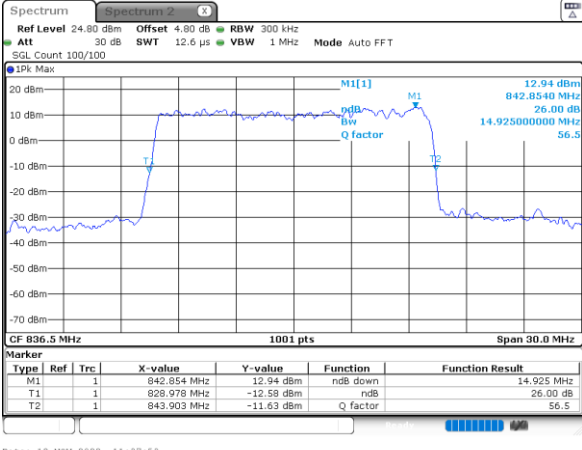




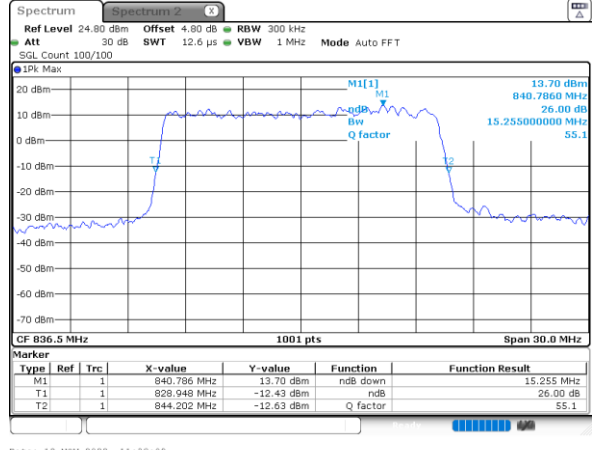
FR1 n5 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



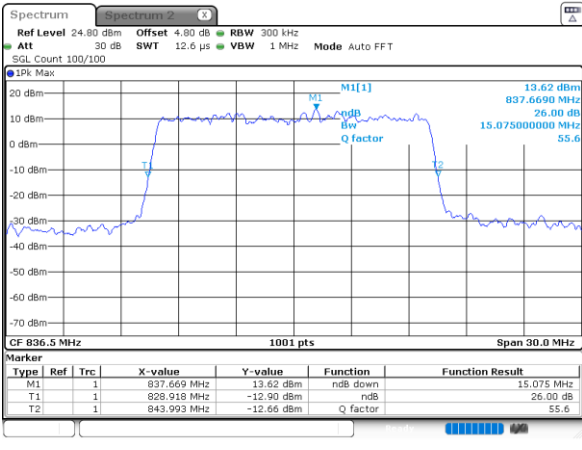
Date: 12.NOV.2022 11:37:53

16QAM



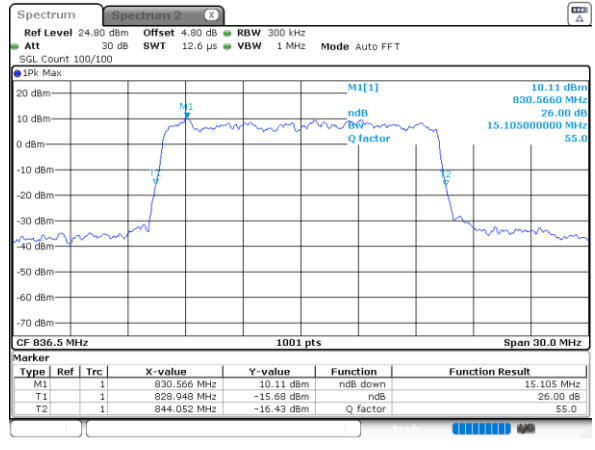
Date: 12.NOV.2022 11:38:09

64QAM



Date: 12.NOV.2022 11:38:27

256QAM

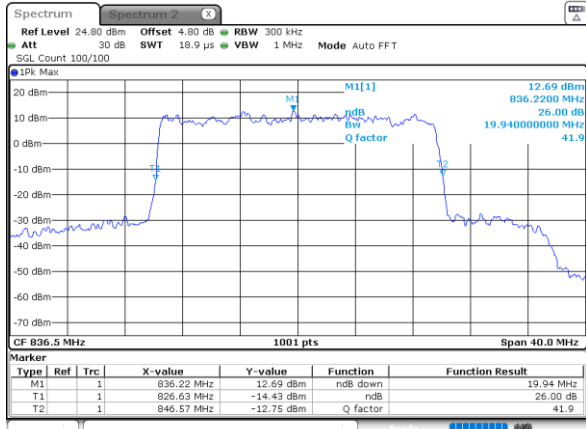


Date: 12.NOV.2022 11:38:54



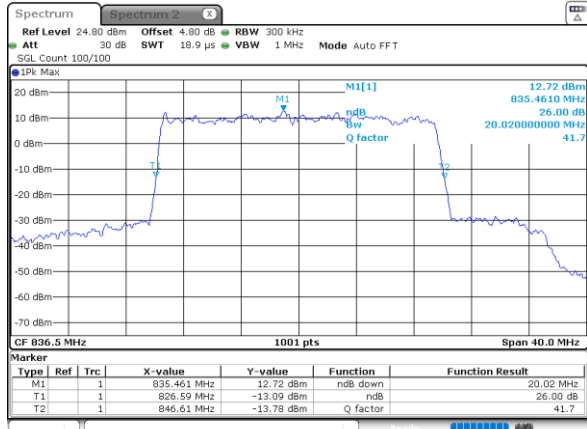
FR1 n5 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



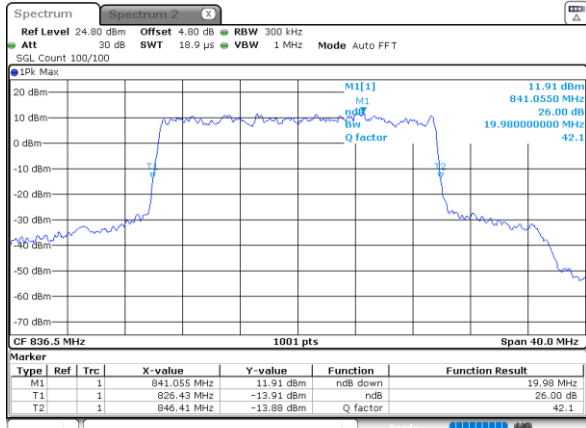
Date: 12.NOV.2022 11:20:08

16QAM



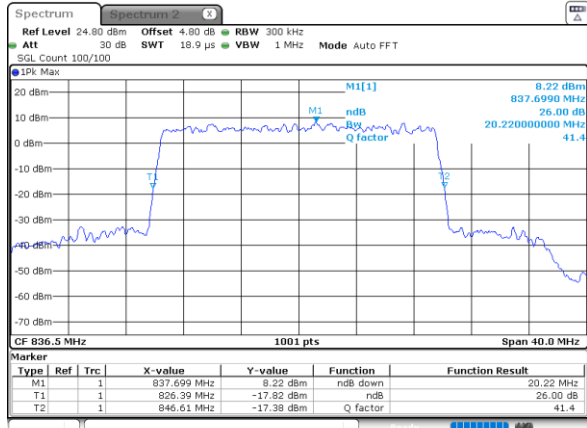
Date: 12.NOV.2022 11:20:29

64QAM



Date: 12.NOV.2022 11:20:53

256QAM



Date: 12.NOV.2022 11:21:15



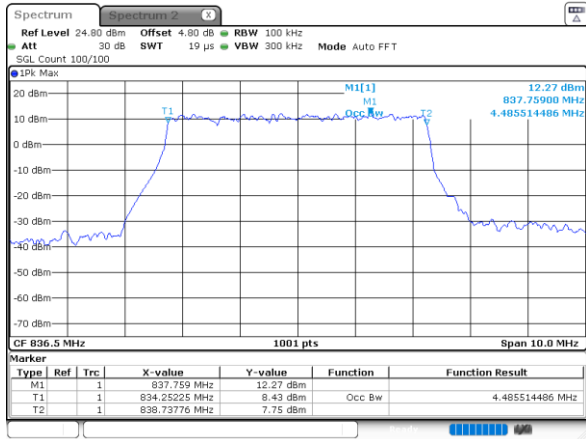
### Occupied Bandwidth

Mode	FR1 n5 : 99%OBW (MHz) / CP OFDM			
<b>BW</b>	<b>5MHz</b>	<b>10MHz</b>	<b>15MHz</b>	<b>20MHz</b>
<b>Mod.</b>	<b>QPSK</b>	<b>QPSK</b>	<b>QPSK</b>	<b>QPSK</b>
<b>Middle CH</b>	4.49	9.35	14.12	18.94
<b>BW</b>	<b>5MHz</b>	<b>10MHz</b>	<b>15MHz</b>	<b>20MHz</b>
<b>Mod.</b>	<b>16QAM</b>	<b>16QAM</b>	<b>16QAM</b>	<b>16QAM</b>
<b>Middle CH</b>	4.51	9.35	14.18	18.98
<b>BW</b>	<b>5MHz</b>	<b>10MHz</b>	<b>15MHz</b>	<b>20MHz</b>
<b>Mod.</b>	<b>64QAM</b>	<b>64QAM</b>	<b>64QAM</b>	<b>64QAM</b>
<b>Middle CH</b>	4.49	9.35	14.18	18.90
<b>BW</b>	<b>5MHz</b>	<b>10MHz</b>	<b>15MHz</b>	<b>20MHz</b>
<b>Mod.</b>	<b>256QAM</b>	<b>256QAM</b>	<b>256QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	4.49	9.37	14.15	18.86



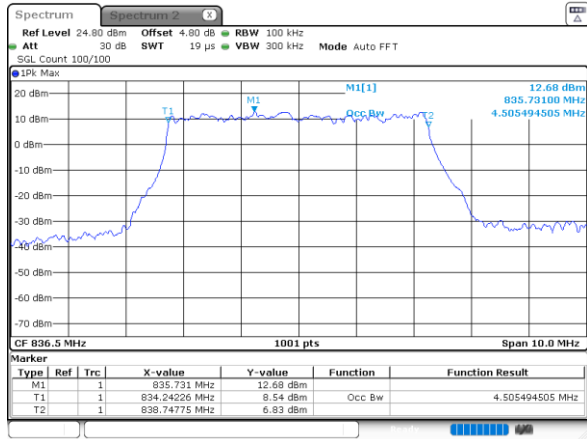
FR1 n5 / 5MHz / CP OFDM / Middle Channel / Full RB

QPSK



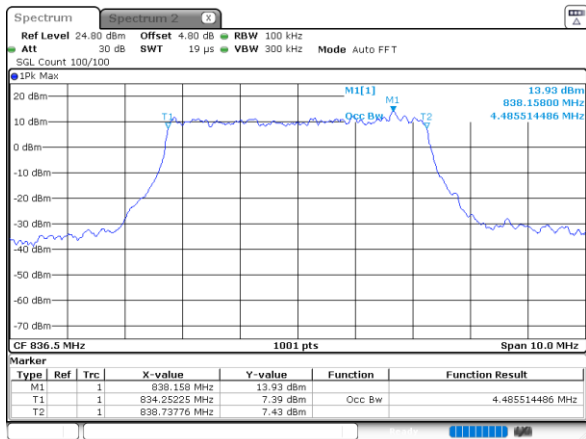
Date: 12.NOV.2022 12:33:36

16QAM



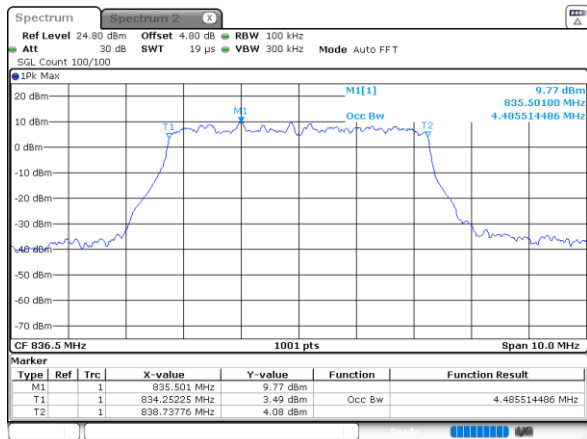
Date: 12.NOV.2022 12:33:53

64QAM



Date: 12.NOV.2022 12:34:13

256QAM

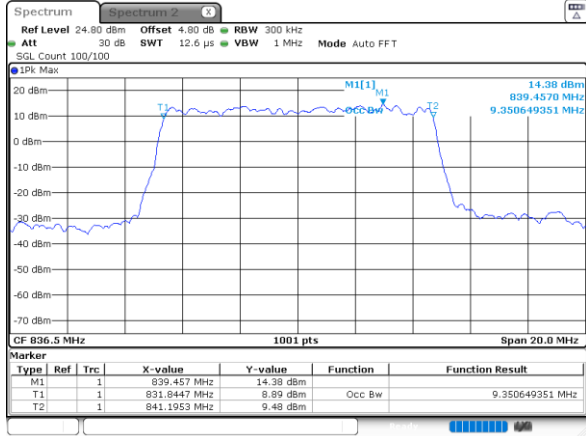


Date: 12.NOV.2022 12:34:49

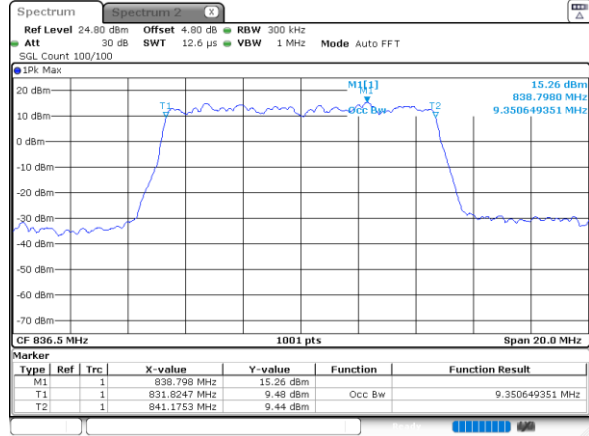


FR1 n5 / 10MHz / CP OFDM / Middle Channel / Full RB

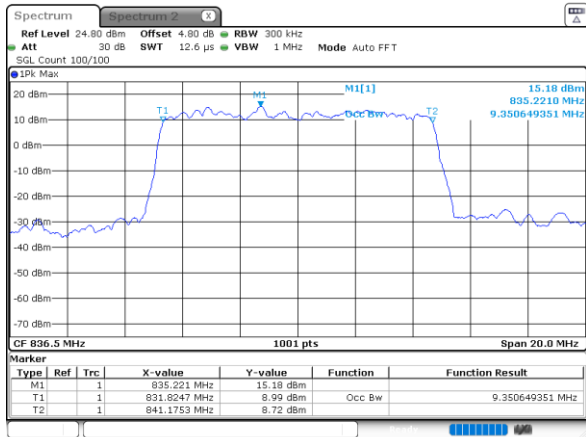
QPSK



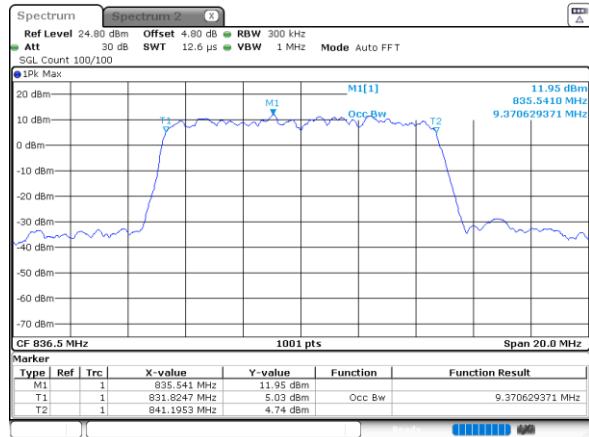
16QAM



64QAM



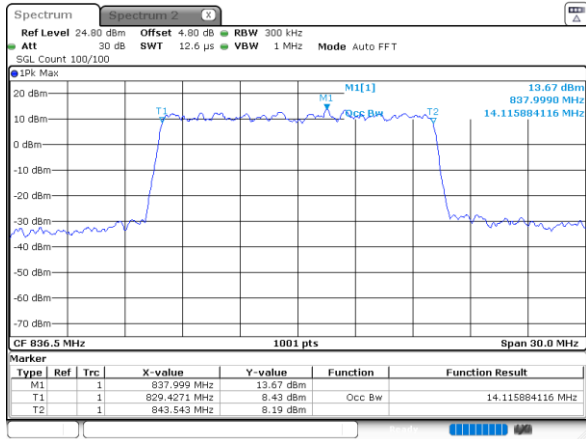
256QAM





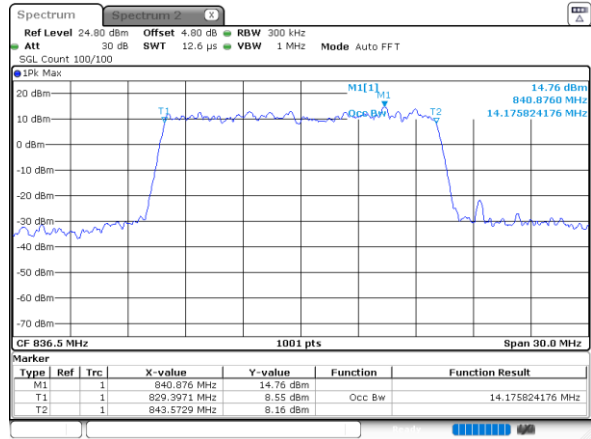
FR1 n5 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



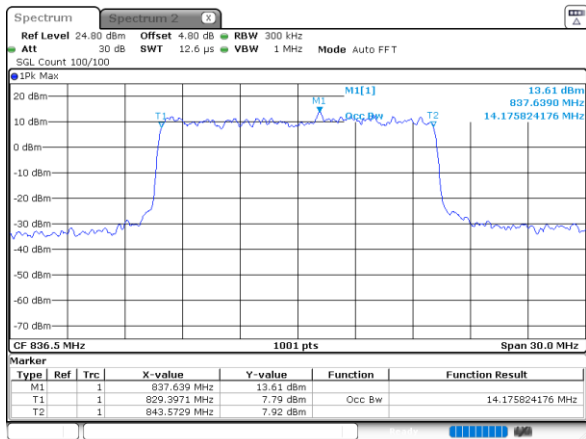
Date: 12.NOV.2022 11:37:44

16QAM



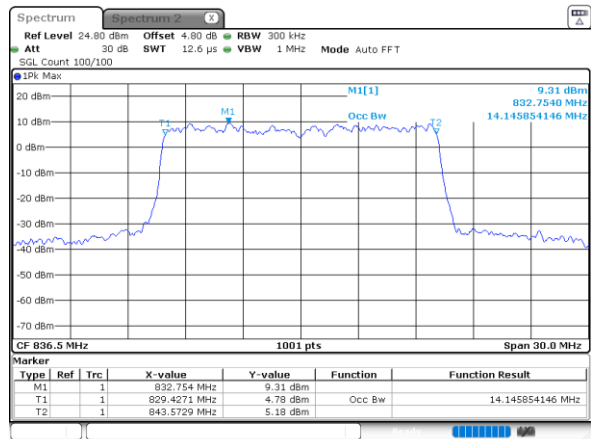
Date: 12.NOV.2022 11:38:04

64QAM



Date: 12.NOV.2022 11:38:21

256QAM

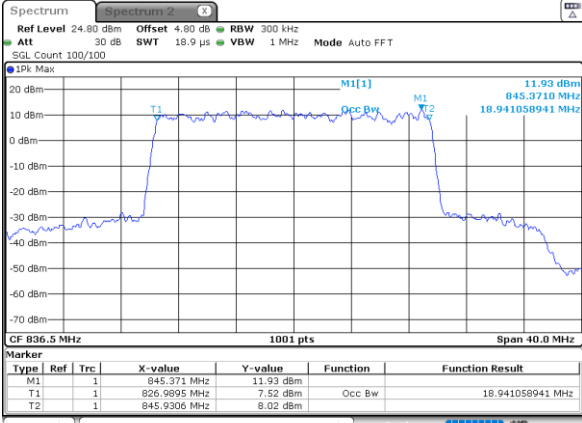


Date: 12.NOV.2022 11:38:46



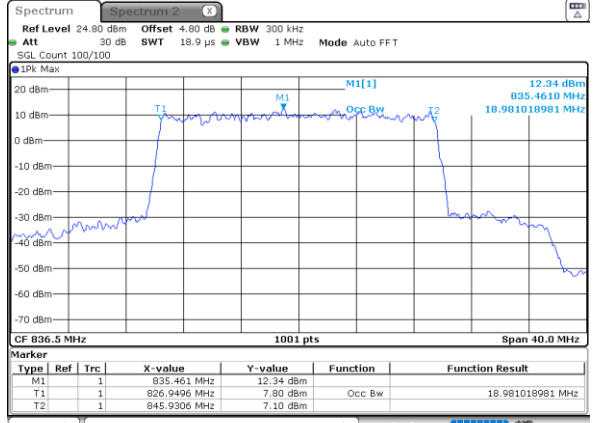
FR1 n5 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



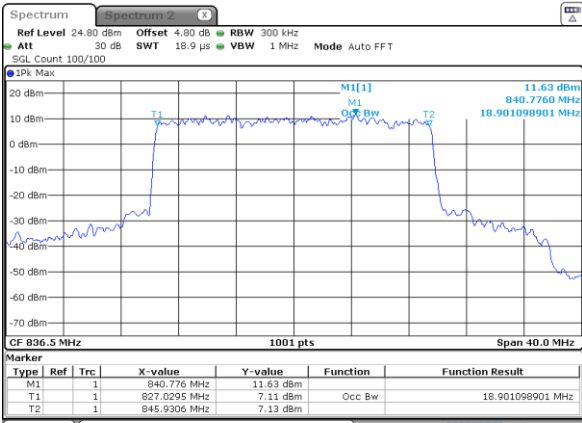
Date: 12.NOV.2022 11:20:01

16QAM



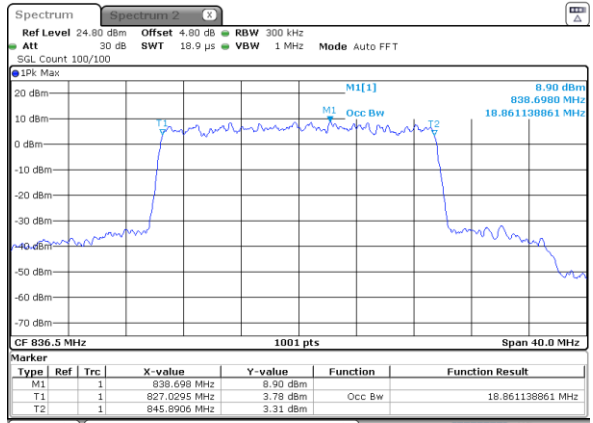
Date: 12.NOV.2022 11:20:22

64QAM



Date: 12.NOV.2022 11:20:47

256QAM



Date: 12.NOV.2022 11:21:10

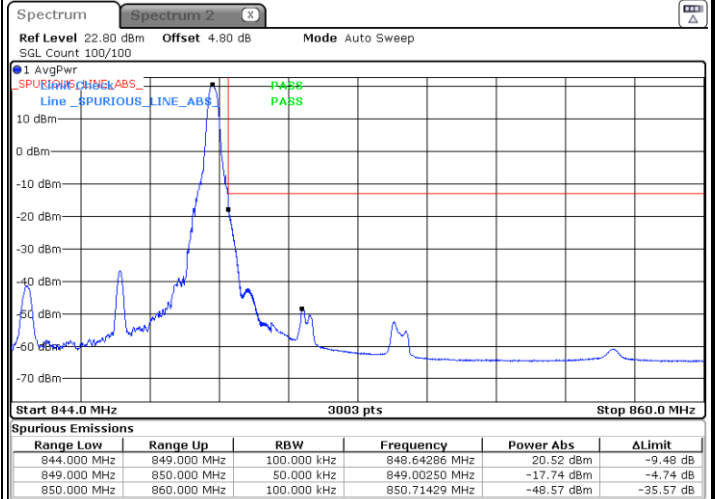
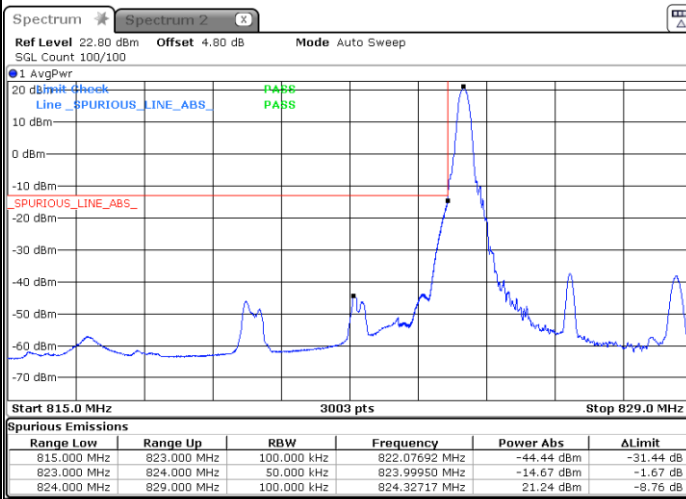


# Conducted Band Edge

FR1 n5 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

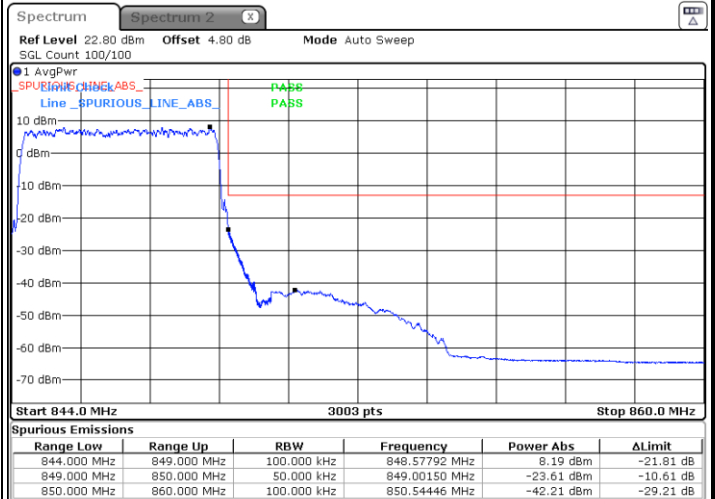
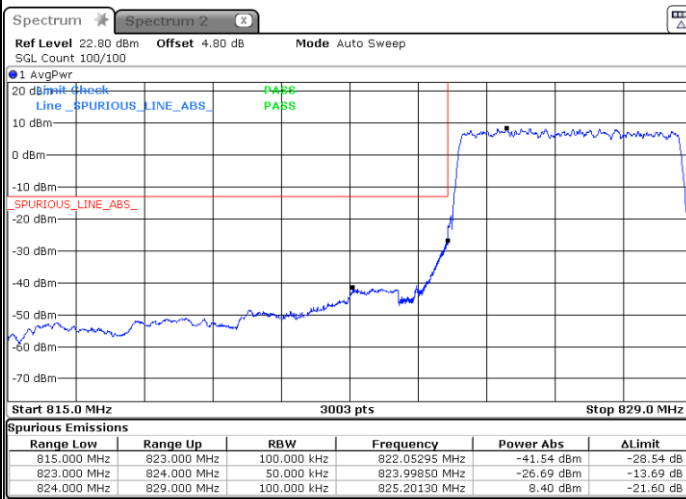


Date: 12.NOV.2022 12:40:12

Date: 12.NOV.2022 12:46:43

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.NOV.2022 12:43:10

Date: 12.NOV.2022 12:44:17

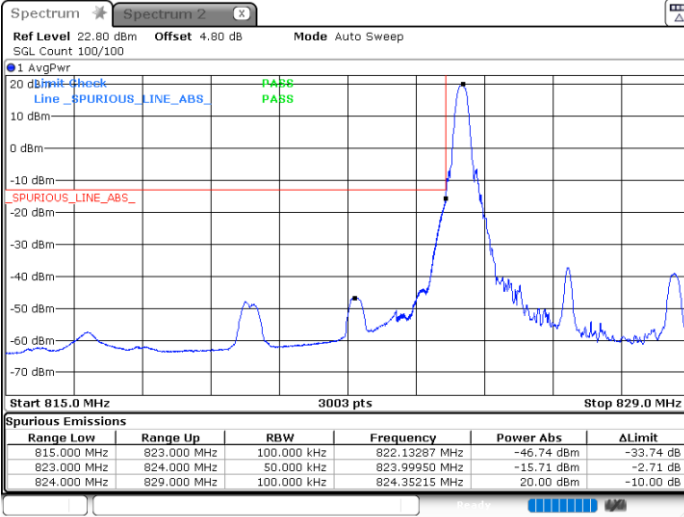




FR1 n5 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

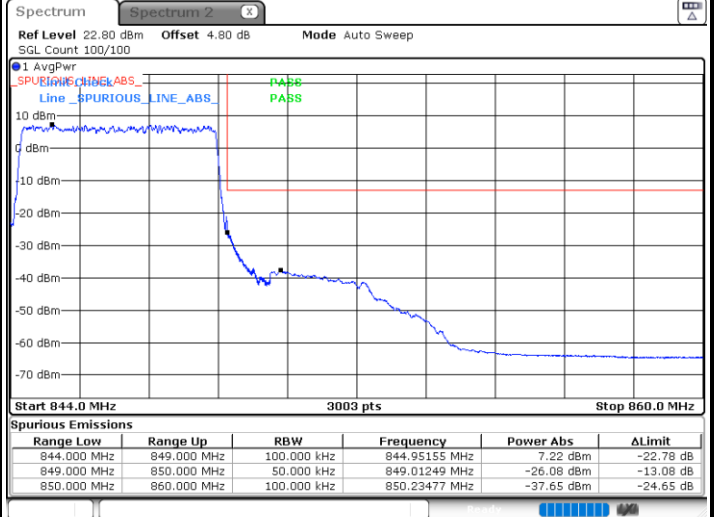
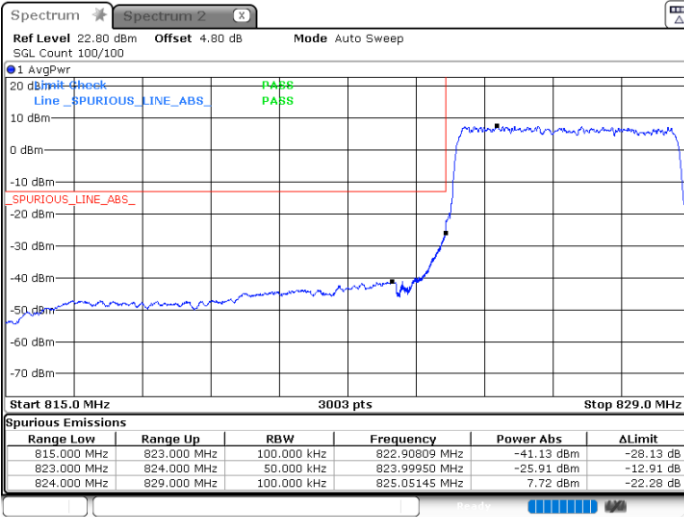


Date: 12.NOV.2022 12:41:21

Date: 12.NOV.2022 12:45:57

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.NOV.2022 12:42:16

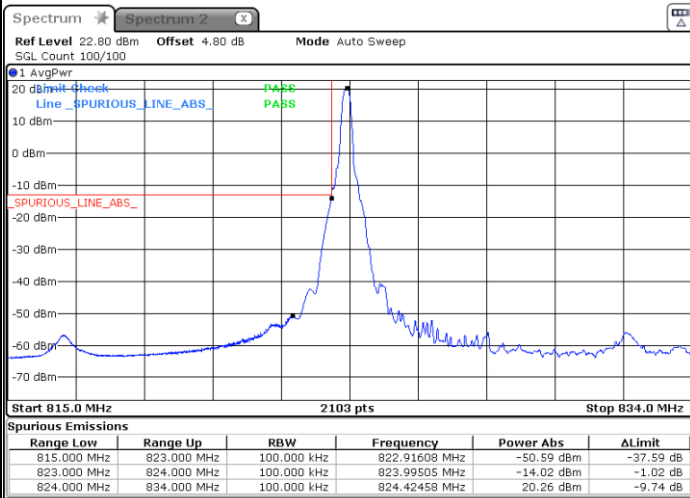
Date: 12.NOV.2022 12:45:04



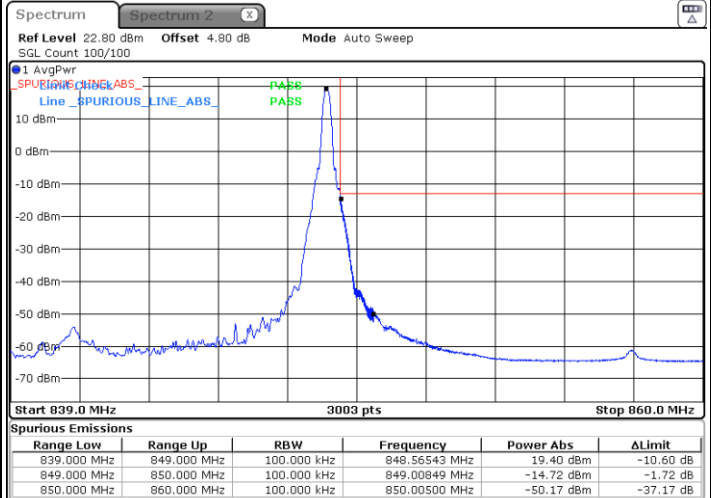
FR1 n5 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



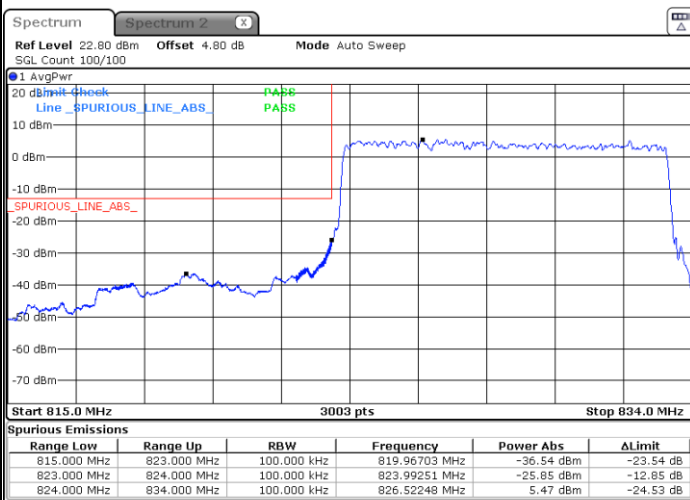
Date: 12.NOV.2022 11:46:55



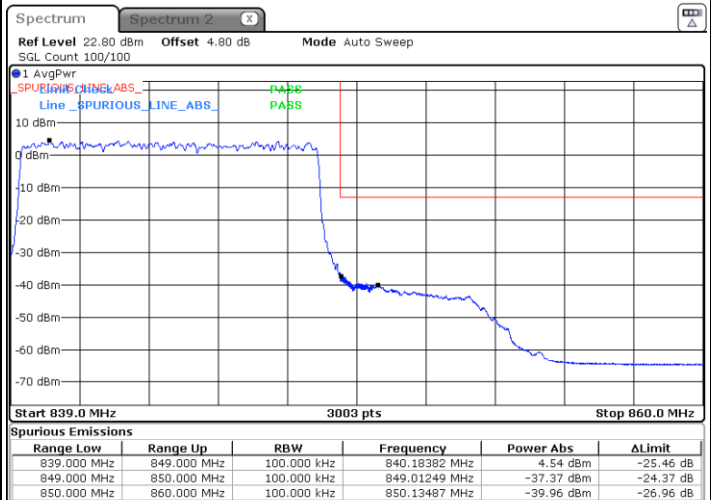
Date: 12.NOV.2022 12:31:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.NOV.2022 11:50:16



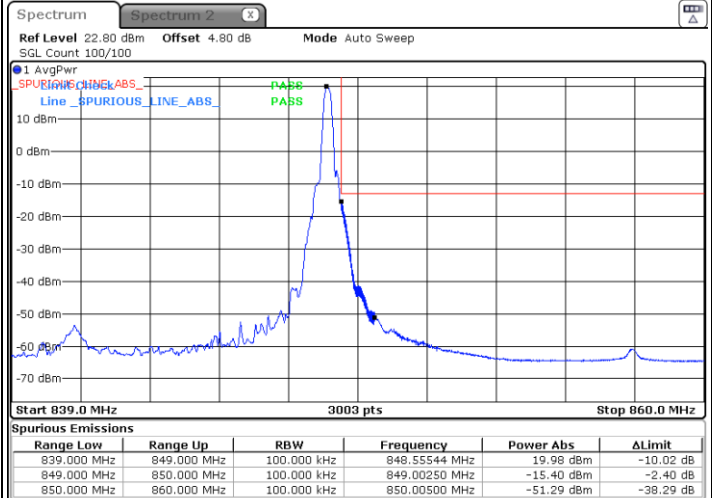
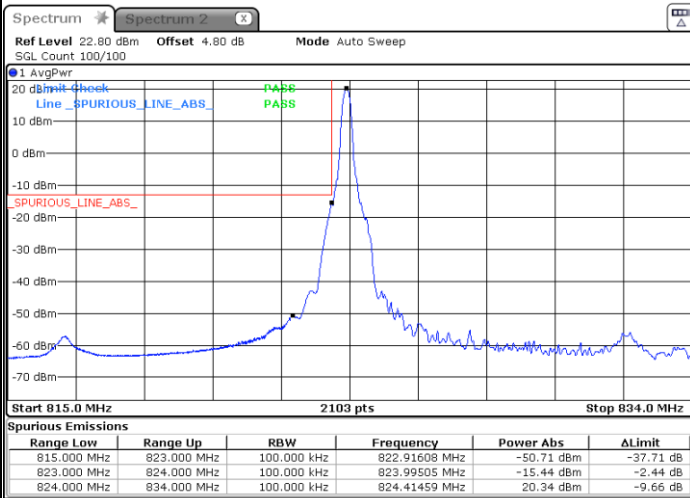
Date: 12.NOV.2022 12:31:56



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

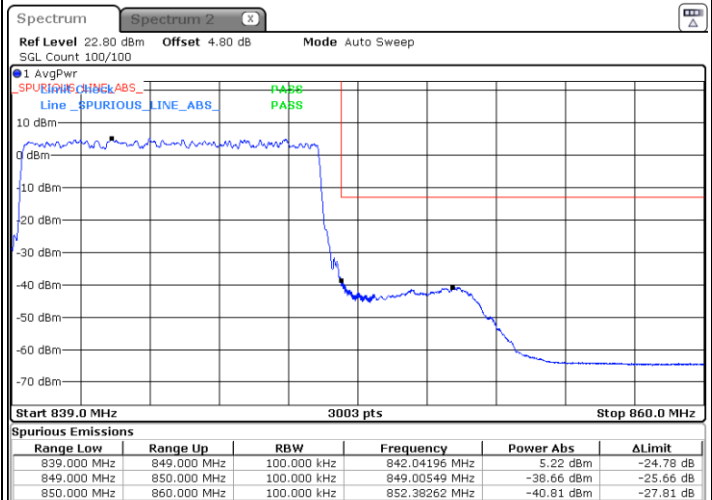
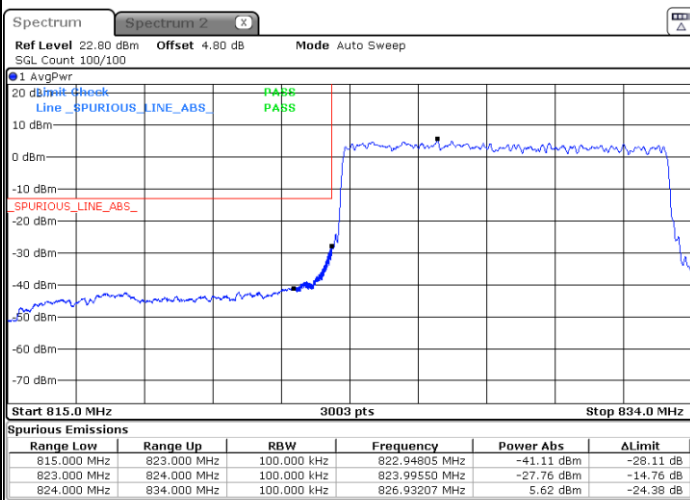


Date: 12.NOV.2022 11:49:06

Date: 12.NOV.2022 12:30:24

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.NOV.2022 11:49:41

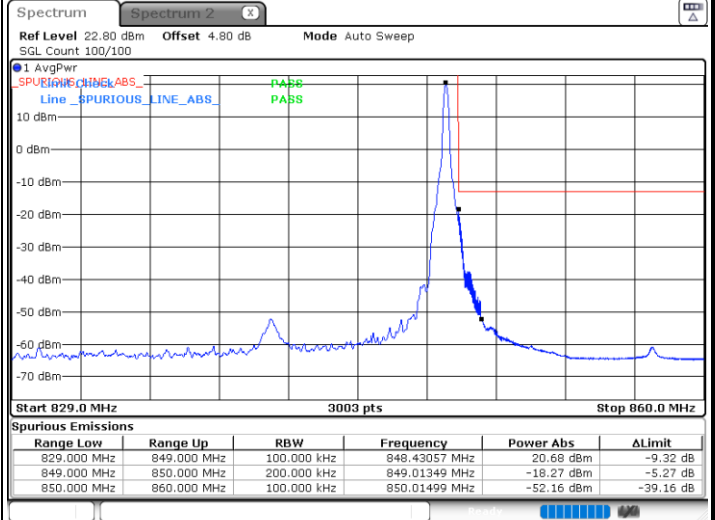
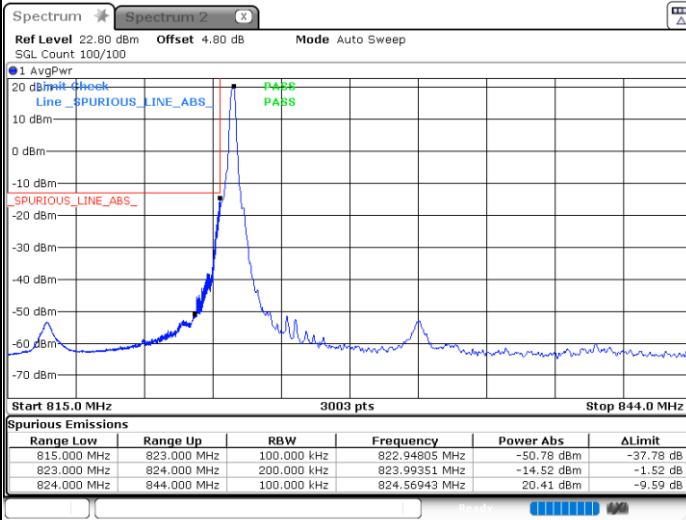
Date: 12.NOV.2022 12:32:41



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

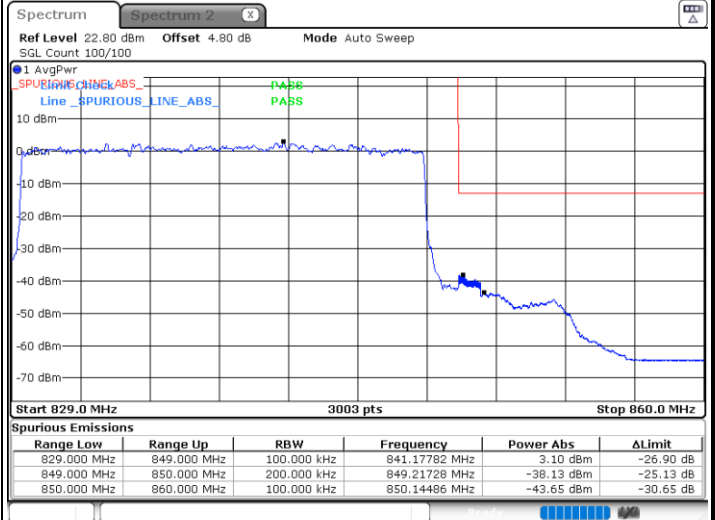
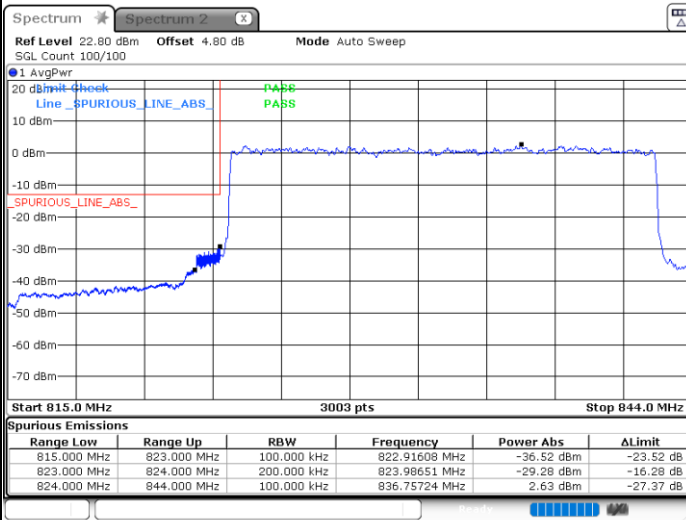


Date: 12.NOV.2022 11:27:33

Date: 12.NOV.2022 11:35:02

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.NOV.2022 11:31:08

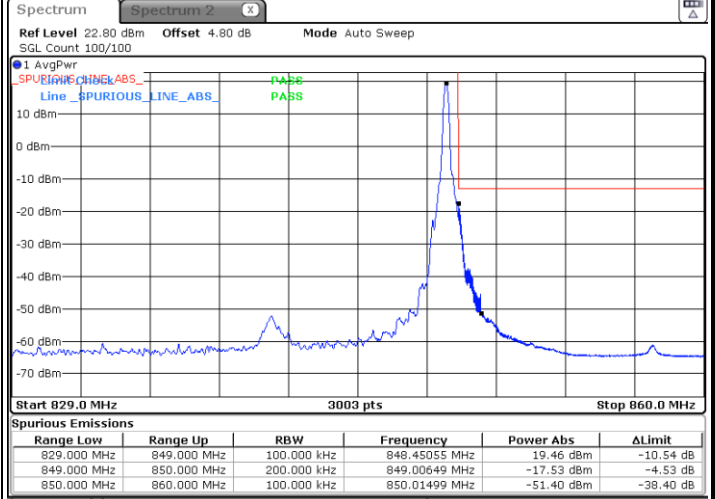
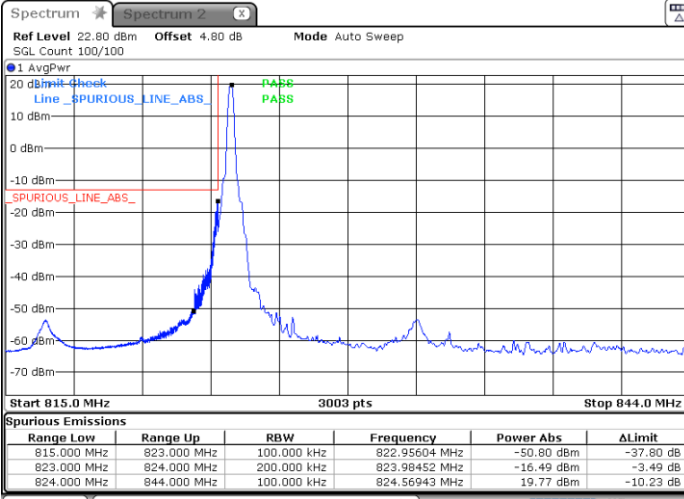
Date: 12.NOV.2022 11:32:27



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

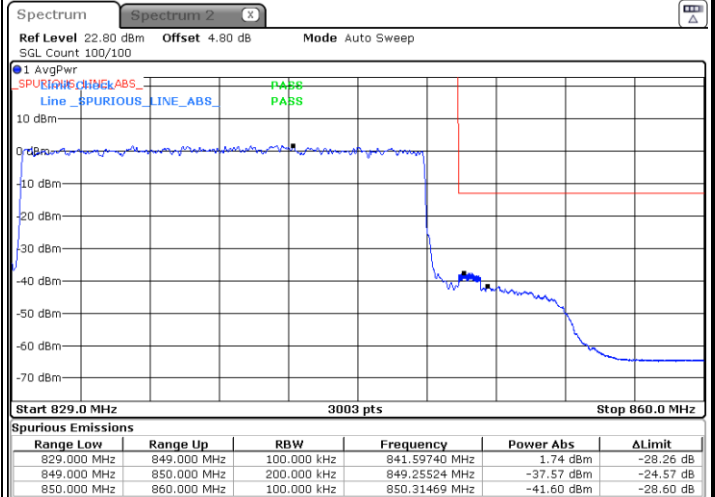
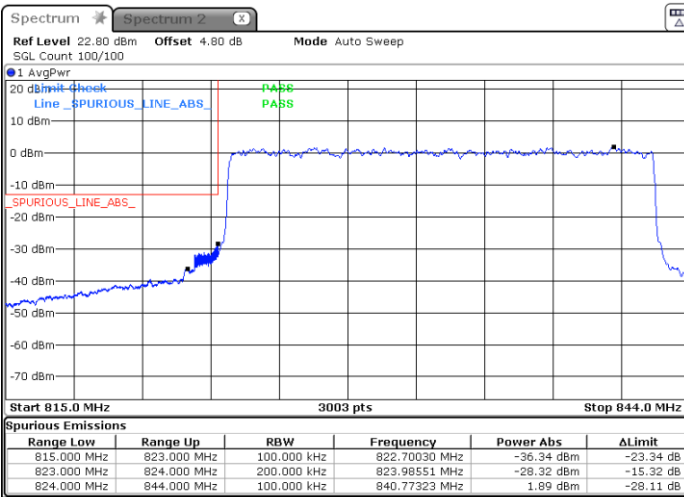


Date: 12.NOV.2022 11:29:14

Date: 12.NOV.2022 11:34:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.NOV.2022 11:30:21

Date: 12.NOV.2022 11:33:28

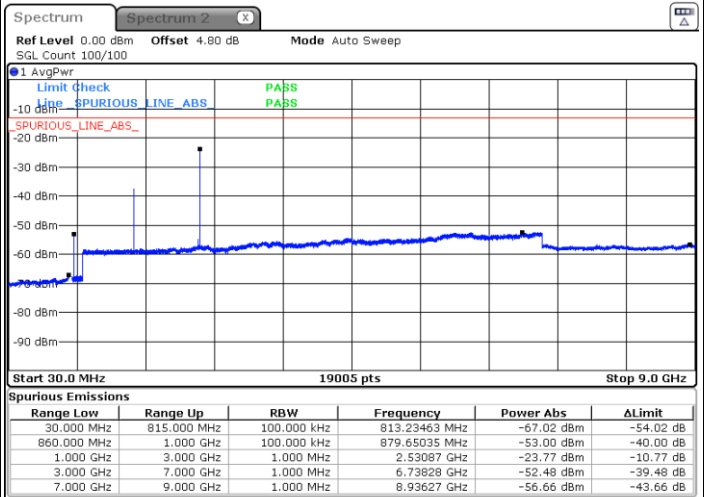
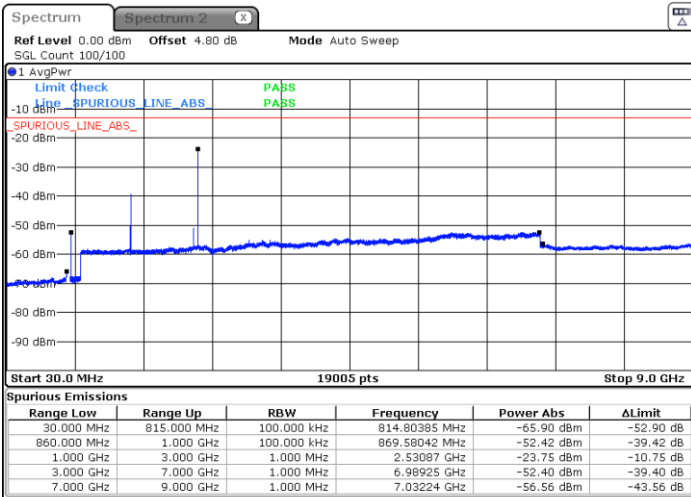


# Conducted Spurious Emission

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

Lowest Channel / 1RB1

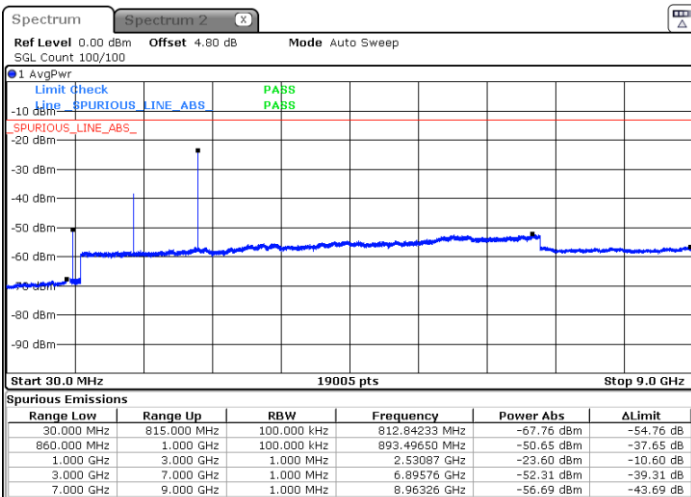
Middle Channel / 1RB1



Date: 12.NOV.2022 12:39:19

Date: 12.NOV.2022 12:36:05

Highest Channel / 1RB1



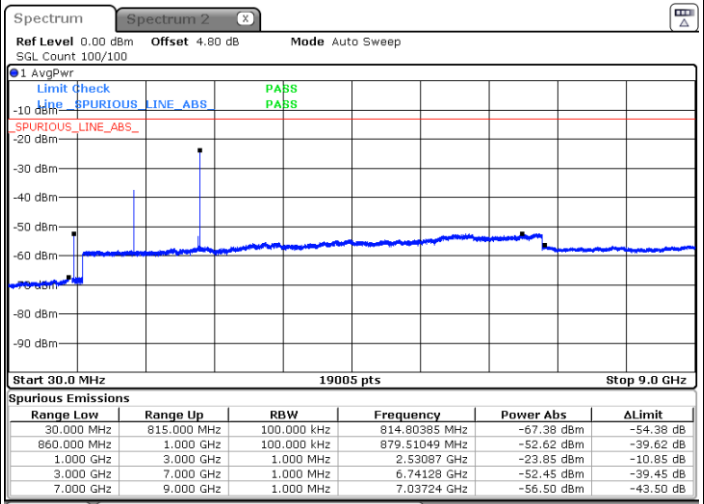
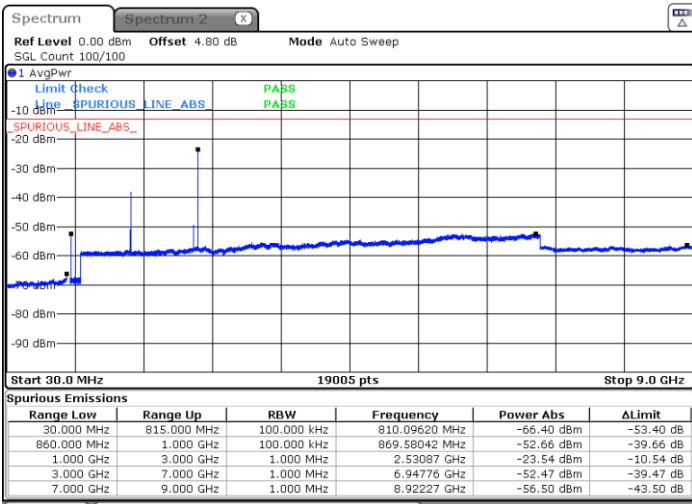
Date: 12.NOV.2022 12:47:22



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

Lowest Channel / 1RB1

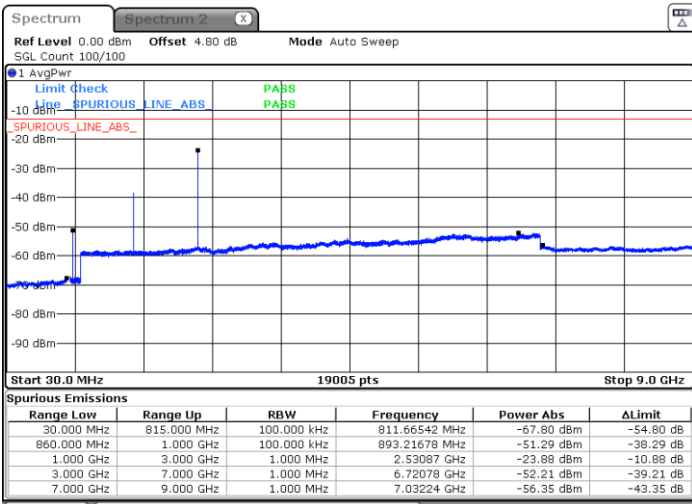
Middle Channel / 1RB1



Date: 12.NOV.2022 12:38:50

Date: 12.NOV.2022 12:37:39

Highest Channel / 1RB1



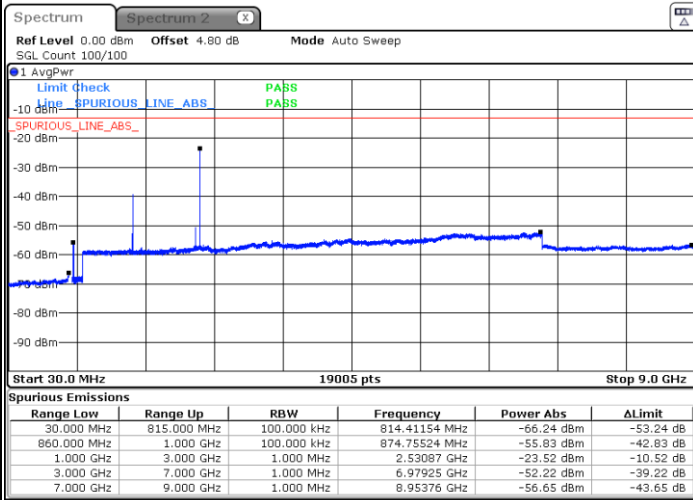
Date: 12.NOV.2022 12:47:53



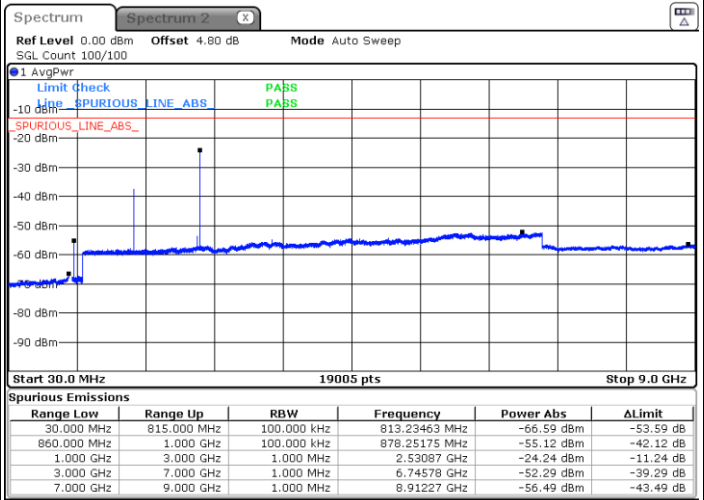
FR1 n5 / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

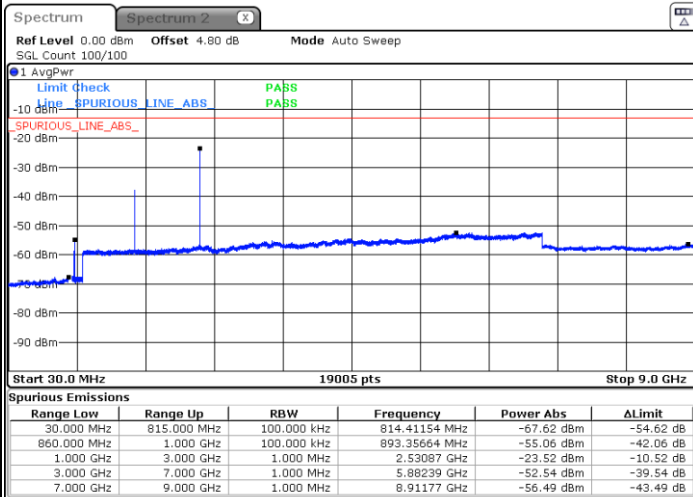


Date: 12.NOV.2022 12:24:04



Date: 12.NOV.2022 12:28:06

Highest Channel / 1RB1



Date: 12.NOV.2022 12:29:05

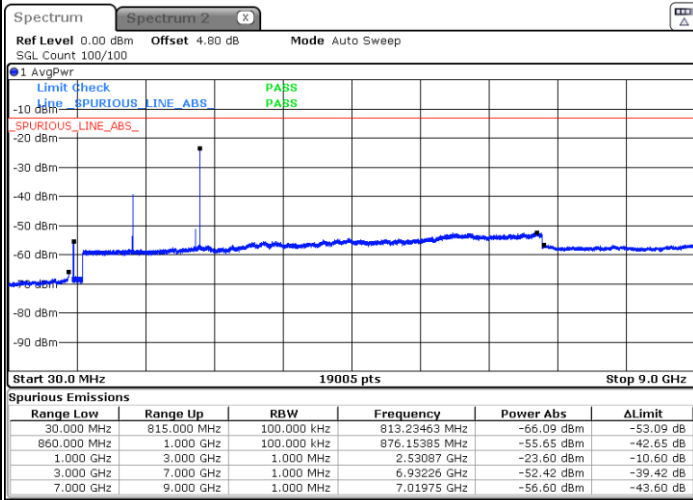




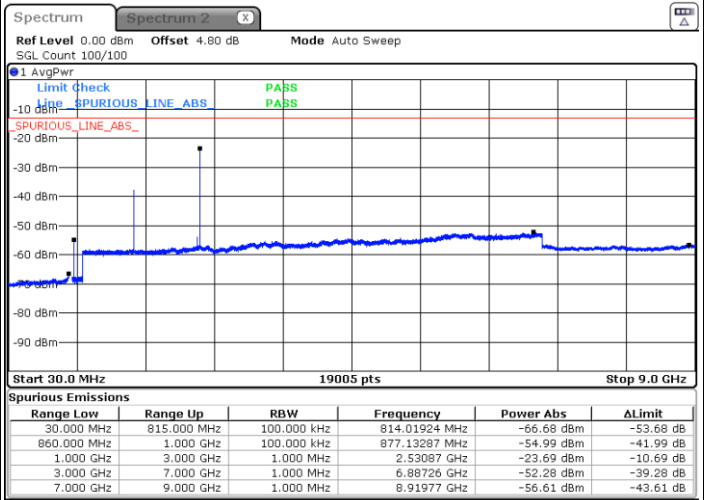
FR1 n5 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

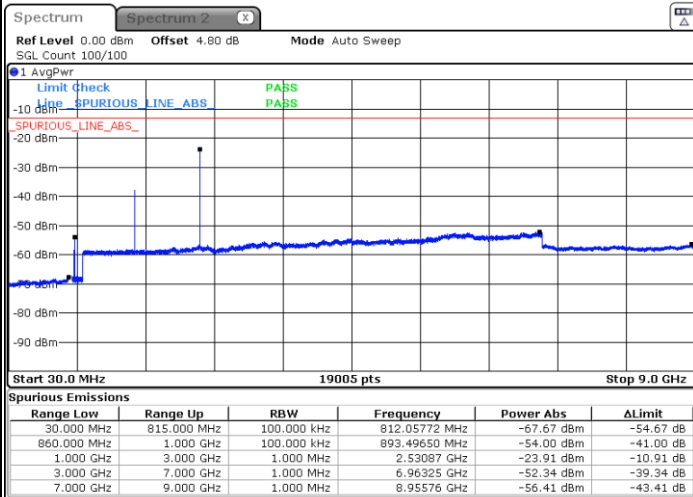


Date: 12.NOV.2022 12:26:04



Date: 12.NOV.2022 12:27:20

Highest Channel / 1RB1



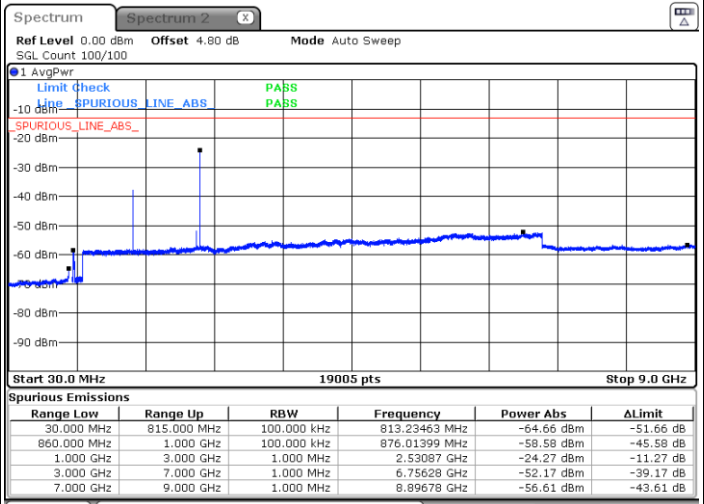
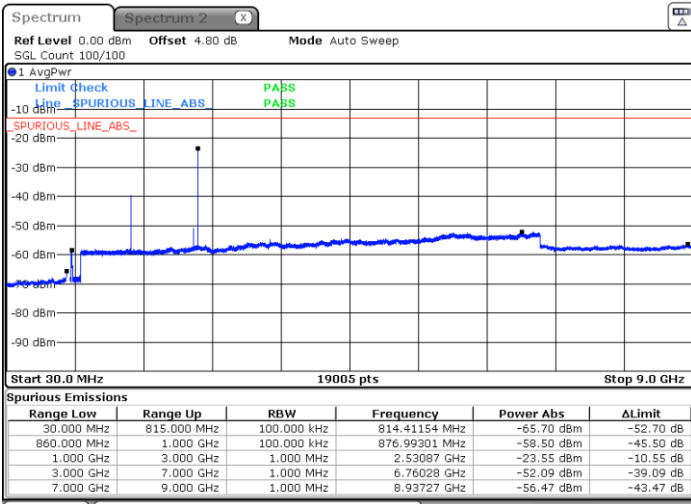
Date: 12.NOV.2022 12:29:42



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

Lowest Channel / 1RB1

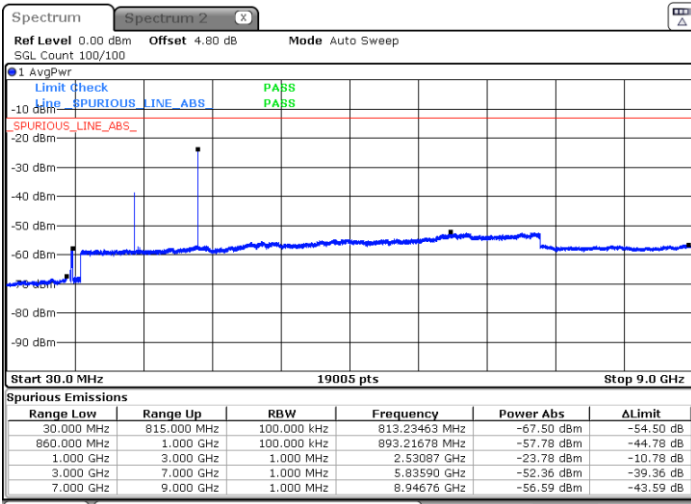
Middle Channel / 1RB1



Date: 12.NOV.2022 11:26:26

Date: 12.NOV.2022 11:22:11

Highest Channel / 1RB1



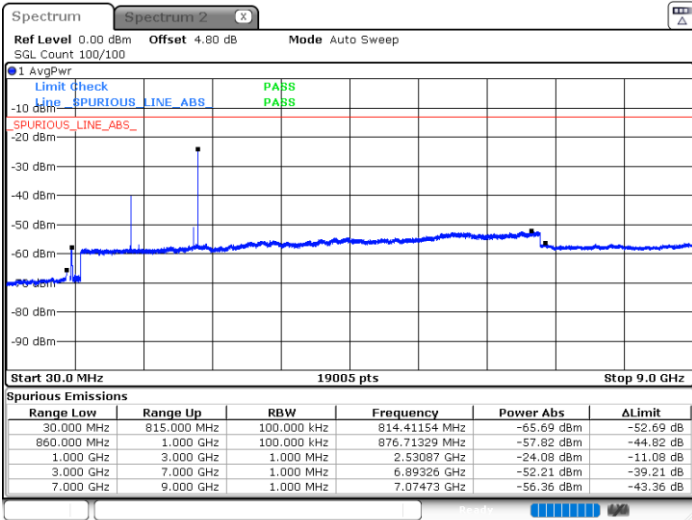
Date: 12.NOV.2022 11:35:29



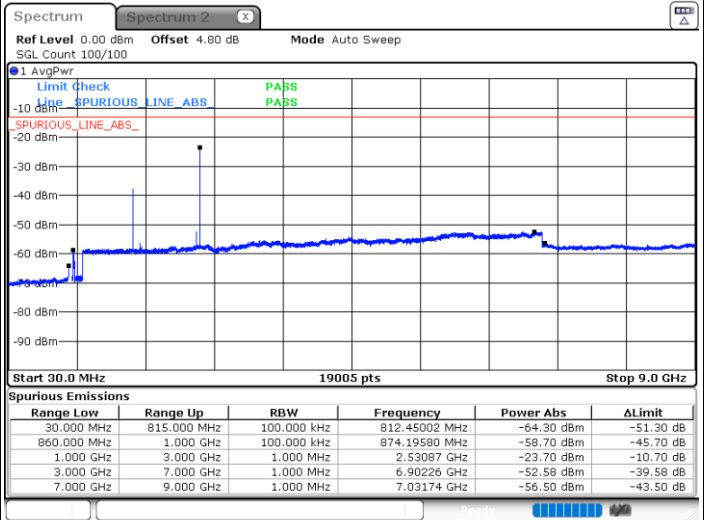
FR1 n5 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

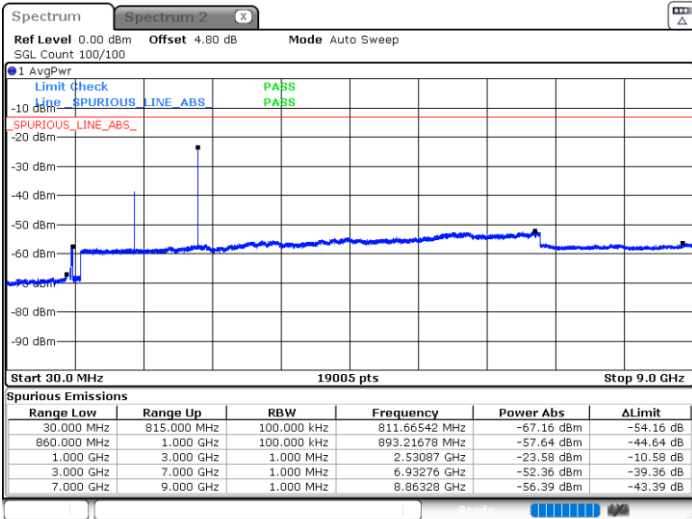


Date: 12.NOV.2022 11:25:54



Date: 12.NOV.2022 11:23:15

Highest Channel / 1RB1



Date: 12.NOV.2022 11:35:53



Frequency Stability

Test Conditions		FR1 n5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0025	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0028	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

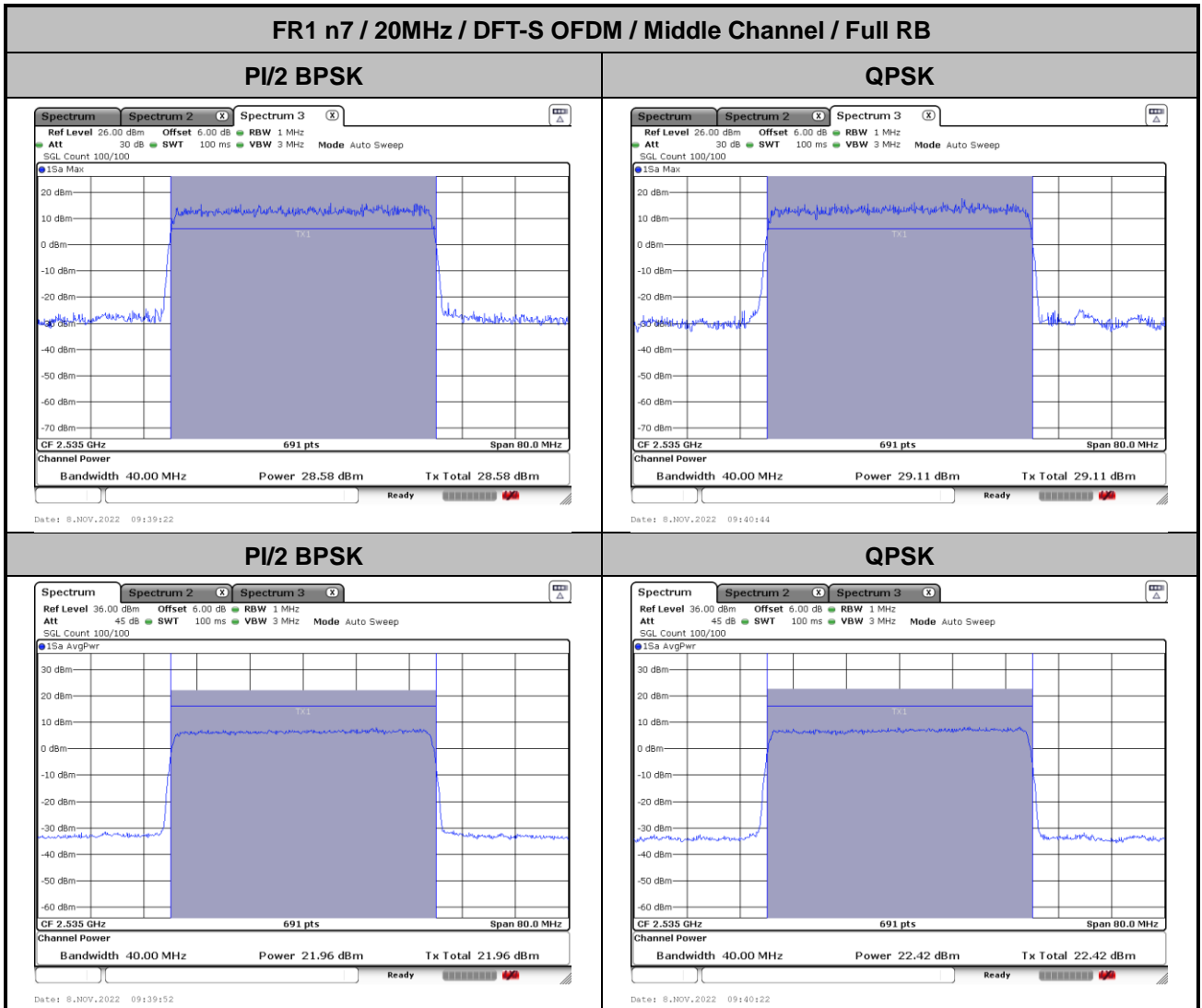
Note: Normal Voltage =3.89V. ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.48 V.



# FR1 n7(Main PA)

## Peak-to-Average Ratio

Mode	FR1 n7 / 20MHz / DFT-S OFDM			
Mod.	PI/2 BPSK	QPSK		Limit: 13dB
RB Size	Full RB	Full RB		Result
Middle CH	6.62	6.69		PASS





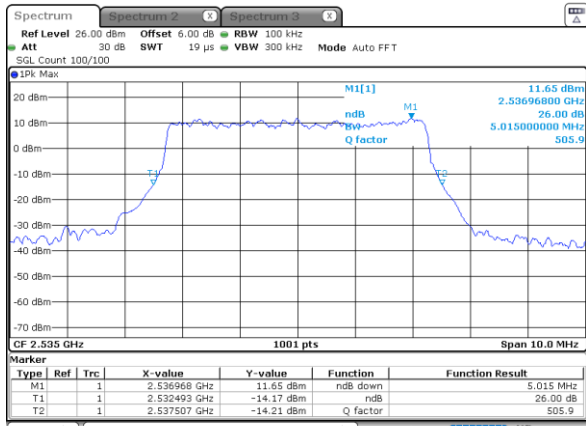
**26dB Bandwidth**

Mode	FR1 n7 : 26dBW (MHz) / CP OFDM						
<b>BW</b>	<b>5MHz</b>	<b>10MHz</b>	<b>15MHz</b>	<b>20MHz</b>	<b>25MHz</b>	<b>30MHz</b>	<b>40MHz</b>
<b>Mod.</b>	<b>QPSK</b>	<b>QPSK</b>	<b>QPSK</b>	<b>QPSK</b>	<b>QPSK</b>	<b>QPSK</b>	<b>QPSK</b>
<b>Middle CH</b>	5.02	10.17	15.02	20.18	24.62	29.57	41.08
<b>BW</b>	<b>5MHz</b>	<b>10MHz</b>	<b>15MHz</b>	<b>20MHz</b>	<b>25MHz</b>	<b>30MHz</b>	<b>40MHz</b>
<b>Mod.</b>	<b>16QAM</b>	<b>16QAM</b>	<b>16QAM</b>	<b>16QAM</b>	<b>16QAM</b>	<b>16QAM</b>	<b>16QAM</b>
<b>Middle CH</b>	5.16	10.13	15.02	19.86	24.66	29.65	40.92
<b>BW</b>	<b>5MHz</b>	<b>10MHz</b>	<b>15MHz</b>	<b>20MHz</b>	<b>25MHz</b>	<b>30MHz</b>	<b>40MHz</b>
<b>Mod.</b>	<b>64QAM</b>	<b>64QAM</b>	<b>64QAM</b>	<b>64QAM</b>	<b>64QAM</b>	<b>64QAM</b>	<b>64QAM</b>
<b>Middle CH</b>	5.14	10.15	14.84	20.02	24.86	29.73	41.08
<b>BW</b>	<b>5MHz</b>	<b>10MHz</b>	<b>15MHz</b>	<b>20MHz</b>	<b>25MHz</b>	<b>30MHz</b>	<b>40MHz</b>
<b>Mod.</b>	<b>256QAM</b>	<b>256QAM</b>	<b>256QAM</b>	<b>256QAM</b>	<b>256QAM</b>	<b>256QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	5.07	10.25	15.08	19.98	24.74	29.73	41.08



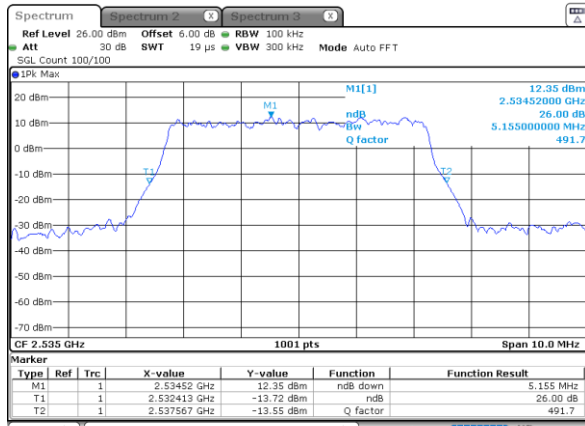
FR1 n7 / 5MHz / CP OFDM / Middle Channel / Full RB

QPSK



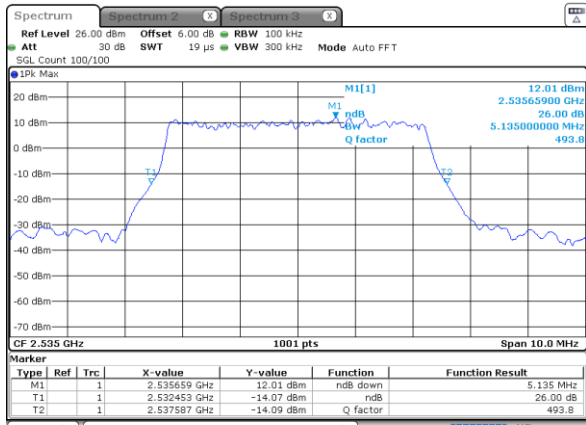
Date: 8,NOV,2022 10:43:21

16QAM



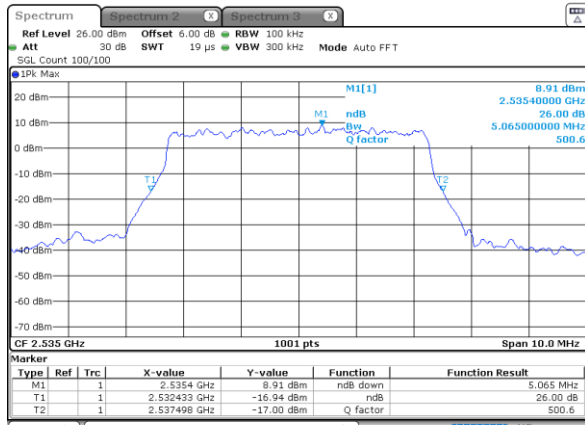
Date: 8,NOV,2022 10:43:40

64QAM



Date: 8,NOV,2022 10:43:57

256QAM

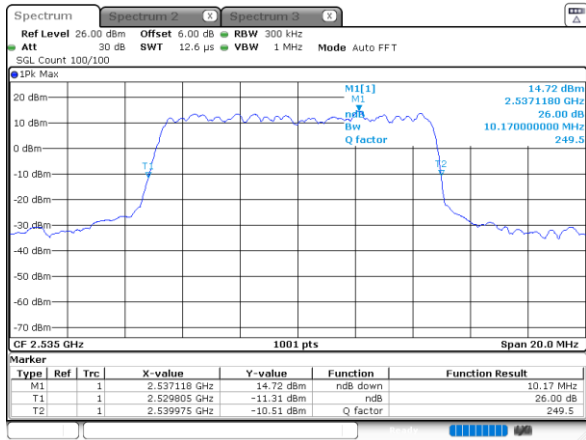


Date: 8,NOV,2022 10:44:13



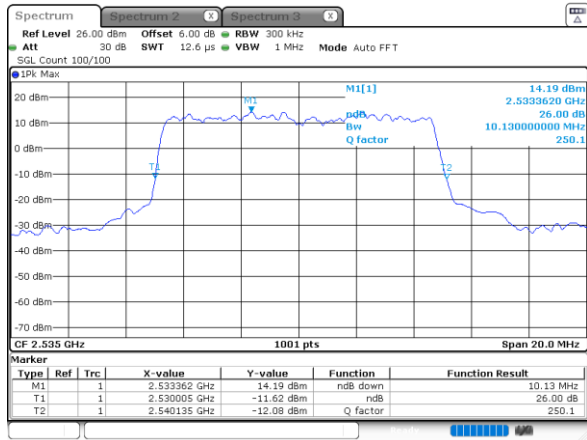
FR1 n7 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



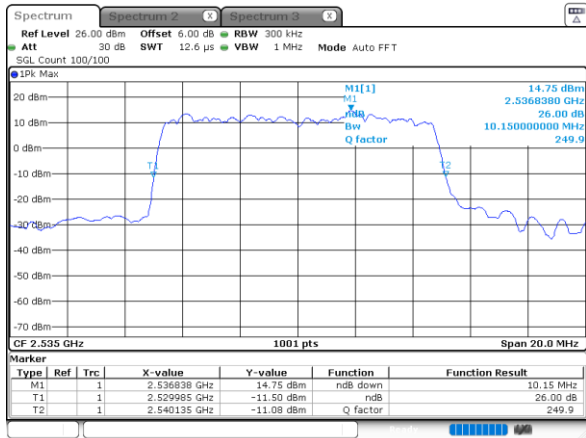
Date: 8,NOV,2022 10:42:03

16QAM



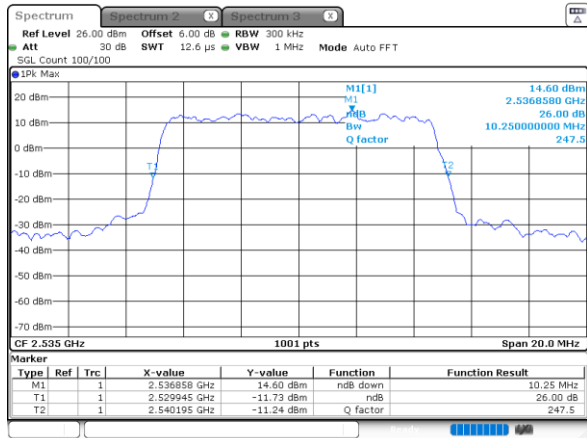
Date: 8,NOV,2022 10:42:18

64QAM



Date: 8,NOV,2022 10:42:35

256QAM



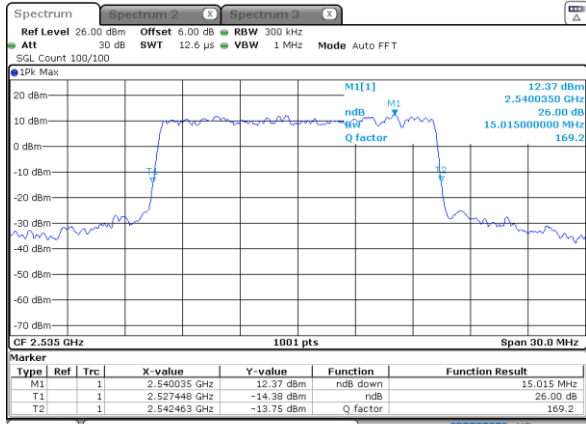
Date: 8,NOV,2022 10:42:37





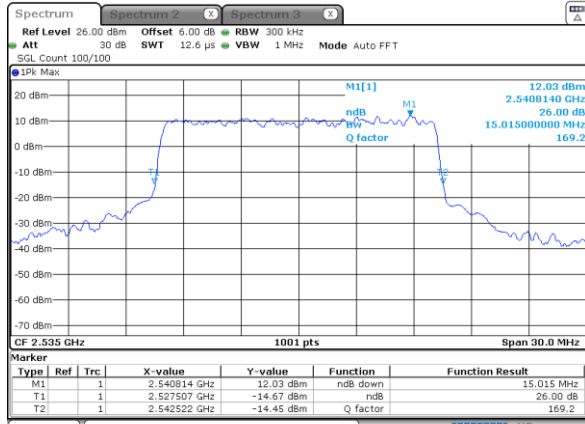
FR1 n7 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



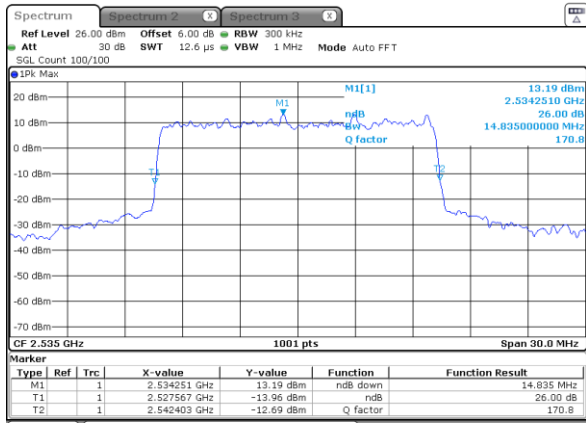
Date: 8,NOV,2022 10:39:23

16QAM



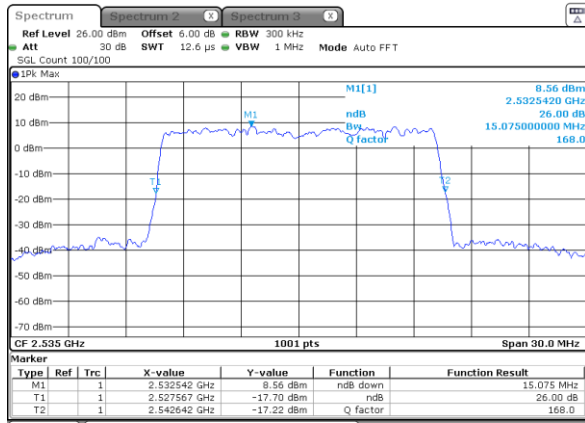
Date: 8,NOV,2022 10:39:44

64QAM



Date: 8,NOV,2022 10:40:01

256QAM

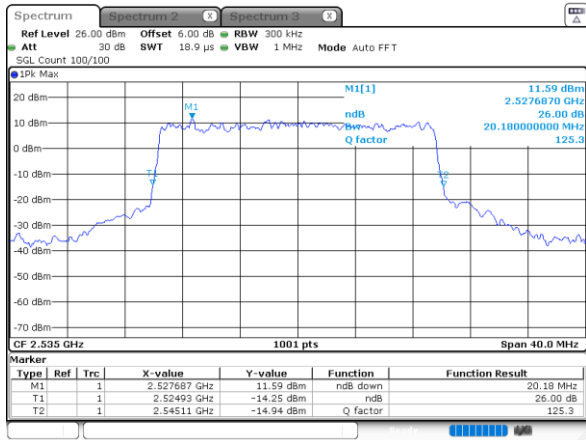


Date: 8,NOV,2022 10:40:43



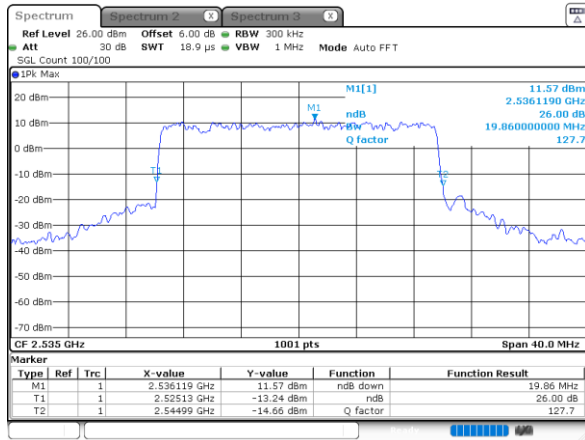
FR1 n7 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



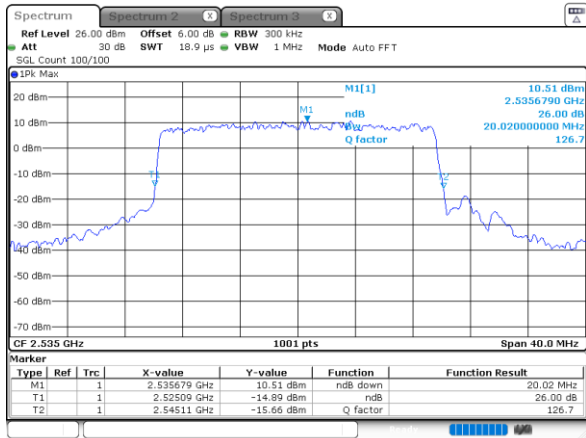
Date: 8.NOV.2022 10:06:22

16QAM



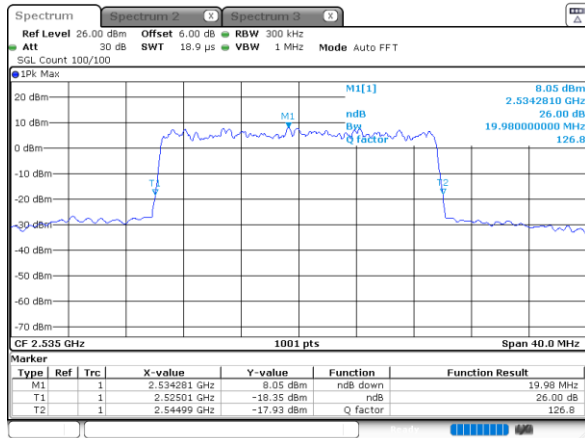
Date: 8.NOV.2022 10:06:07

64QAM



Date: 8.NOV.2022 10:05:51

256QAM

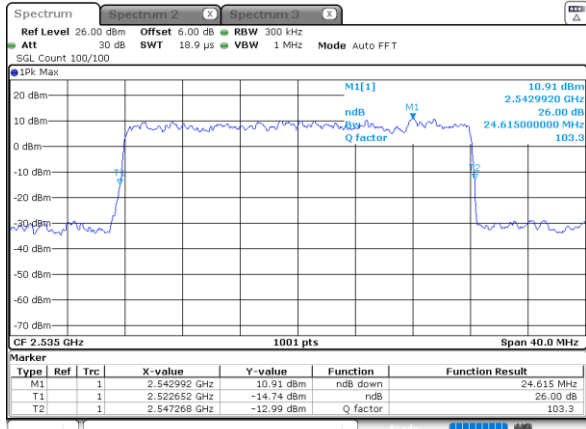


Date: 8.NOV.2022 10:05:34



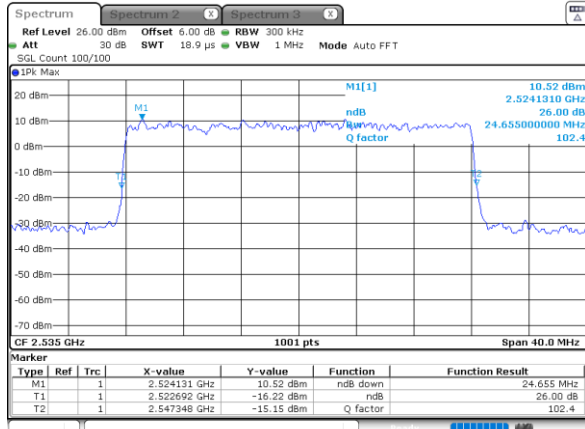
FR1 n7 / 25MHz / CP OFDM / Middle Channel / Full RB

QPSK



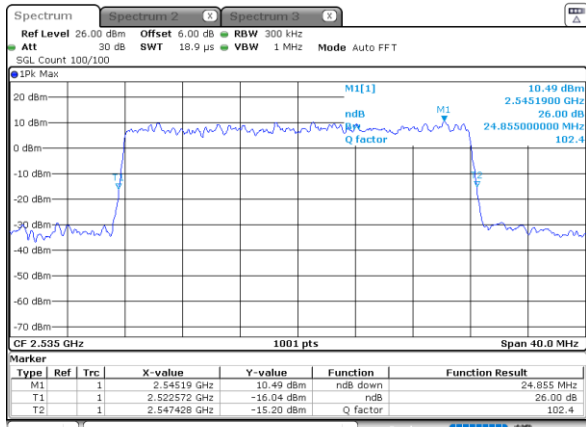
Date: 8.NOV.2022 10:07:21

16QAM



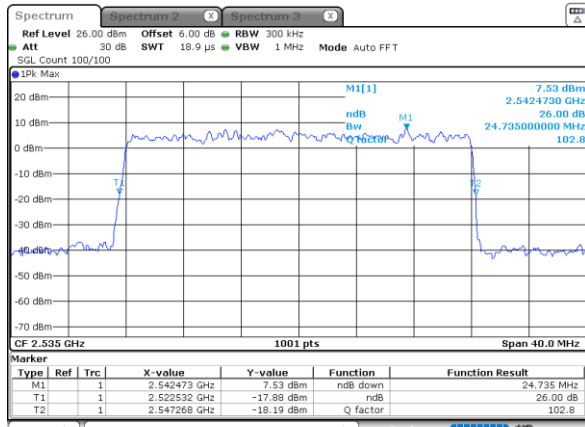
Date: 8.NOV.2022 10:07:37

64QAM



Date: 8.NOV.2022 10:07:52

256QAM

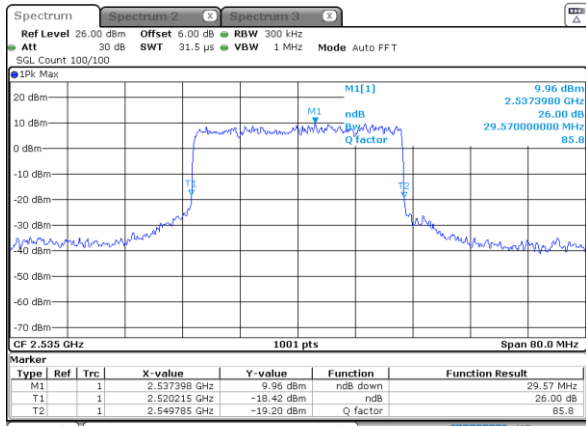


Date: 8.NOV.2022 10:08:07



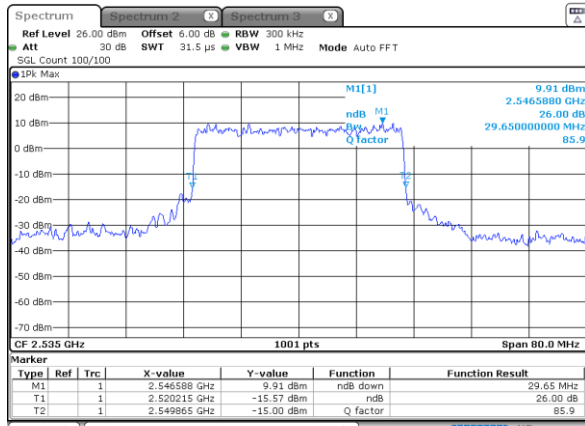
FR1 n7 / 30MHz / CP OFDM / Middle Channel / Full RB

QPSK



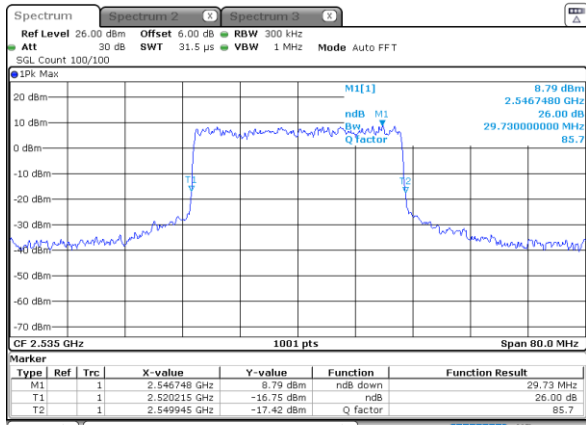
Date: 8,NOV,2022 10:02:00

16QAM



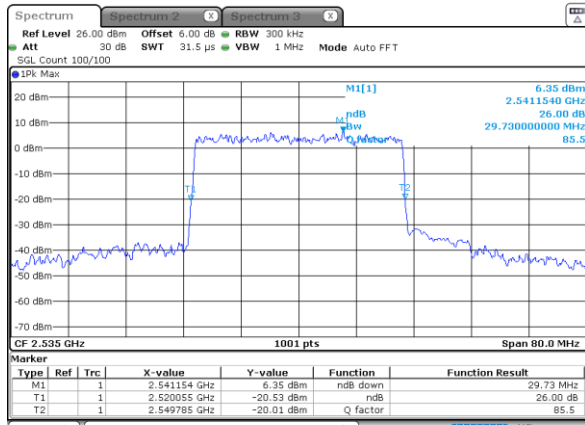
Date: 8,NOV,2022 10:02:32

64QAM



Date: 8,NOV,2022 10:02:52

256QAM

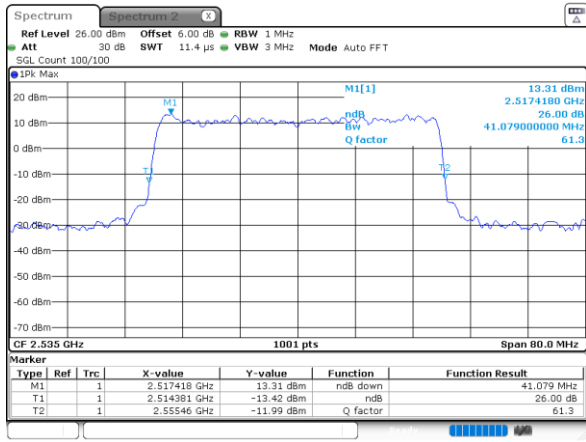


Date: 8,NOV,2022 10:03:44



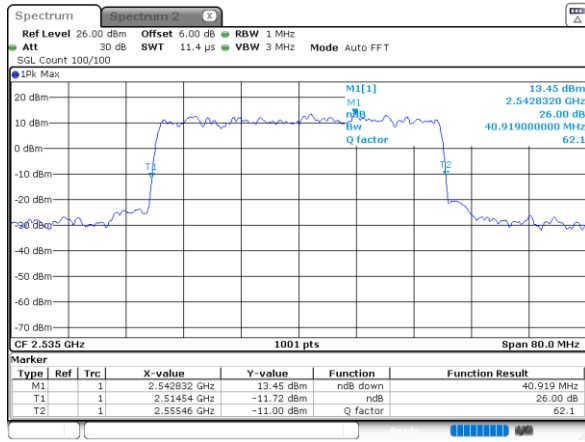
FR1 n7 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



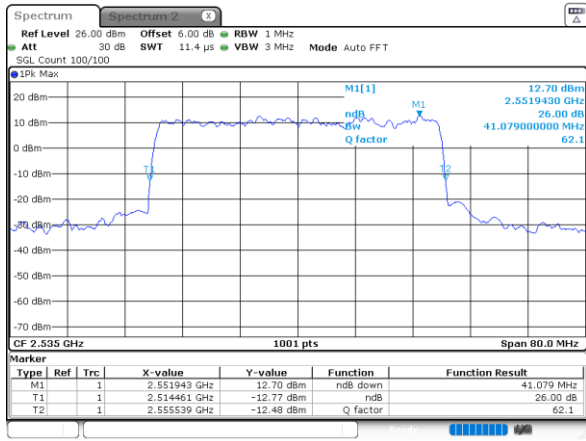
Date: 8.NOV.2022 09:33:01

16QAM



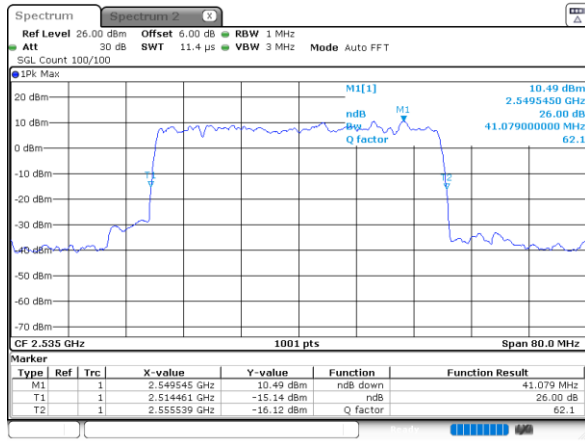
Date: 8.NOV.2022 09:33:19

64QAM



Date: 8.NOV.2022 09:33:53

256QAM



Date: 8.NOV.2022 09:34:36



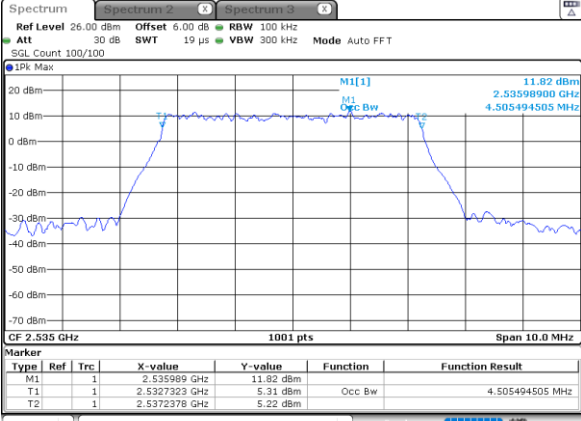
### Occupied Bandwidth

Mode	FR1 n7 : 99%OBW (MHz) / CP OFDM						
BW	5MHz	10MHz	15MHz	20MHz	25MHz	30MHz	40MHz
Mod.	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK
Middle CH	4.51	9.33	14.21	18.94	23.70	28.53	38.76
BW	5MHz	10MHz	15MHz	20MHz	25MHz	30MHz	40MHz
Mod.	16QAM	16QAM	16QAM	16QAM	16QAM	16QAM	16QAM
Middle CH	4.49	9.35	14.15	18.94	23.74	28.61	38.92
BW	5MHz	10MHz	15MHz	20MHz	25MHz	30MHz	40MHz
Mod.	64QAM	64QAM	64QAM	64QAM	64QAM	64QAM	64QAM
Middle CH	4.51	9.33	14.12	18.94	23.74	28.45	38.92
BW	5MHz	10MHz	15MHz	20MHz	25MHz	30MHz	40MHz
Mod.	256QAM	256QAM	256QAM	256QAM	256QAM	256QAM	256QAM
Middle CH	4.50	9.35	14.15	18.90	23.74	28.69	38.92



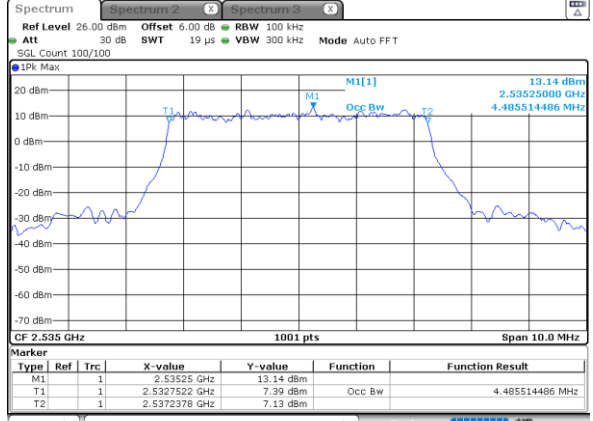
FR1 n7 / 5MHz / CP OFDM / Middle Channel / Full RB

QPSK



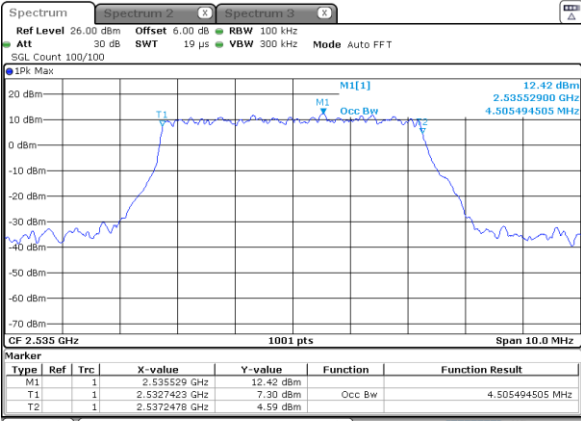
Date: 8,NOV,2022 10:43:16

16QAM



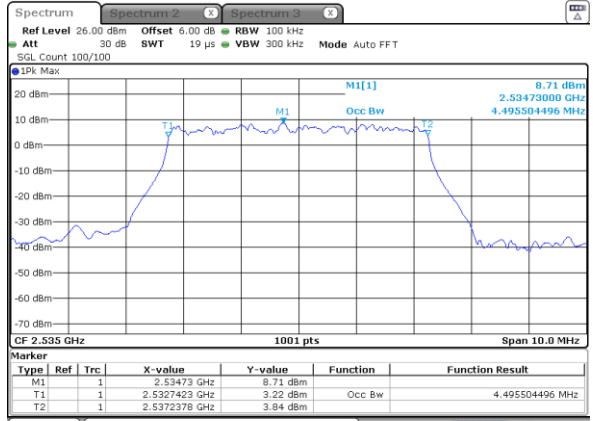
Date: 8,NOV,2022 10:43:34

64QAM



Date: 8,NOV,2022 10:43:51

256QAM

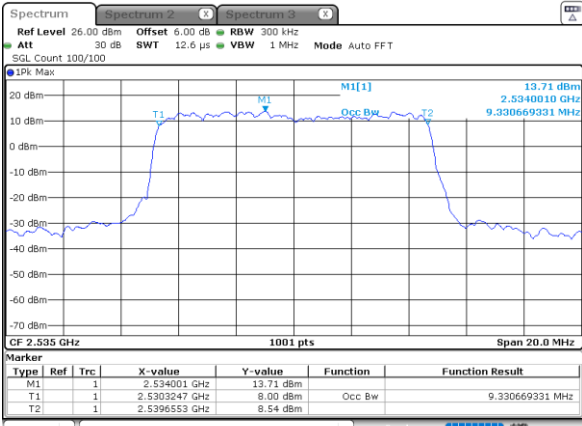


Date: 8,NOV,2022 10:44:07



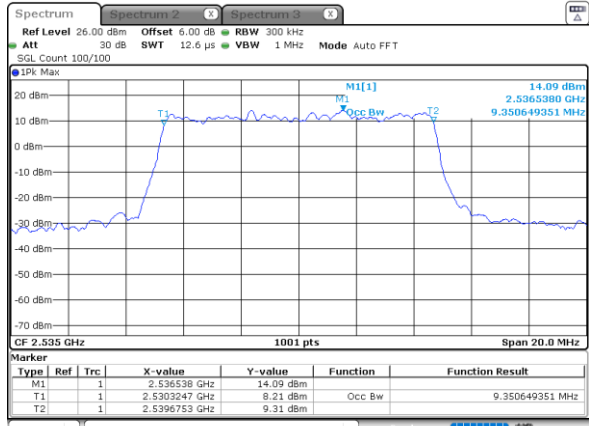
FR1 n7 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



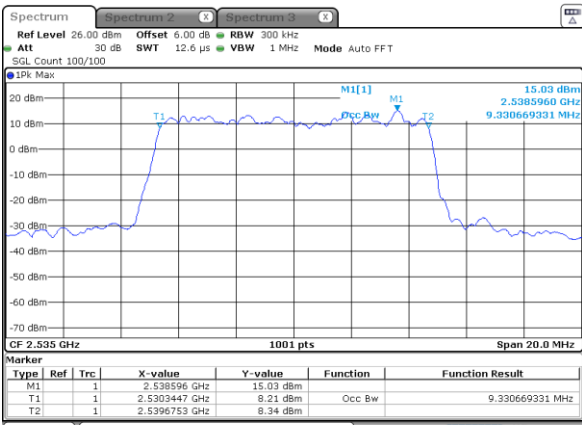
Date: 8,NOV,2022 10:41:58

16QAM



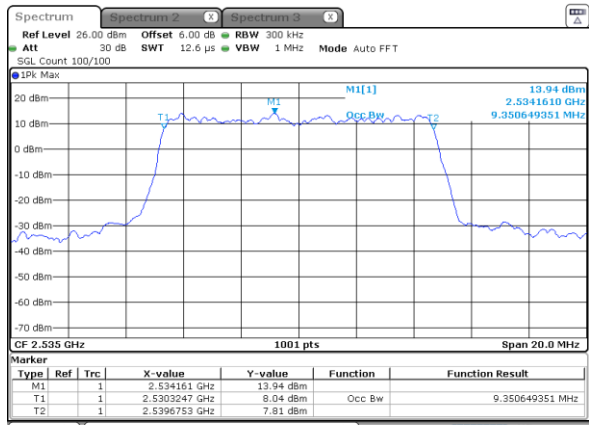
Date: 8,NOV,2022 10:42:12

64QAM



Date: 8,NOV,2022 10:42:29

256QAM



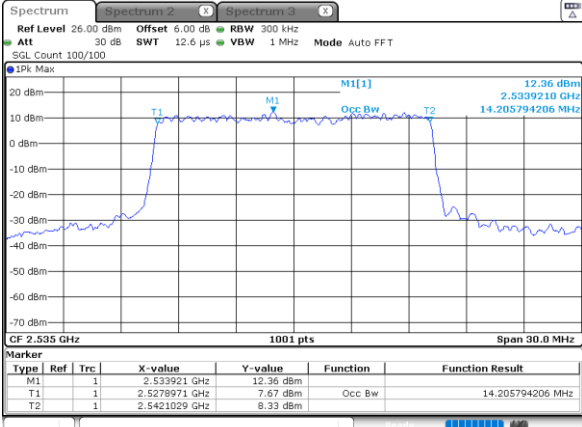
Date: 8,NOV,2022 10:41:32



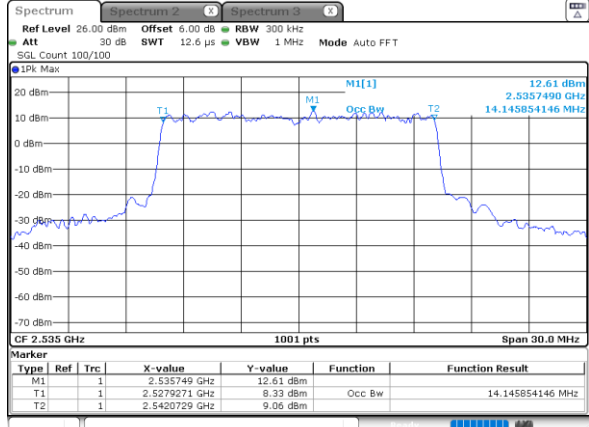


FR1 n7 /15MHz / CP OFDM / Middle Channel / Full RB

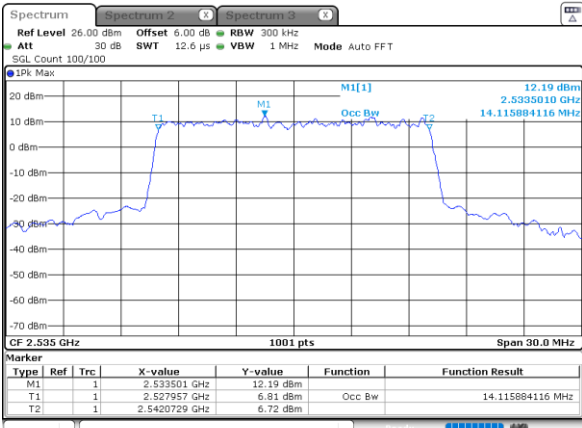
QPSK



16QAM



64QAM



256QAM

