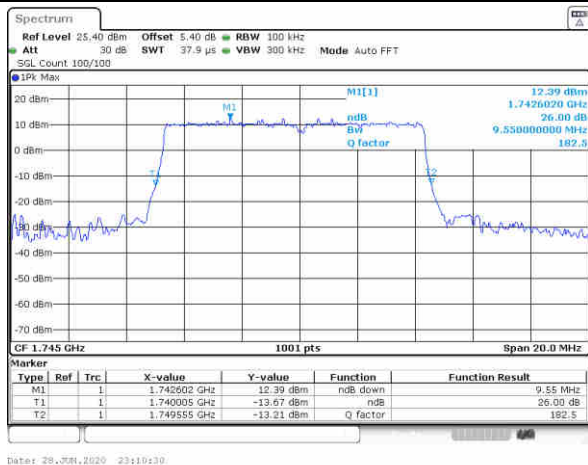


16QAM

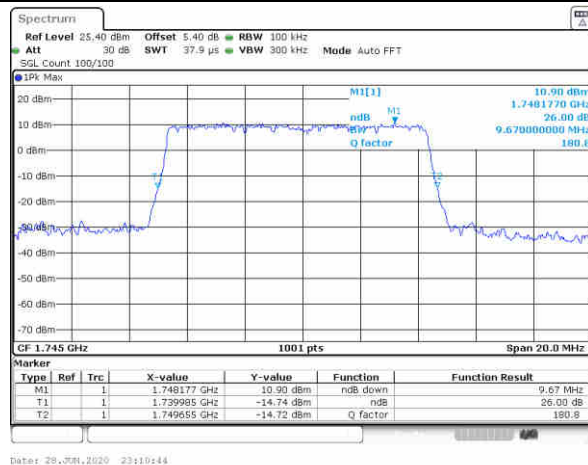
Lowest Channel



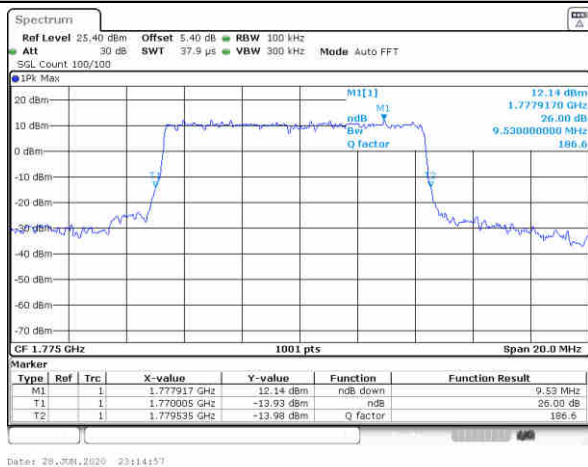
Middle Channel



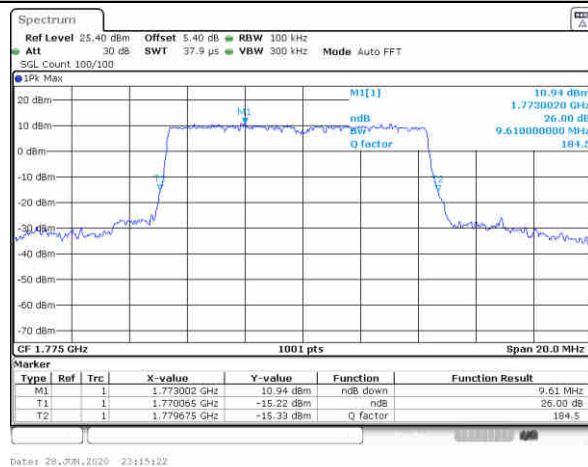
Middle Channel



Highest Channel



Highest Channel

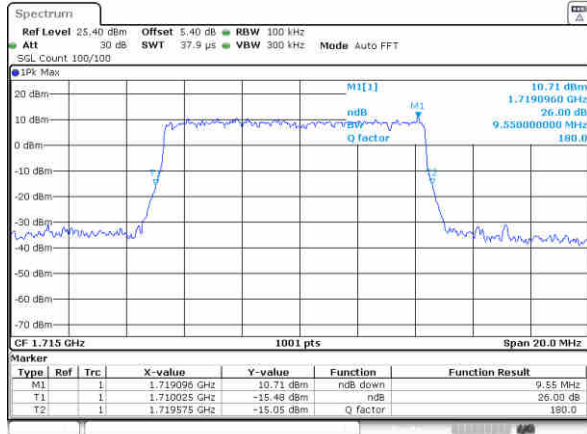




FR1 n66 / 10MHz / DFT-S OFDM

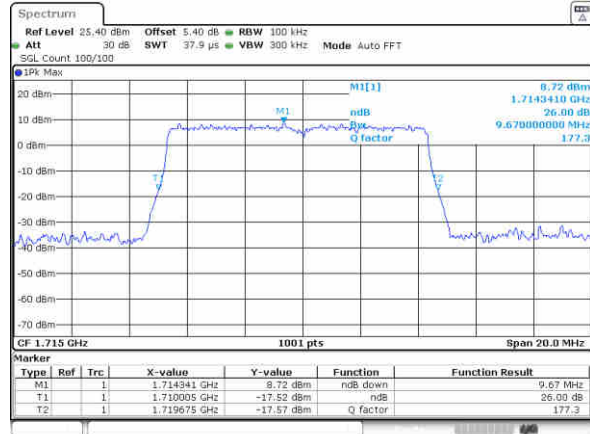
64QAM

Lowest Channel

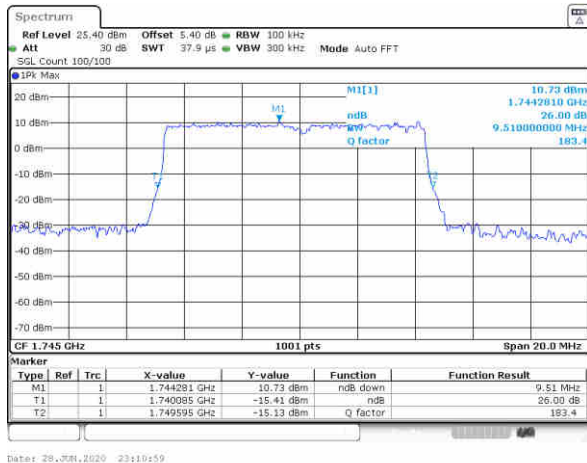


256QAM

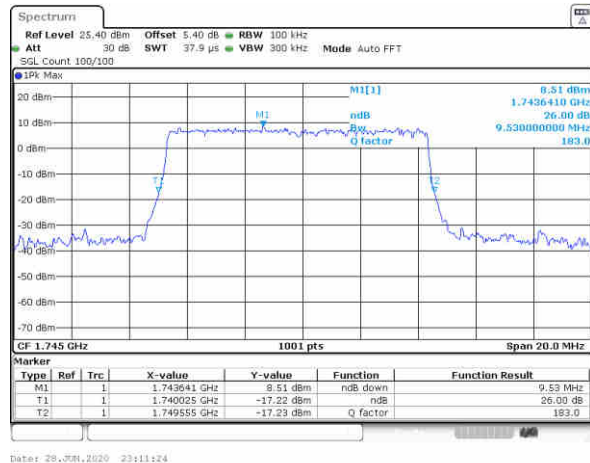
Lowest Channel



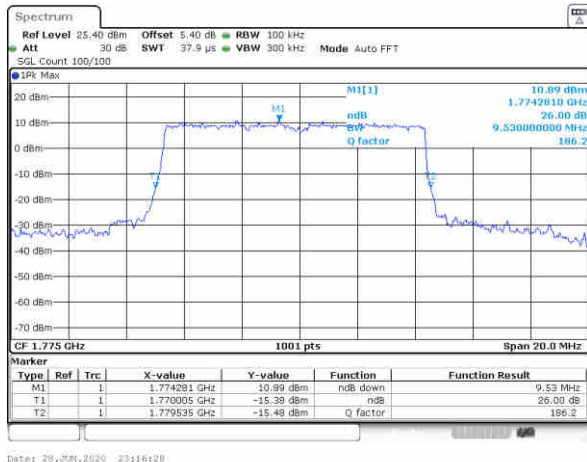
Middle Channel



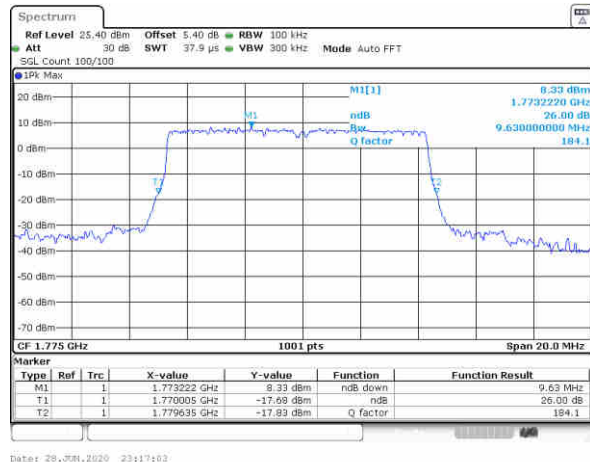
Middle Channel



Highest Channel



Highest Channel

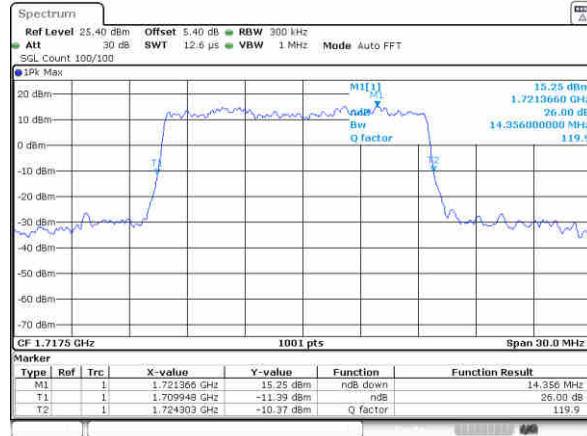




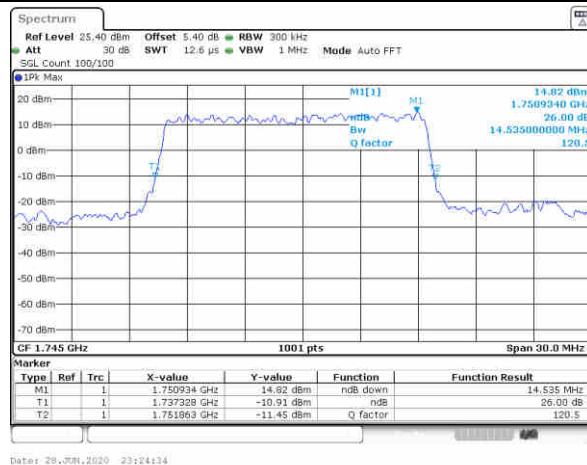
FR1 n66 / 15MHz / DFT-S OFDM

PI/2 BPSK

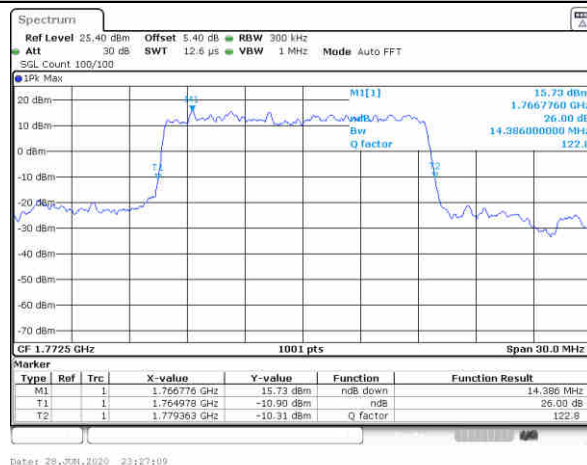
Lowest Channel



Middle Channel



Highest Channel

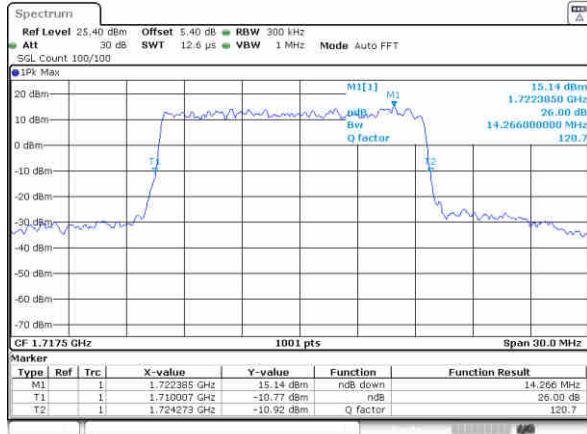




FR1 n66 / 15MHz / DFT-S OFDM

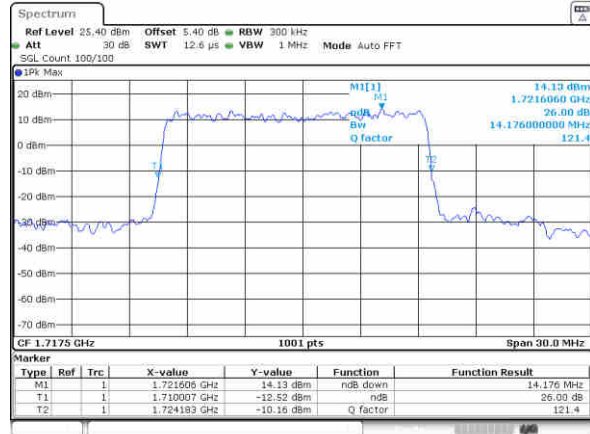
QPSK

Lowest Channel

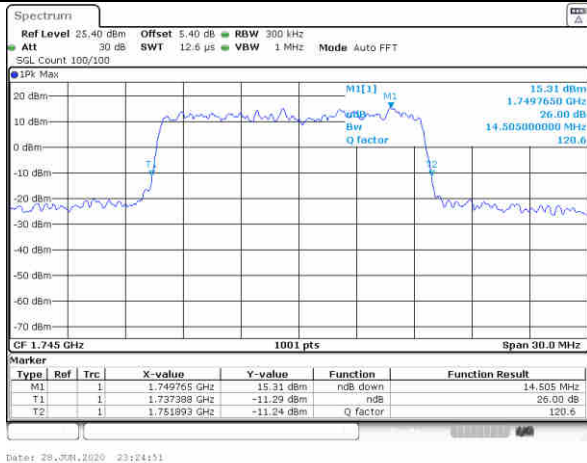


16QAM

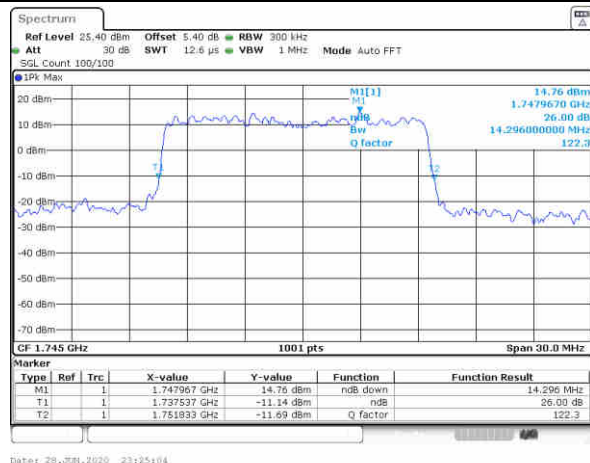
Lowest Channel



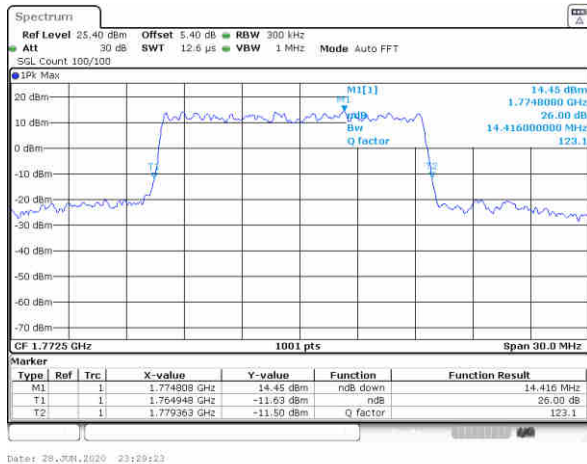
Middle Channel



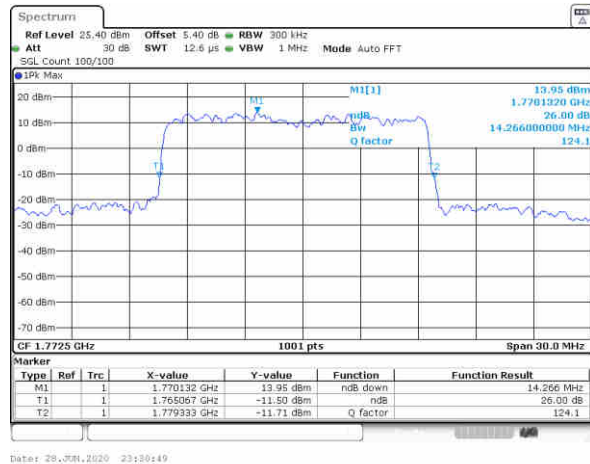
Middle Channel



Highest Channel



Highest Channel

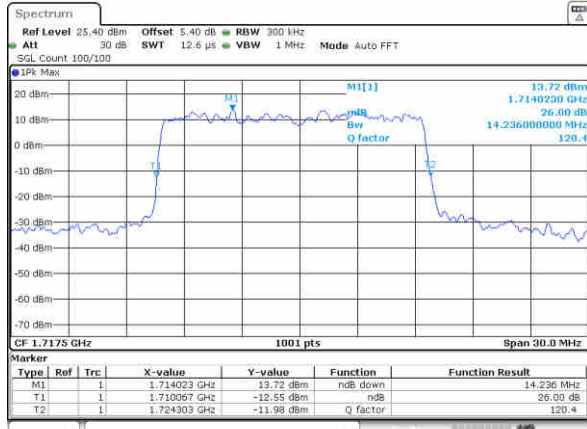




FR1 n66 / 15MHz / DFT-S OFDM

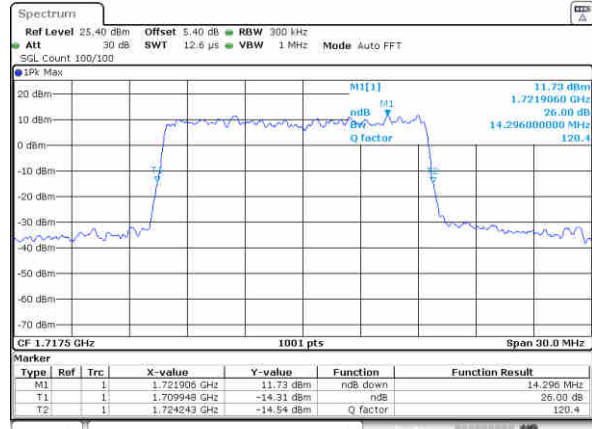
64QAM

Lowest Channel

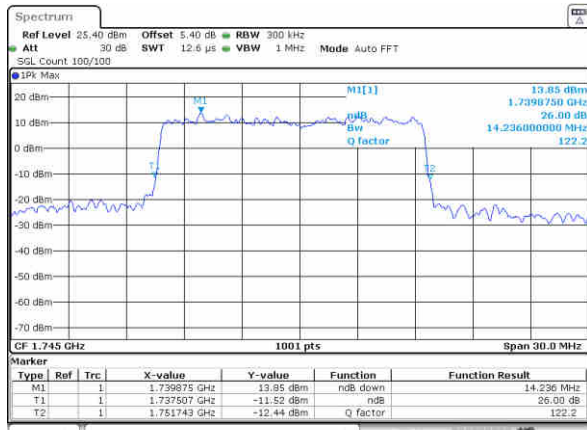


256QAM

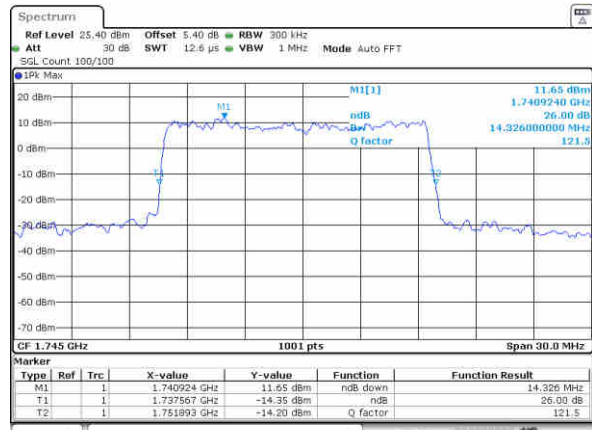
Lowest Channel



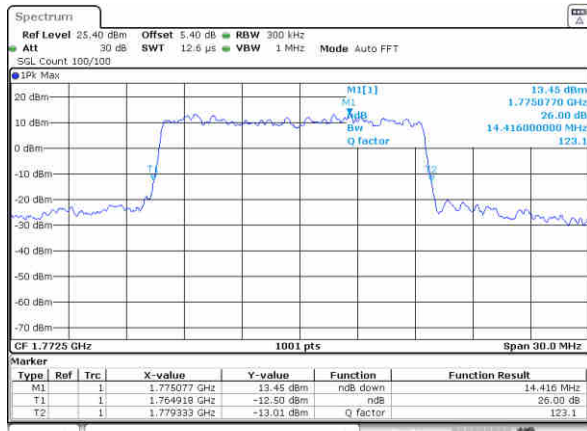
Middle Channel



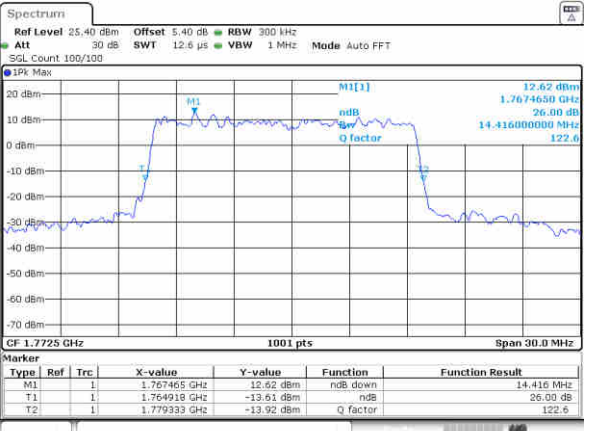
Middle Channel



Highest Channel



Highest Channel

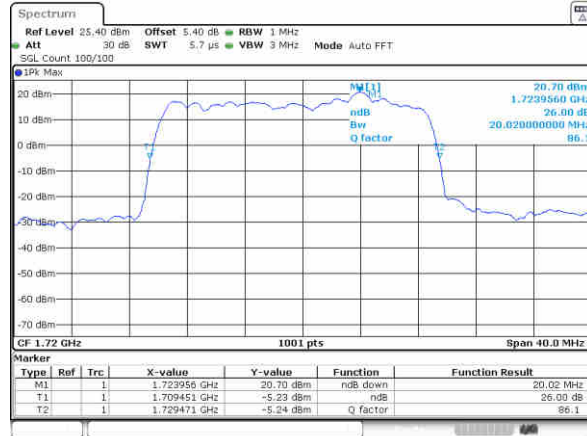




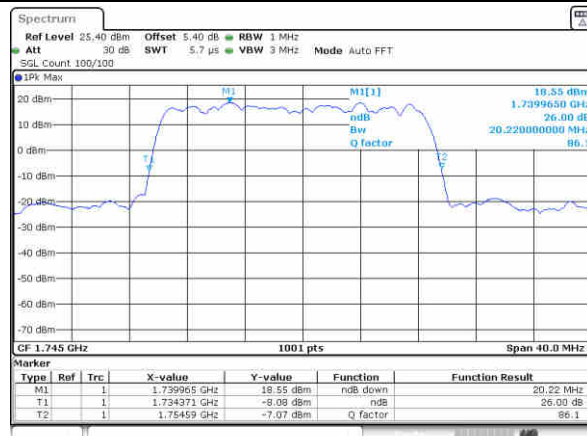
FR1 n66 / 20MHz / DFT-S OFDM

PI/2 BPSK

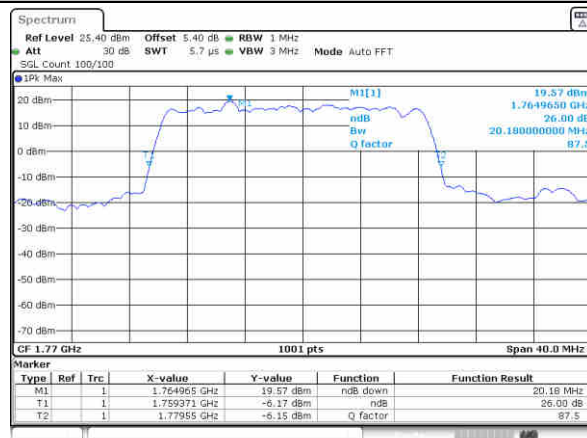
Lowest Channel



Middle Channel



Highest Channel

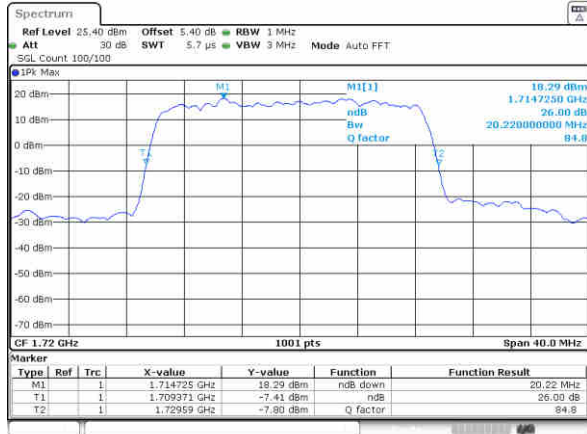




FR1 n66 / 20MHz / DFT-S OFDM

QPSK

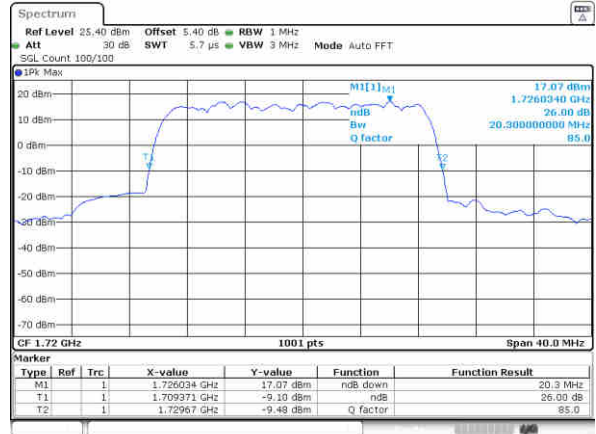
Lowest Channel



Date: 29-JUN-2020 23:14:25

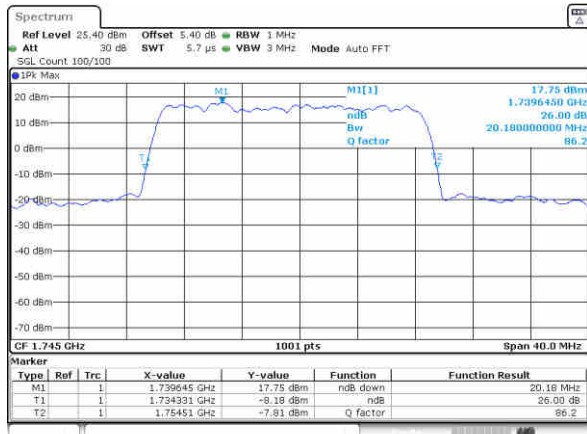
16QAM

Lowest Channel



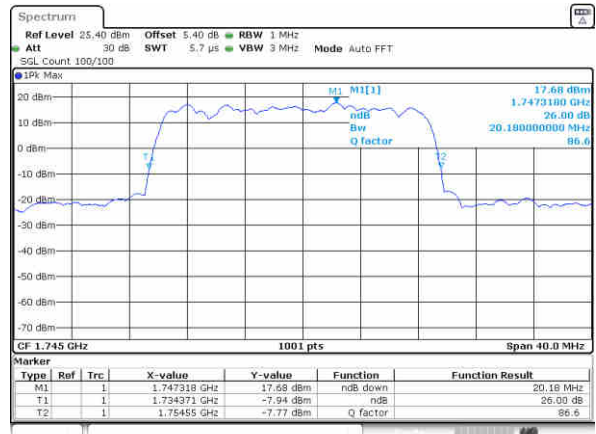
Date: 29-JUN-2020 23:14:05

Middle Channel



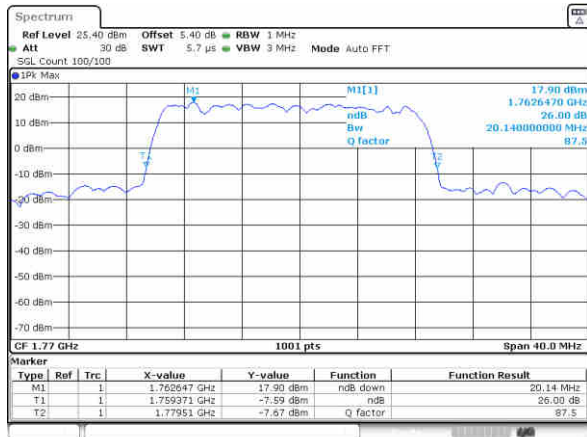
Date: 29-JUN-2020 00:38:07

Middle Channel



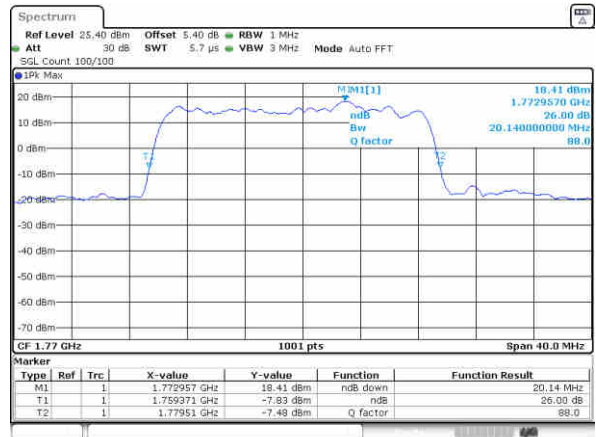
Date: 29-JUN-2020 00:38:23

Highest Channel



Date: 29-JUN-2020 00:43:59

Highest Channel



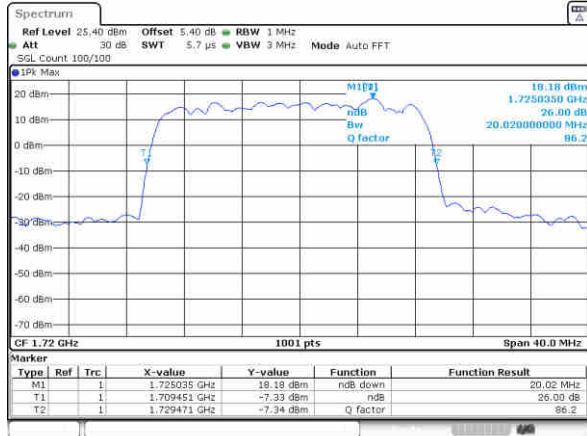
Date: 29-JUN-2020 00:44:33



FR1 n66 / 20MHz / DFT-S OFDM

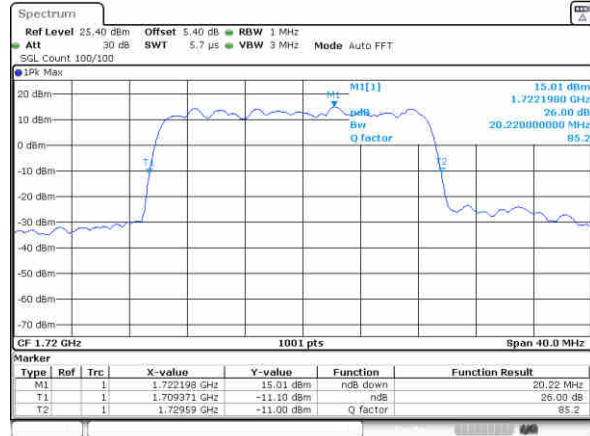
64QAM

Lowest Channel

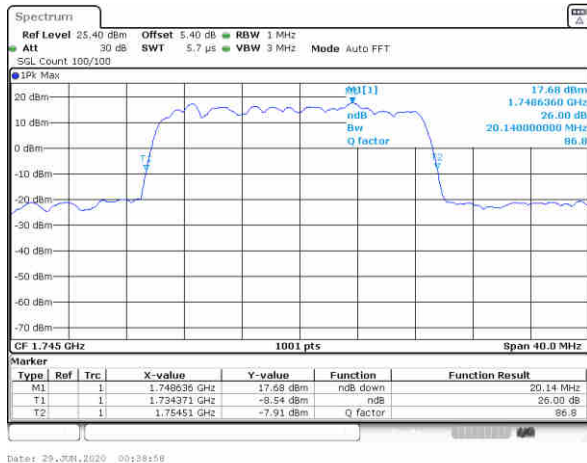


256QAM

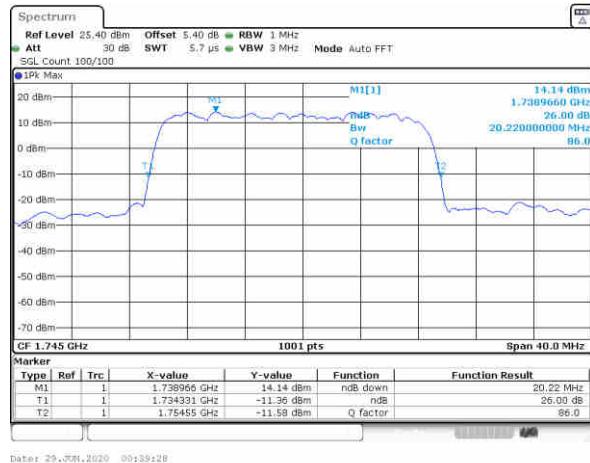
Lowest Channel



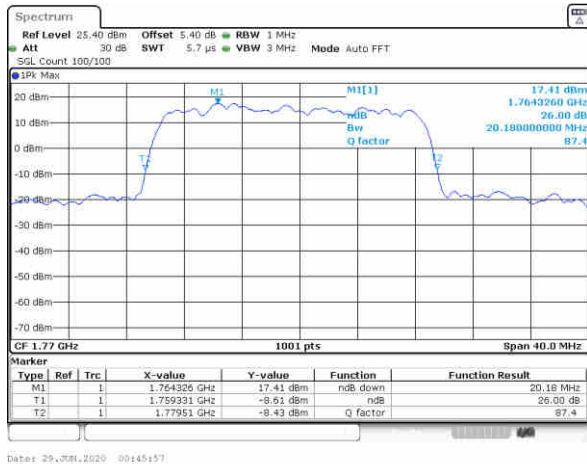
Middle Channel



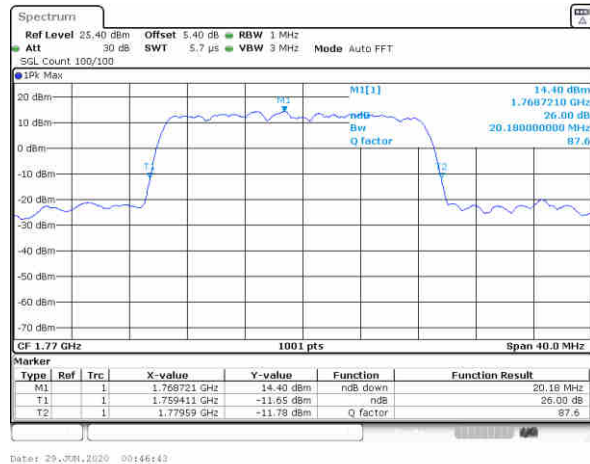
Middle Channel



Highest Channel



Highest Channel





Occupied Bandwidth

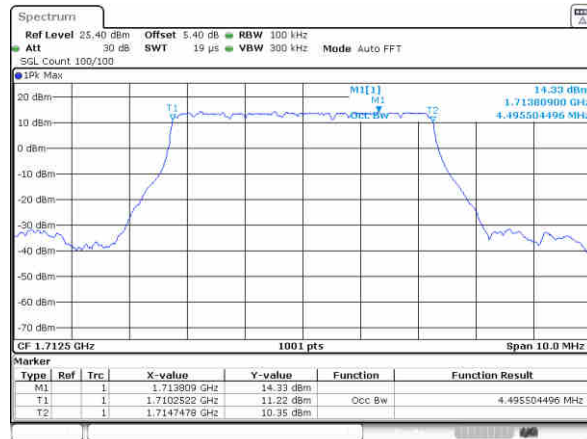
Mode	FR1 n66 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Lowest CH	4.50		8.89		13.52		18.30	
Middle CH	4.48		8.91		13.52		18.38	
Highest CH	4.50		8.91		13.49		18.34	
Mode	FR1 n66 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		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



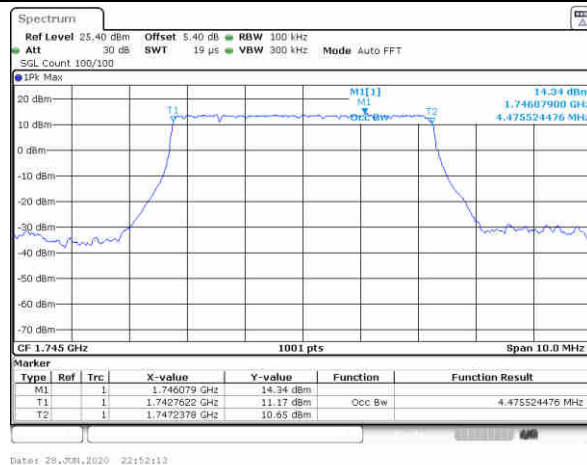
FR1 n66 / 5MHz / DFT-S OFDM

PI/2 BPSK

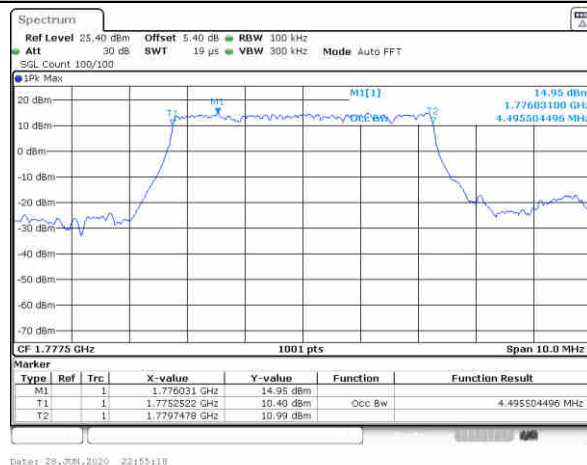
Lowest Channel



Middle Channel



Highest Channel

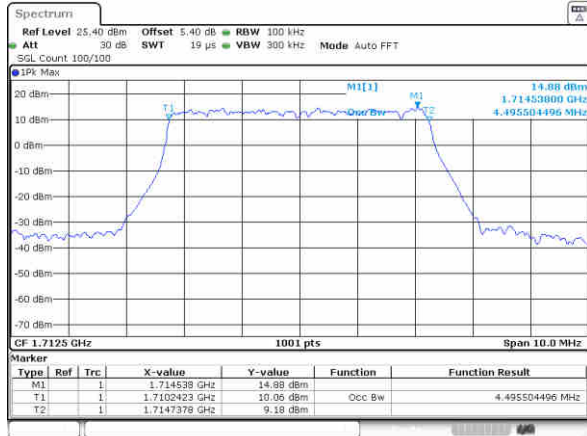




FR1 n66 / 5MHz / DFT-S OFDM

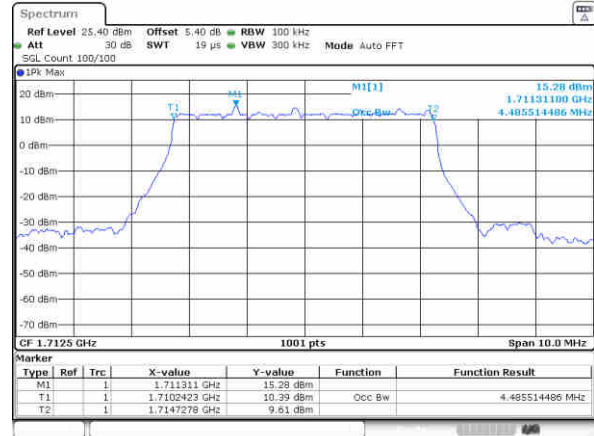
QPSK

Lowest Channel

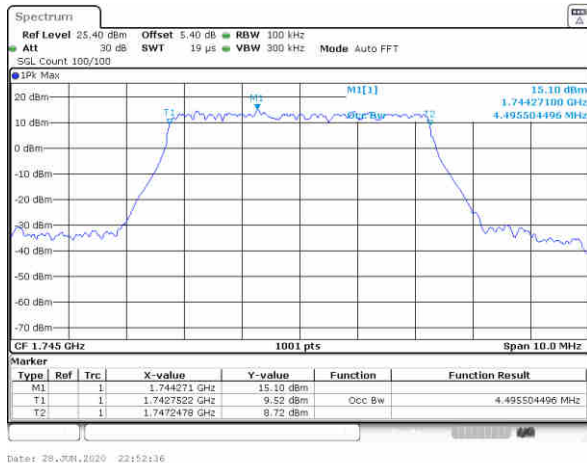


16QAM

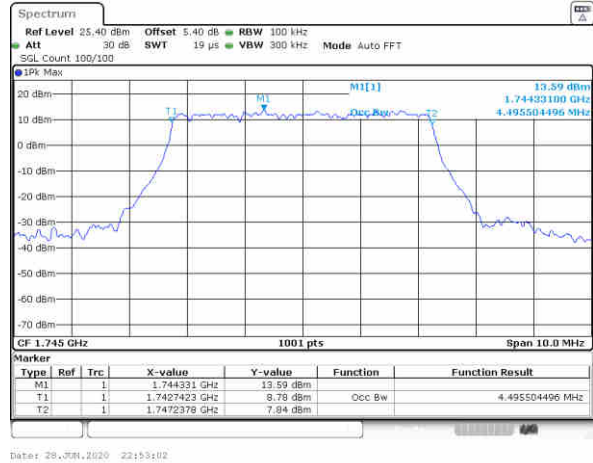
Lowest Channel



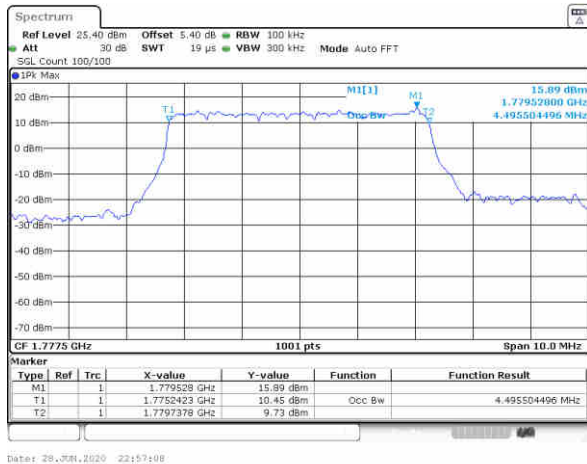
Middle Channel



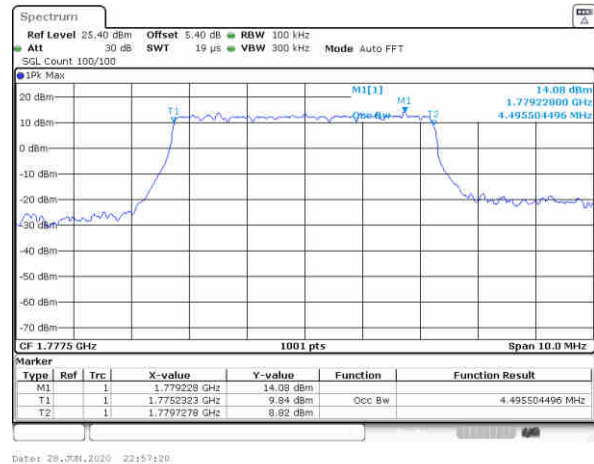
Middle Channel



Highest Channel



Highest Channel





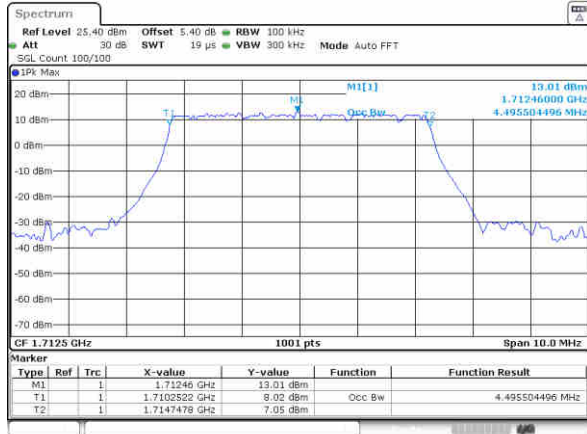
FR1 n66 / 5MHz / DFT-S OFDM

64QAM

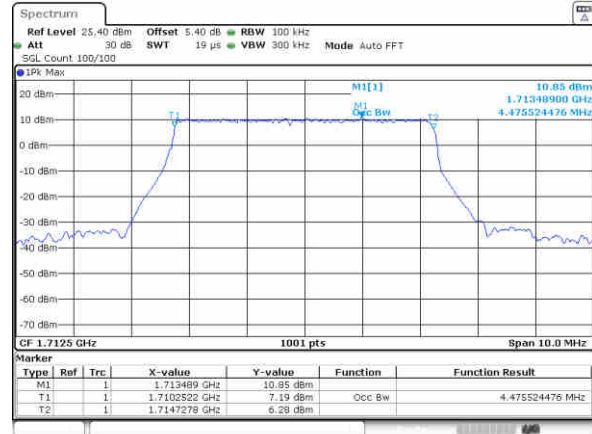
256QAM

Lowest Channel

Lowest Channel



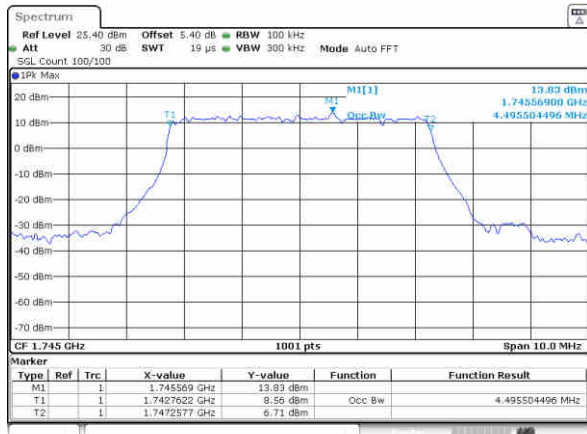
Date: 29-JUN-2020 22:14:48



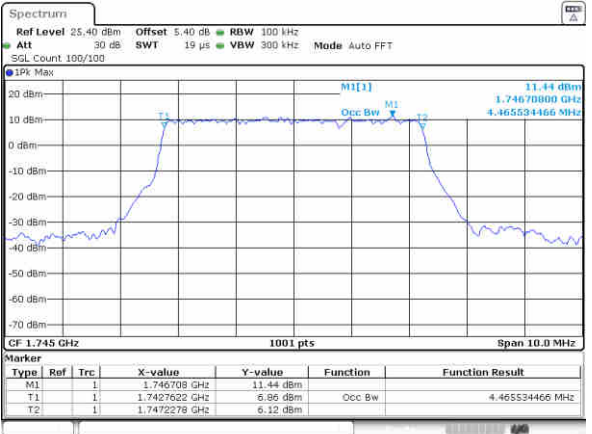
Date: 29-JUN-2020 22:15:11

Middle Channel

Middle Channel



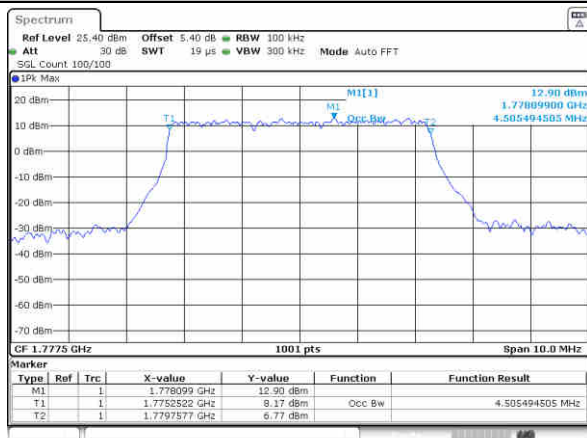
Date: 29-JUN-2020 22:15:14



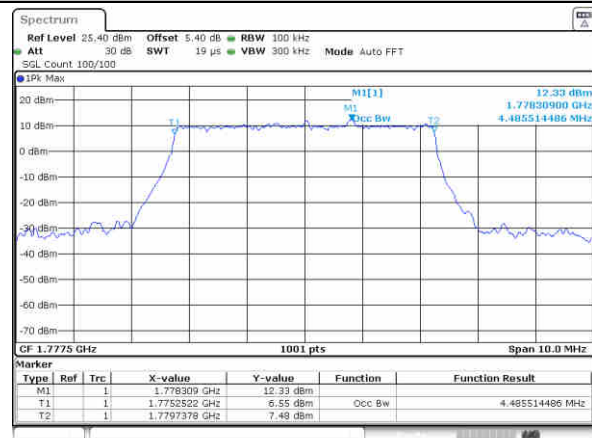
Date: 29-JUN-2020 22:15:49

Highest Channel

Highest Channel



Date: 29-JUN-2020 22:15:28



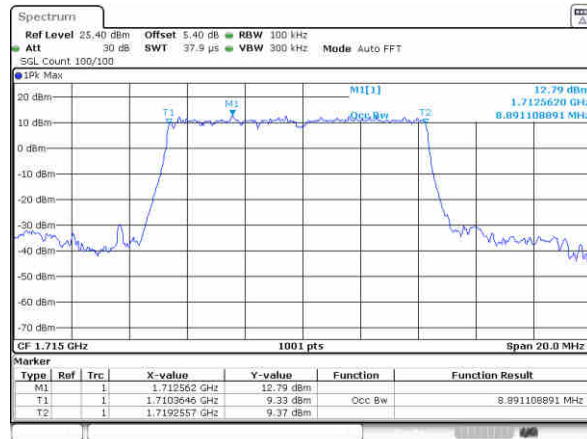
Date: 29-JUN-2020 22:15:55



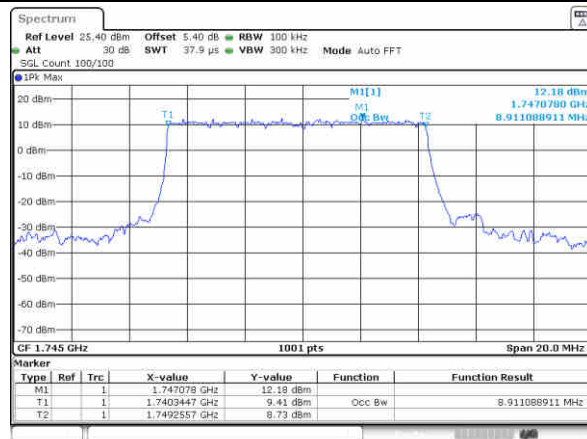
FR1 n66 / 10MHz / DFT-S OFDM

PI/2 BPSK

Lowest Channel



Middle Channel



Highest Channel

