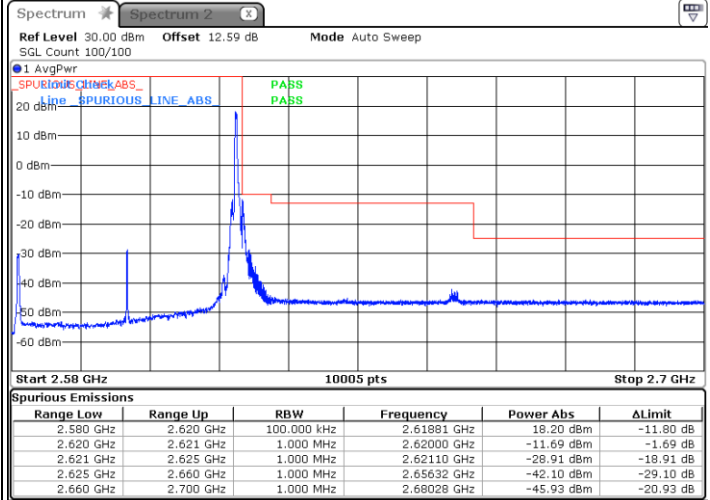
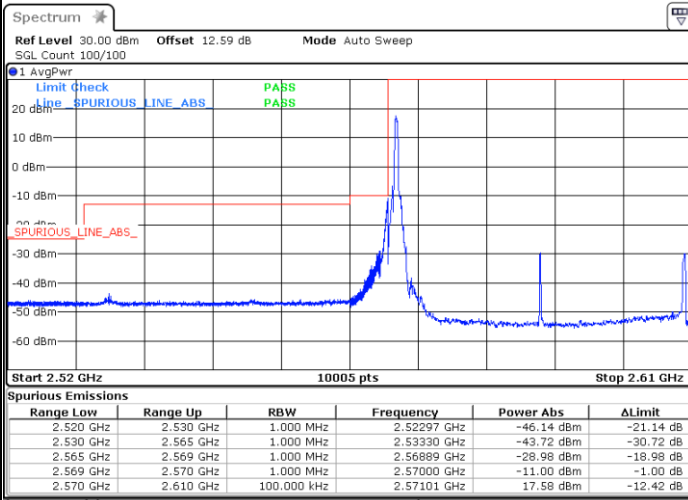




FR1 n38 / 40MHz / DFT-S OFDM / QPSK

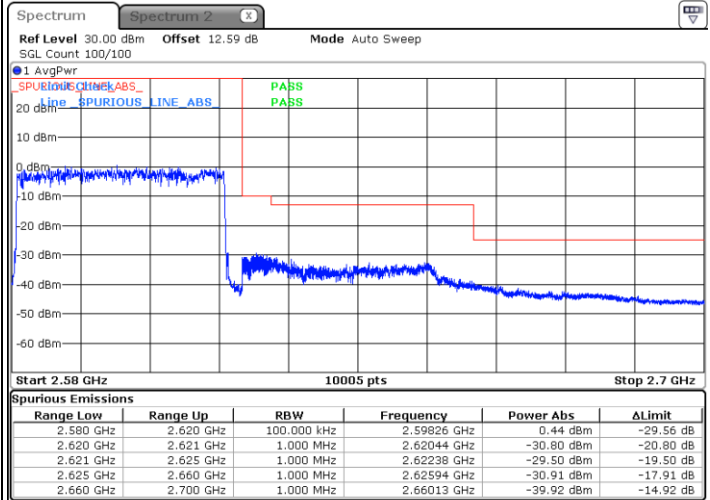
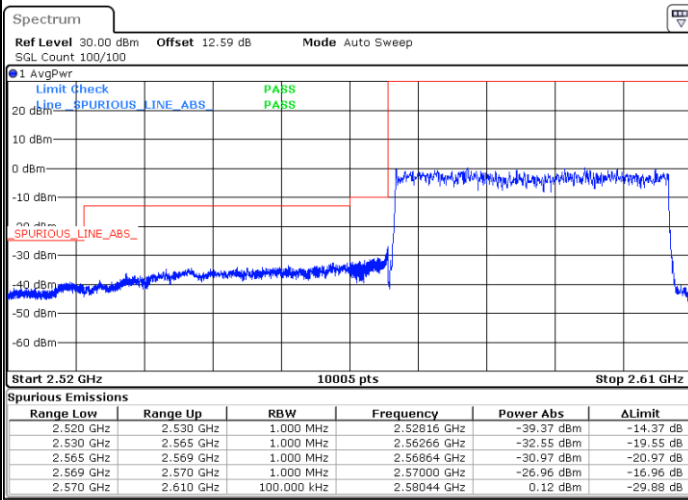
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB



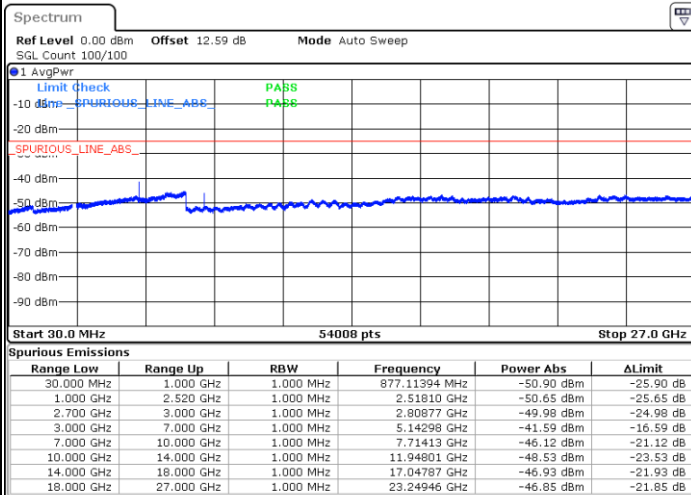


Conducted Spurious Emission

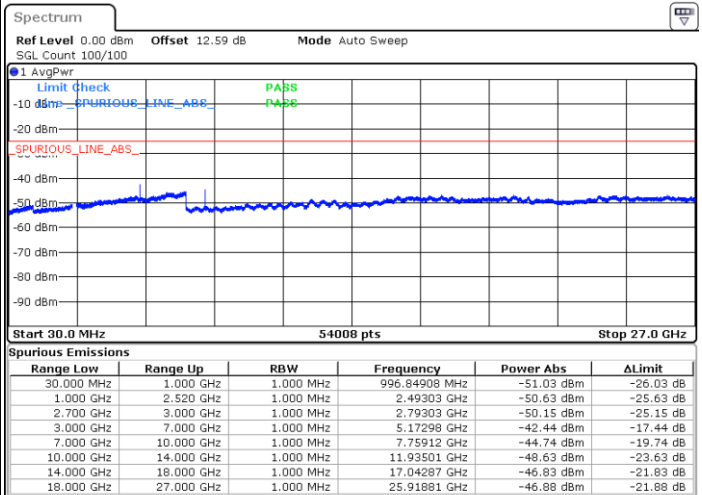
FR1 n38 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

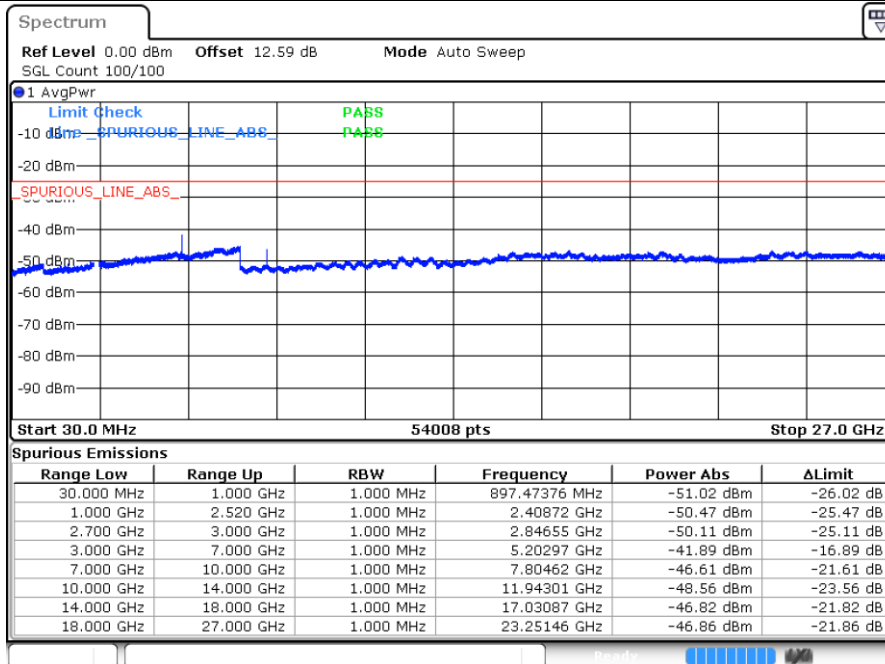


Date: 18 JUN 2022 07:40:53



Date: 18 JUN 2022 07:44:02

Highest Channel / 1RB1

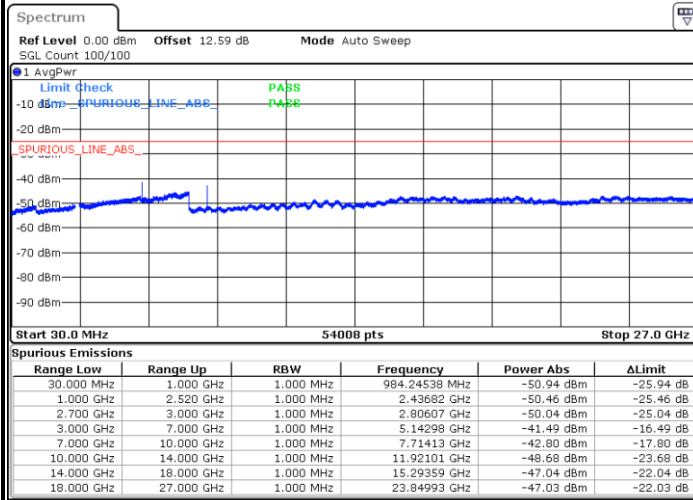


Date: 18 JUN 2022 07:50:56



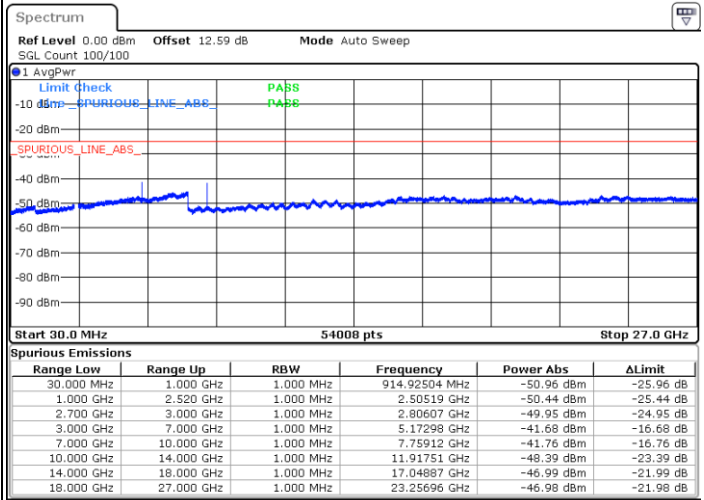
FR1 n38 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



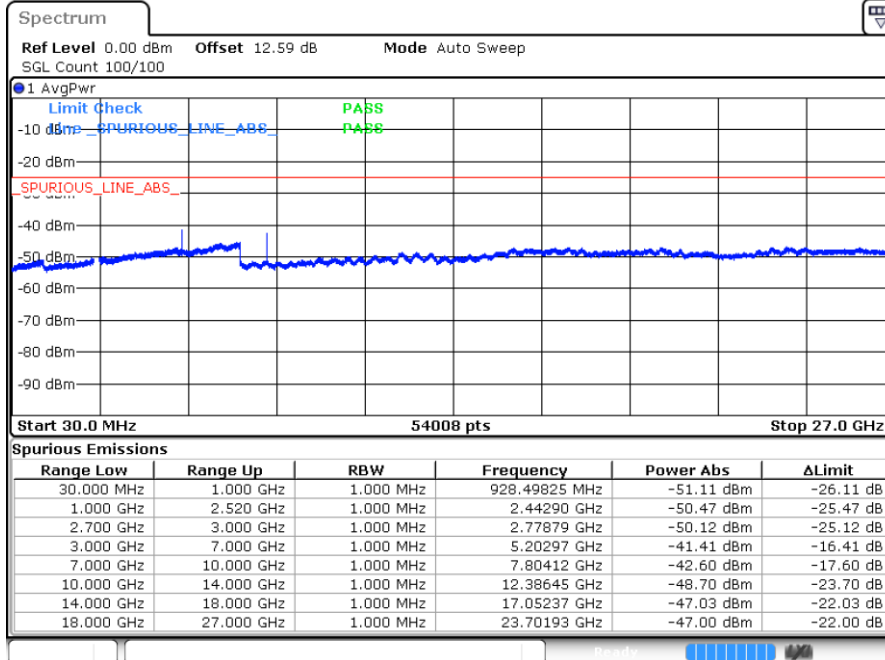
Date: 18 JUN 2022 07:41:50

Middle Channel / 1RB1



Date: 18 JUN 2022 07:43:11

Highest Channel / 1RB1

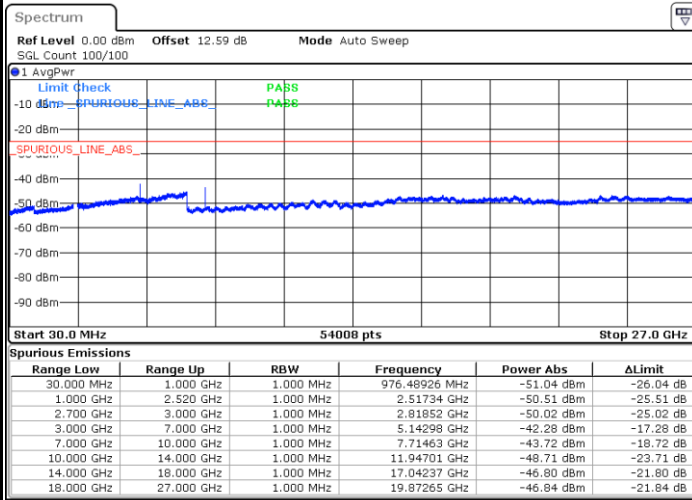


Date: 18 JUN 2022 07:51:57



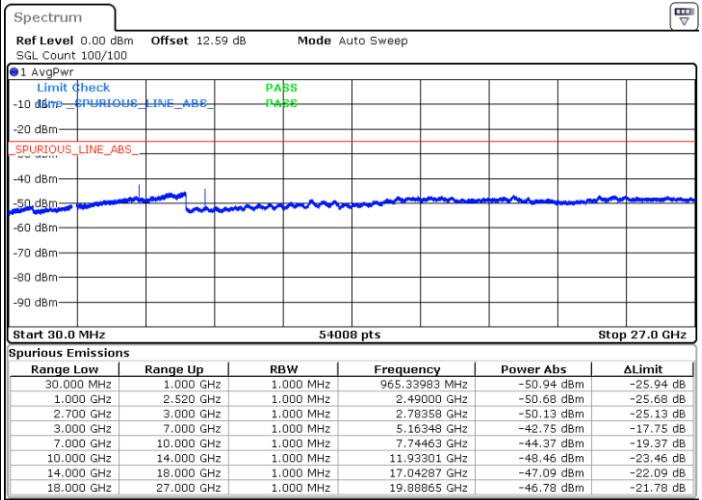
FR1 n38 / 30MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1



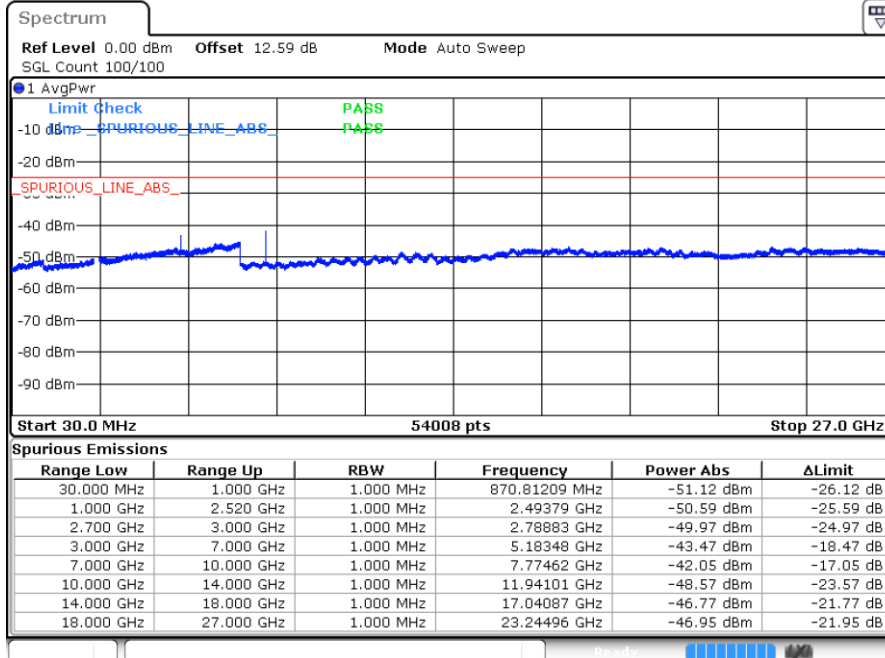
Date: 18 JUN 2022 08:00:37

Middle Channel / 1RB1



Date: 18 JUN 2022 08:03:46

Highest Channel / 1RB1

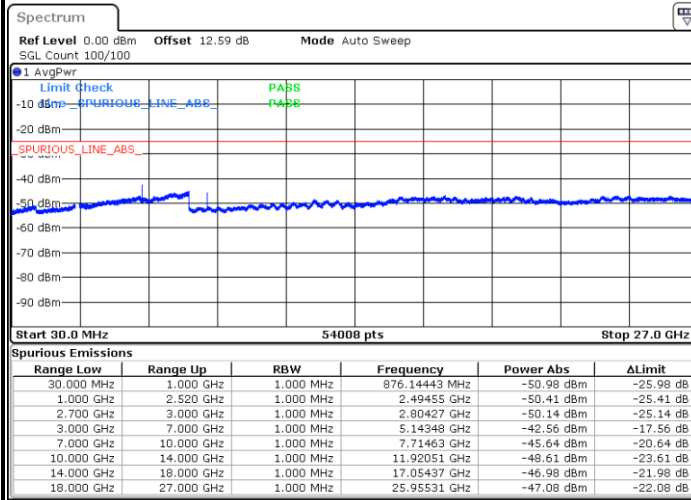


Date: 18 JUN 2022 08:13:55



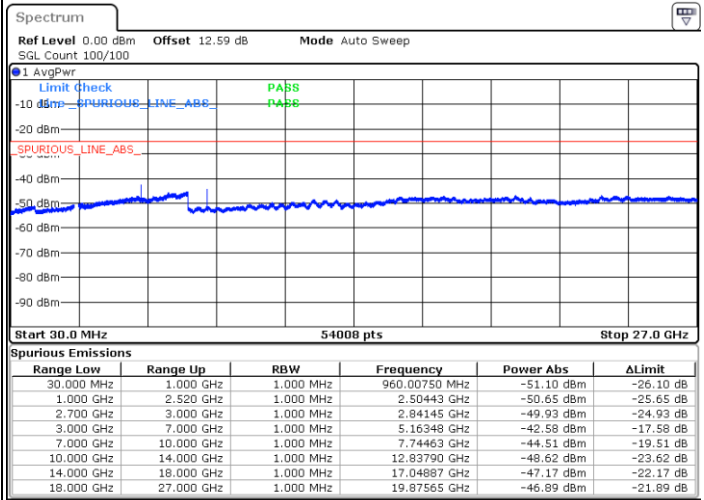
FR1 n38 / 30MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



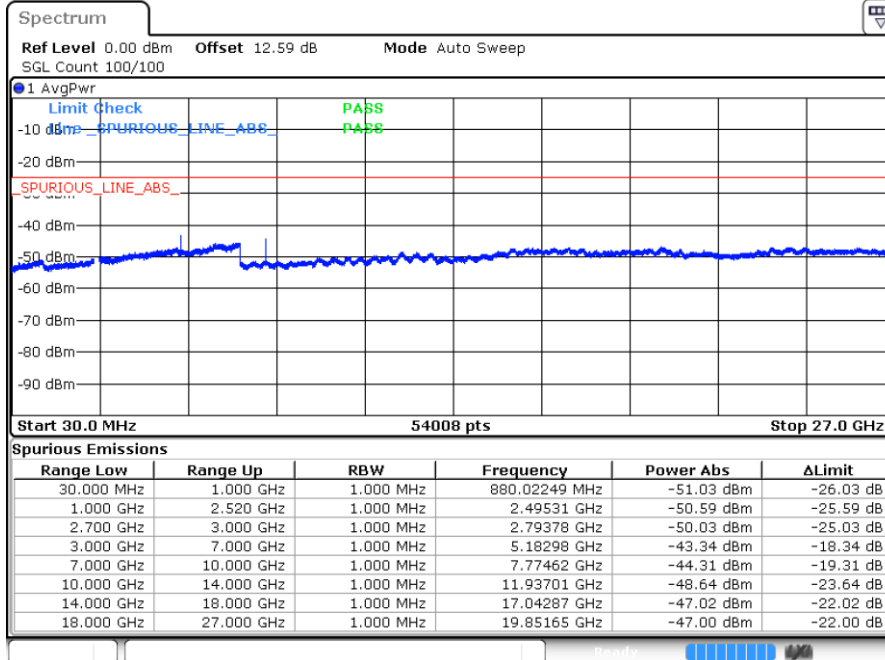
Date: 18 JUN 2022 08:01:34

Middle Channel / 1RB1



Date: 18 JUN 2022 08:02:45

Highest Channel / 1RB1

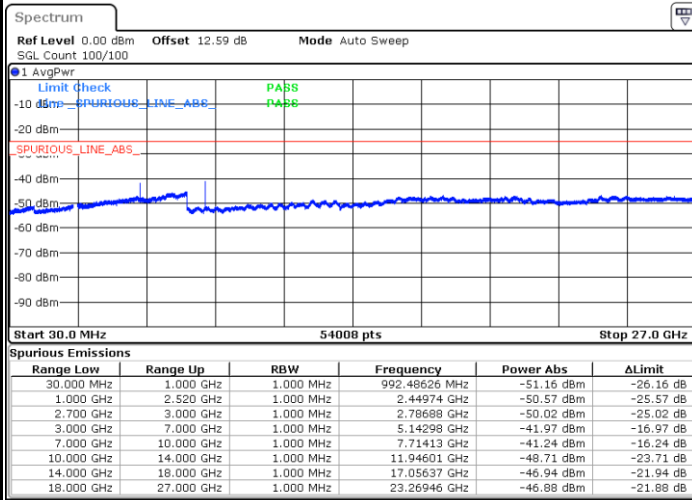


Date: 18 JUN 2022 08:14:47



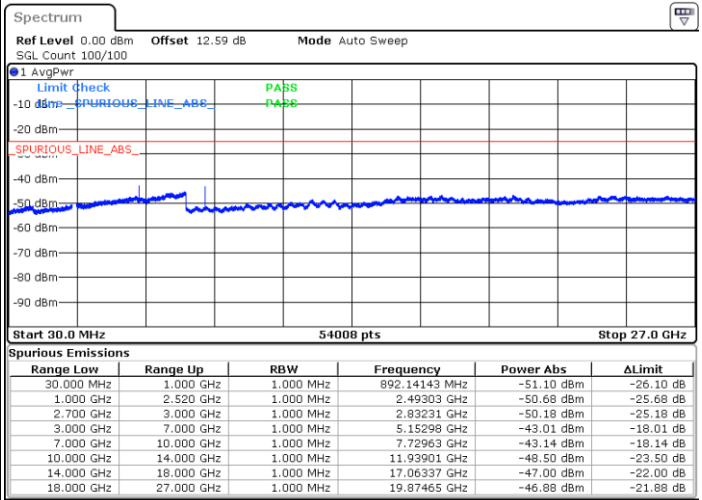
FR1 n38 / 40MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1



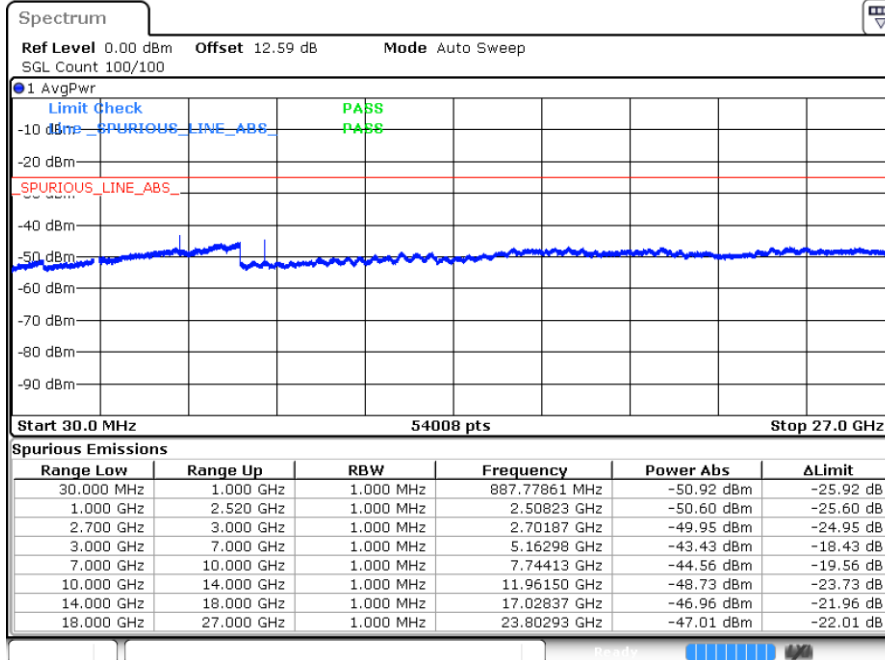
Date: 18 JUN 2022 08:27:48

Middle Channel / 1RB1



Date: 18 JUN 2022 08:30:47

Highest Channel / 1RB1

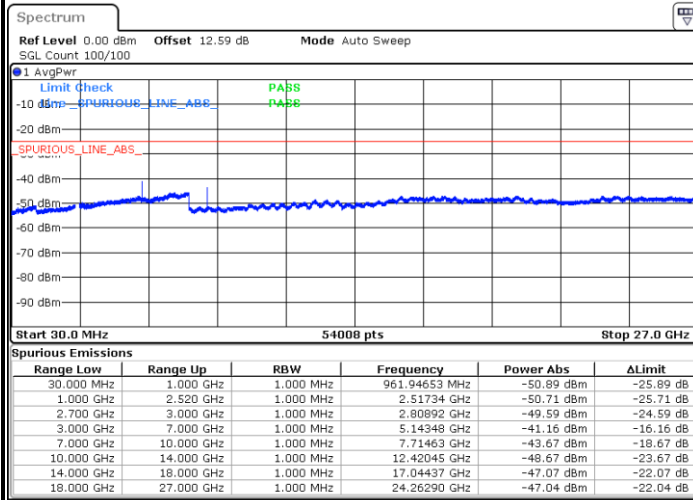


Date: 18 JUN 2022 09:01:32



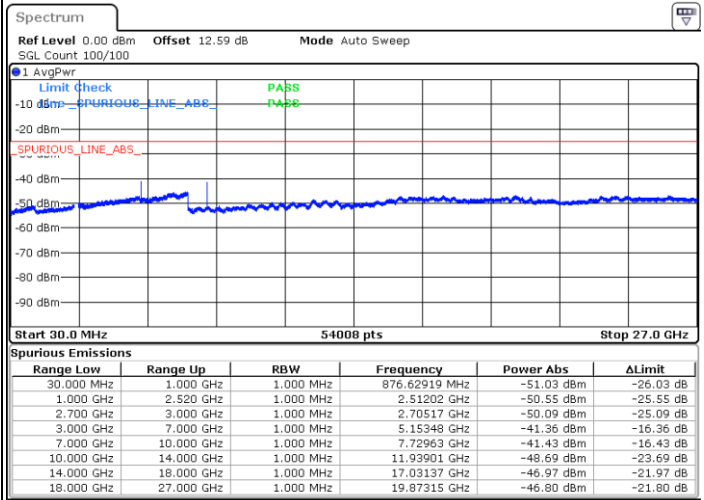
FR1 n38 / 40MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



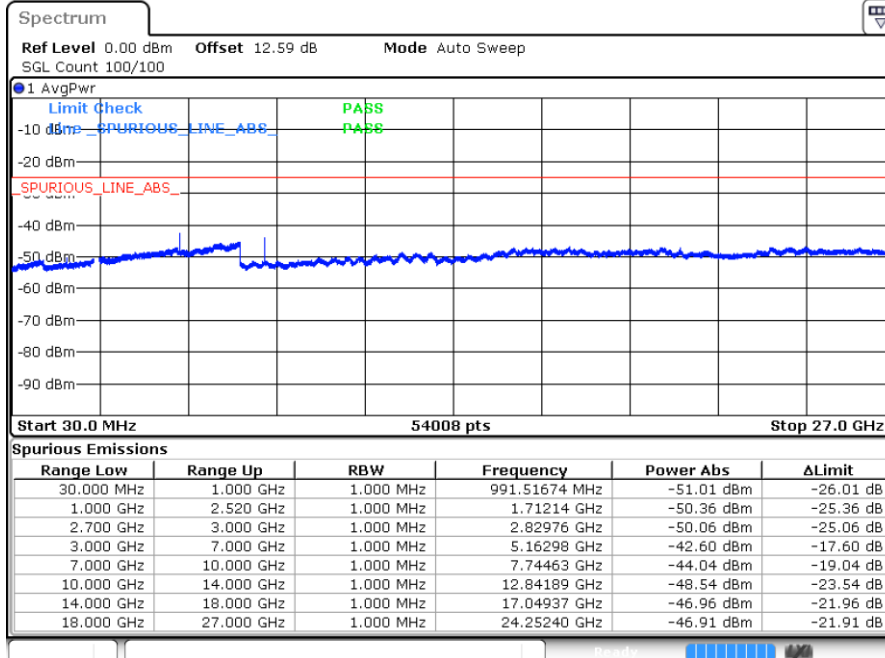
Date: 18 JUN 2022 08:28:52

Middle Channel / 1RB1



Date: 18 JUN 2022 08:29:56

Highest Channel / 1RB1



Date: 18 JUN 2022 09:02:24

Frequency Stability

Test Conditions		FR1 n38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 100MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0034	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0035	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0031	
20	Battery End Point	0.0038	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.55 V. ; Maximum Voltage =4.45V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



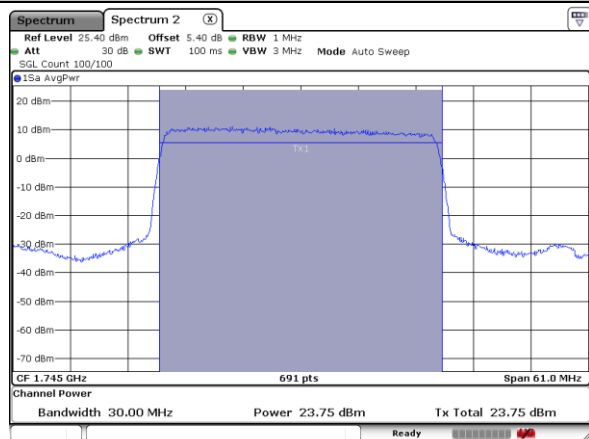
FR1 12A_N66

Peak-to-Average Ratio

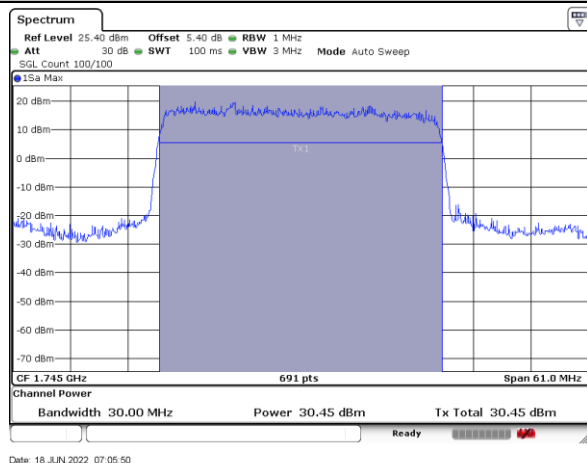
Mode	FR1 B12_N66 / 20MHz / DFT-S OFDM		
Mod.	PI/2 BPSK	QPSK	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	6.7	6.66	PASS

FR1 B2_N71 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

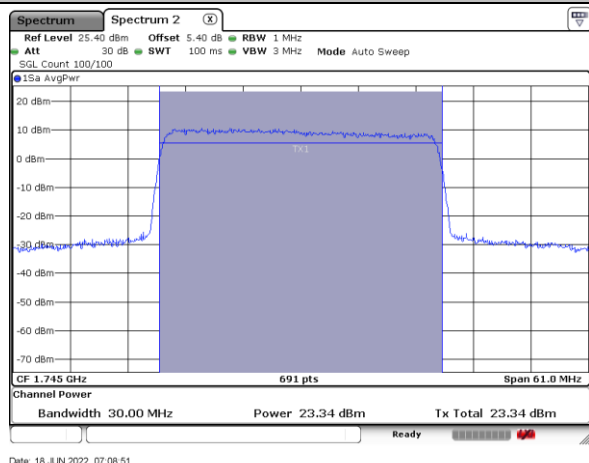
PI/2 BPSK-A



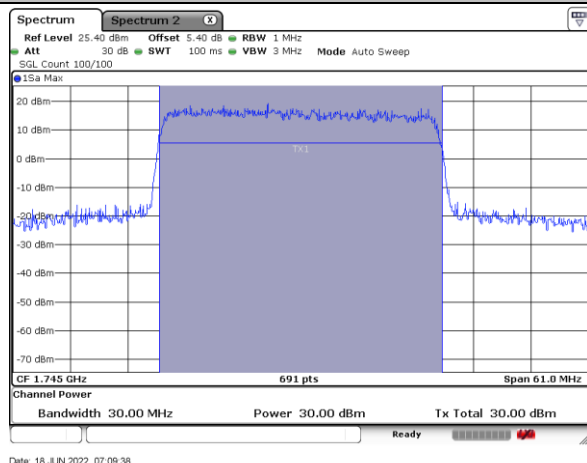
PI/2 BPSK-P



QPSK-A



QPSK-P



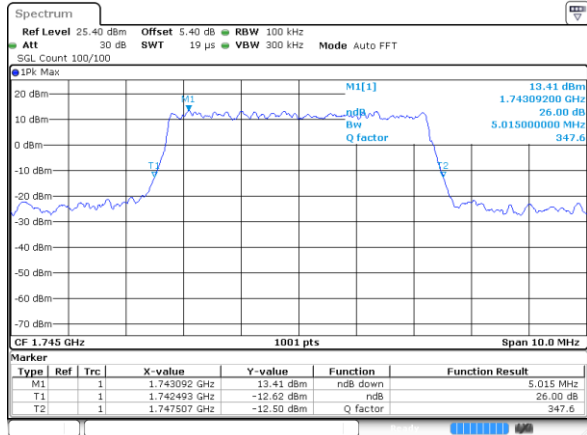
**26dB Bandwidth**

Mode	FR1 B12_N66 : 26dBW (MHz) / CP OFDM							
BW	5MHz				10MHz			
Mod.	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
Middle CH	5.02	4.90	4.92	5.01	10.09	10.05	10.05	10.03
Mode	FR1 B2_N71 : 26dBW (MHz) / CP OFDM							
BW	15MHz				20MHz			
Mod.	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
Middle CH	14.90	14.90	14.99	14.93	21.38	21.30	21.34	21.10
Mode	FR1 B2_N71 : 26dBW (MHz) / CP OFDM							
BW	30MHz							
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	29.49	29.57	29.57	29.61				



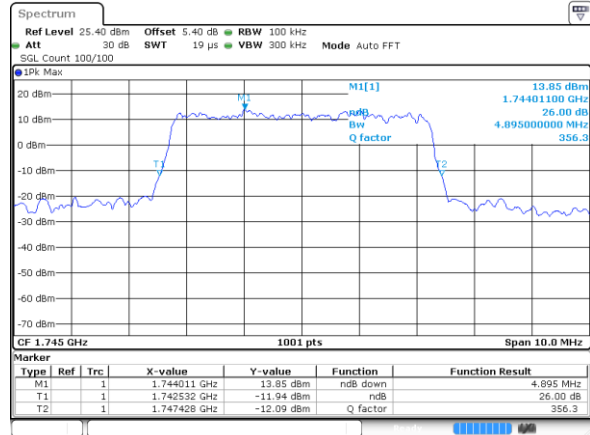
FR1 B12_N66 / 5MHz / CP- OFDM / Middle Channel / Full RB

QPSK



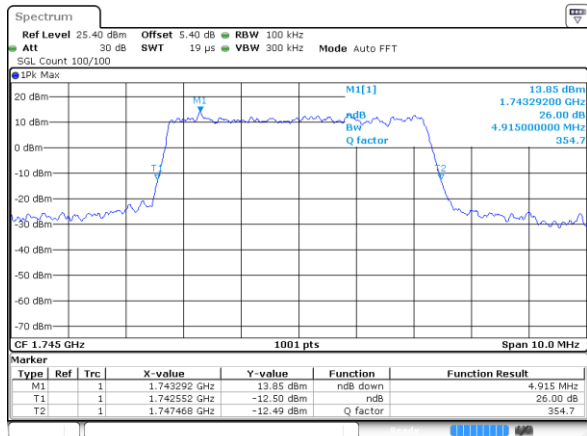
Date: 18 JUN 2022 05:12:11

16QAM



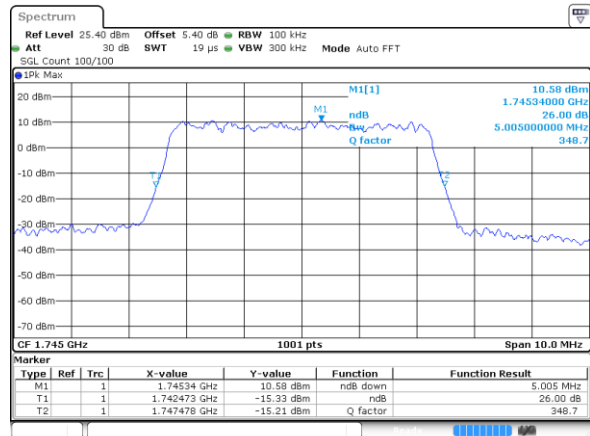
Date: 18 JUN 2022 05:12:41

64QAM



Date: 18 JUN 2022 05:37:53

256QAM

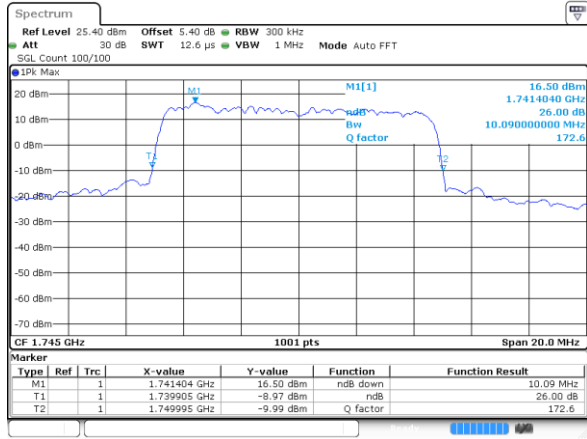


Date: 18 JUN 2022 05:38:17

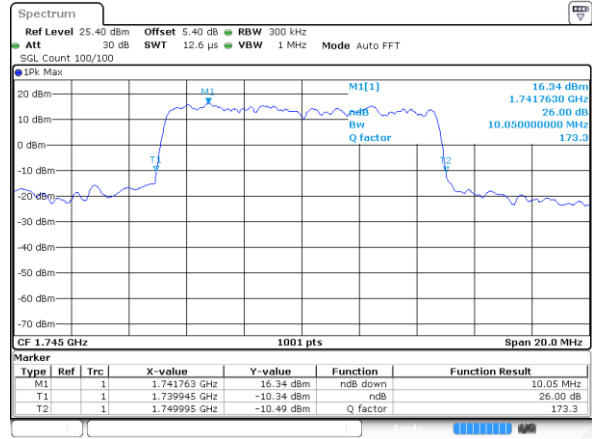


FR1 B12_N66 / 10MHz / CP-S OFDM / Middle Channel / Full RB

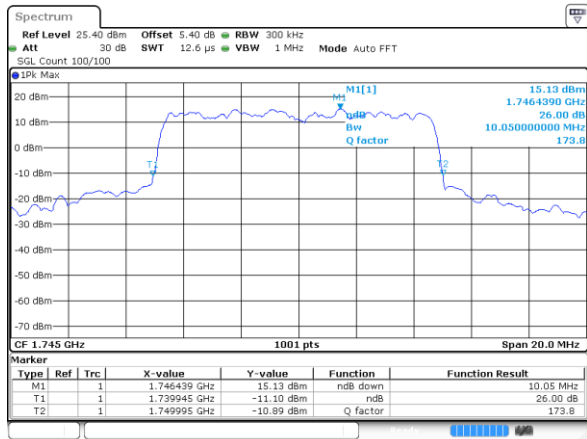
QPSK



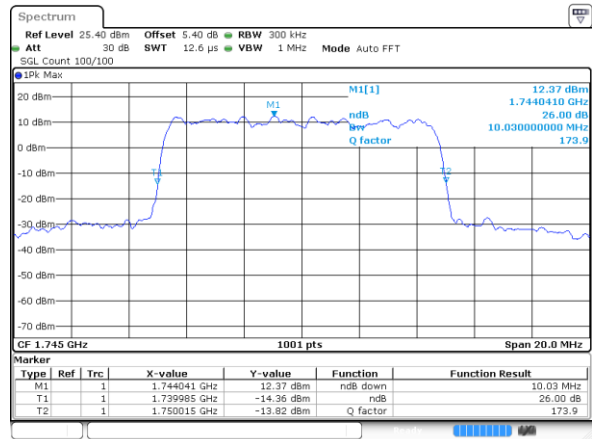
16QAM



64QAM



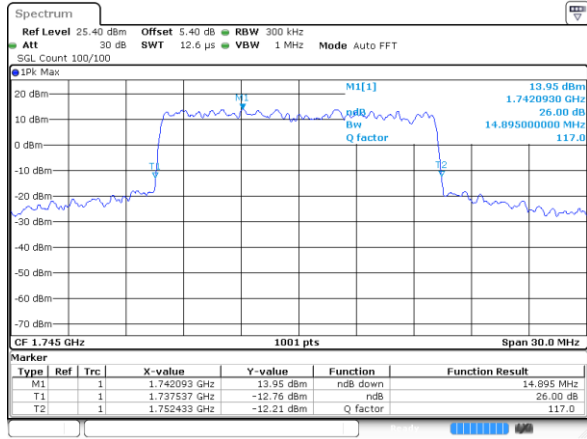
256QAM



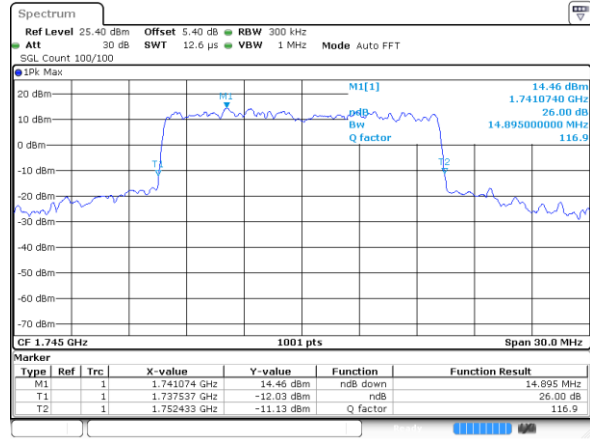


FR1 B12_N66 / 15MHz / CP-S OFDM / Middle Channel / Full RB

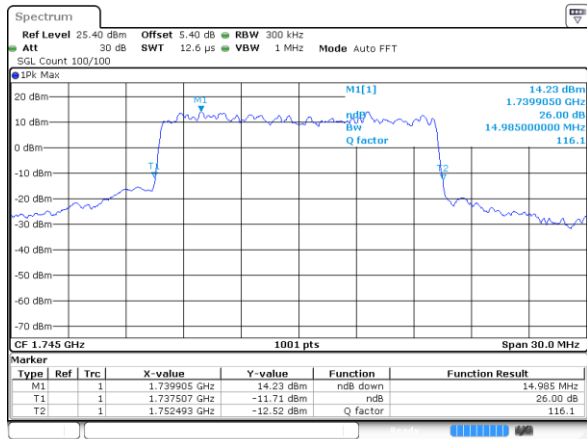
QPSK



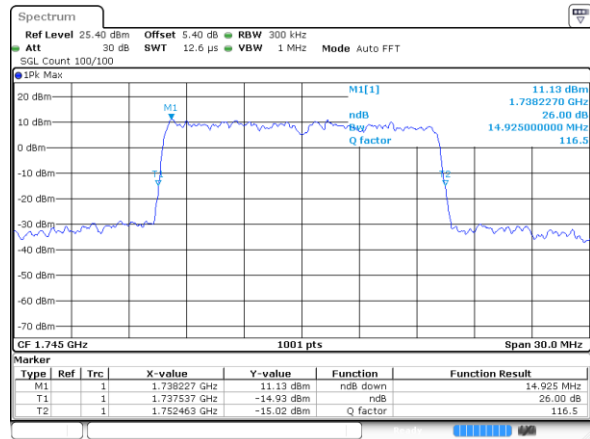
16QAM



64QAM



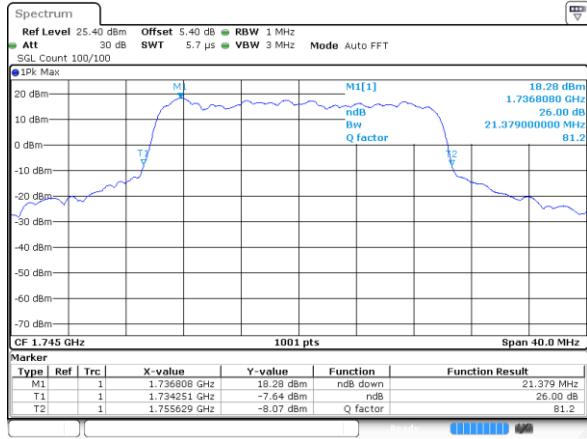
256QAM





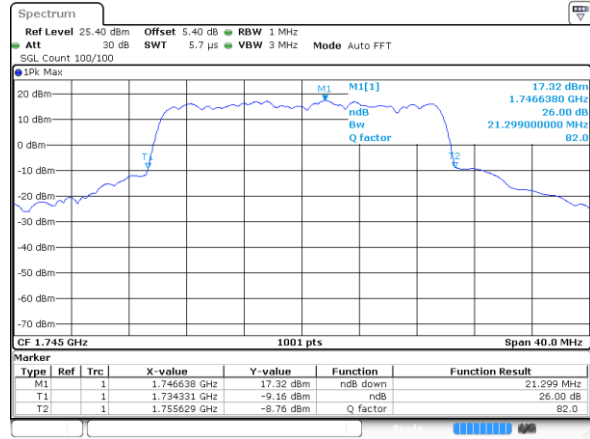
FR1 B12_N66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

QPSK



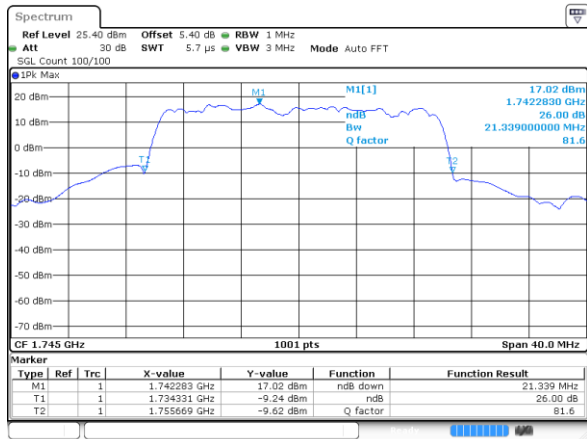
Date: 19 JUN 2022 04:17:00

16QAM



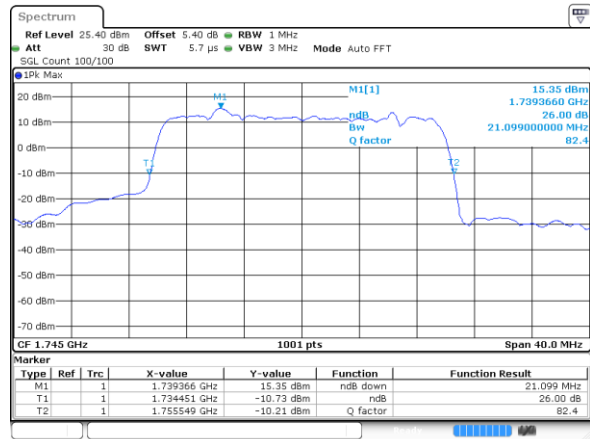
Date: 19 JUN 2022 04:17:41

64QAM



Date: 18 JUN 2022 06:35:39

256QAM

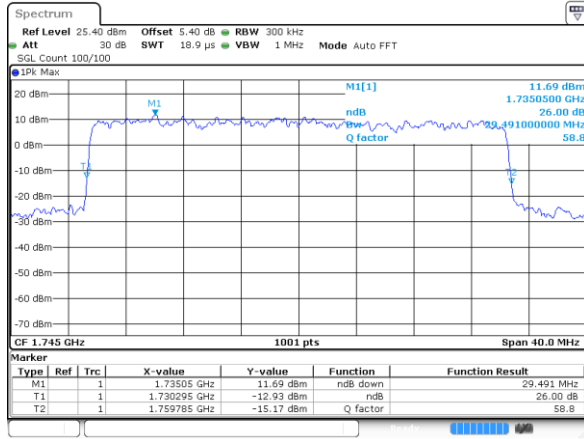


Date: 18 JUN 2022 06:37:47

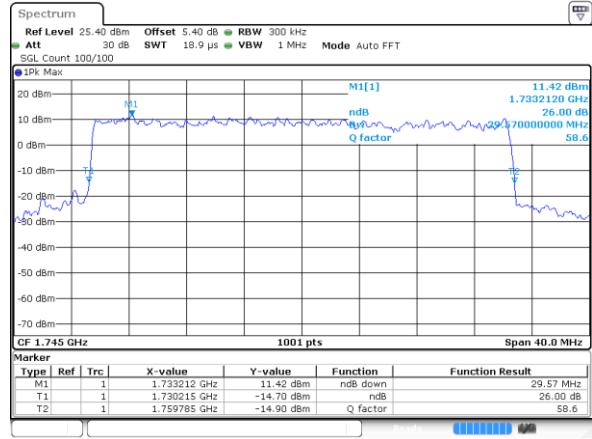


FR1 B12_N66 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

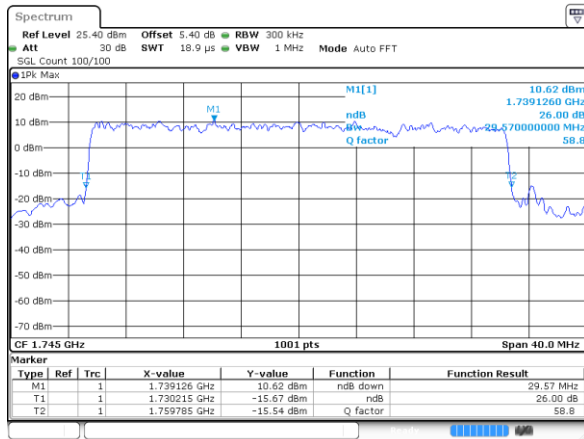
QPSK



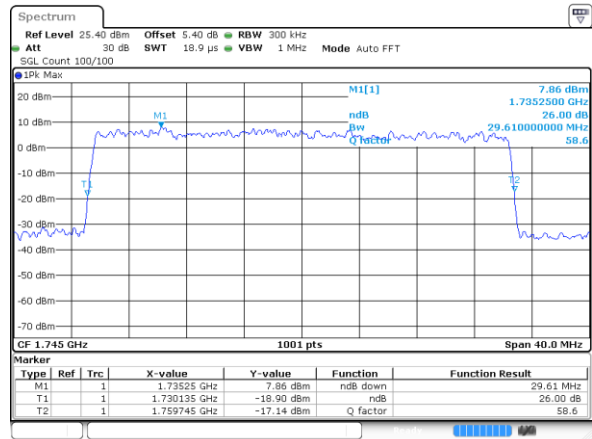
16QAM



64QAM



256QAM



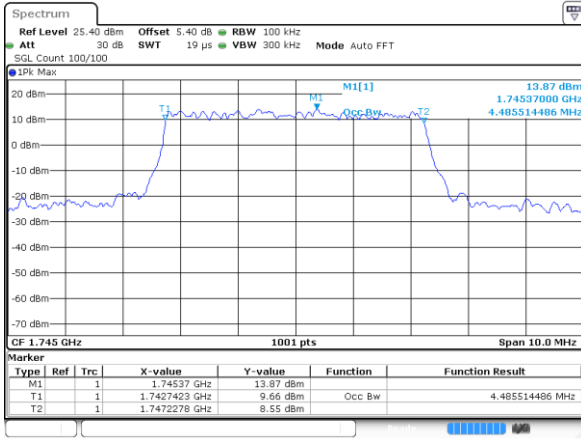
**Occupied Bandwidth**

Mode	FR1 B12_N66 : 99%OBW (MHz) / CP OFDM							
BW	5MHz				10MHz			
Mod.	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
Middle CH	4.49	4.49	4.49	4.47	9.41	9.37	9.33	9.35
Mode	FR1 B2_N71 : 99%OBW (MHz) / CP OFDM							
BW	15MHz				20MHz			
Mod.	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
Middle CH	14.09	14.12	14.18	14.18	19.62	19.42	19.38	19.42
Mode	FR1 B2_N71 : 99%OBW (MHz) / CP OFDM							
BW	30MHz							
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	28.49	28.49	28.49	28.49				

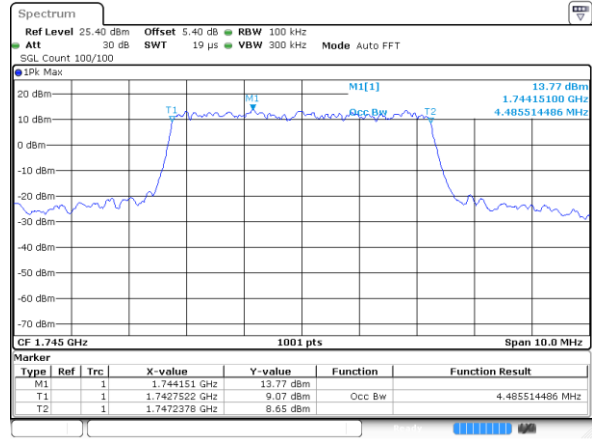


FR1 B12_N66 / 5MHz / CP OFDM / Middle Channel / Full RB

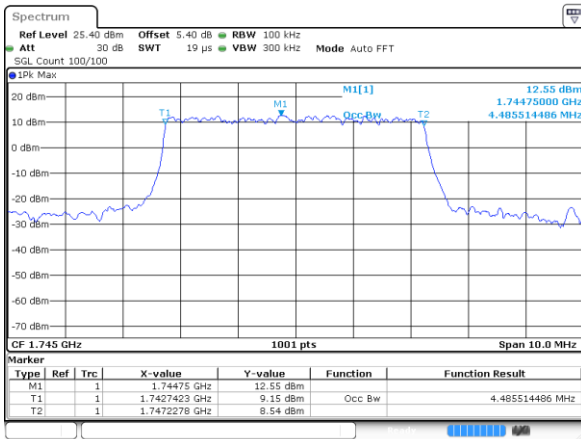
QPSK



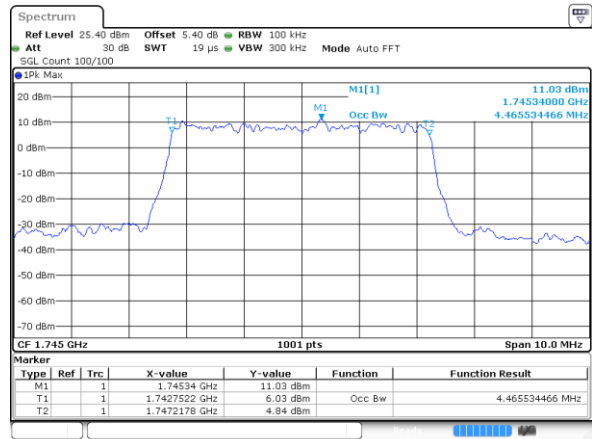
16QAM



64QAM



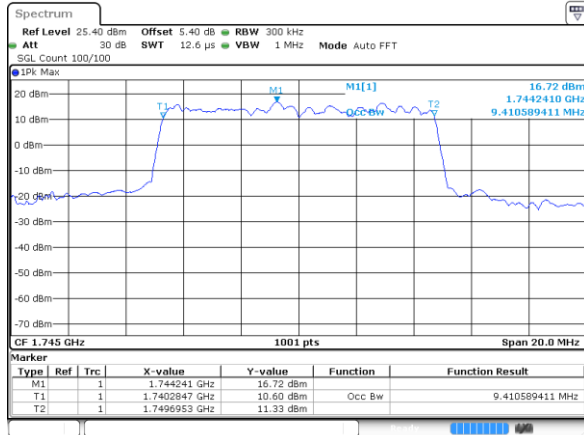
256QAM



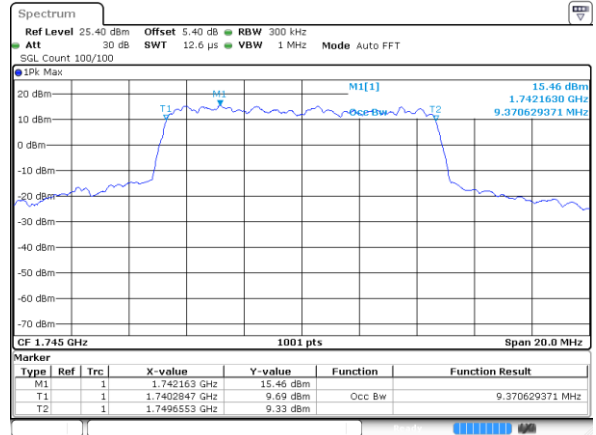


FR1 B12_N66 / 10MHz / CP OFDM / Middle Channel / Full RB

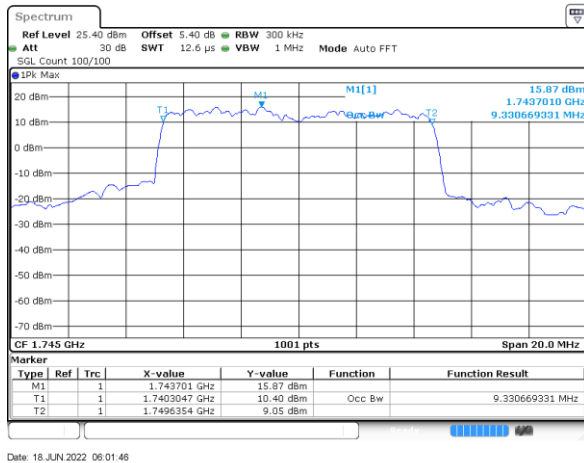
QPSK



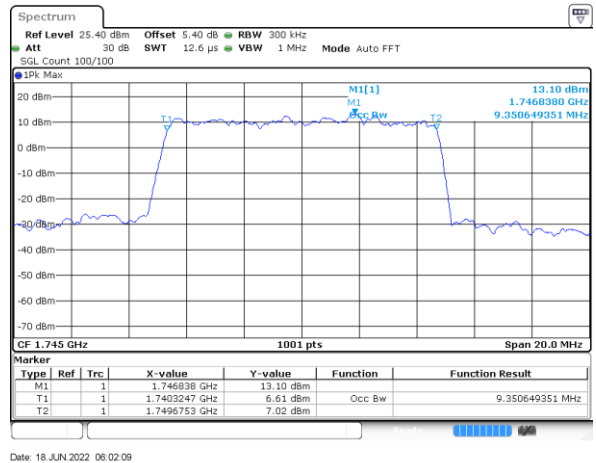
16QAM



64QAM



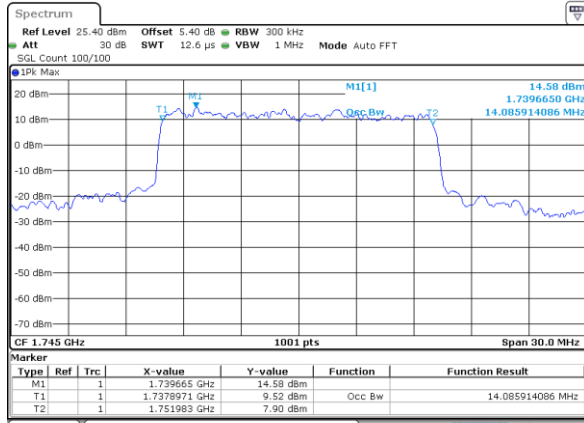
64QAM





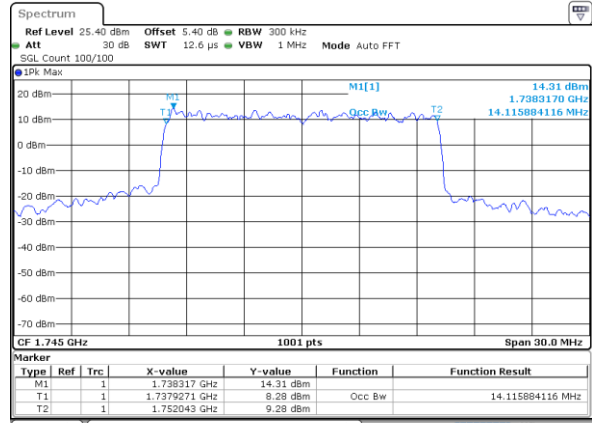
FR1 B12_N66 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



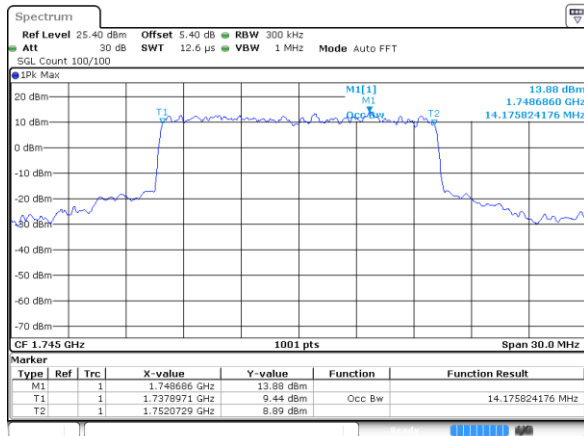
Date: 18 JUN 2022 06:10:58

16QAM



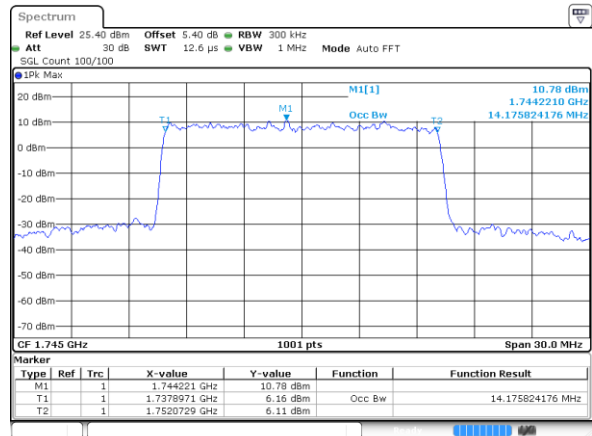
Date: 18 JUN 2022 06:11:23

64QAM



Date: 18 JUN 2022 06:12:06

256QAM

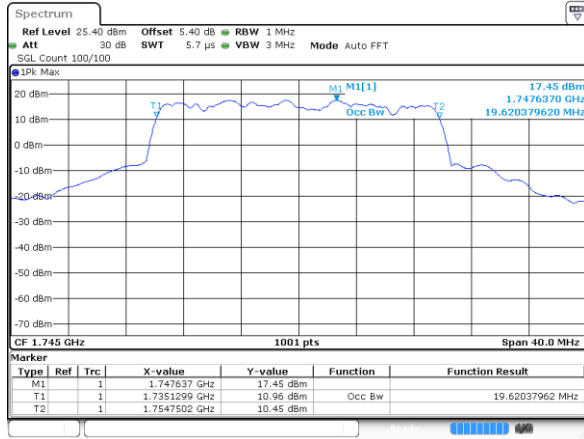


Date: 18 JUN 2022 06:12:34

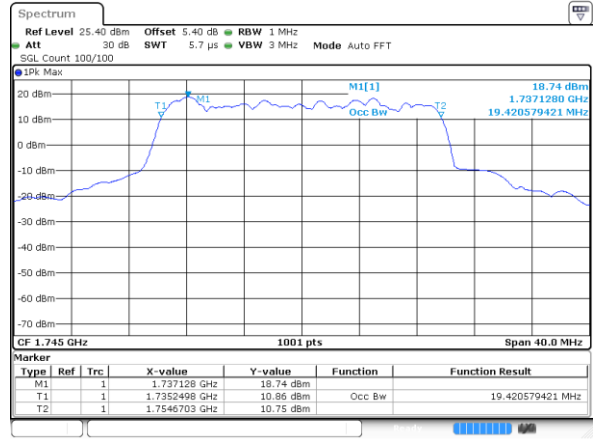


FR1 B12_N66 / 20MHz / CP OFDM / Middle Channel / Full RB

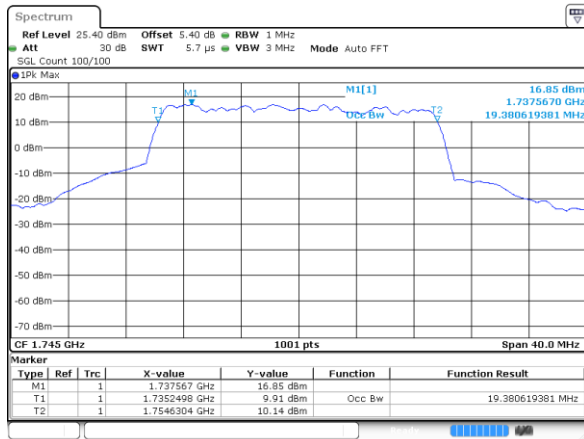
QPSK



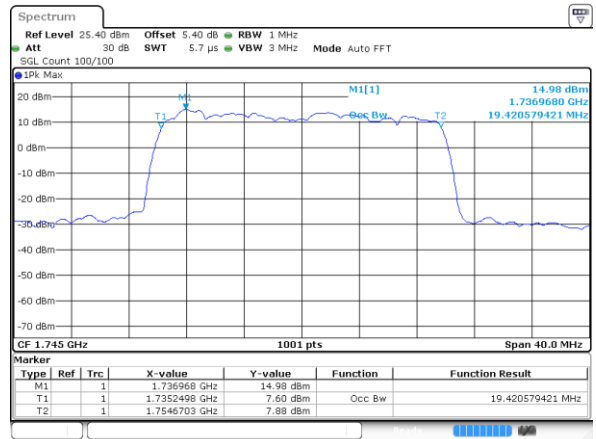
16QAM



64QAM



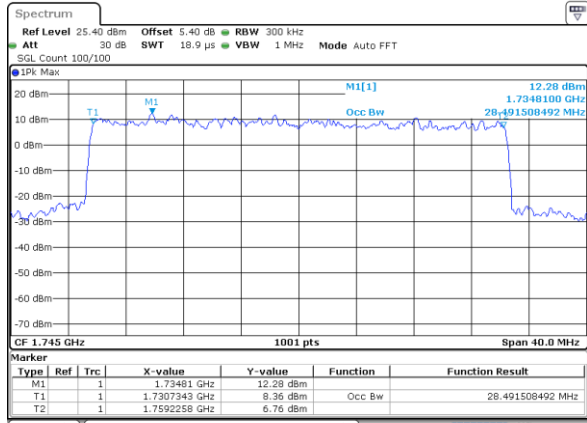
256QAM





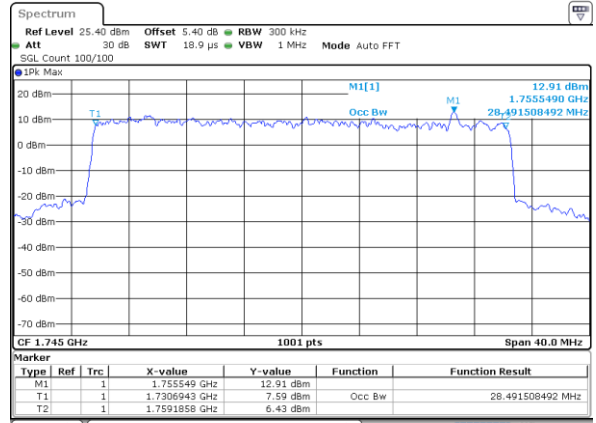
FR1 B12_N66 / 30MHz / CP OFDM / Middle Channel / Full RB

QPSK



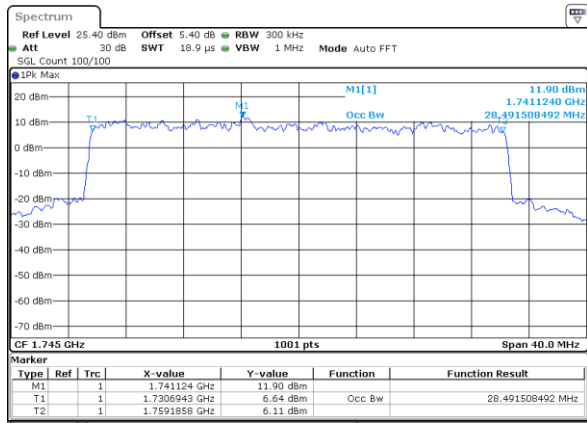
Date: 18 JUN 2022 07:00:19

16QAM



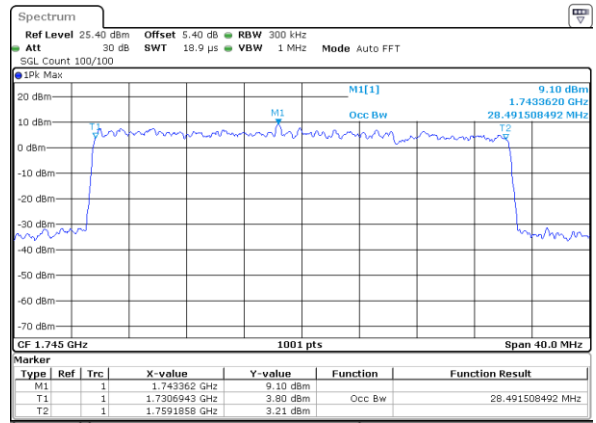
Date: 18 JUN 2022 07:00:47

64QAM



Date: 18 JUN 2022 07:01:46

256QAM



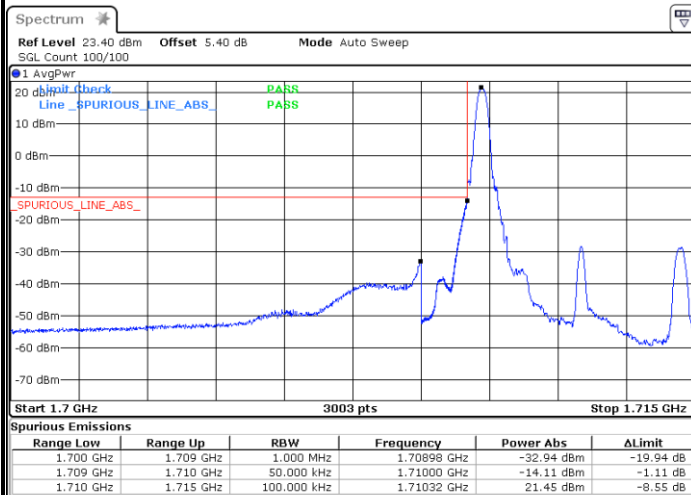
Date: 18 JUN 2022 07:02:07



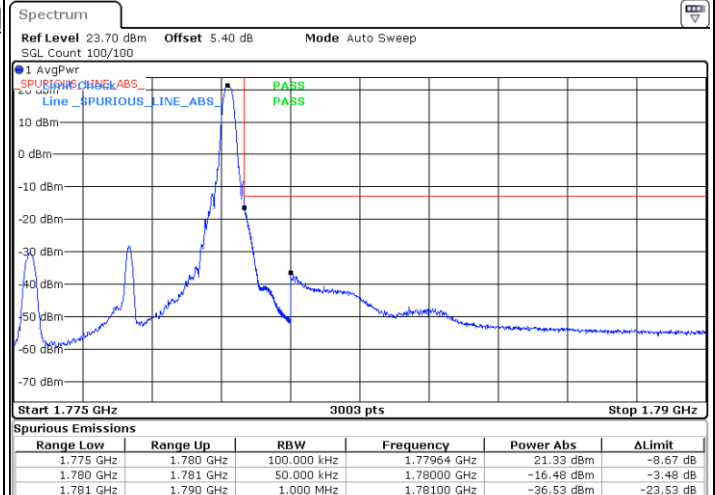
Conducted Band Edge

FR1 B12_N66 / 5MHz / DFT-S OFDM / PI/2 BPSK

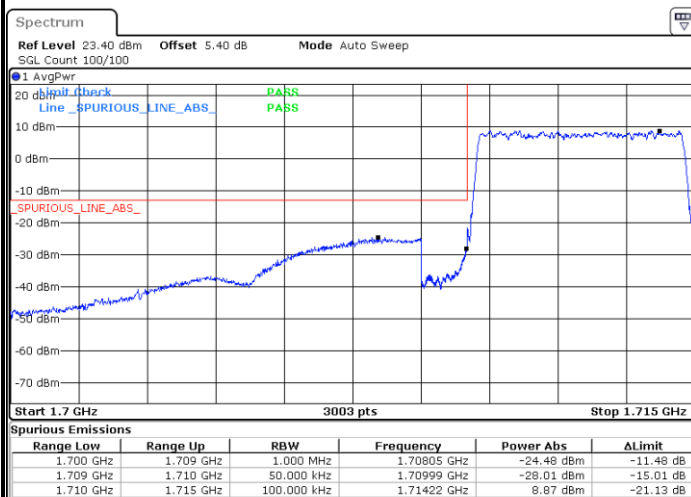
Lowest Band Edge / 1RB0



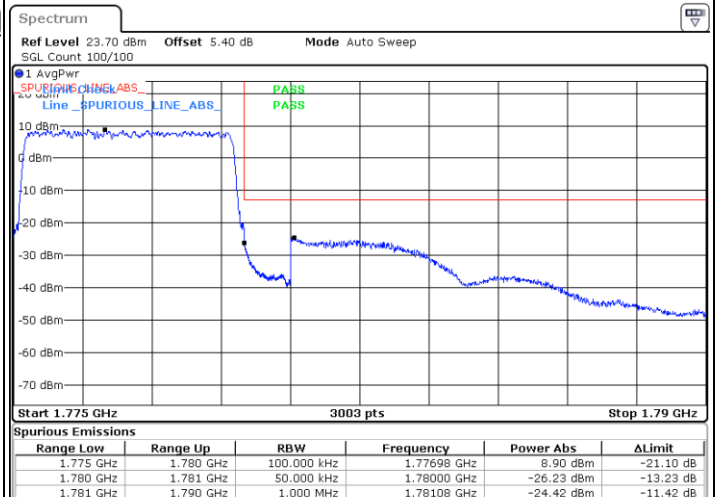
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

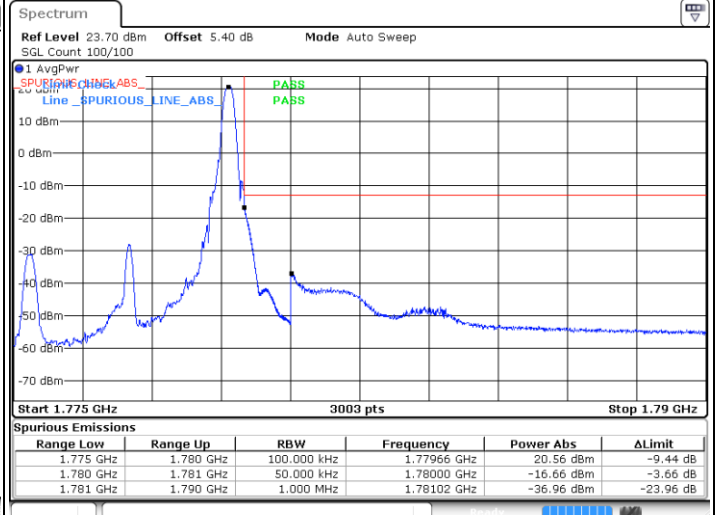
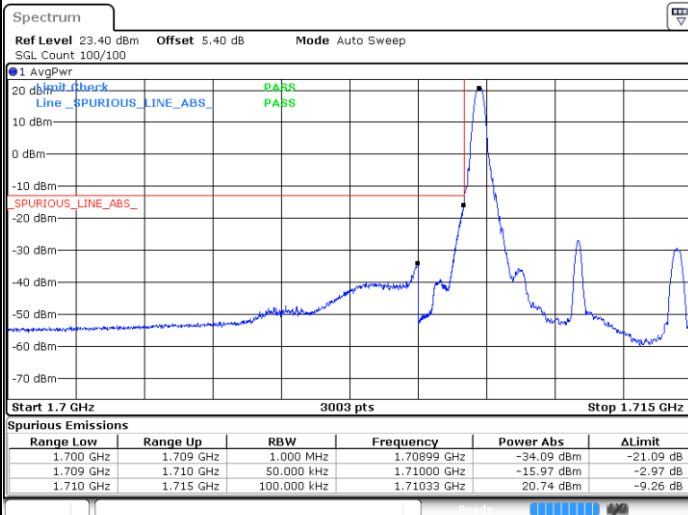




FR1 B12_N66 / 5MHz / DFT-S OFDM / QPSK

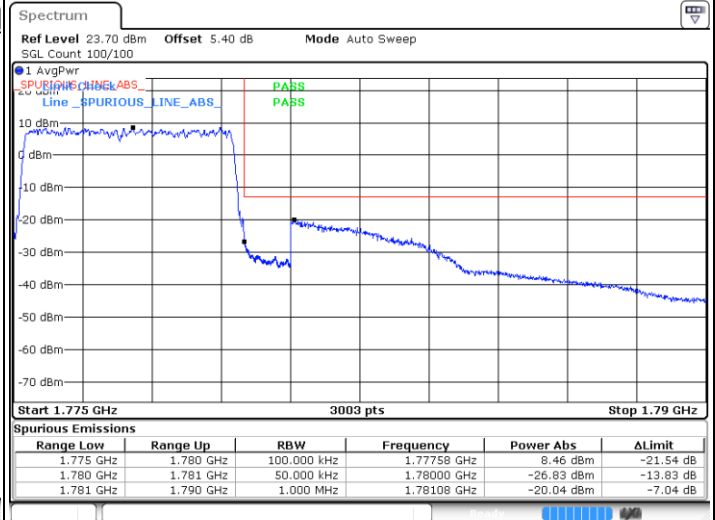
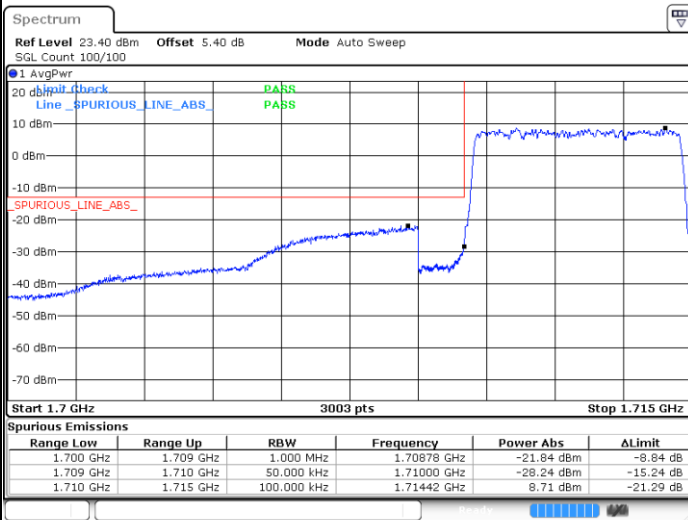
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

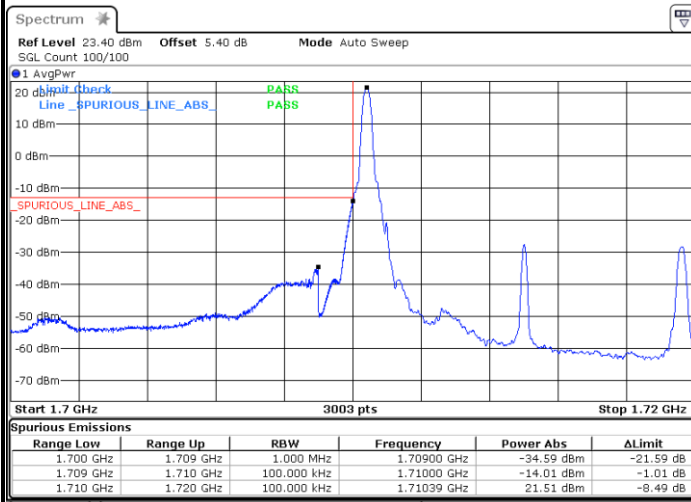
Highest Band Edge / Full RB



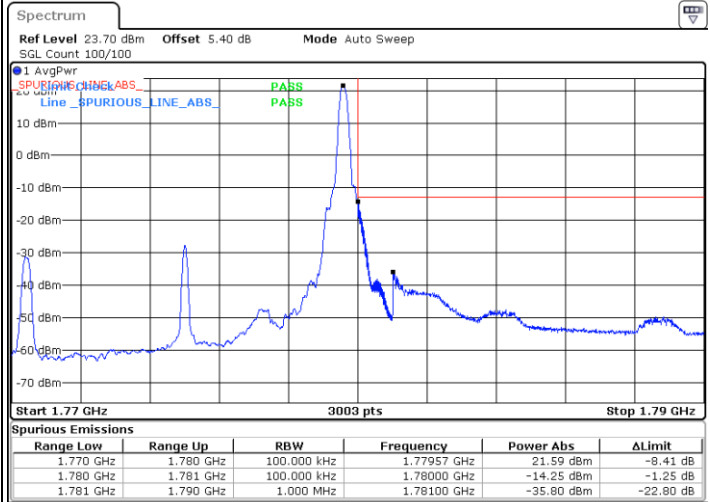


FR1 B12_N66 / 10MHz / DFT-s-OFDM / PI/2 BPSK

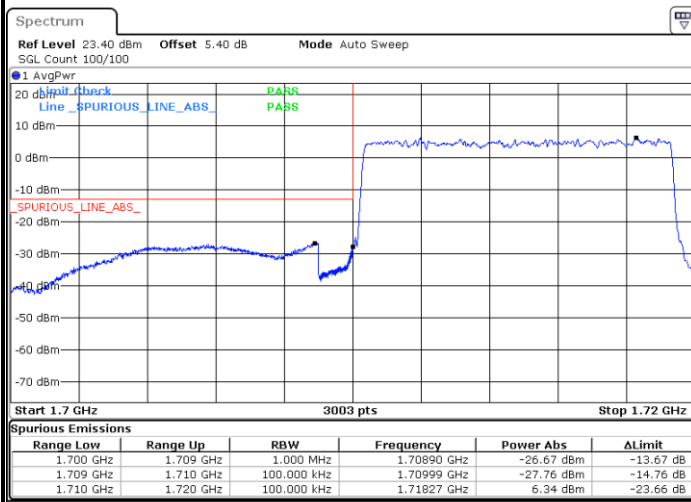
Lowest Band Edge / 1RB0



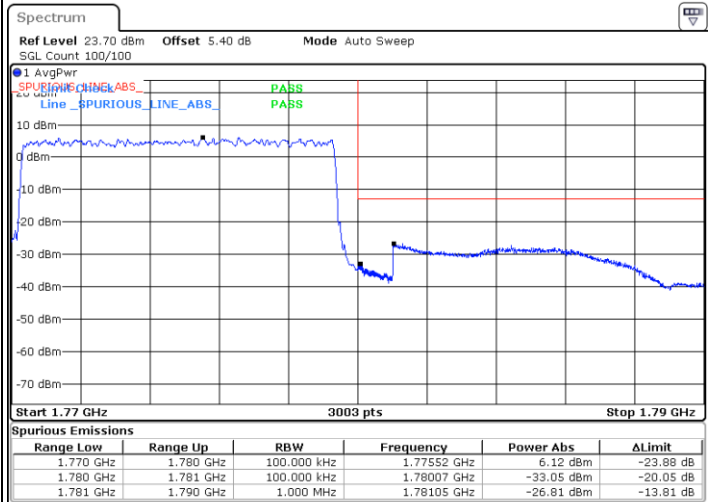
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



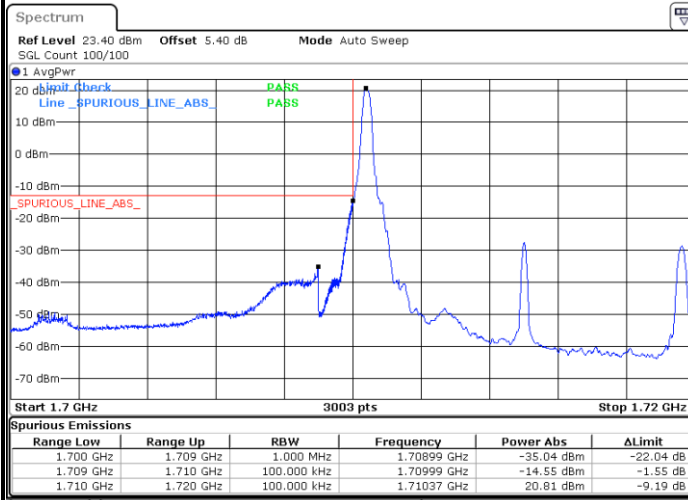
Highest Band Edge / Full RB



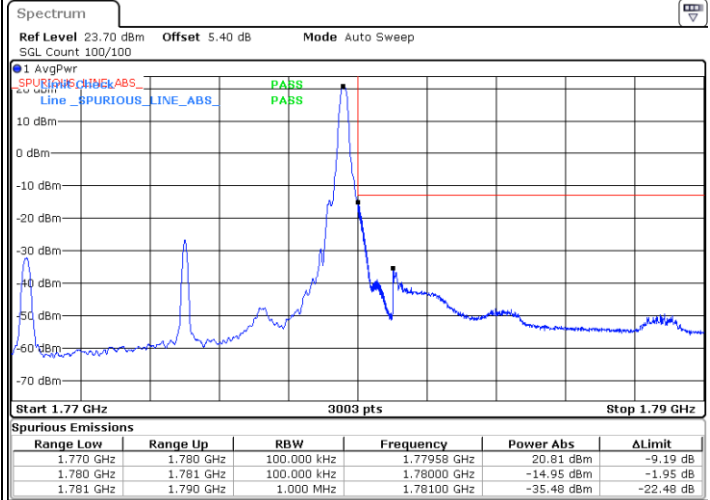


FR1 B12_N66 / 10MHz / DFT-s-OFDM / QPSK

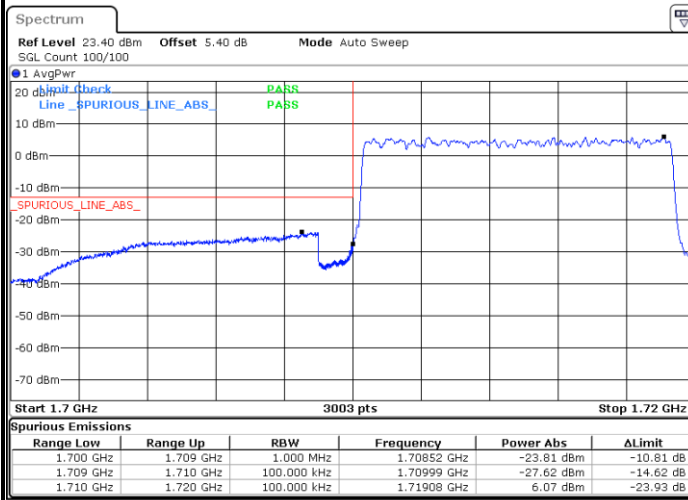
Lowest Band Edge / 1RB0



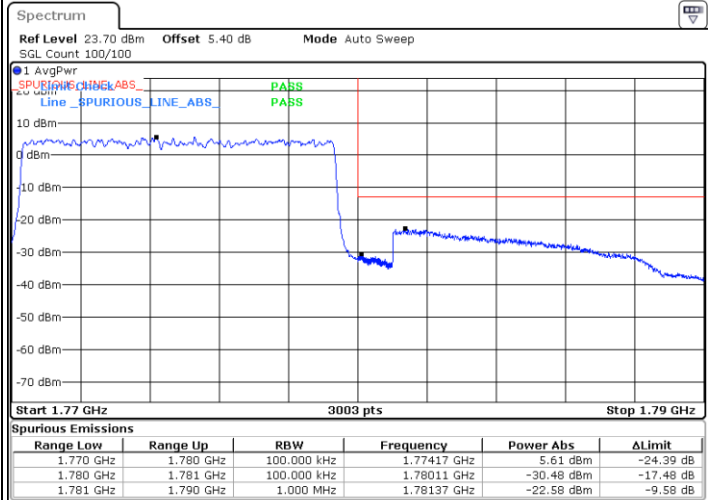
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

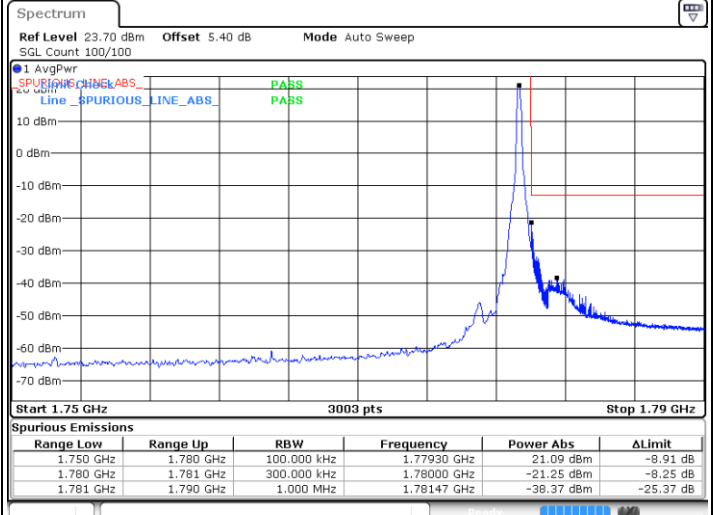
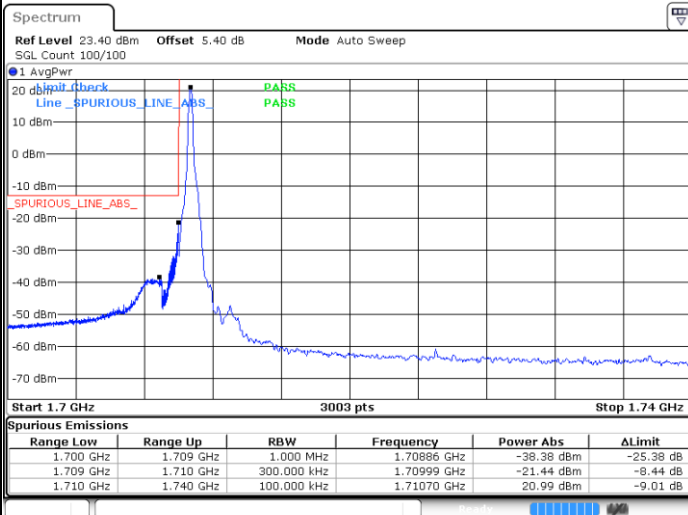




FR1 B12_N66 / 30MHz / DFT-s-OFDM / PI/2 BPSK

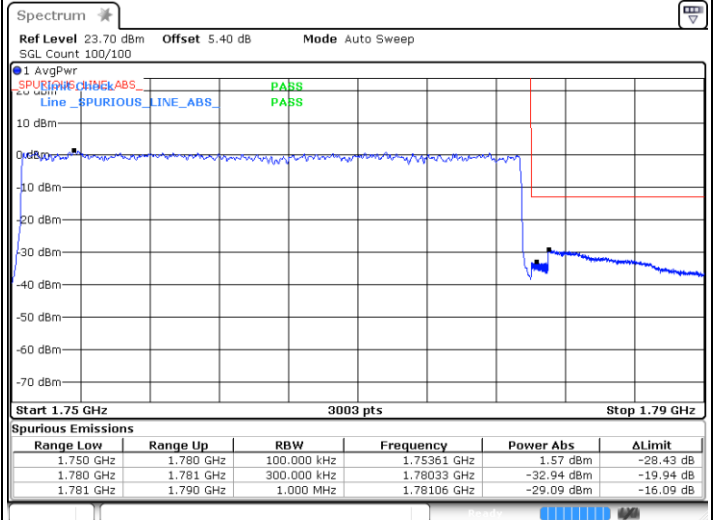
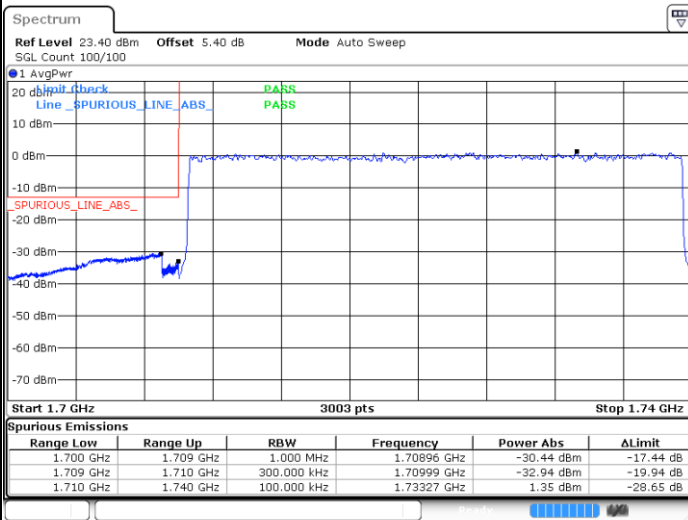
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

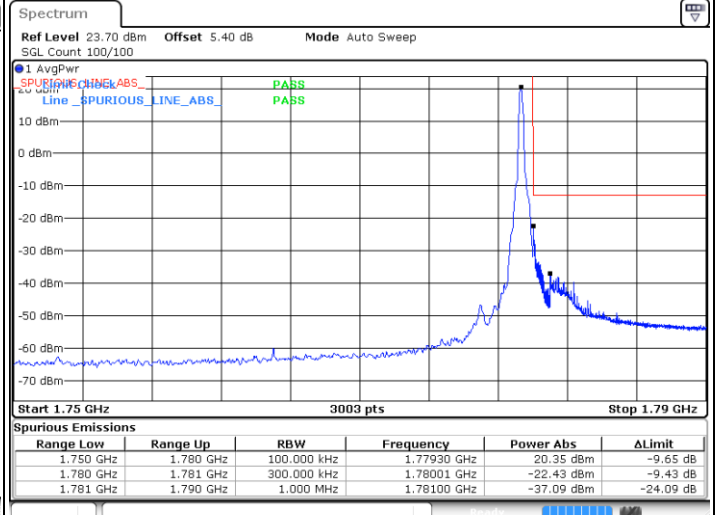
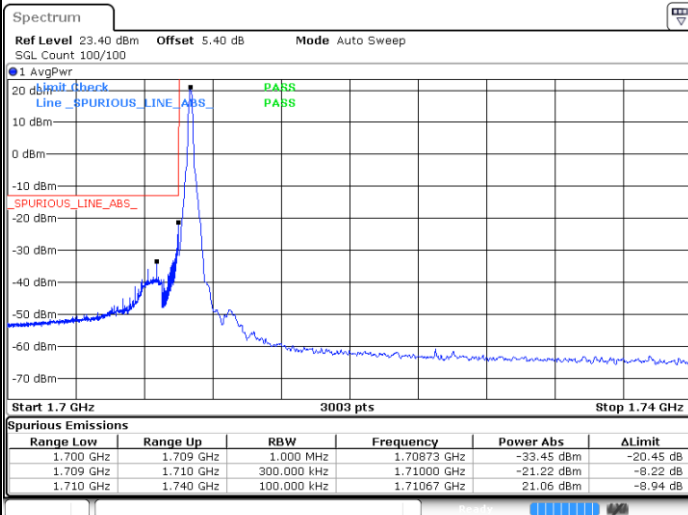




FR1 B12_N66 / 30MHz / DFT-s-OFDM / QPSK

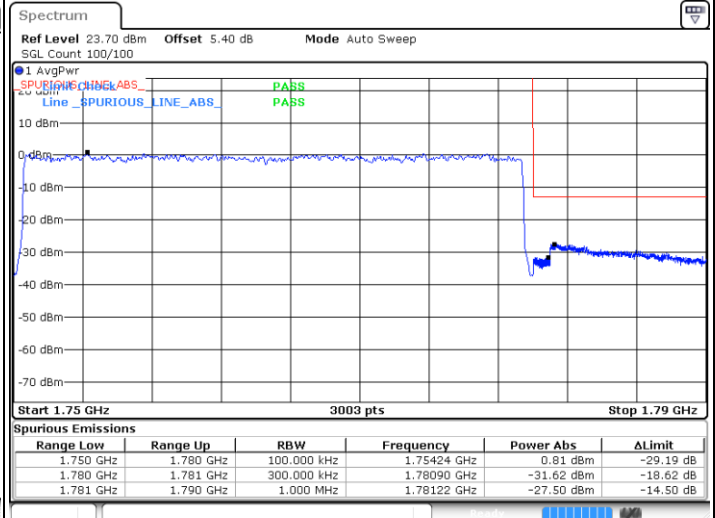
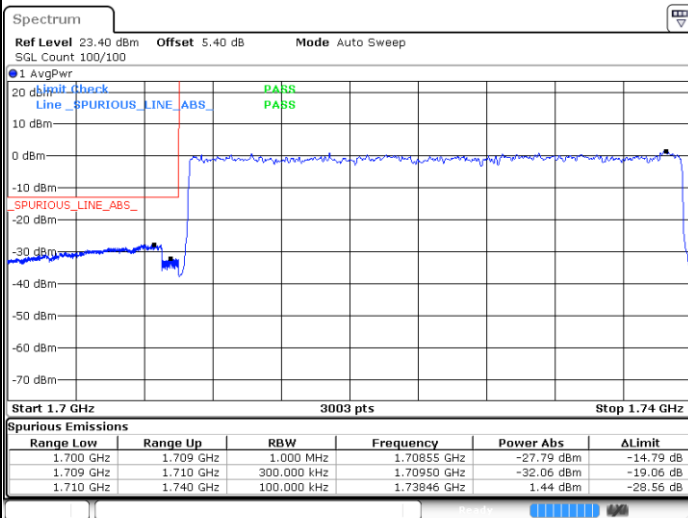
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB



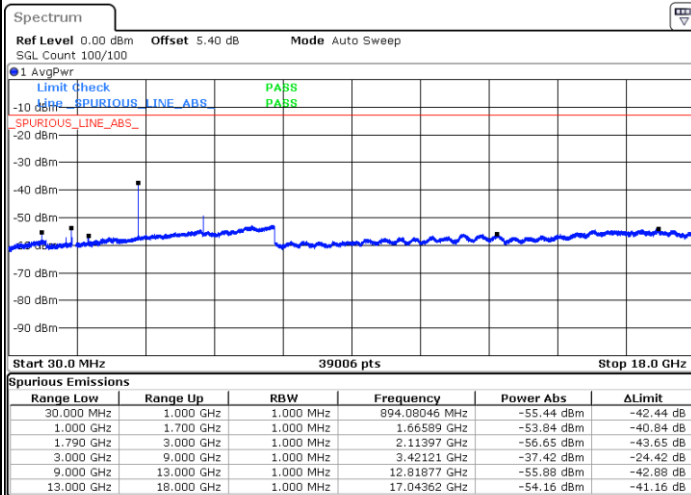


Conducted Spurious Emission

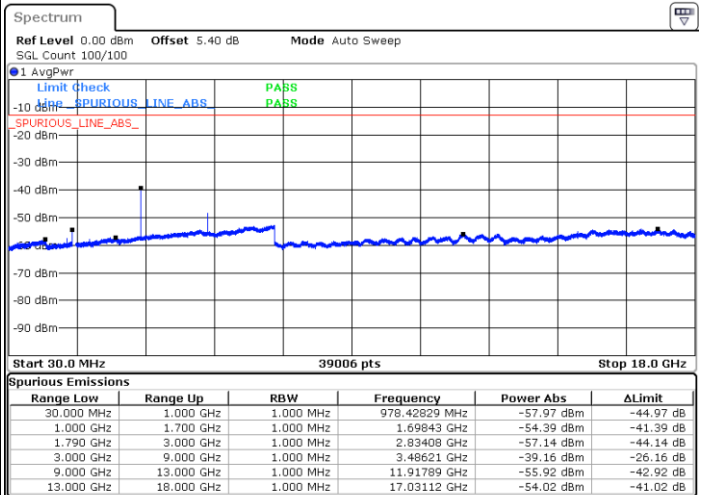
FR1 B12_N66 / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

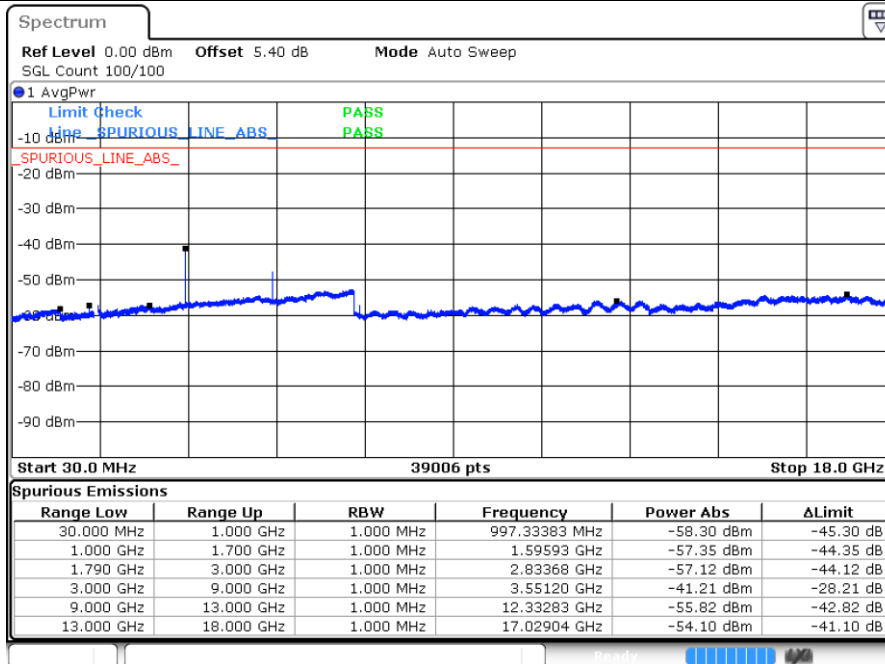


Date: 18 JUN 2022 05:02:09



Date: 18 JUN 2022 05:11:20

Highest Channel / 1RB1

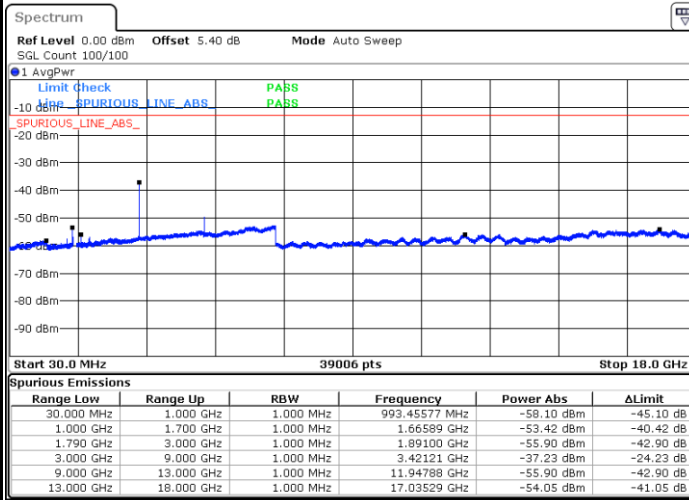


Date: 18 JUN 2022 05:42:24



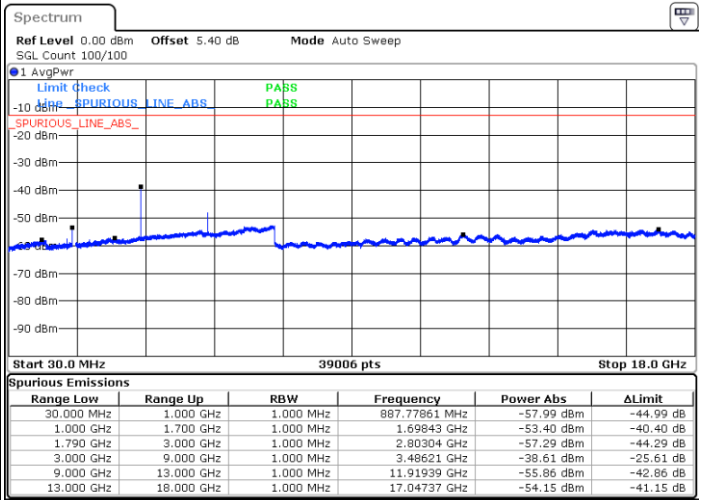
FR1 B12_N66 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



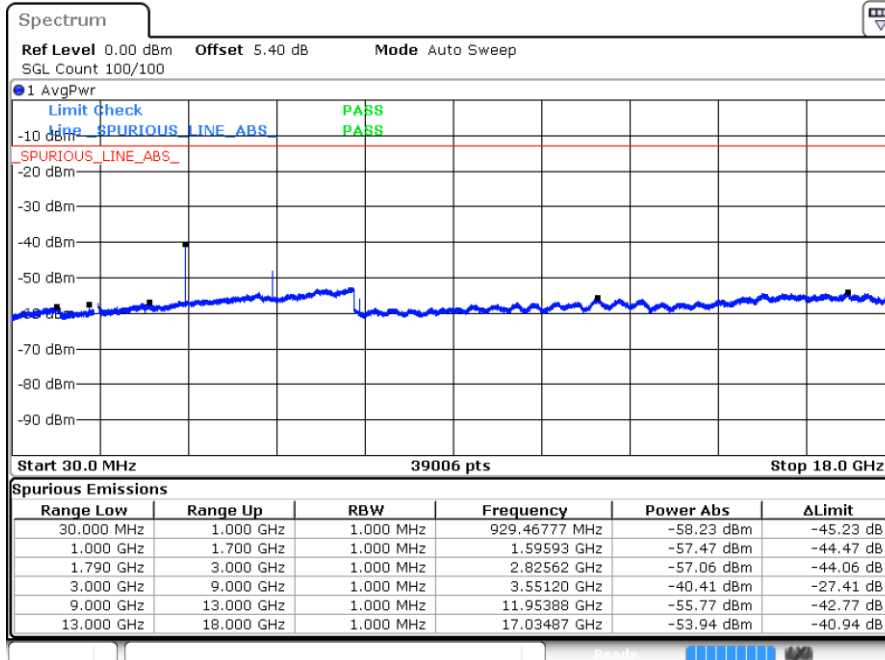
Date: 18 JUN 2022 05:06:21

Middle Channel / 1RB1



Date: 18 JUN 2022 05:09:17

Highest Channel / 1RB1

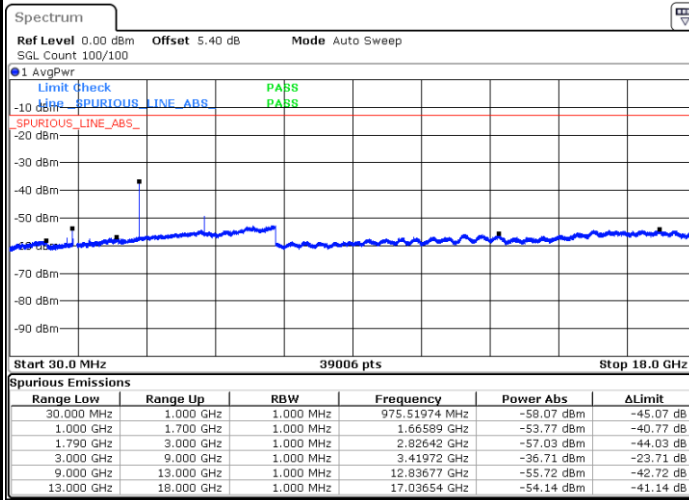


Date: 18 JUN 2022 05:44:25



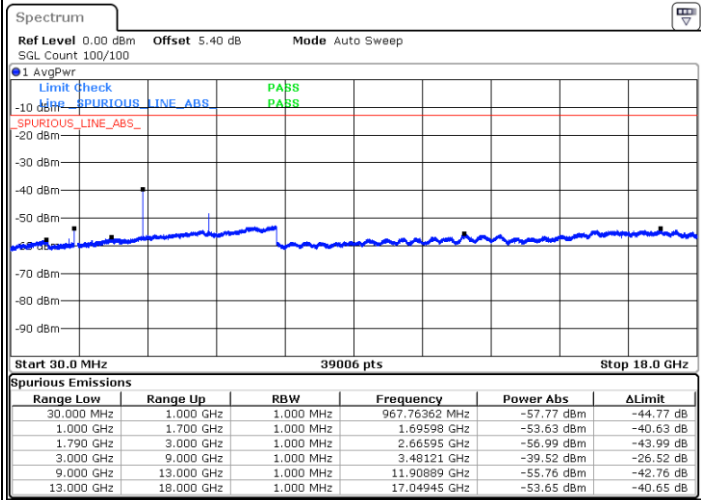
FR1 B12_N66 / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1



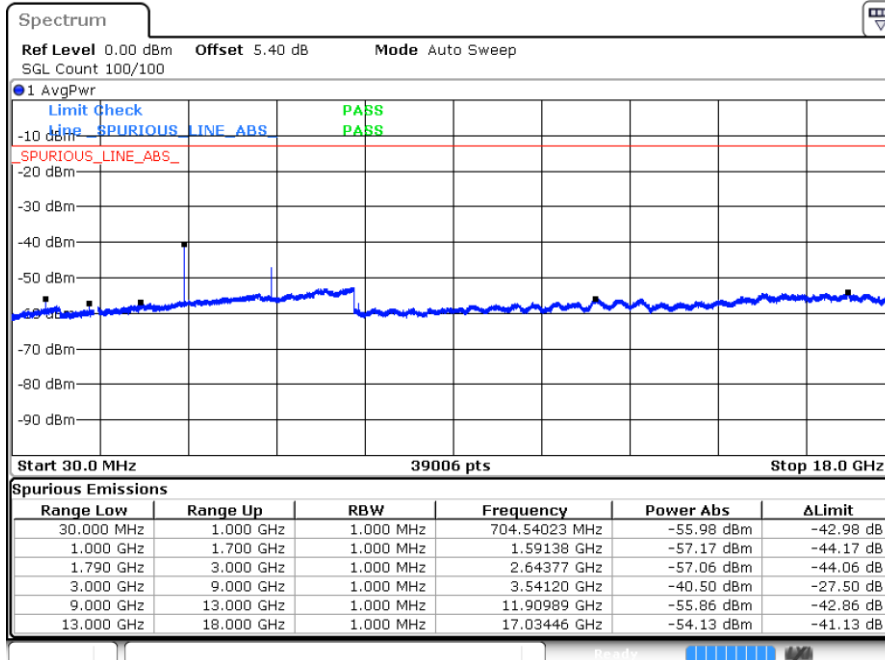
Date: 18 JUN 2022 05:56:47

Middle Channel / 1RB1



Date: 18 JUN 2022 06:00:26

Highest Channel / 1RB1



Date: 18 JUN 2022 06:06:31