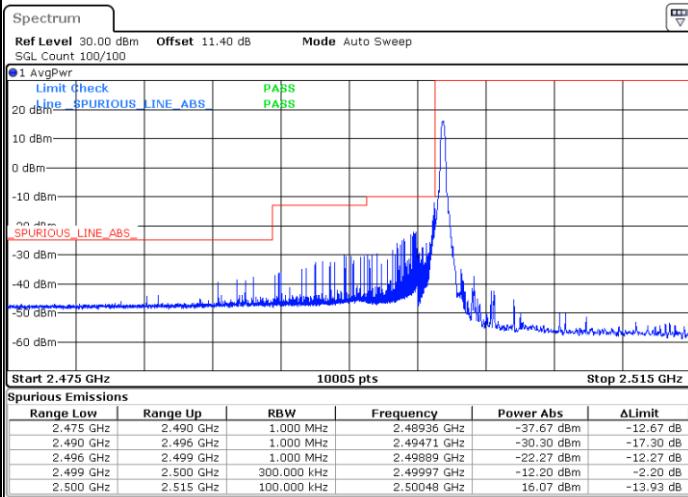




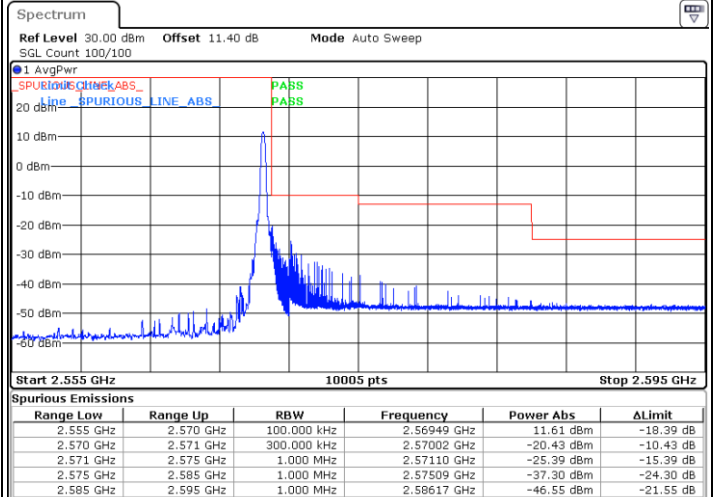
FR1 n7 / 15MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



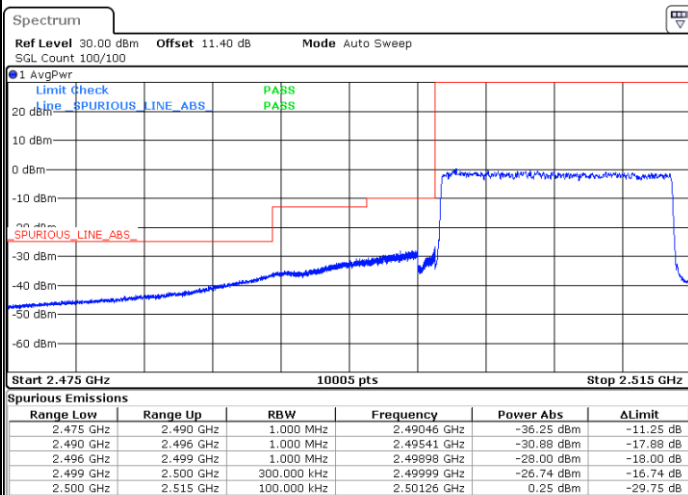
Date: 11.JUN.2020 09:52:58



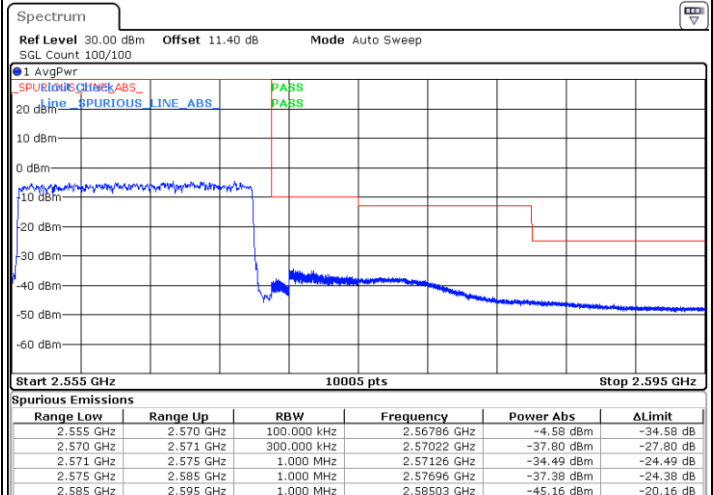
Date: 11.JUN.2020 11:25:40

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUN.2020 09:48:33



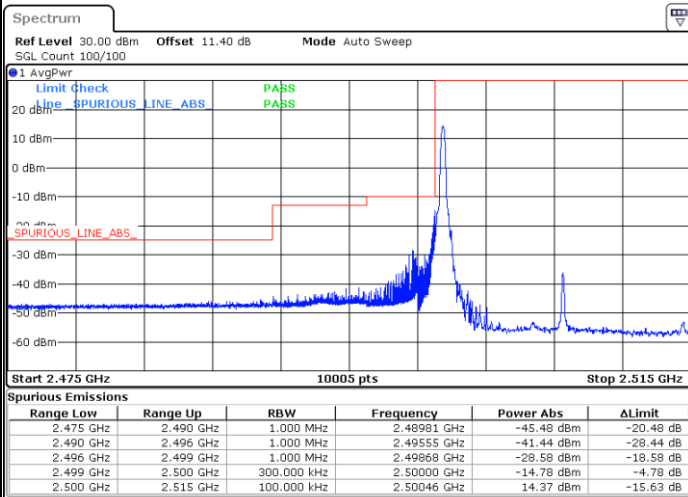
Date: 11.JUN.2020 11:20:38



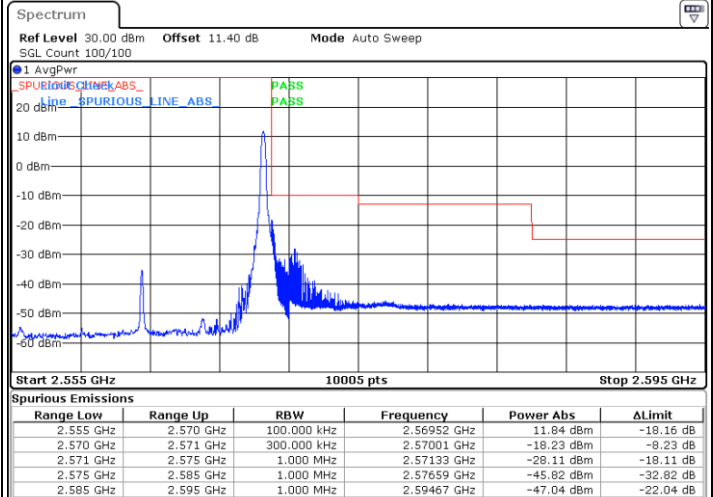
FR1 n7 / 15MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



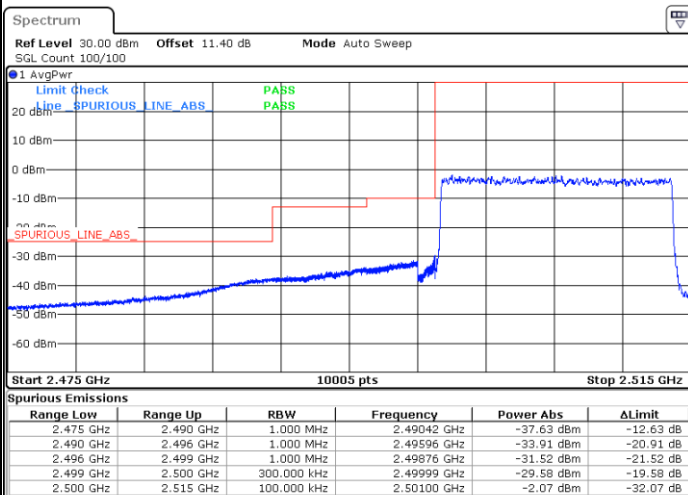
Date: 11.JUN.2020 09:50:48



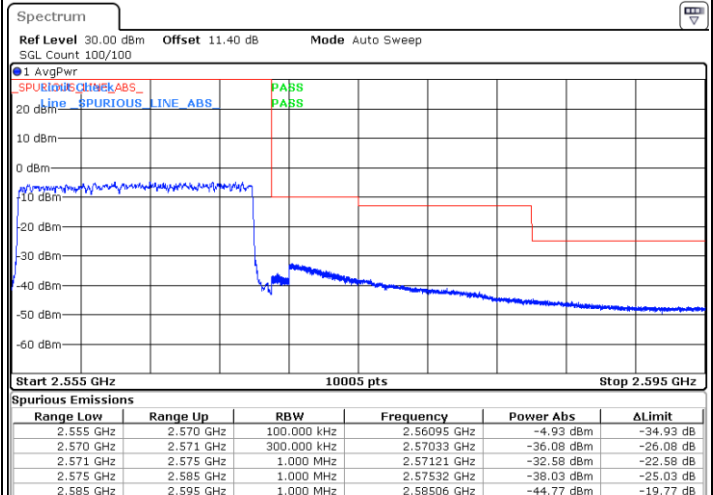
Date: 11.JUN.2020 11:24:36

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUN.2020 09:49:50



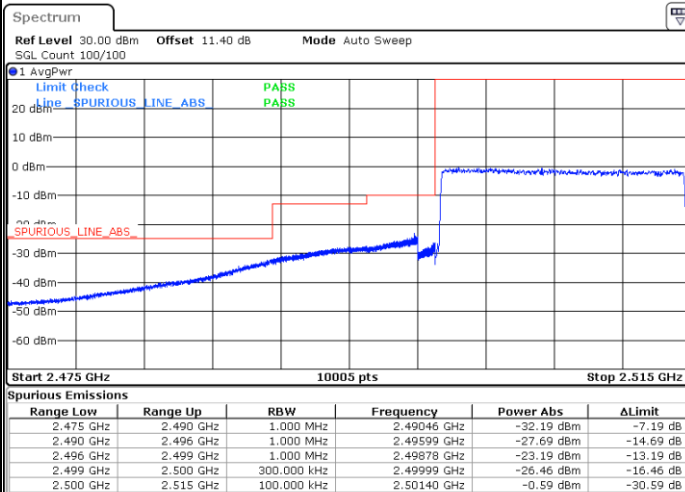
Date: 11.JUN.2020 11:21:55



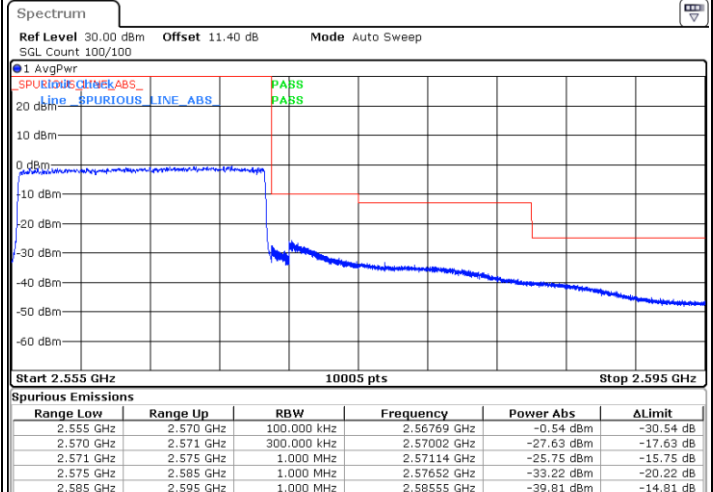
FR1 n7 / 15MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUN.2020 09:14:49



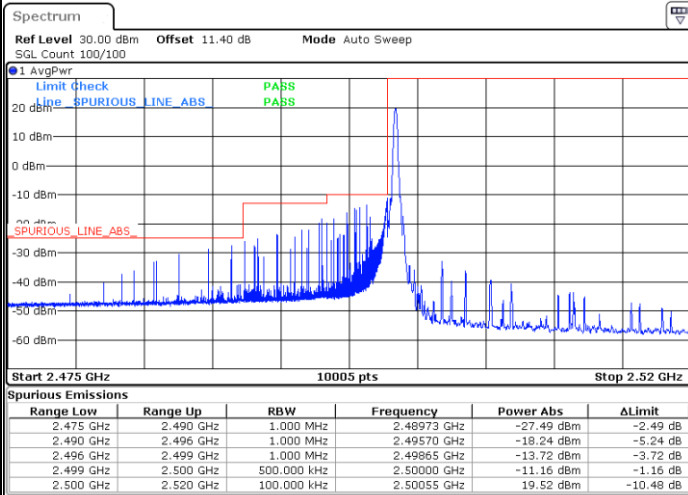
Date: 11.JUN.2020 09:22:53



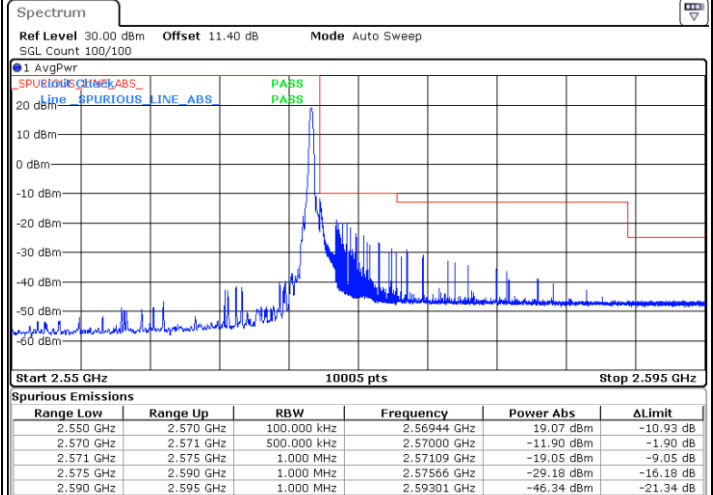
FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



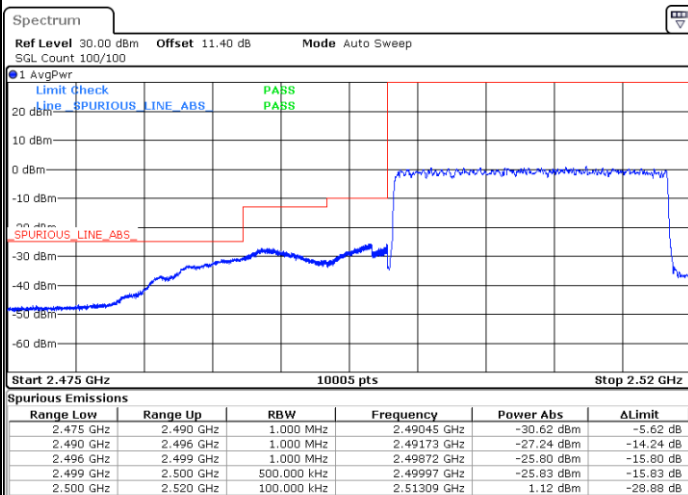
Date: 11.JUN.2020 05:59:39



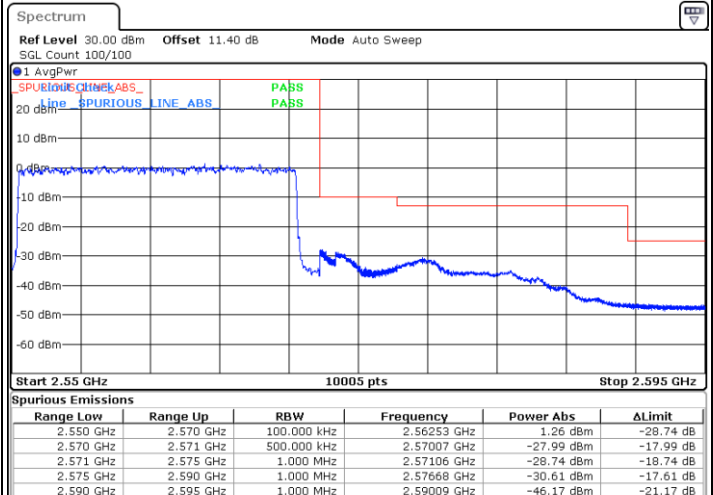
Date: 11.JUN.2020 07:23:33

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.JUN.2020 06:37:41



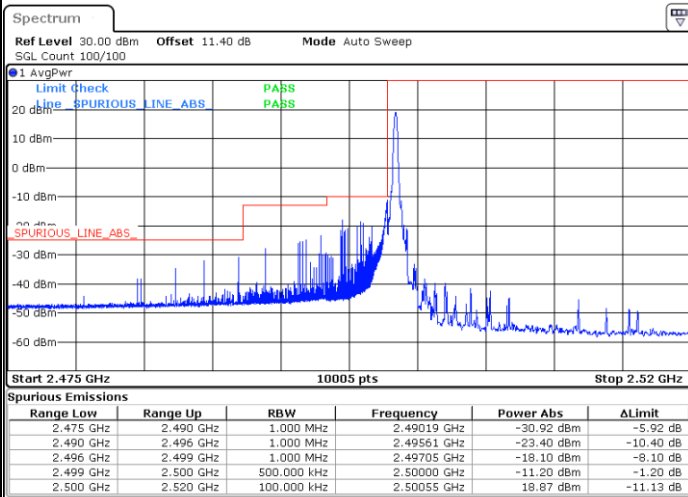
Date: 15.JUN.2020 14:45:04



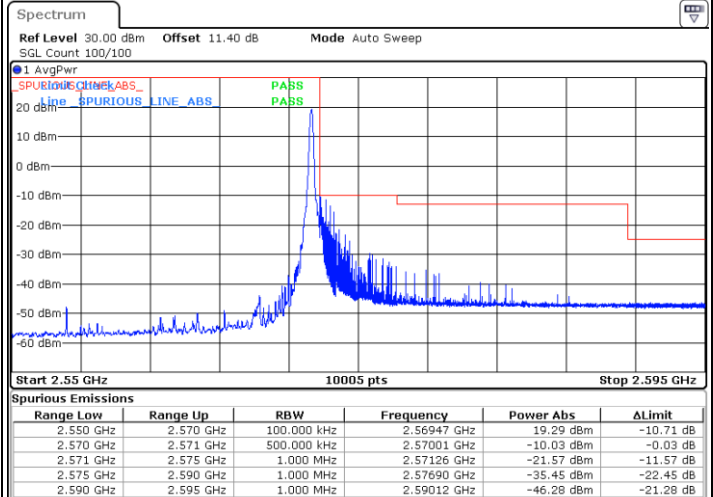
FR1 n7 / 20MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



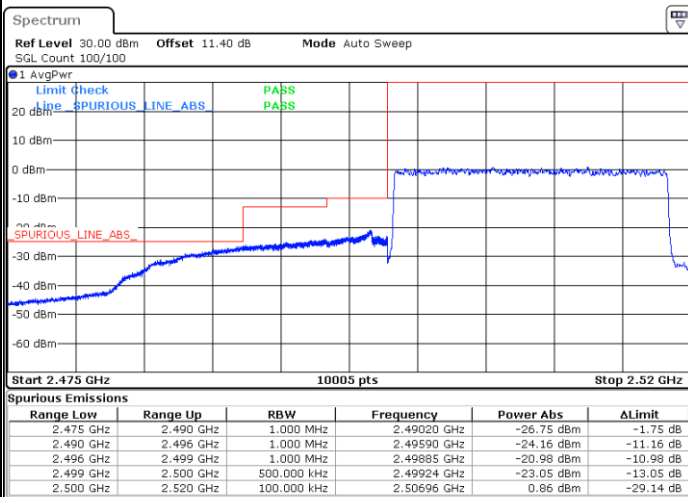
Date: 11.JUN.2020 06:07:11



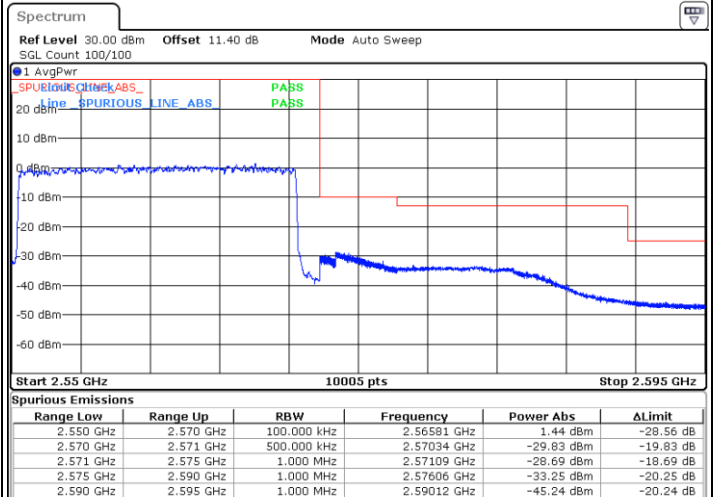
Date: 11.JUN.2020 07:21:18

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUN.2020 06:07:52



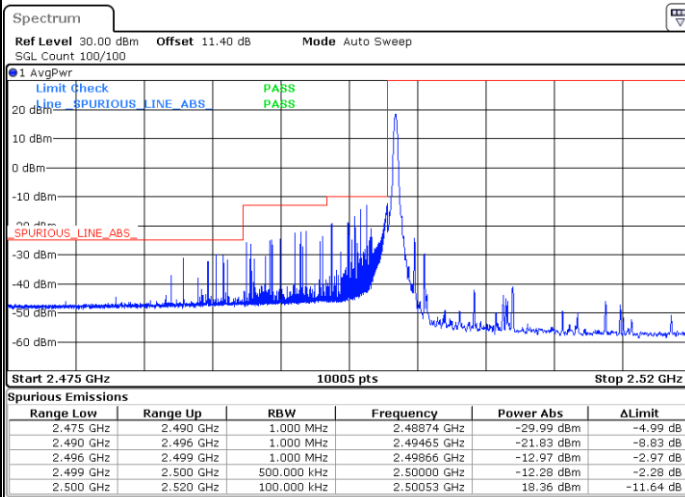
Date: 11.JUN.2020 07:20:36



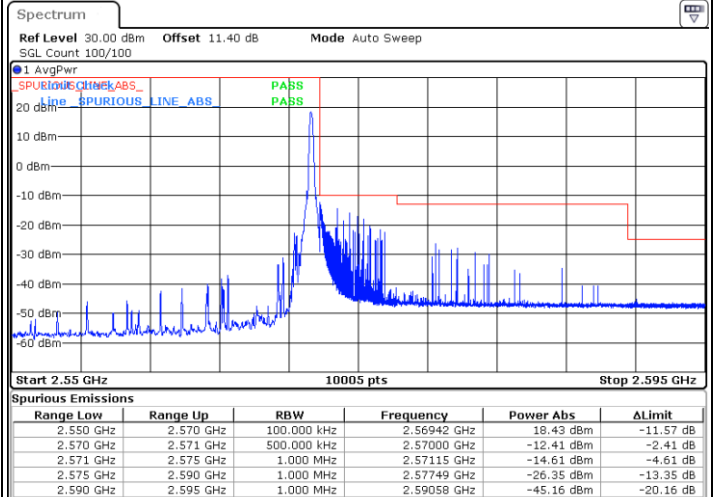
FR1 n7 / 20MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



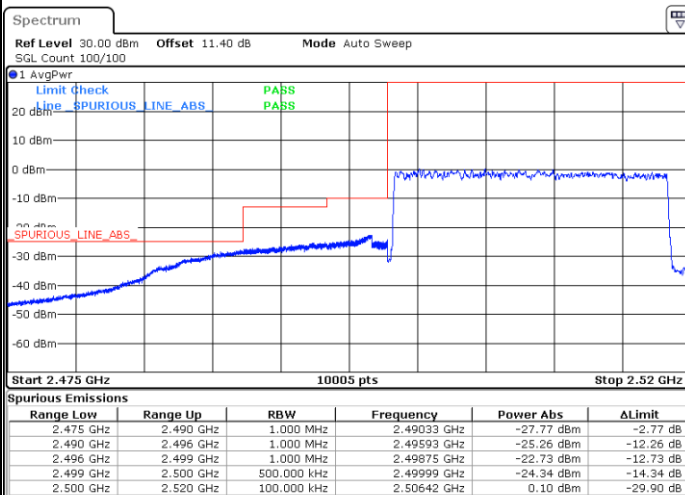
Date: 11.JUN.2020 06:09:57



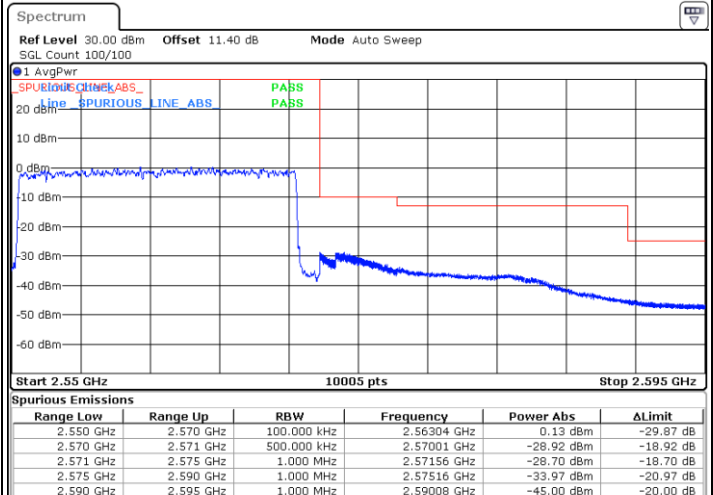
Date: 11.JUN.2020 07:27:29

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUN.2020 06:10:19



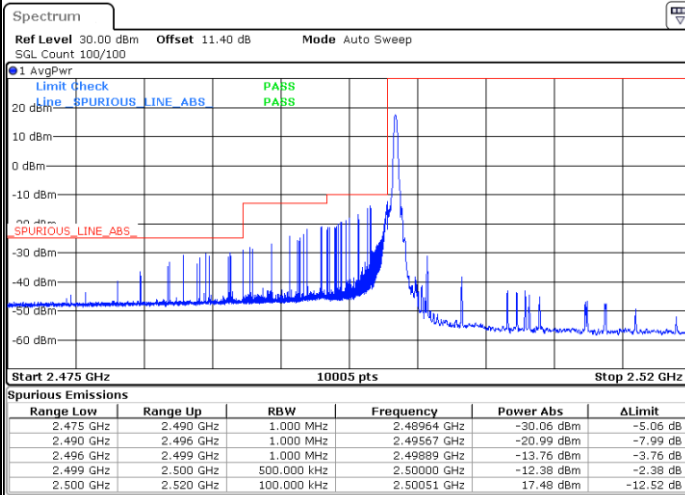
Date: 11.JUN.2020 07:27:59



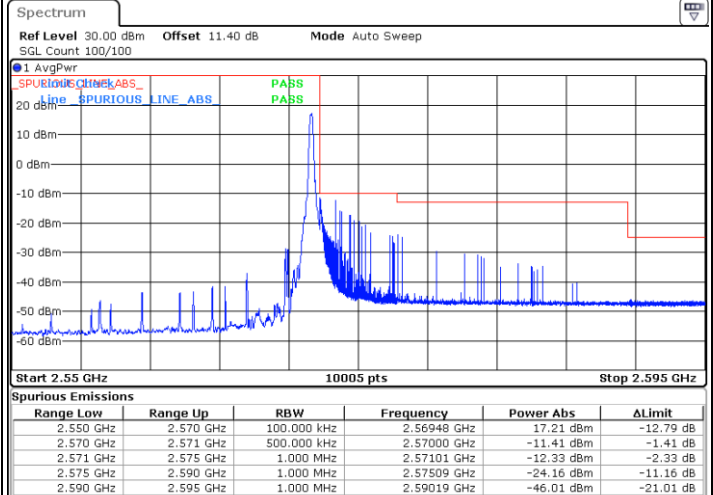
FR1 n7 / 20MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



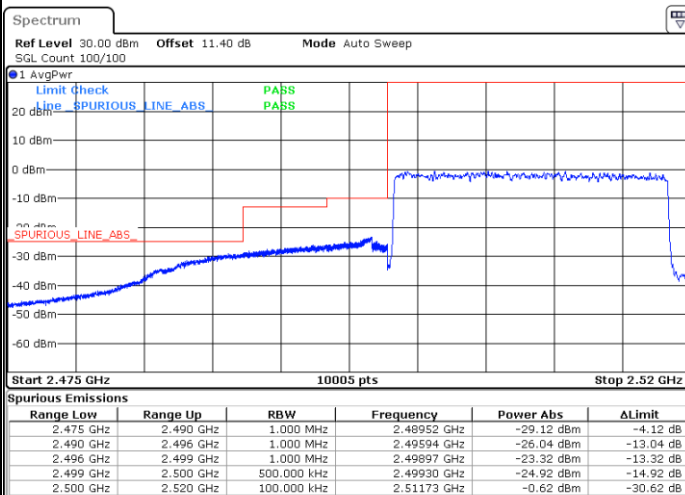
Date: 11.JUN.2020 06:12:09



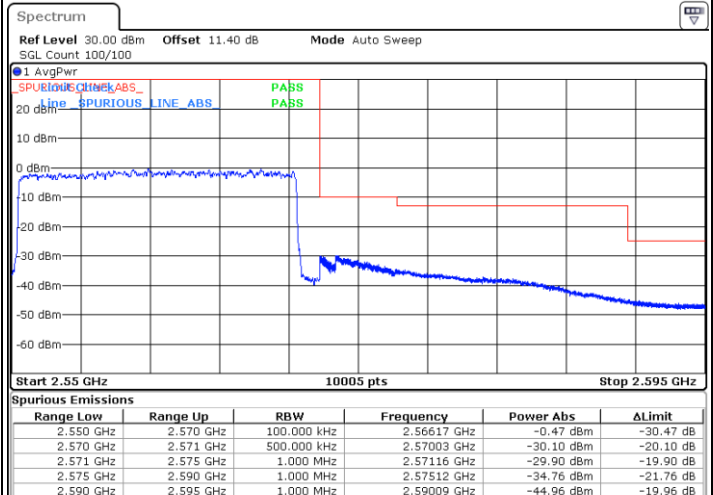
Date: 11.JUN.2020 07:30:08

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUN.2020 06:12:28



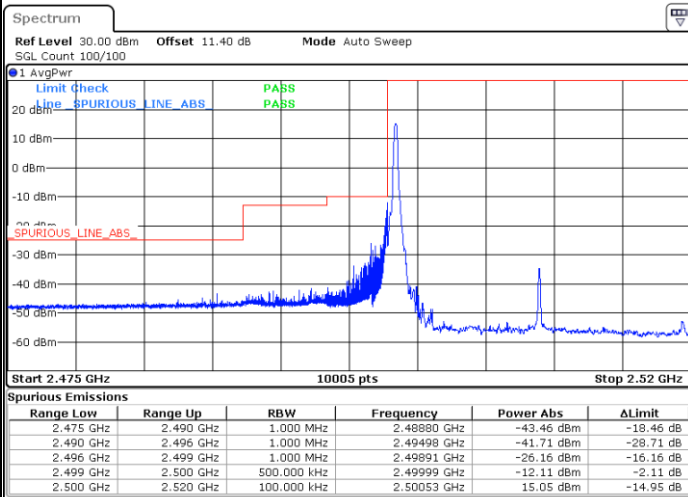
Date: 11.JUN.2020 07:28:33



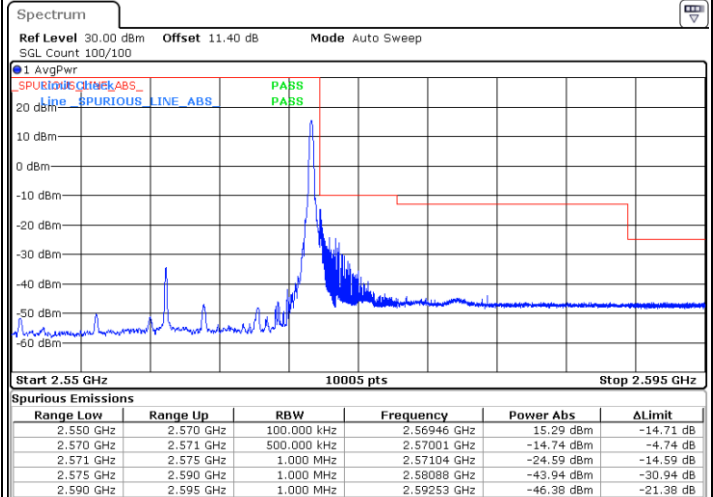
FR1 n7 / 20MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



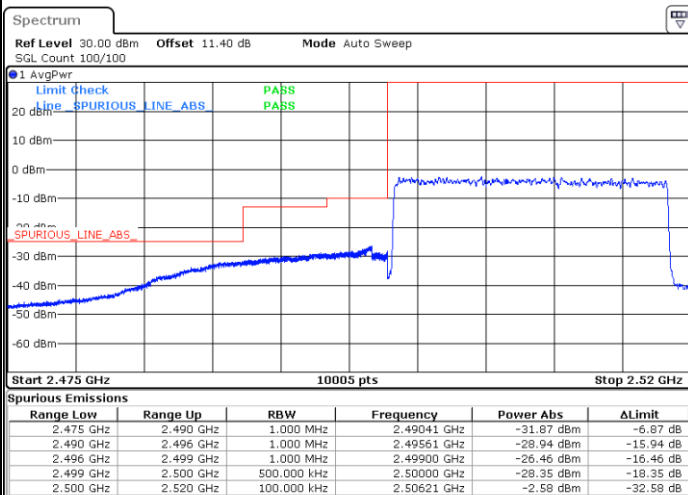
Date: 11.JUN.2020 06:12:57



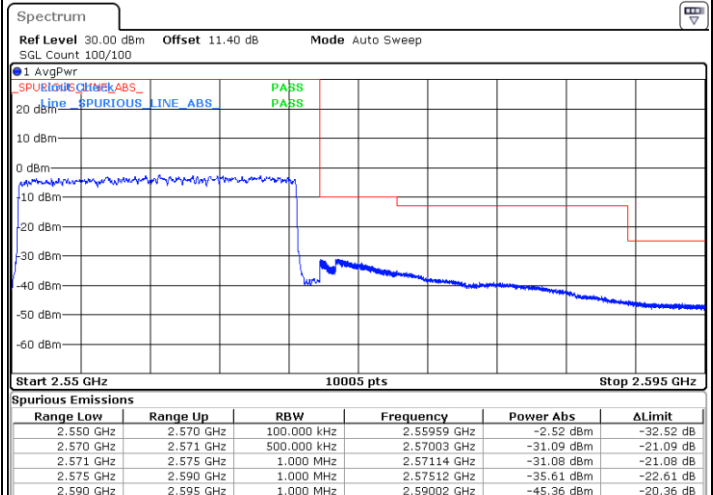
Date: 11.JUN.2020 07:29:25

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUN.2020 06:13:19



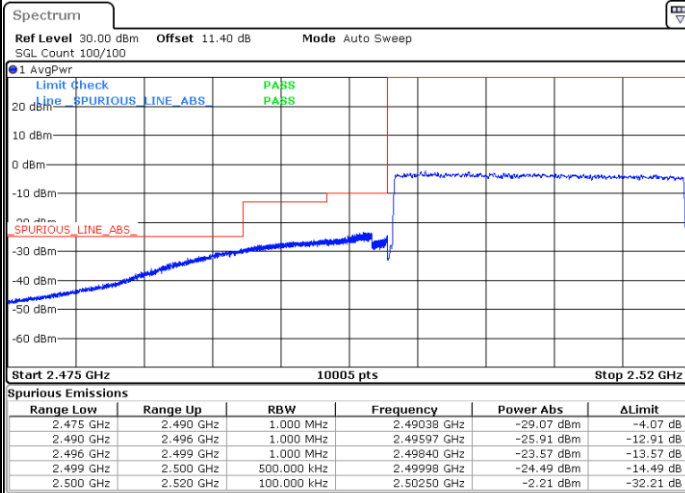
Date: 11.JUN.2020 07:28:59



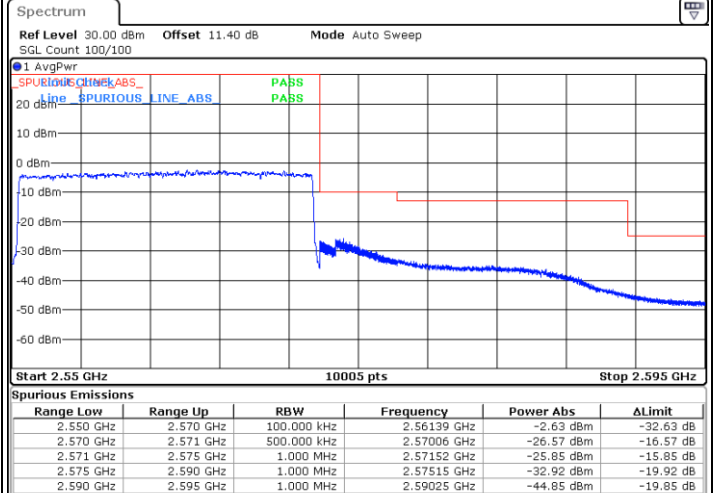
FR1 n7 / 20MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUN.2020 18:31:45



Date: 11.JUN.2020 18:27:18

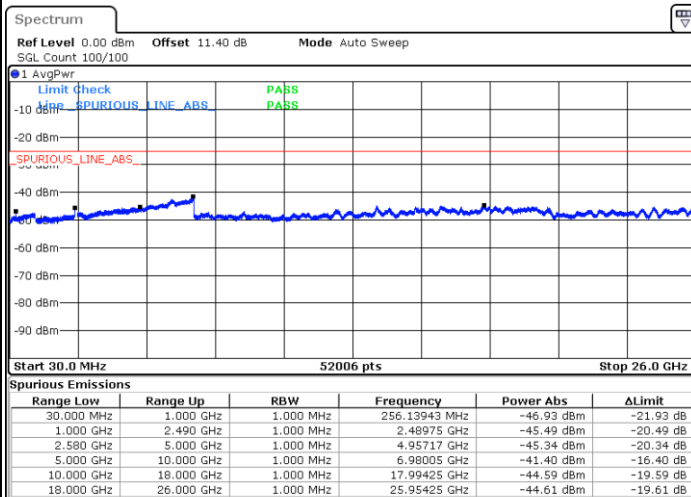


Conducted Spurious Emission

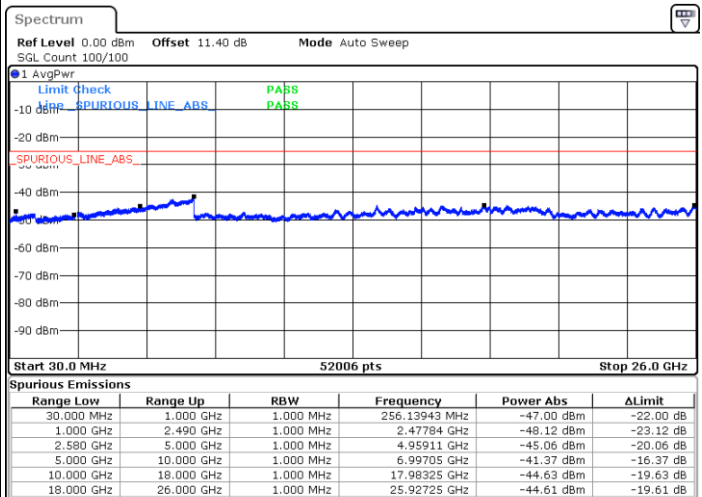
FR1 n7 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

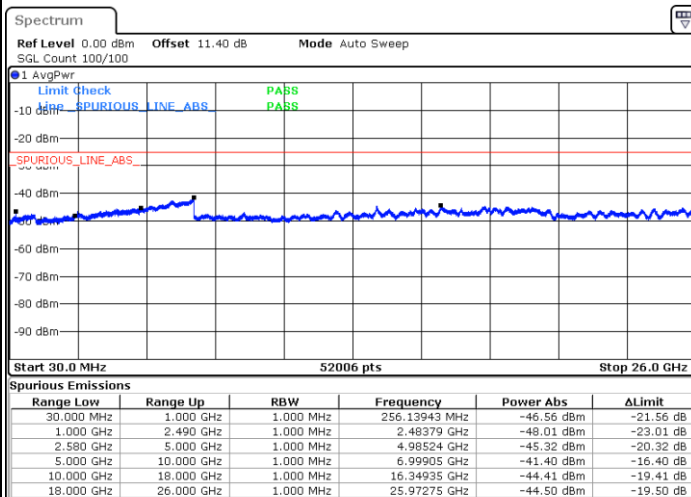


Date: 12.JUN.2020 05:37:56



Date: 12.JUN.2020 05:48:45

Highest Channel / 1RB1

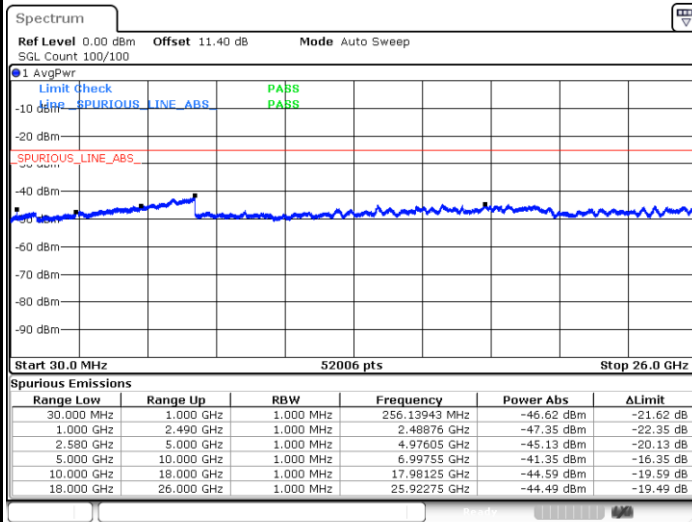


Date: 12.JUN.2020 05:58:37



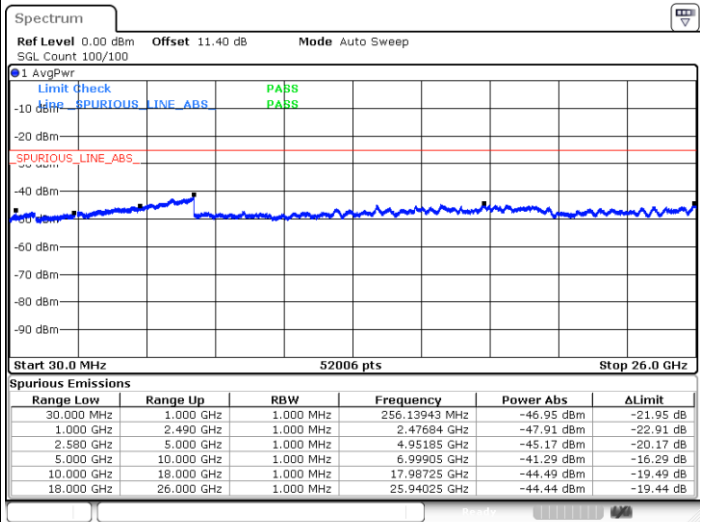
FR1 n7 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



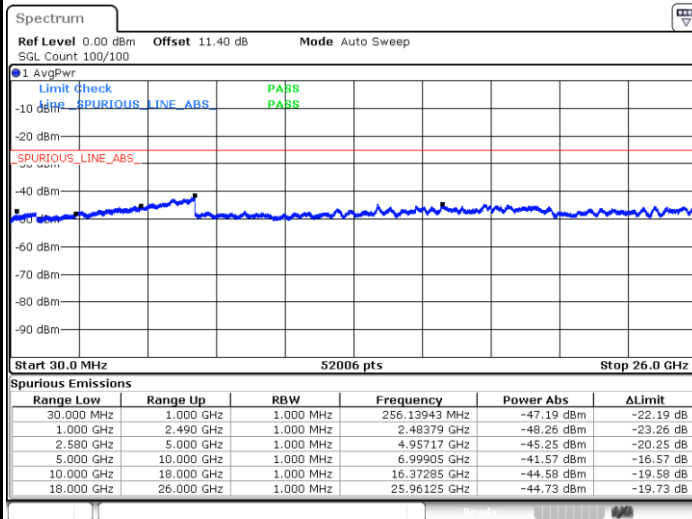
Date: 12.JUN.2020 06:57:05

Middle Channel / 1RB1



Date: 12.JUN.2020 07:13:39

Highest Channel / 1RB1

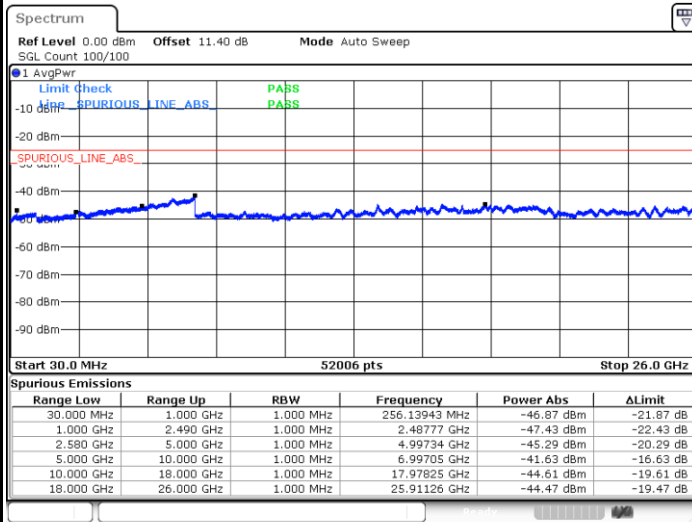


Date: 12.JUN.2020 07:20:54



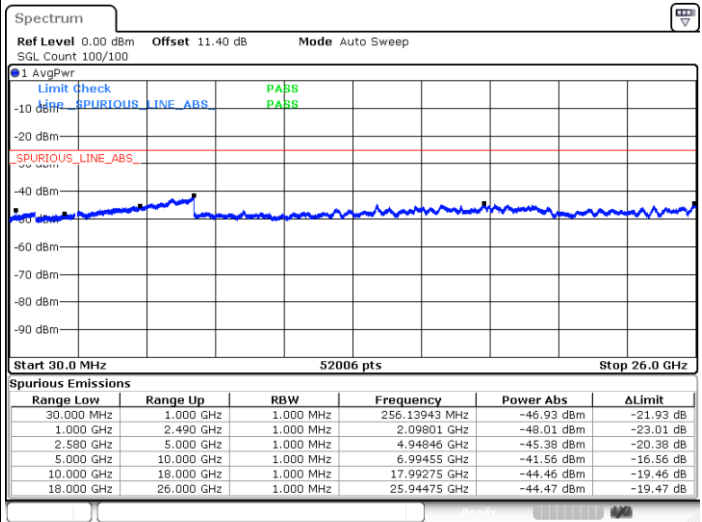
FR1 n7 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



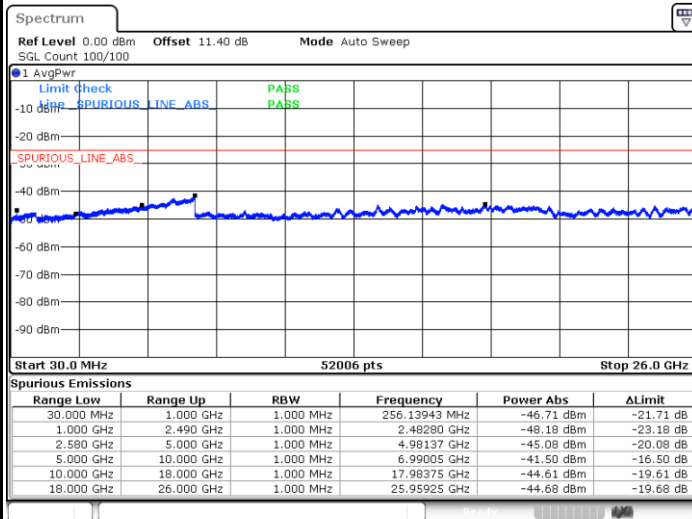
Date: 11.JUN.2020 17:45:24

Middle Channel / 1RB1



Date: 11.JUN.2020 17:47:28

Highest Channel / 1RB1

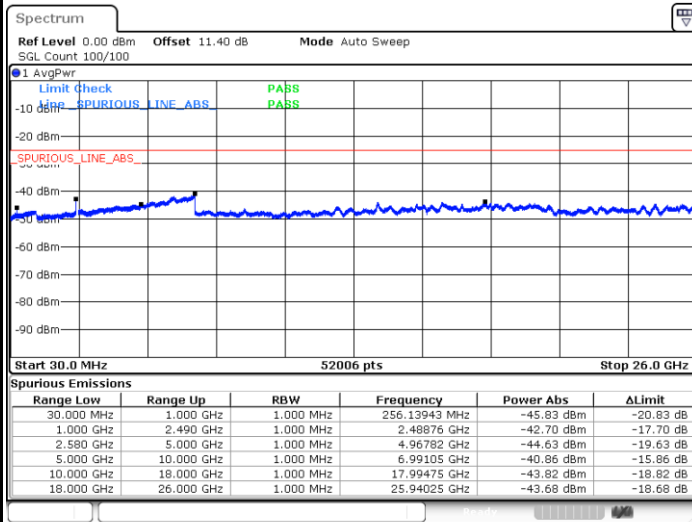


Date: 11.JUN.2020 17:50:28



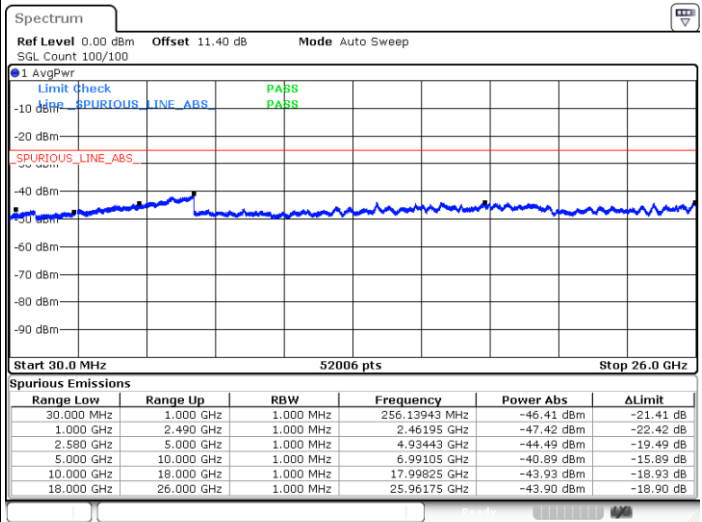
FR1 n7 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



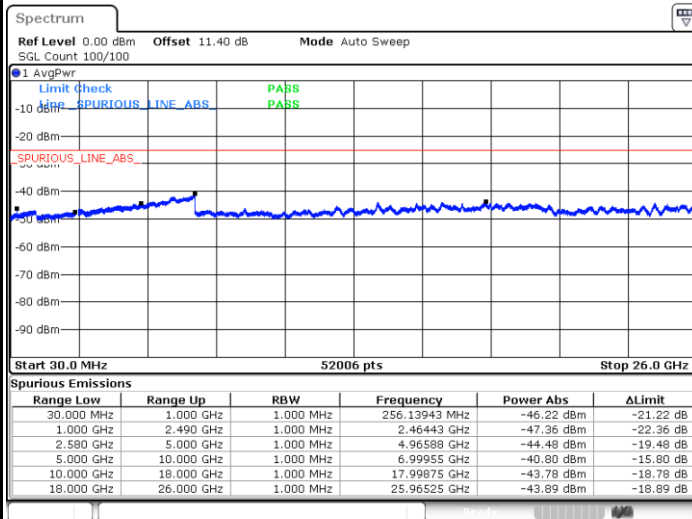
Date: 11.JUN.2020 05:54:59

Middle Channel / 1RB1



Date: 11.JUN.2020 06:15:21

Highest Channel / 1RB1



Date: 11.JUN.2020 06:23:36

Frequency Stability

Test Conditions		FR1 n7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0036	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0037	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0058	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

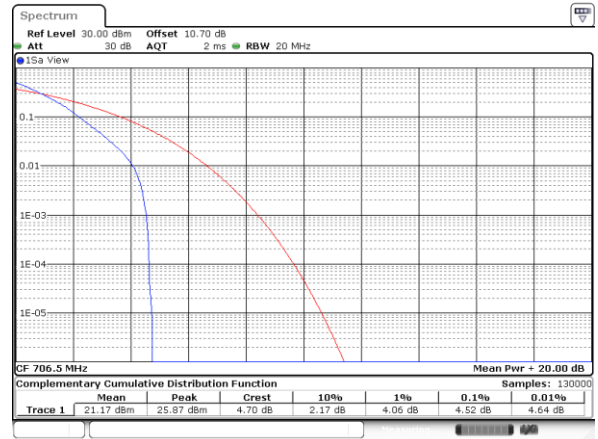
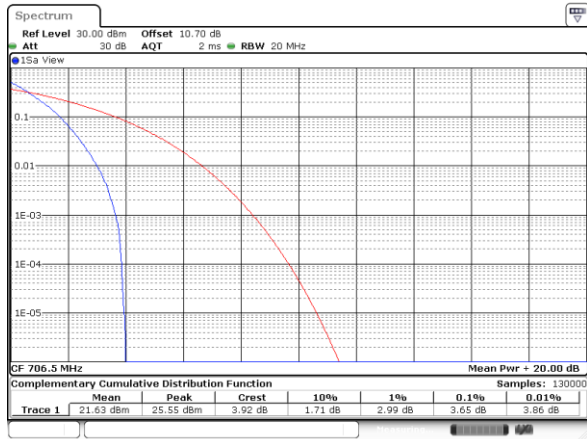
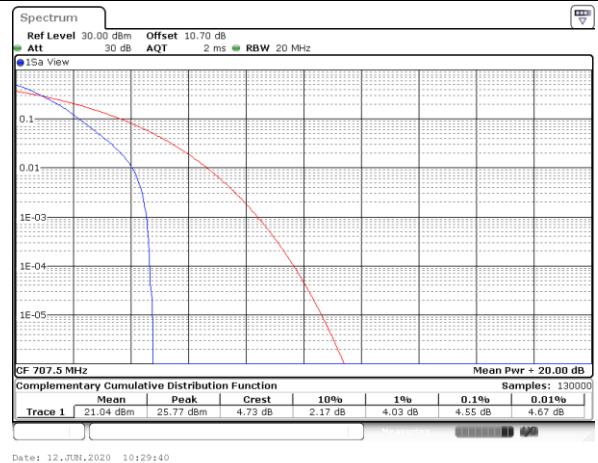
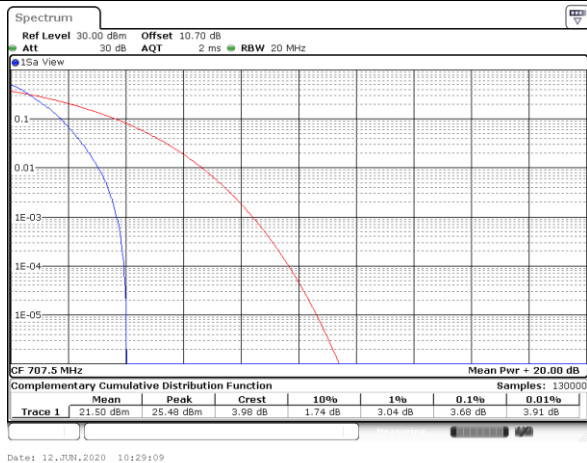
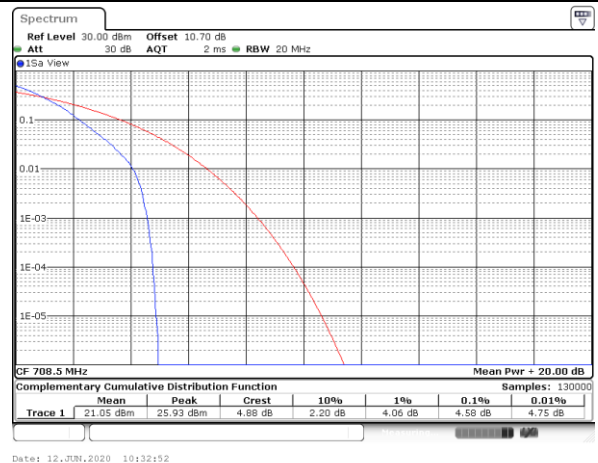
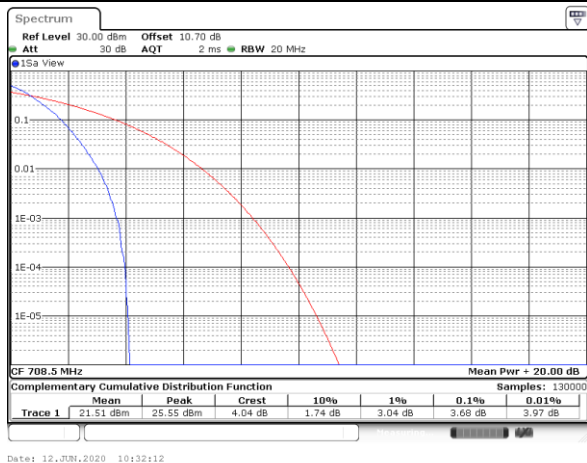
Note:

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 n12

Peak-to-Average Ratio

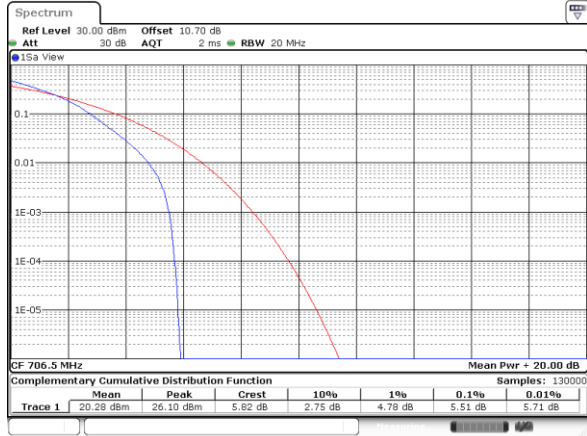
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Lowest CH	3.65	4.52	5.51	5.86	PASS
Middle CH	3.68	4.55	5.57	5.91	
Highest CH	3.68	4.58	5.57	5.94	
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Lowest CH	6.41				PASS
Middle CH	6.38				
Highest CH	6.38				

FR1 n12 / 15MHz / 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 n12 / 15MHz / DFT-S OFDM

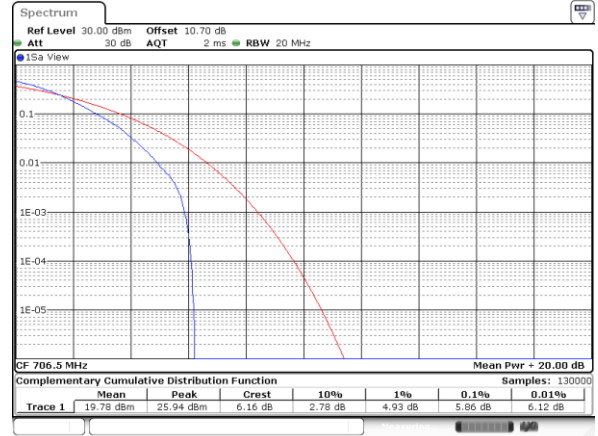
16QAM

Lowest Channel / Full RB

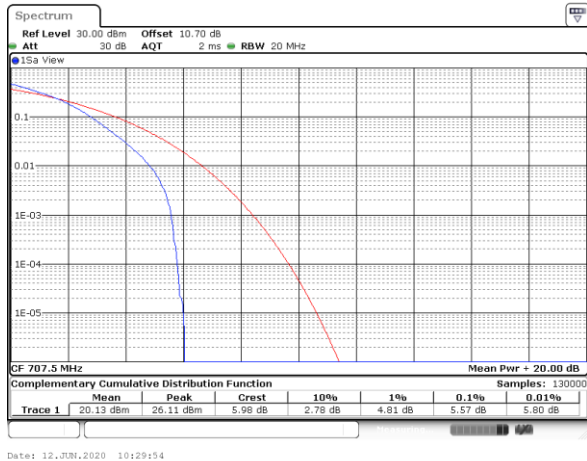


64QAM

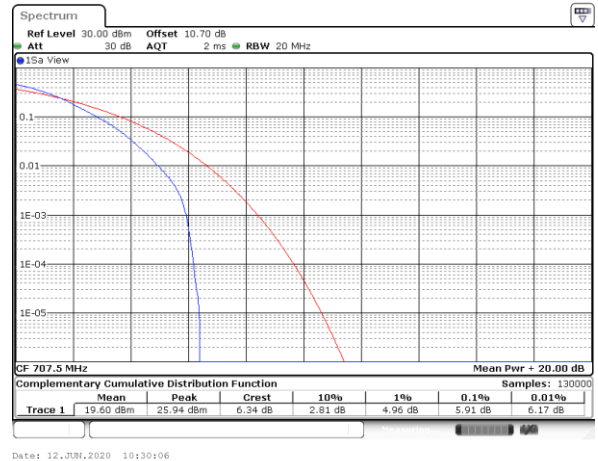
Lowest Channel / Full RB



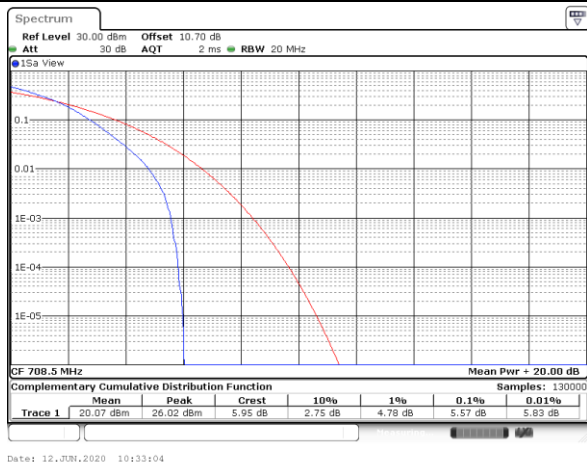
Middle Channel / Full RB



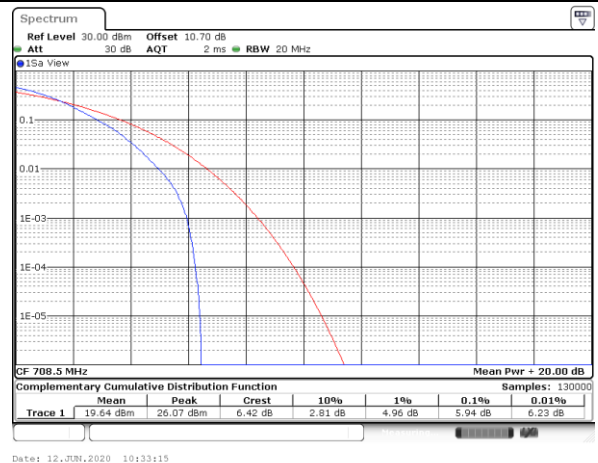
Middle Channel / Full RB



Highest Channel / Full RB



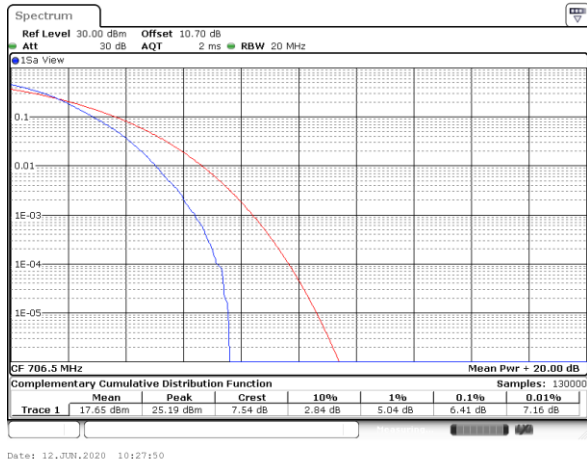
Highest Channel / Full RB



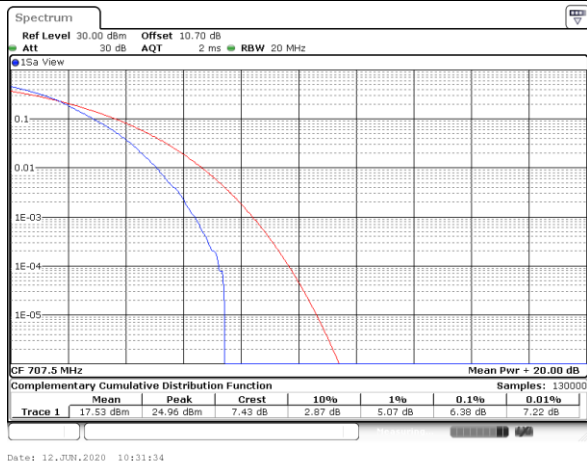
FR1 n12 / 15MHz / DFT-S OFDM

256QAM

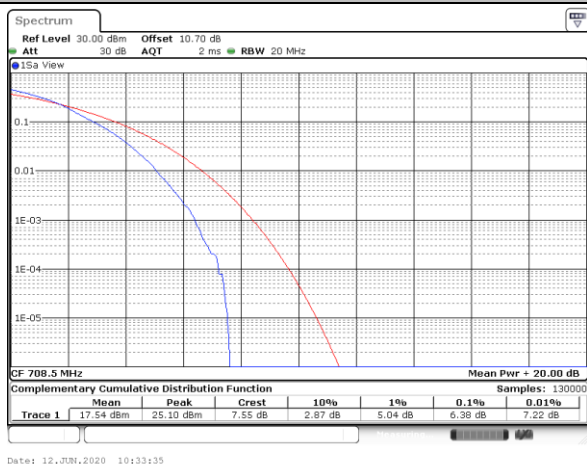
Lowest Channel / Full RB



Middle Channel / Full RB



Highest Channel / Full RB



**26dB Bandwidth**

Mode	FR1 n12 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Lowest CH	5.31		9.67		14.21			
Middle CH	5.20		9.79		14.30			
Highest CH	5.23		9.67		14.33			

Mode	FR1 n12 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Lowest CH	5.42	5.16	10.27	10.09	15.08	15.11		
Middle CH	5.36	5.36	9.99	10.07	15.02	15.02		
Highest CH	5.28	5.29	10.01	10.03	15.05	15.02		

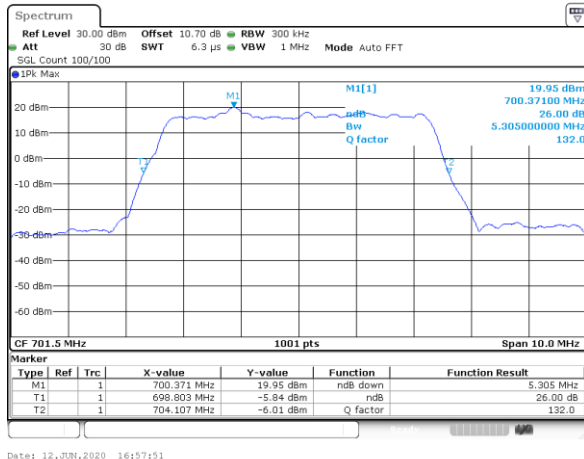
Mode	FR1 n12 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Lowest CH	5.35	5.21	10.25	10.19	15.02	14.90		
Middle CH	5.29	5.25	10.15	10.15	14.93	14.87		
Highest CH	5.14	5.25	10.01	10.29	14.87	14.96		



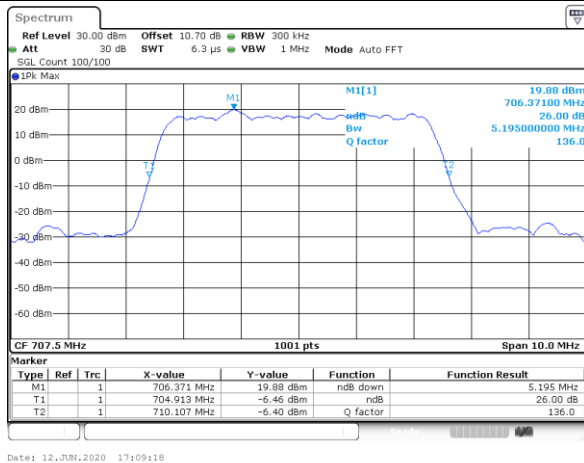
FR1 n12 / 5MHz / DFT-S OFDM

PI/2 BPSK

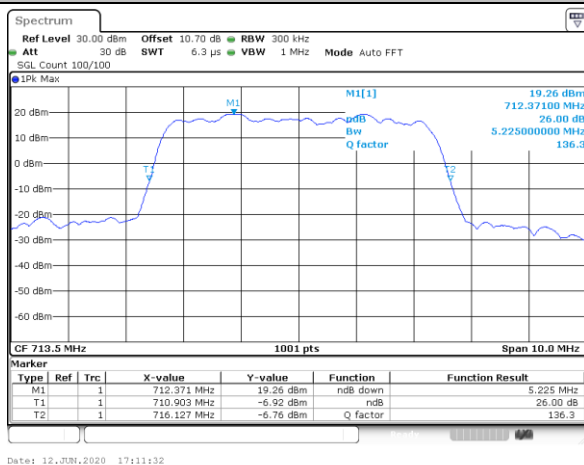
Lowest Channel



Middle Channel



Highest Channel

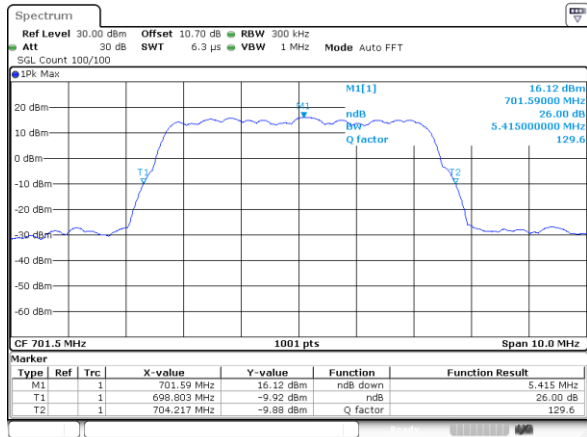




FR1 n12 / 5MHz / CP OFDM

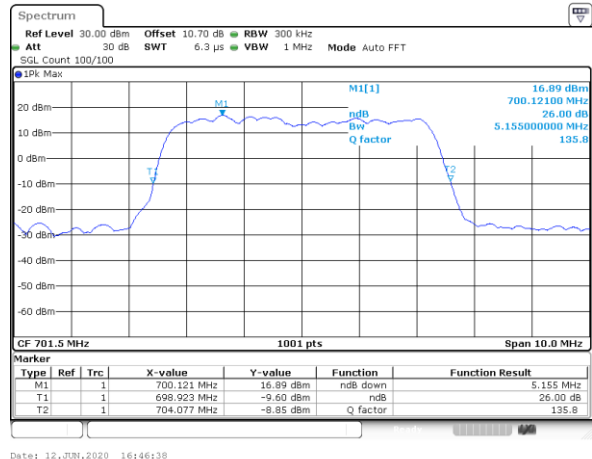
QPSK

Lowest Channel

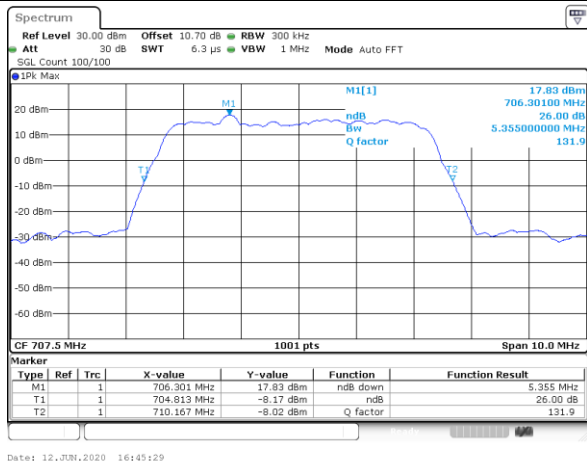


16QAM

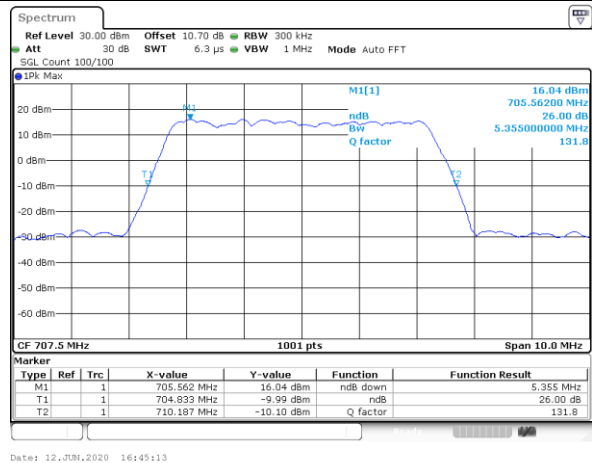
Lowest Channel



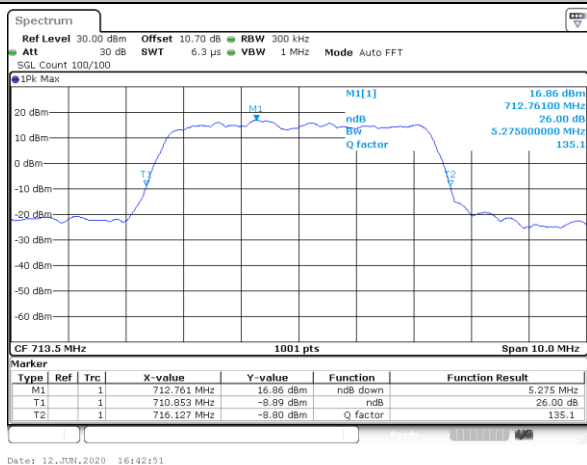
Middle Channel



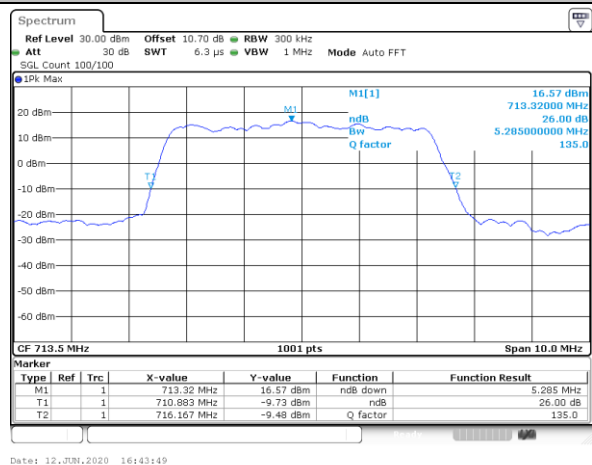
Middle Channel



Highest Channel



Highest Channel

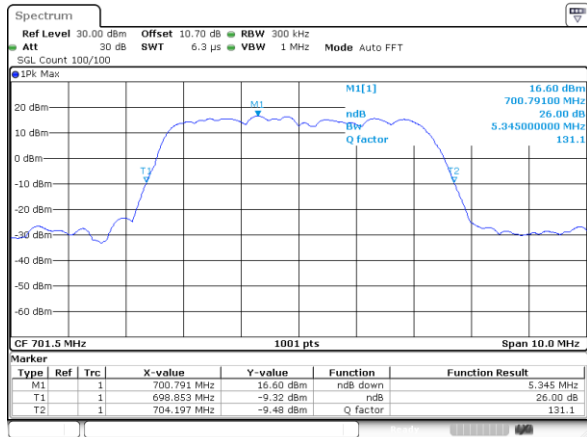




FR1 n12 / 5MHz / CP OFDM

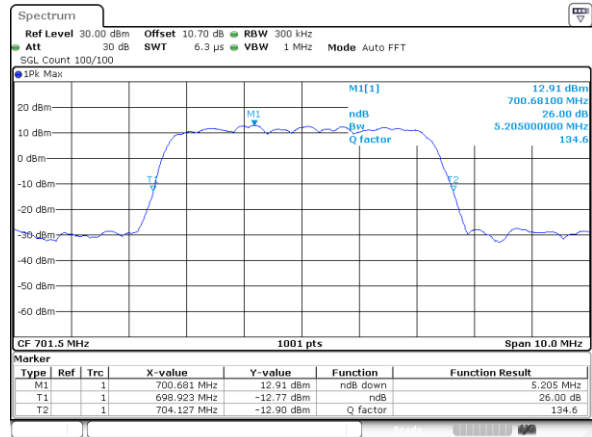
64QAM

Lowest Channel

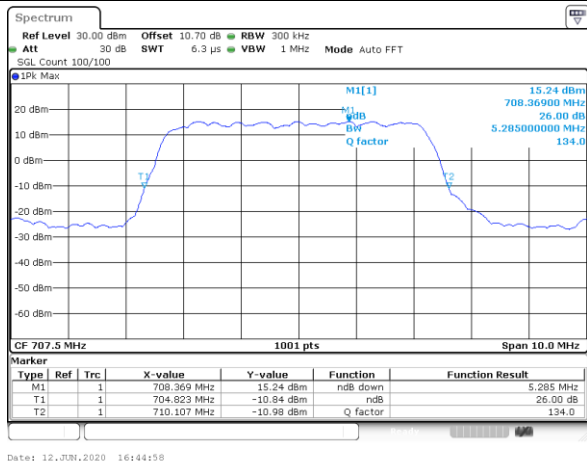


256QAM

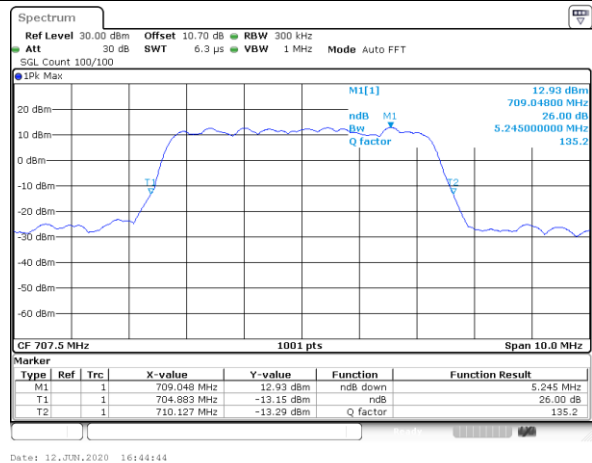
Lowest Channel



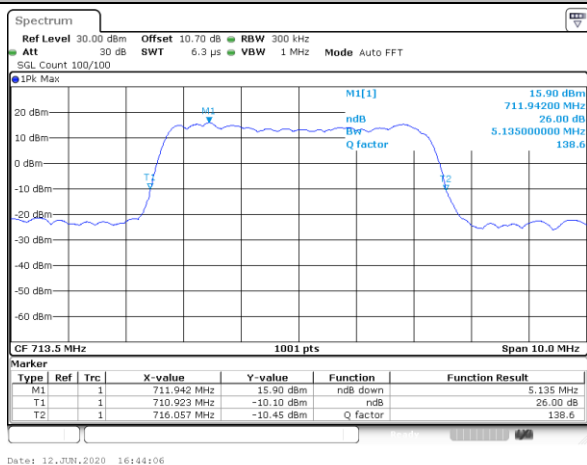
Middle Channel



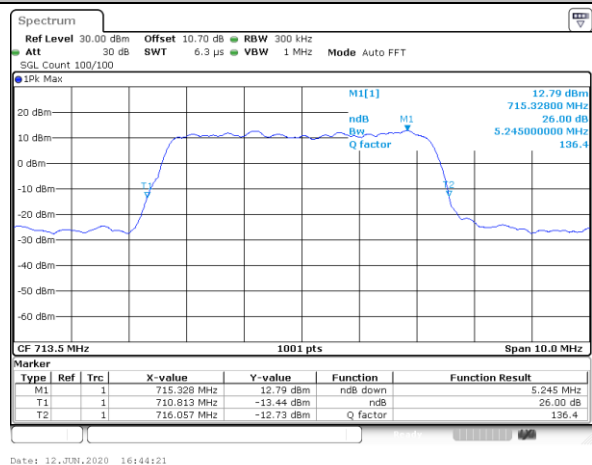
Middle Channel



Highest Channel



Highest Channel

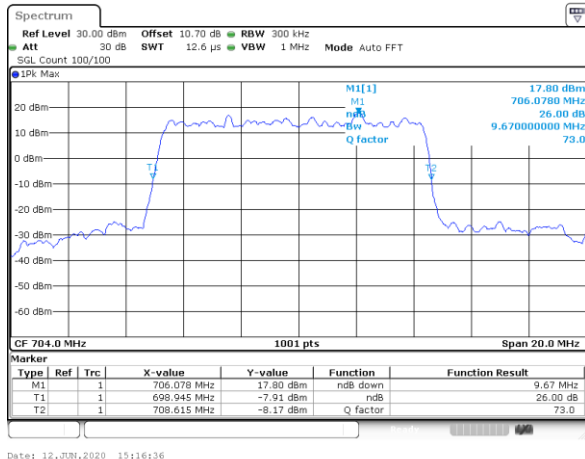




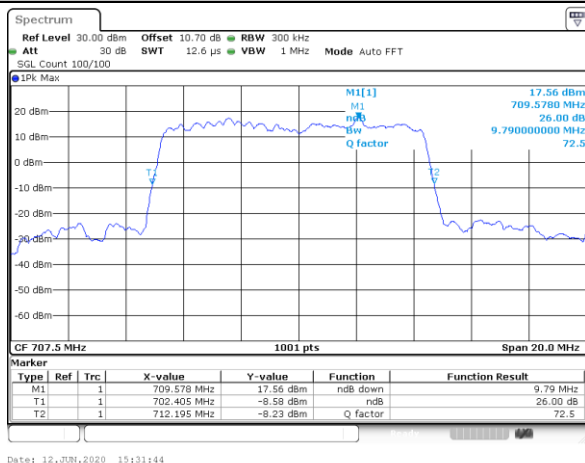
FR1 n12 / 10MHz / DFT-S OFDM

PI/2 BPSK

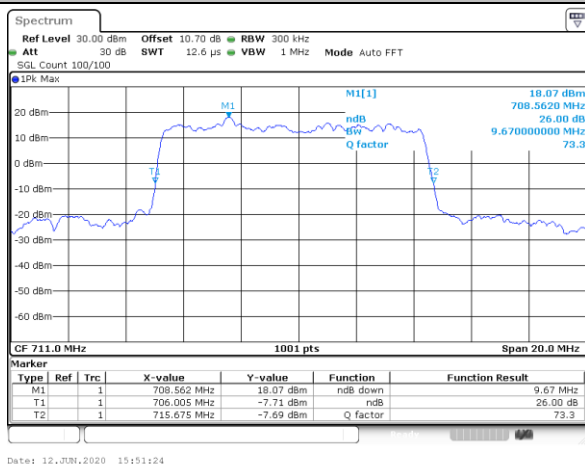
Lowest Channel



Middle Channel



Highest Channel





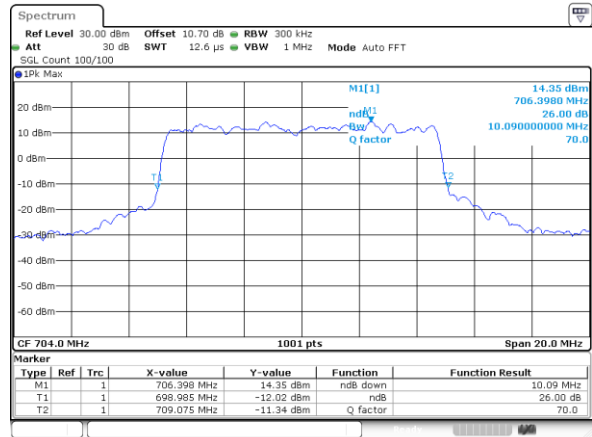
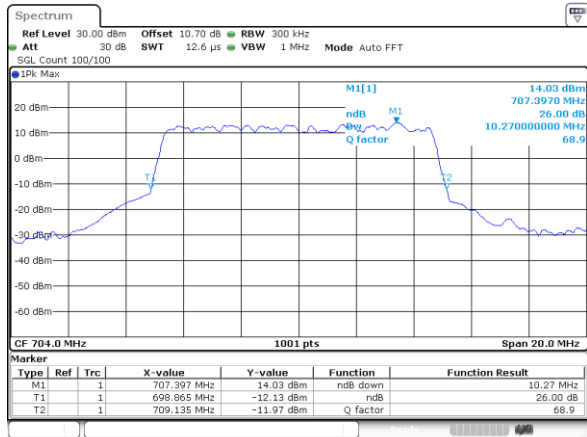
FR1 n12 / 10MHz / CP OFDM

QPSK

16QAM

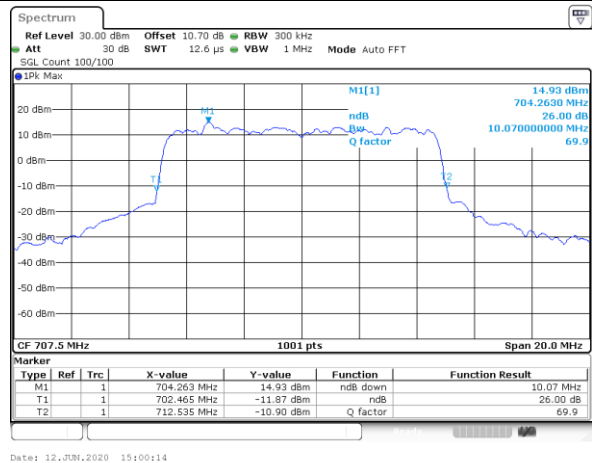
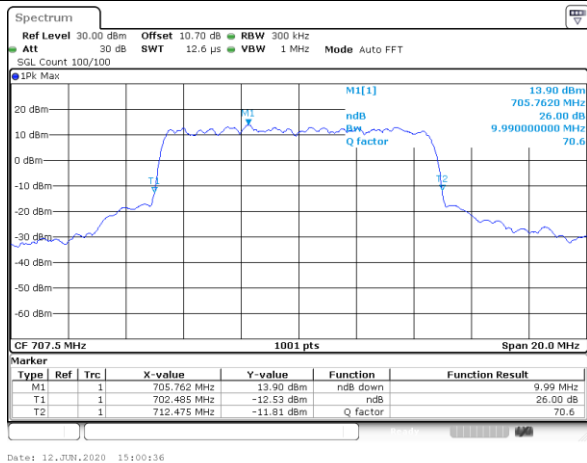
Lowest Channel

Lowest Channel



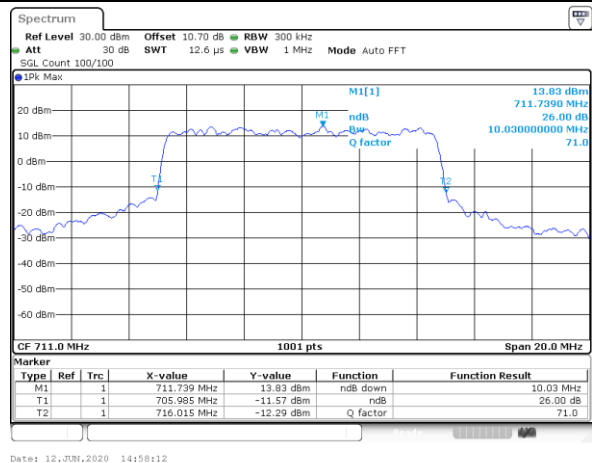
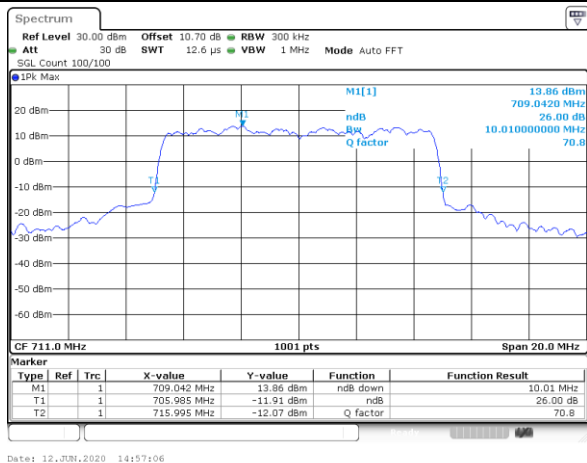
Middle Channel

Middle Channel



Highest Channel

Highest Channel

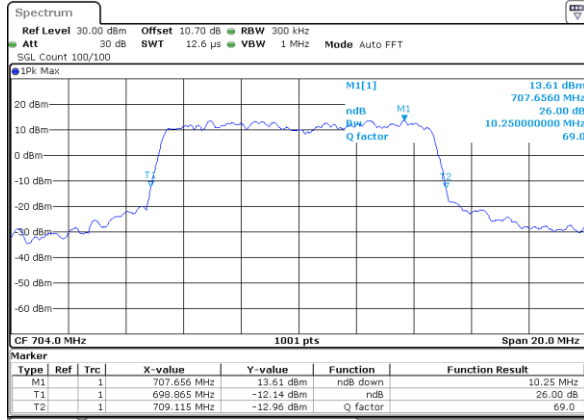




FR1 n12 / 10MHz / CP OFDM

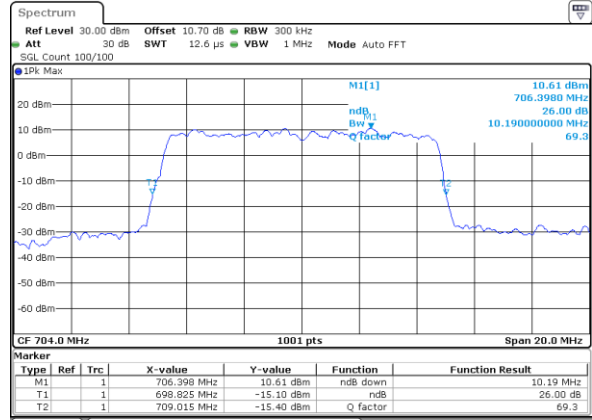
64QAM

Lowest Channel

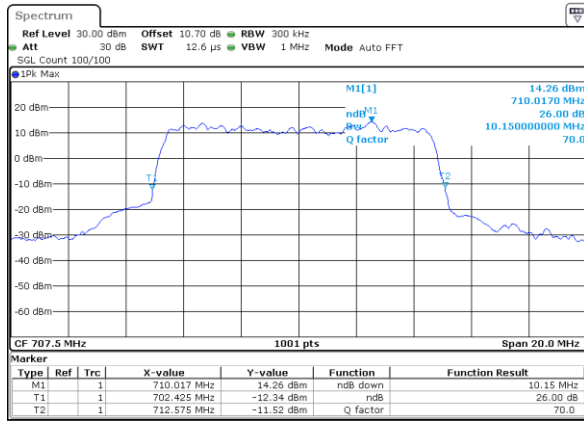


256QAM

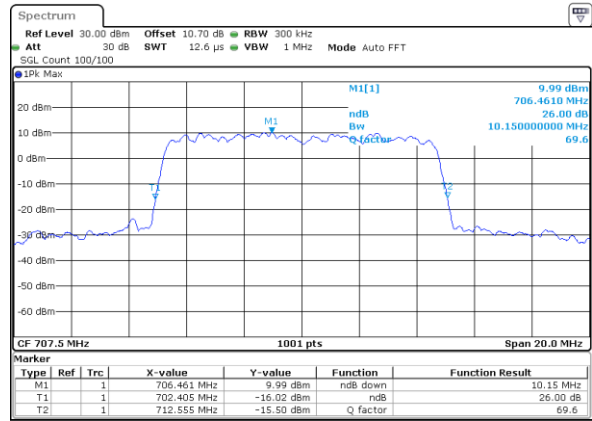
Lowest Channel



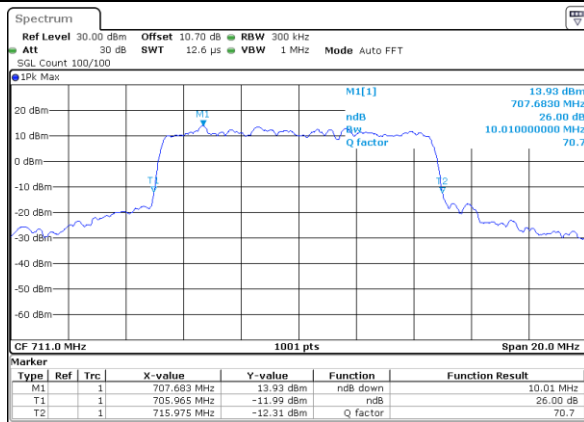
Middle Channel



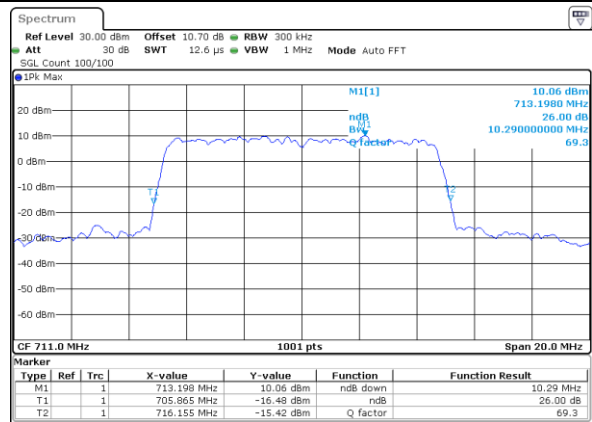
Middle Channel

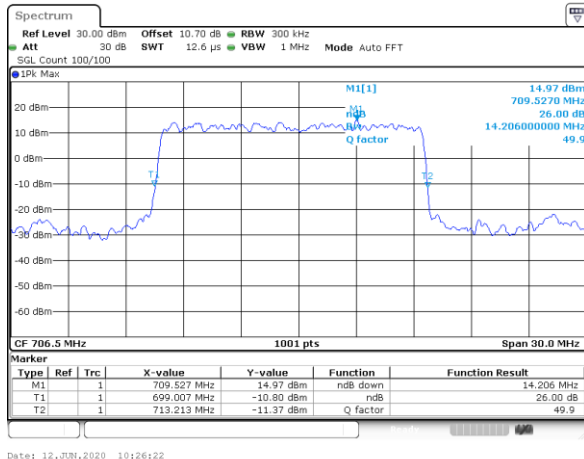
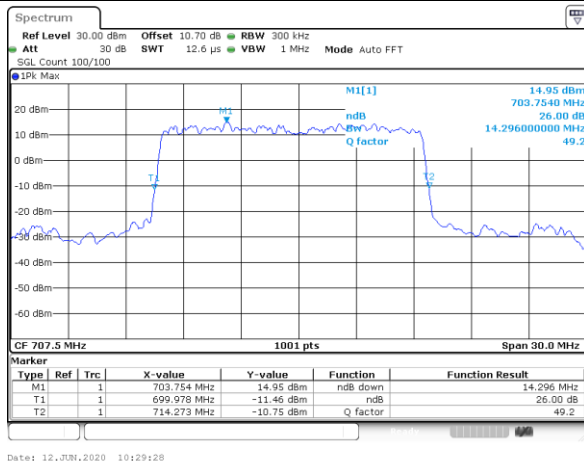
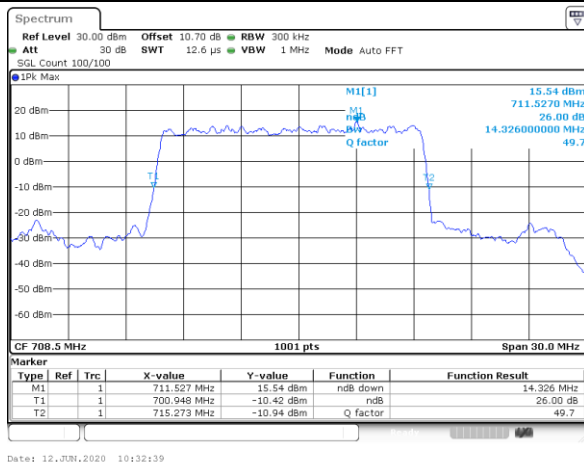


Highest Channel



Highest Channel



**FR1 n12 / 15MHz / DFT-S OFDM****PI/2 BPSK****Lowest Channel****Middle Channel****Highest Channel**



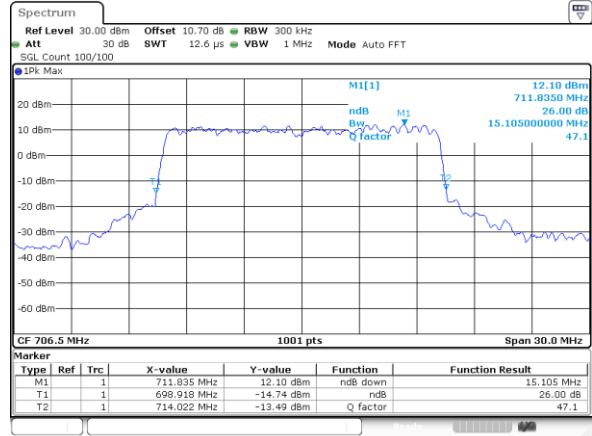
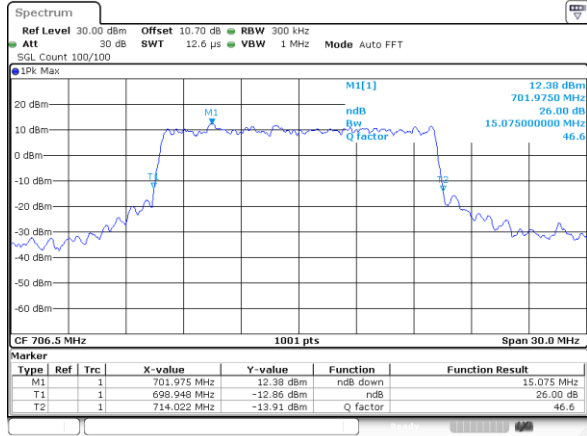
FR1 n12 / 15MHz / CP OFDM

QPSK

16QAM

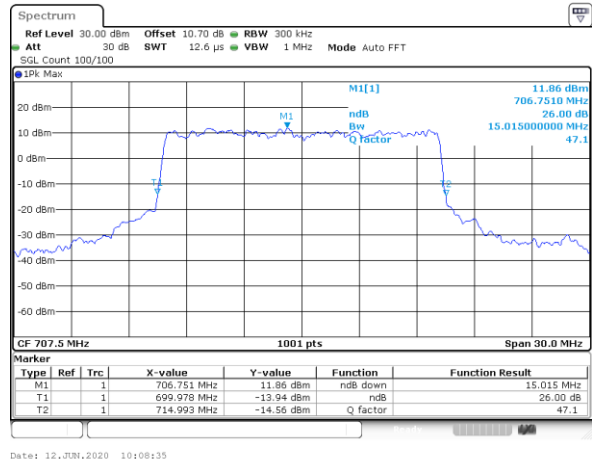
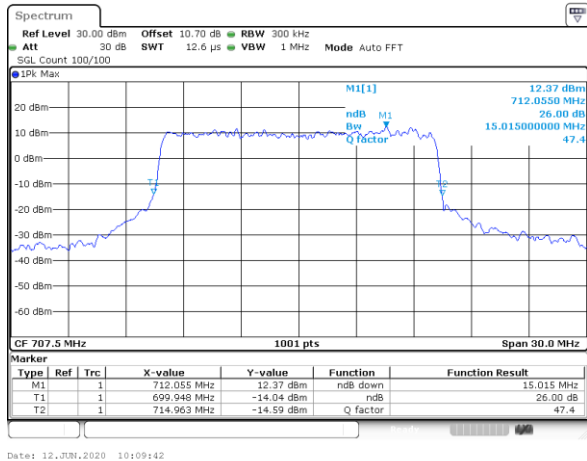
Lowest Channel

Lowest Channel



Middle Channel

Middle Channel



Highest Channel

Highest Channel

