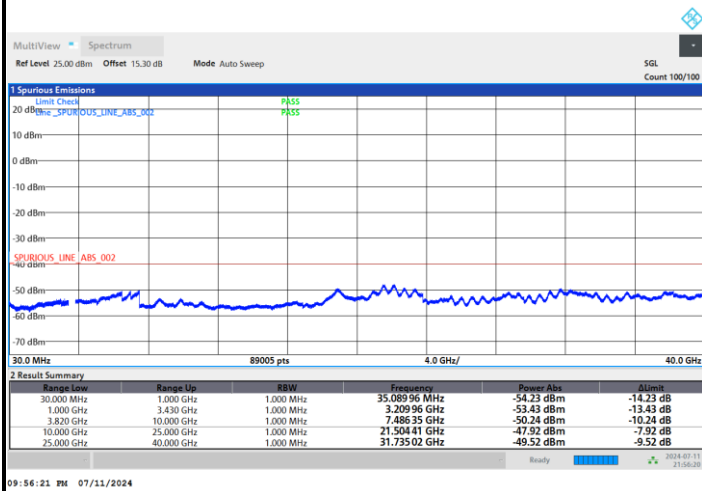


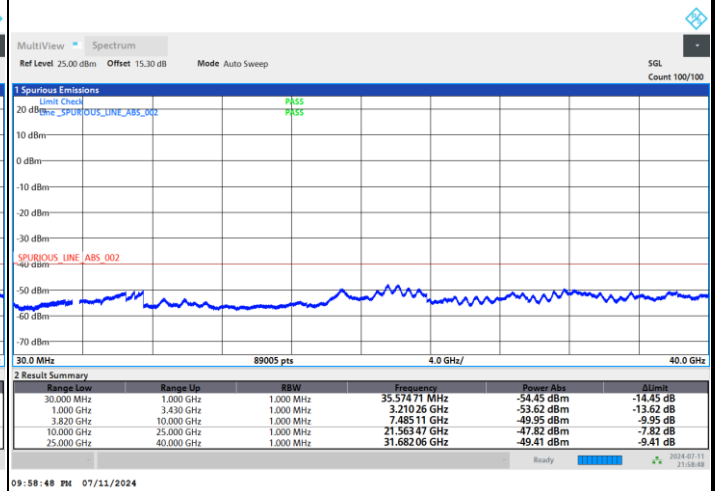


FR1 n48 / 30MHz / CP OFDM / QPSK / 1RB1

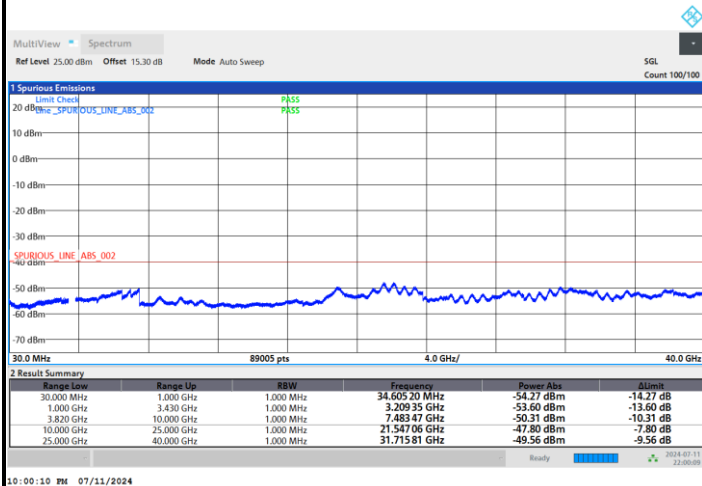
Lowest Channel



Middle Channel



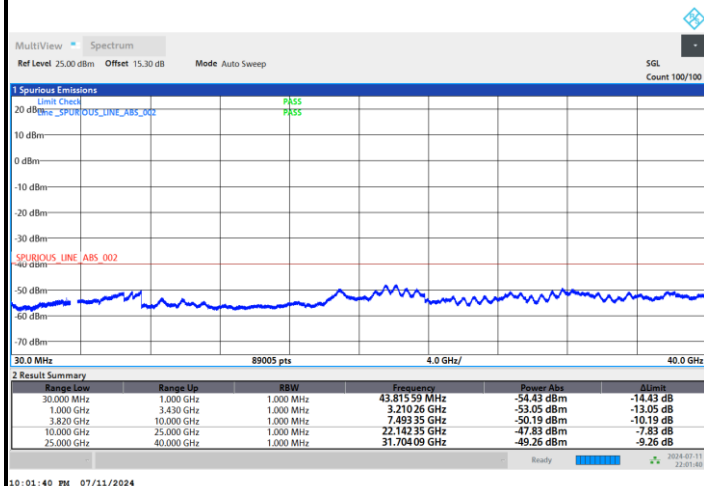
Highest Channel





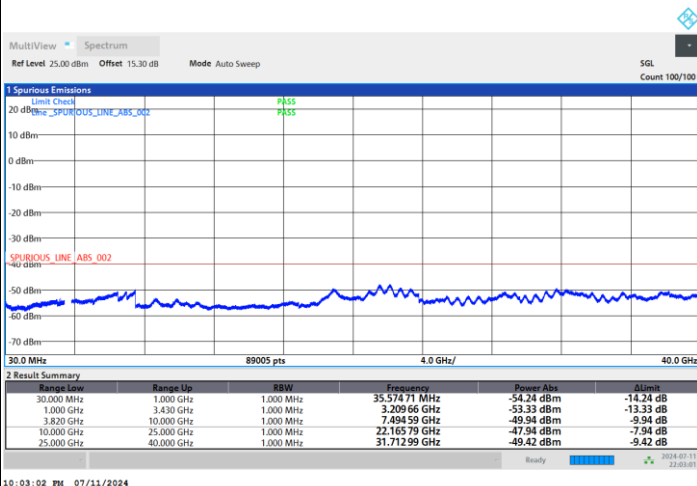
FR1 n48 / 40MHz / CP OFDM / QPSK / 1RB1

Lowest Channel



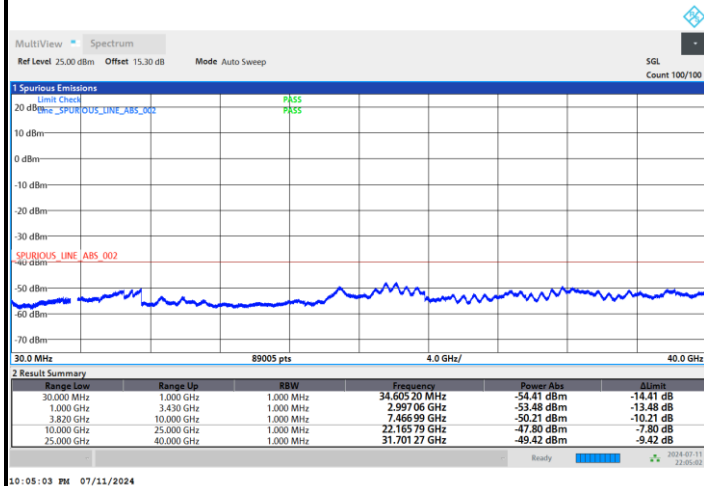
10:01:40 PM 07/11/2024

Middle Channel



10:03:02 PM 07/11/2024

Highest Channel



10:05:03 PM 07/11/2024

Frequency Stability

Test Conditions		FR1 n48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0039	PASS
40	Normal Voltage	0.0038	
30	Normal Voltage	0.0039	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0039	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0032	
-20	Normal Voltage	0.0038	
-30	Normal Voltage	0.0059	
20	Maximum Voltage	0.0053	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0039	

Note:

1. Normal Voltage = 3.3 V. ; Battery End Point (BEP) = 3.135 V. ; Maximum Voltage = 3.465 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

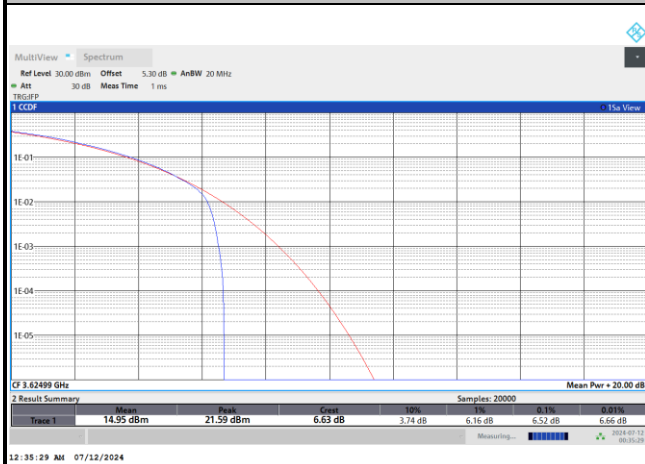
**<Ant. 2>****Peak-to-Average Ratio**

Mode	FR1 n48 / 20MHz / CP OFDM				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	6.52	6.48	7.20	8.78	PASS



FR1 n48 / 20MHz / CP OFDM / Middle Channel / Full RB

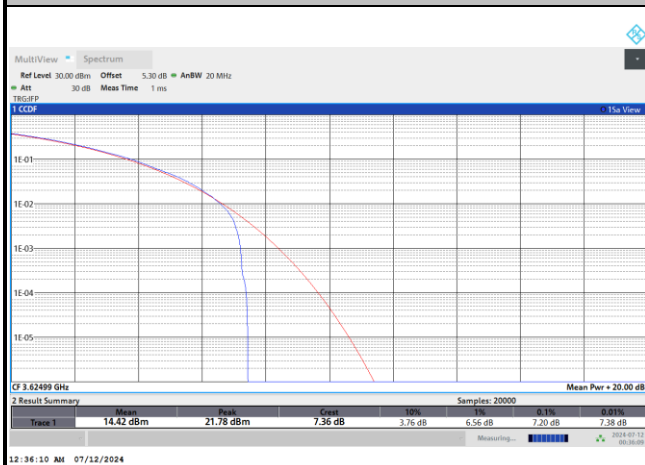
QPSK



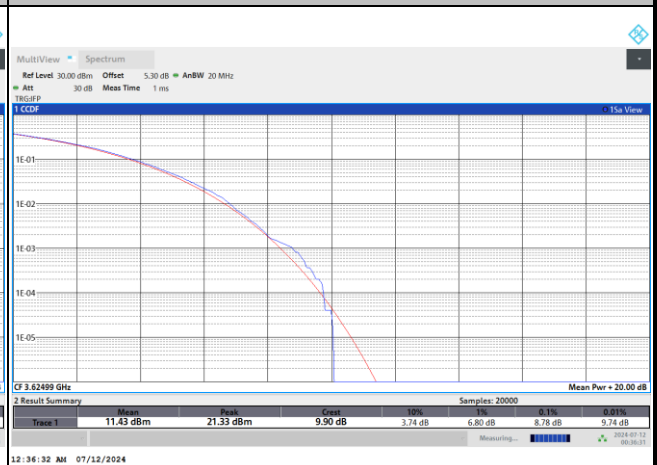
16QAM



64QAM



256QAM



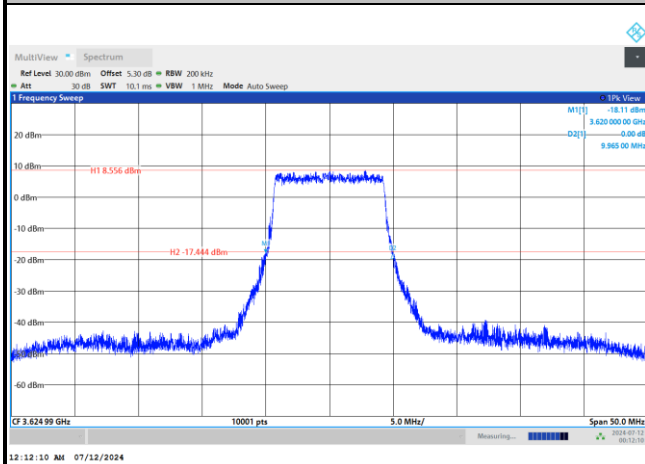
**26dB Bandwidth**

Mode	FR1 n48 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	9.96	10.19	15.43	15.43	20.34	20.39	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	10.26	10.12	15.28	15.19	20.37	20.25	-	-
BW	30MHz		40MHz		-		-	
Mod.	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	30.68	30.76	40.79	41.09	-	-	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	-	-	-	-
Middle CH	30.56	30.60	40.73	40.98	-	-	-	-

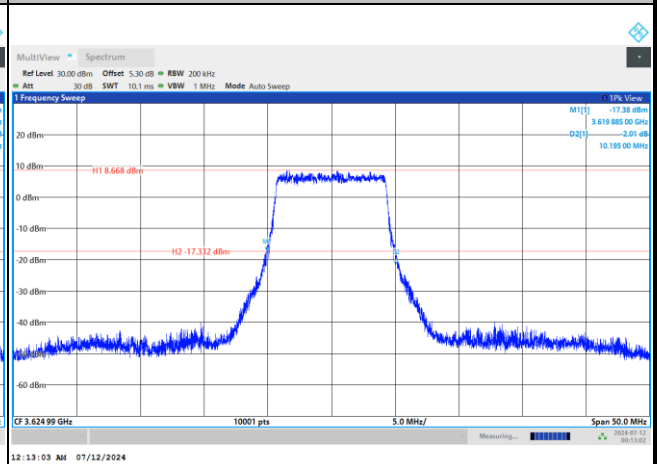


FR1 n48 / 10MHz / CP OFDM / Middle Channel / Full RB

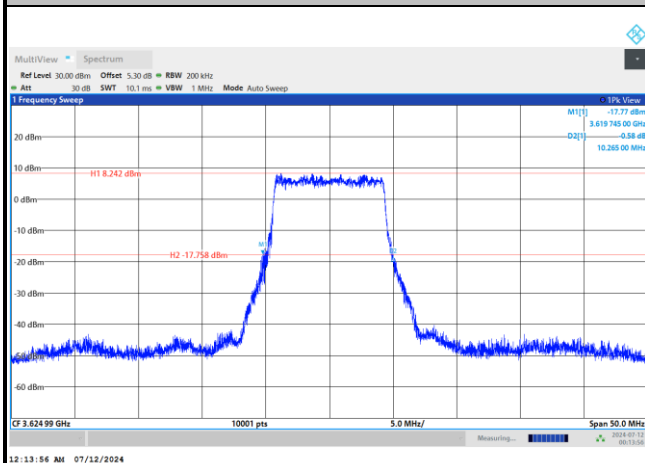
QPSK



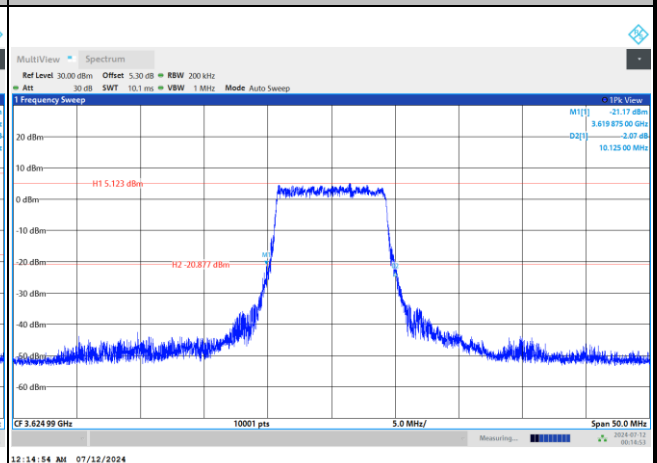
16QAM



64QAM



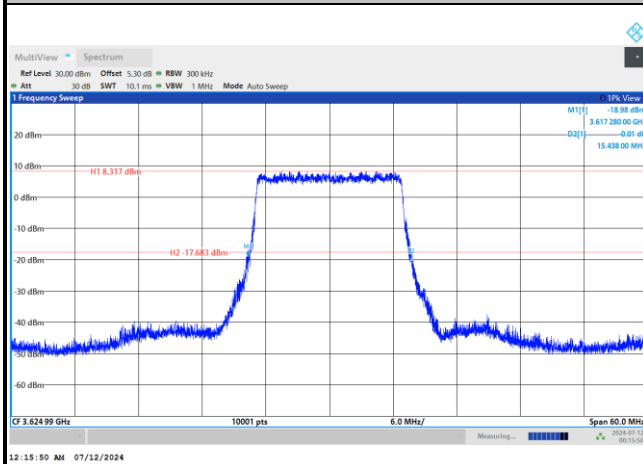
256QAM



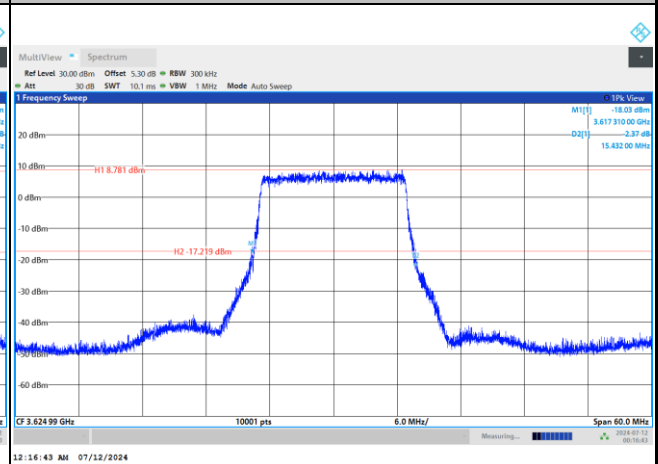


FR1 n48 / 15MHz / CP OFDM / Middle Channel / Full RB

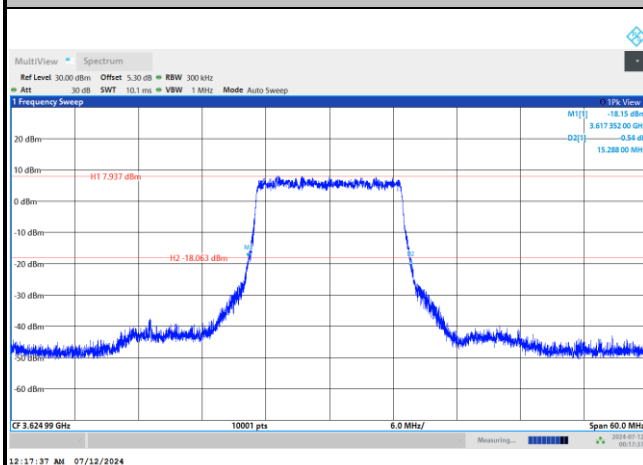
QPSK



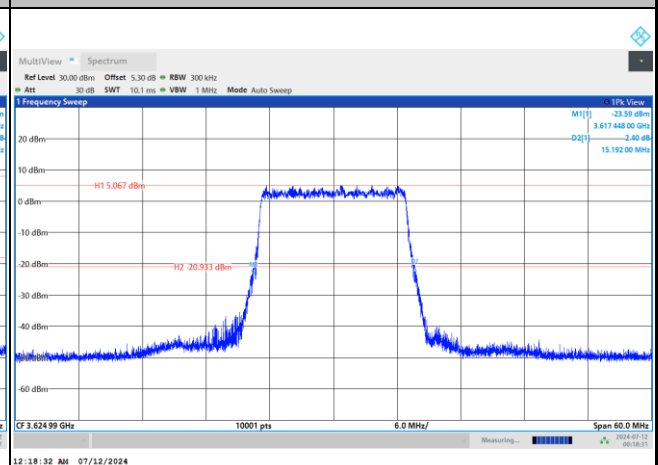
16QAM



64QAM



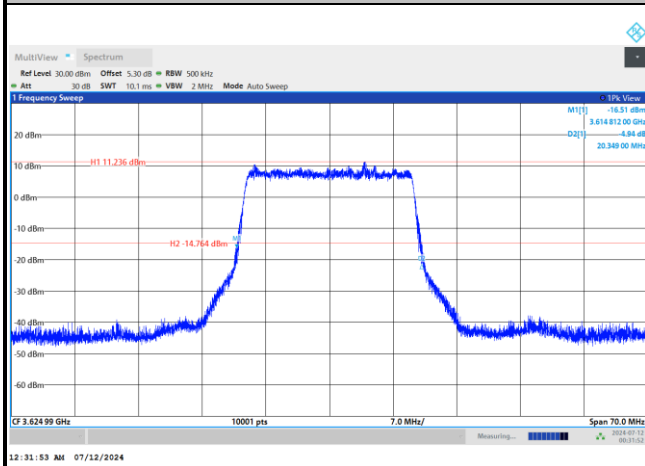
256QAM



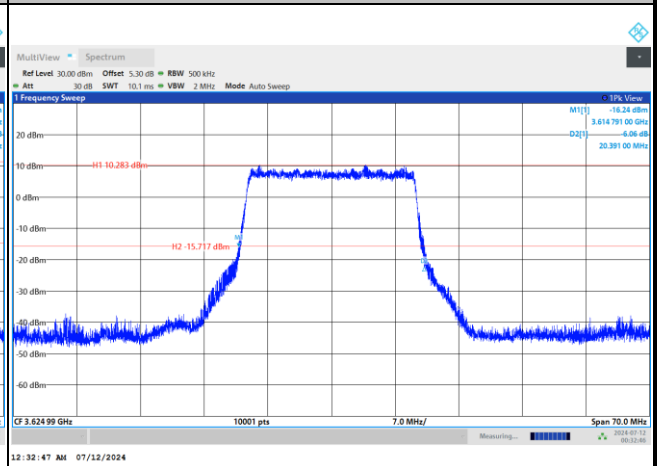


FR1 n48 / 20MHz / CP OFDM / Middle Channel / Full RB

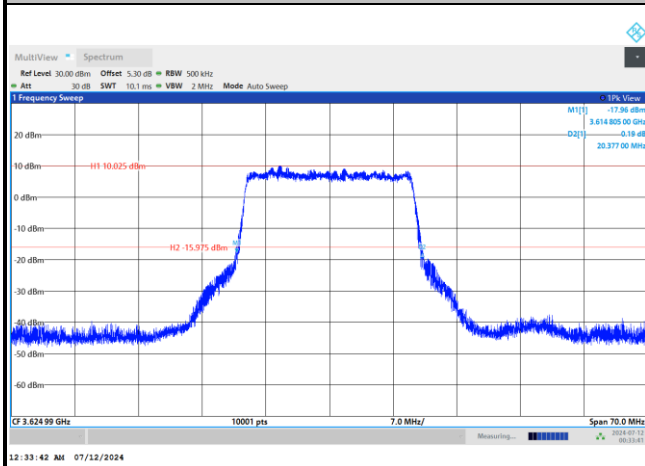
QPSK



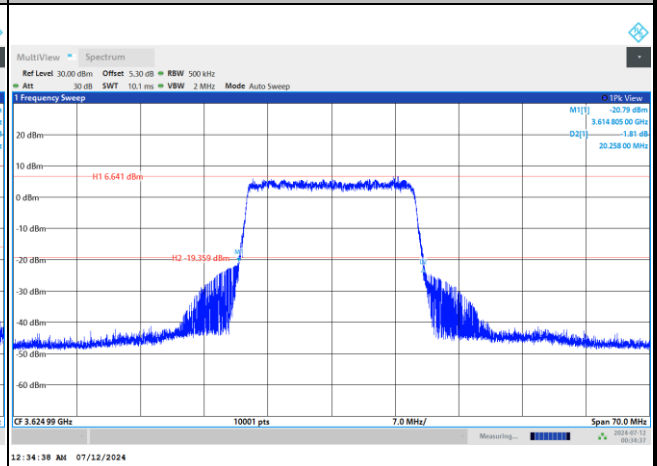
16QAM



64QAM



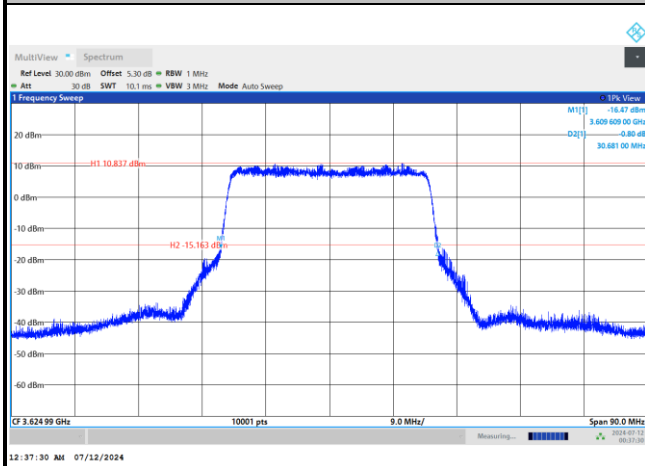
256QAM



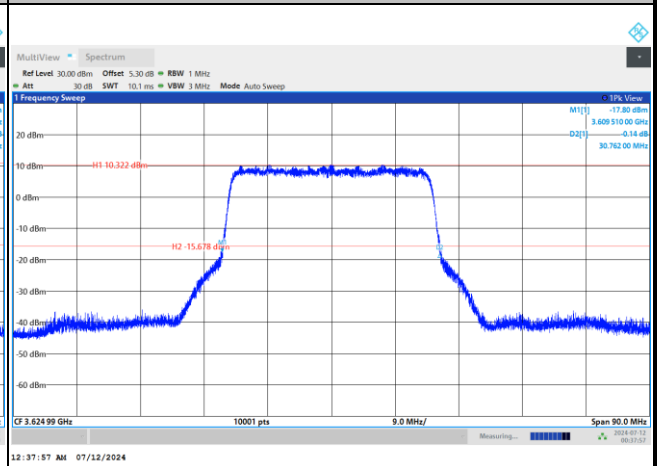


FR1 n48 / 30MHz / CP OFDM / Middle Channel / Full RB

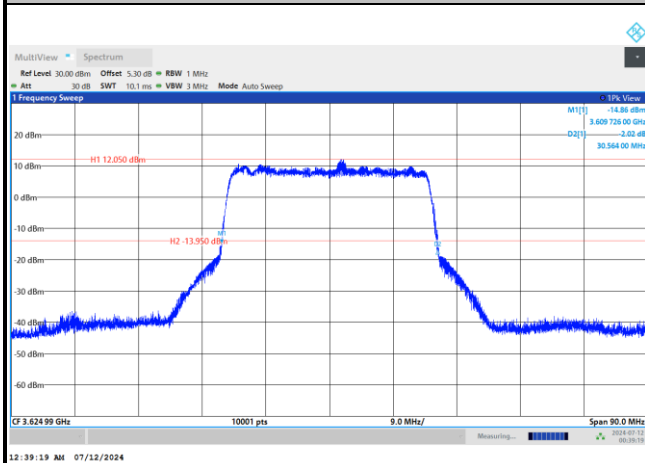
QPSK



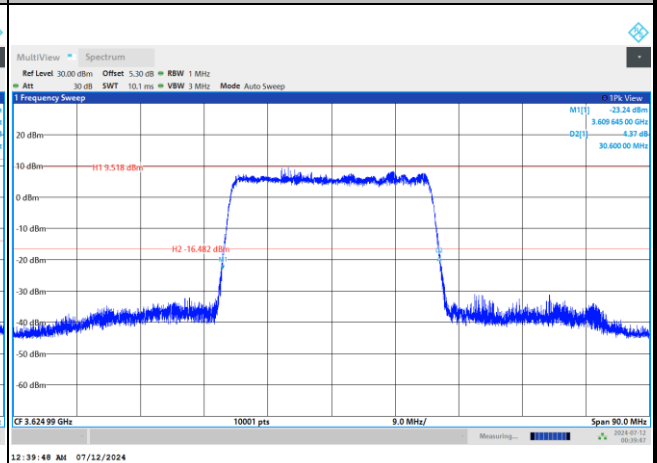
16QAM



64QAM



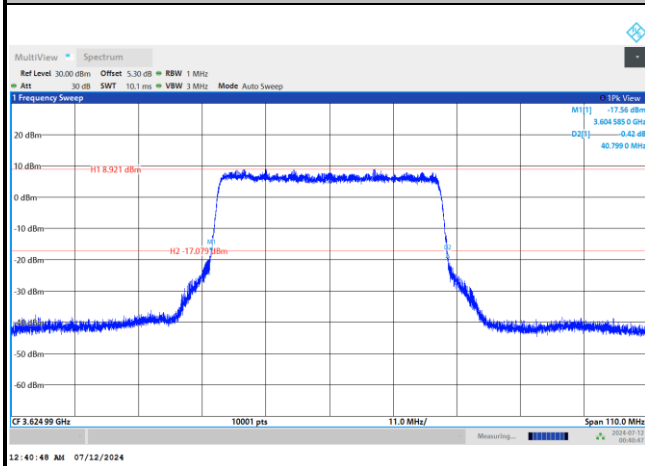
256QAM



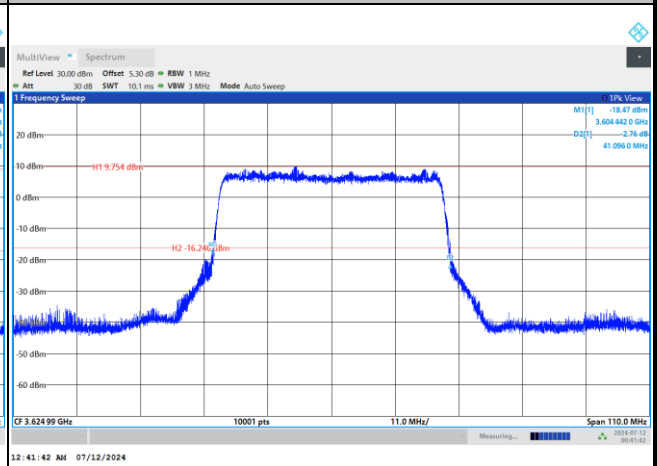


FR1 n48 / 40MHz / CP OFDM / Middle Channel / Full RB

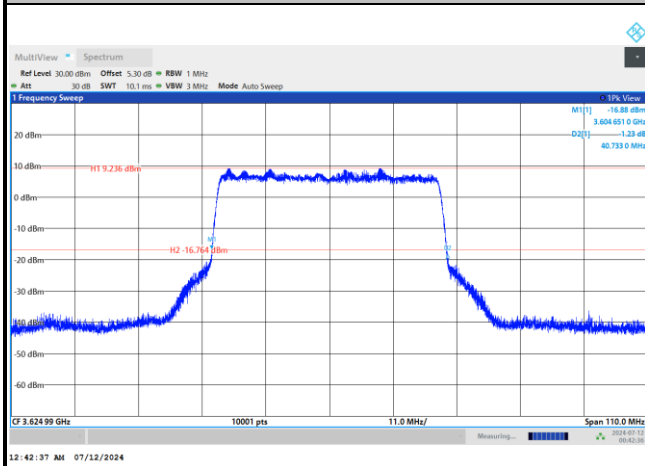
QPSK



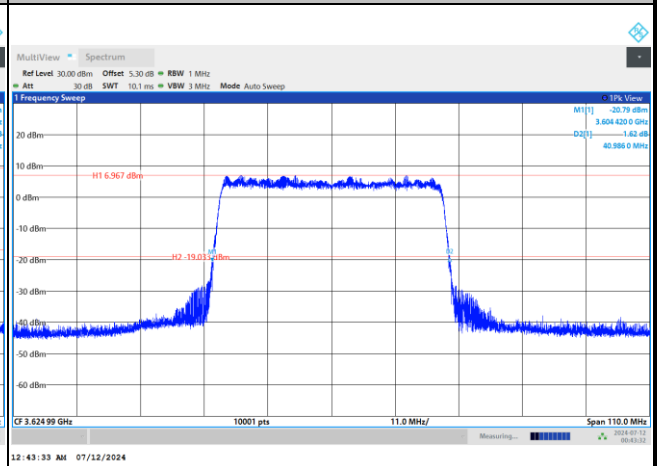
16QAM



64QAM



256QAM



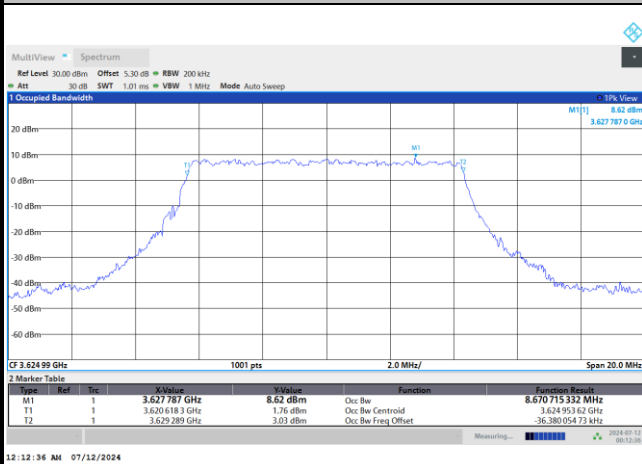
**Occupied Bandwidth**

Mode	FR1 n48 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		30MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	8.67	8.68	13.68	13.63	18.39	18.36	28.17	28.13
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	8.64	8.63	13.64	13.63	18.37	18.37	28.17	28.13
BW	40MHz		-		-		-	
Mod.	QPSK	16QAM	-	-	-	-	-	-
Middle CH	38.05	38.08	-	-	-	-	-	-
Mod.	64QAM	256QAM	-	-	-	-	-	-
Middle CH	38.06	38.08	-	-	-	-	-	-

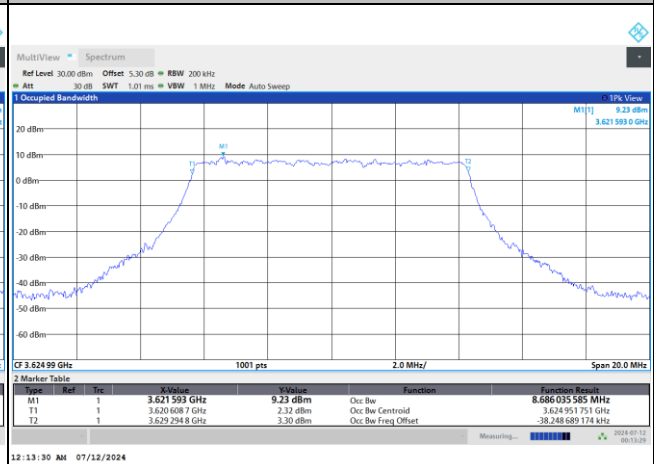


FR1 n48 / 10MHz / CP OFDM / Middle Channel / Full RB

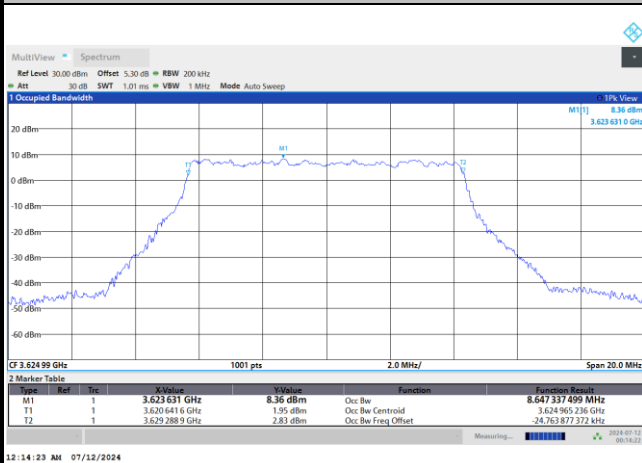
QPSK



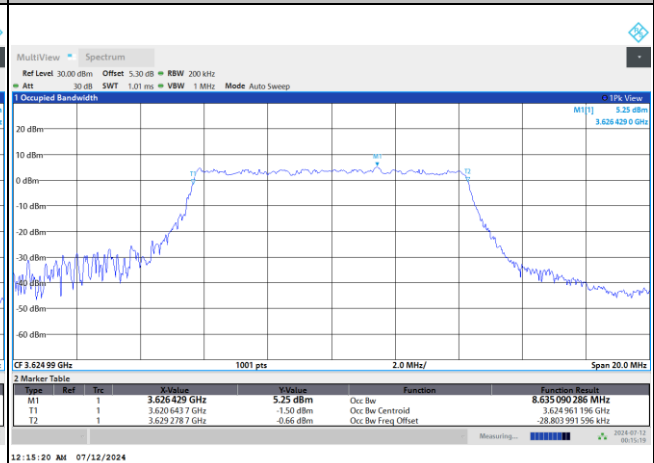
16QAM



64QAM



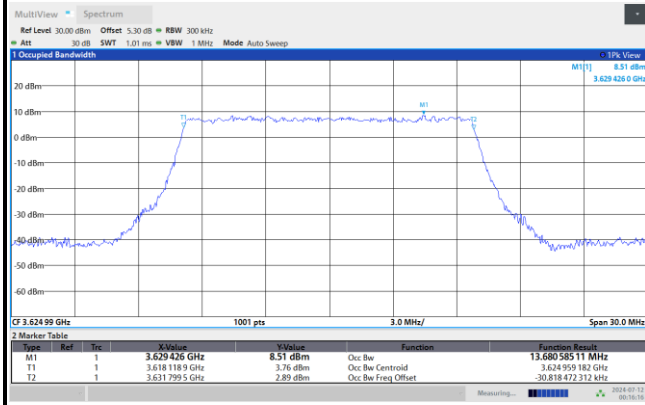
256QAM





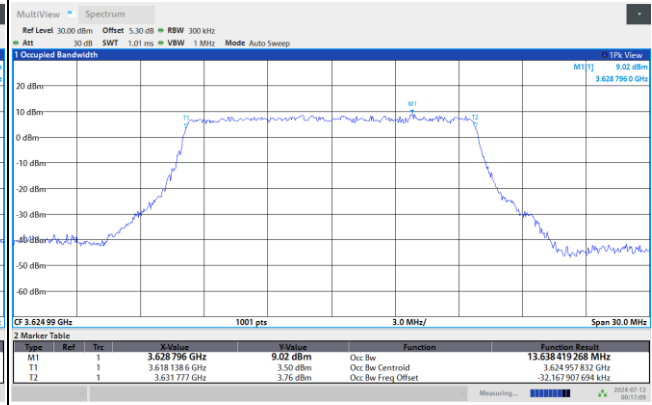
FR1 n48 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



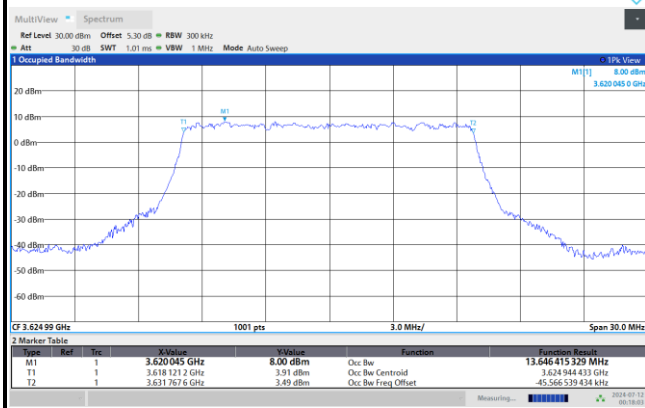
12:16:17 AM 07/12/2024

16QAM



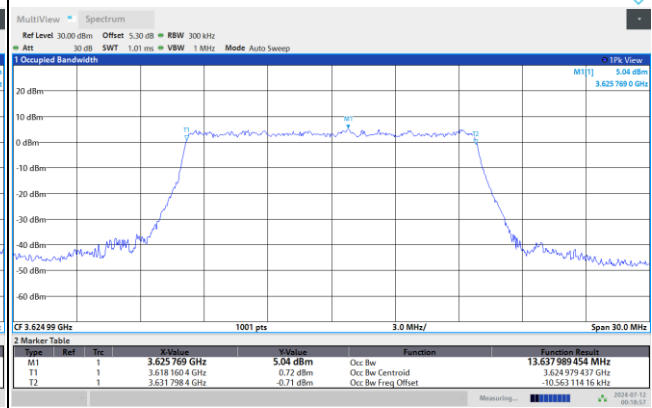
12:17:10 AM 07/12/2024

64QAM



12:18:03 AM 07/12/2024

256QAM

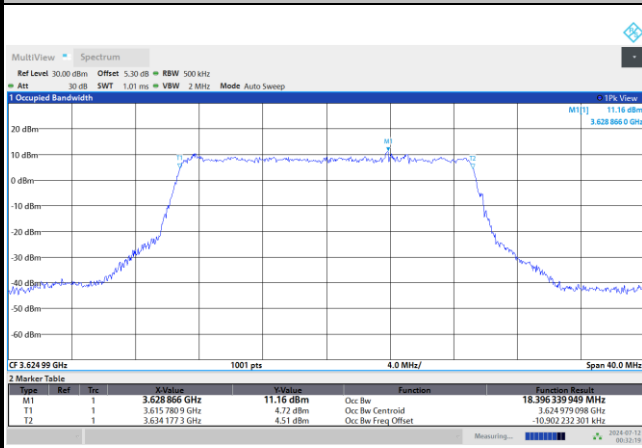


12:18:58 AM 07/12/2024



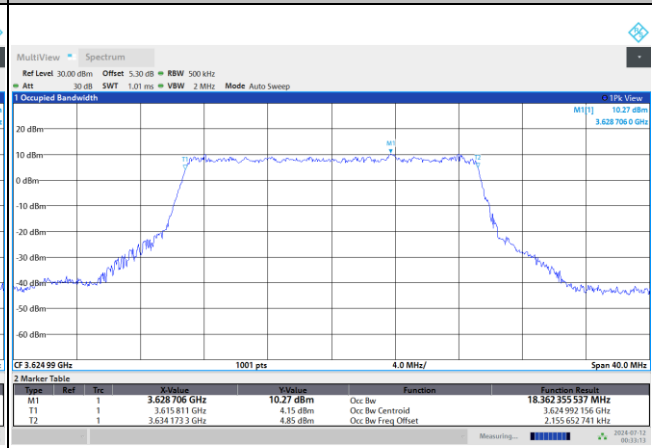
FR1 n48 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



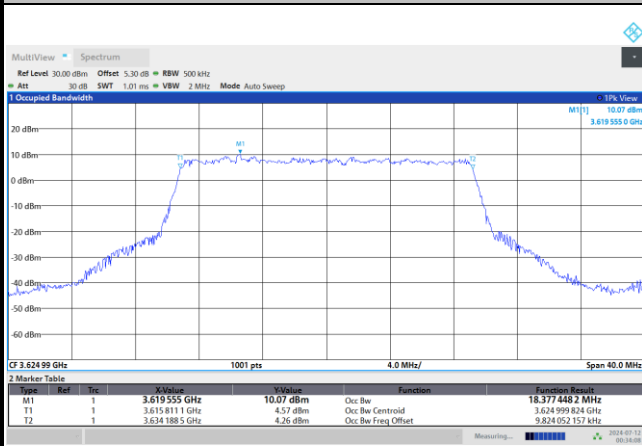
12:32:20 AM 07/12/2024

16QAM



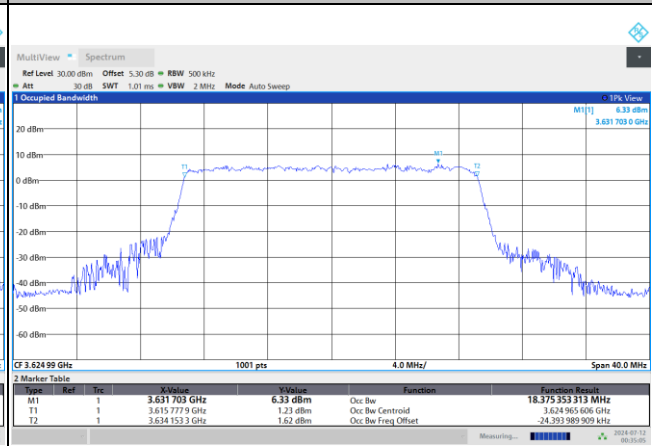
12:33:14 AM 07/12/2024

64QAM



12:34:09 AM 07/12/2024

256QAM

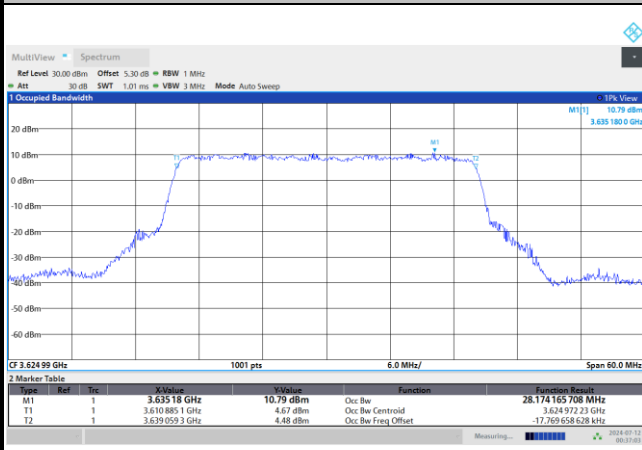


12:35:05 AM 07/12/2024



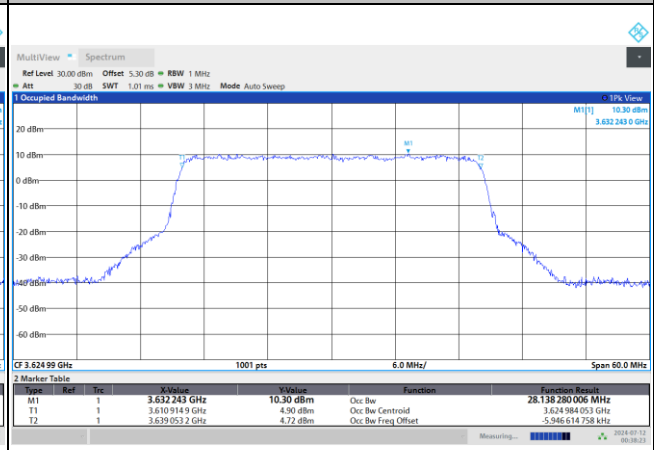
FR1 n48 / 30MHz / CP OFDM / Middle Channel / Full RB

QPSK



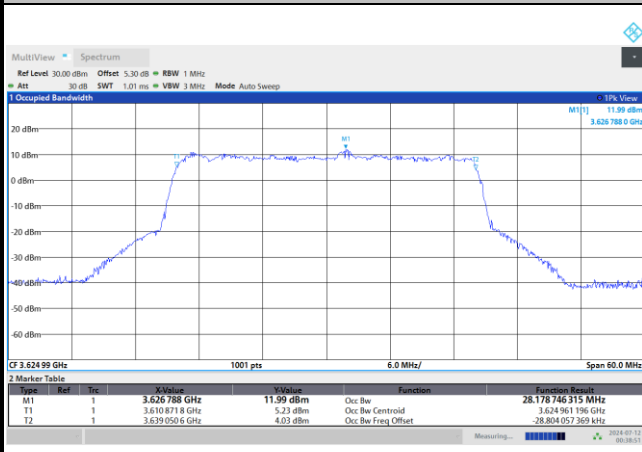
12:37:03 AM 07/12/2024

16QAM



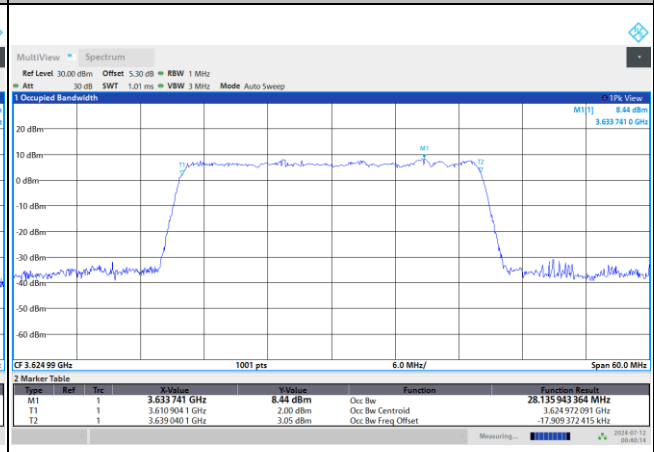
12:38:24 AM 07/12/2024

64QAM



12:38:52 AM 07/12/2024

256QAM

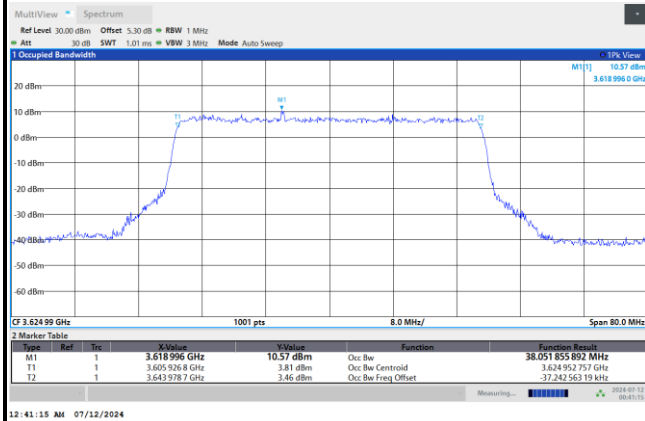


12:40:15 AM 07/12/2024

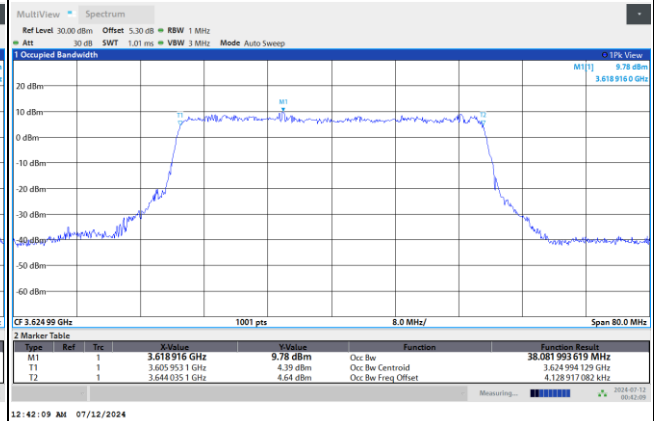


FR1 n48 / 40MHz / CP OFDM / Middle Channel / Full RB

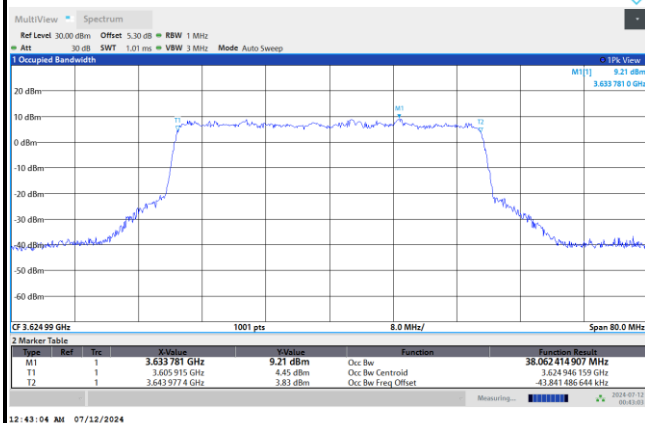
QPSK



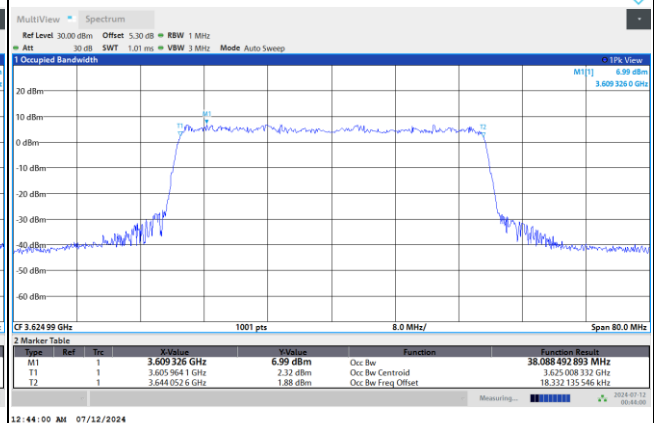
16QAM



64QAM



256QAM



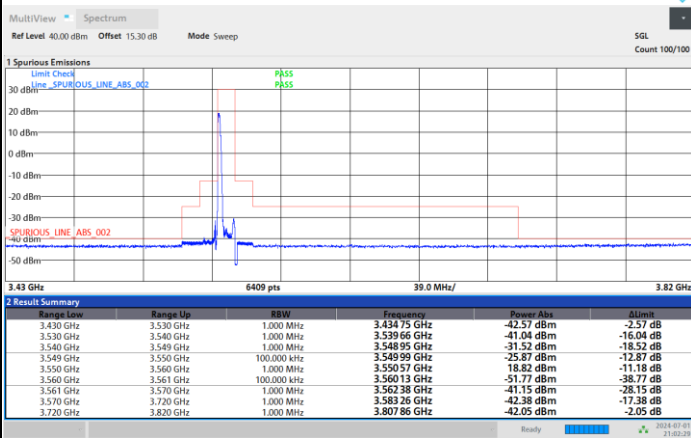
**Unwanted Emission (MASK)**

FR1 n48 / 10MHz / CP OFDM / QPSK

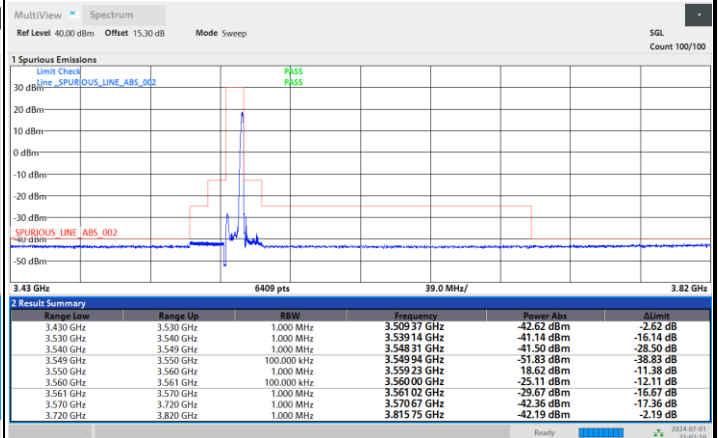
Lowest Channel

1RB0

1RBmax

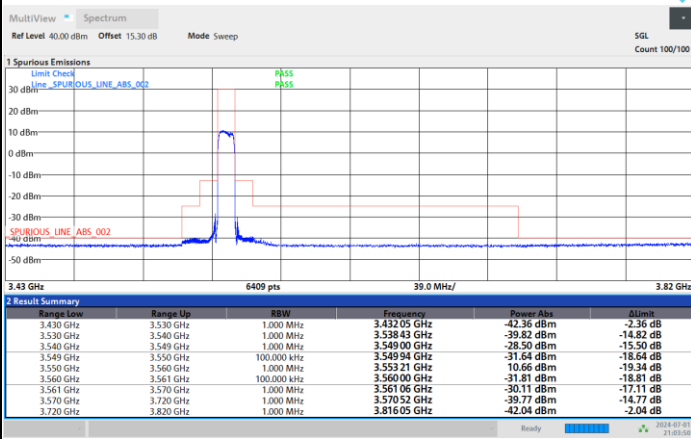


09:02:30 PM 07/01/2024



09:03:11 PM 07/01/2024

Full RB



09:03:51 PM 07/01/2024

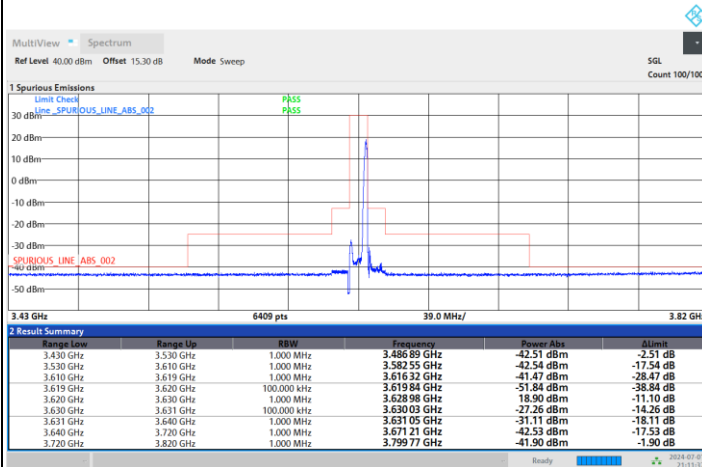
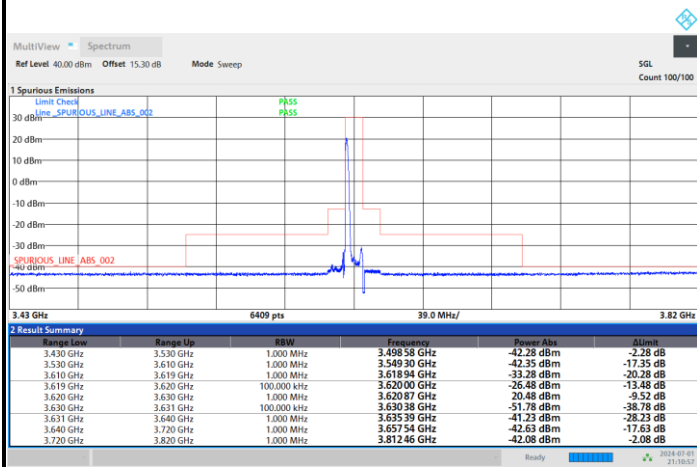


FR1 n48 / 10MHz / CP OFDM / QPSK

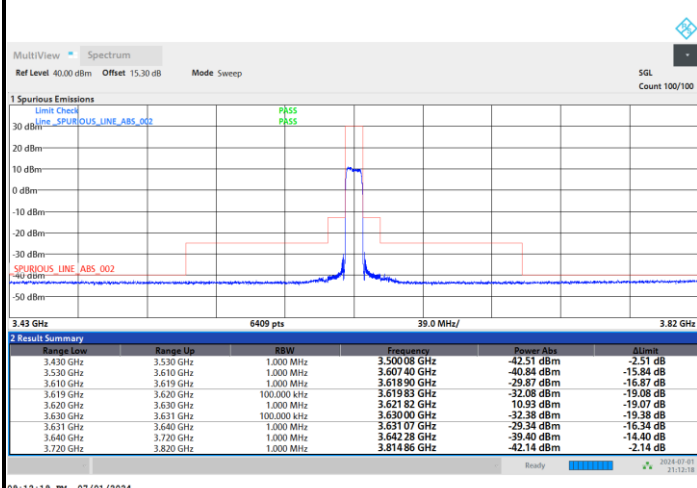
Middle Channel

1RB0

1RBmax



Full RB

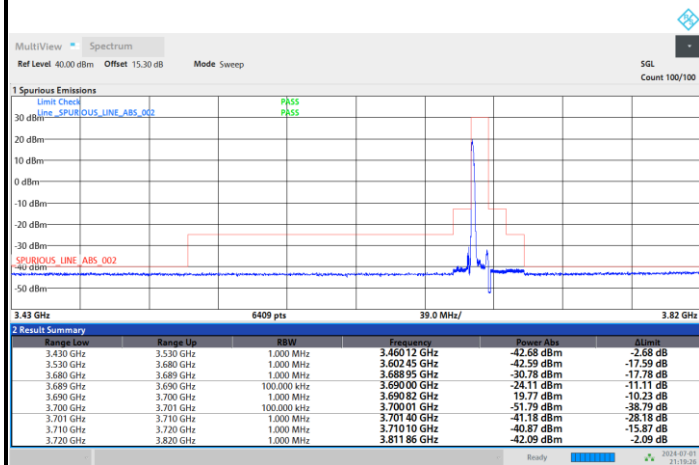




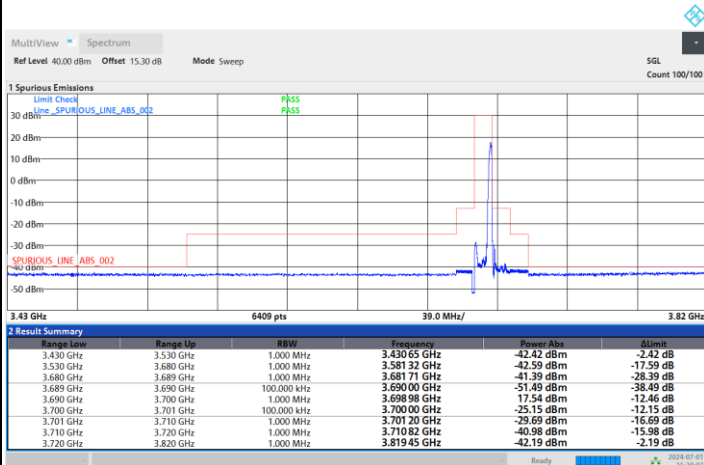
FR1 n48 / 10MHz / CP OFDM / QPSK

Highest Channel

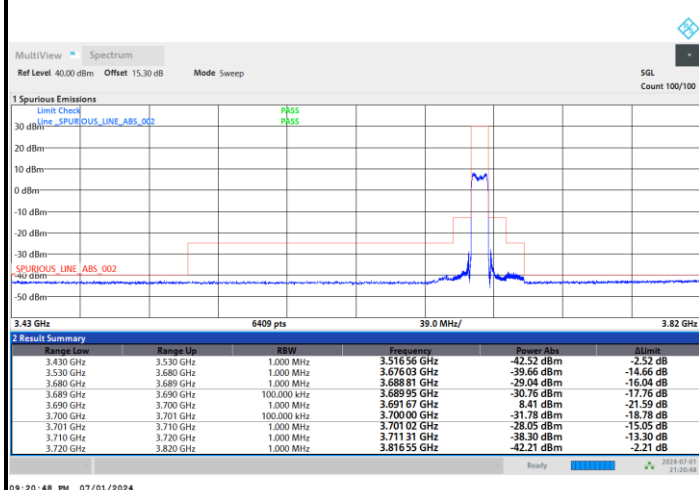
1RB0



1RBmax



Full RB

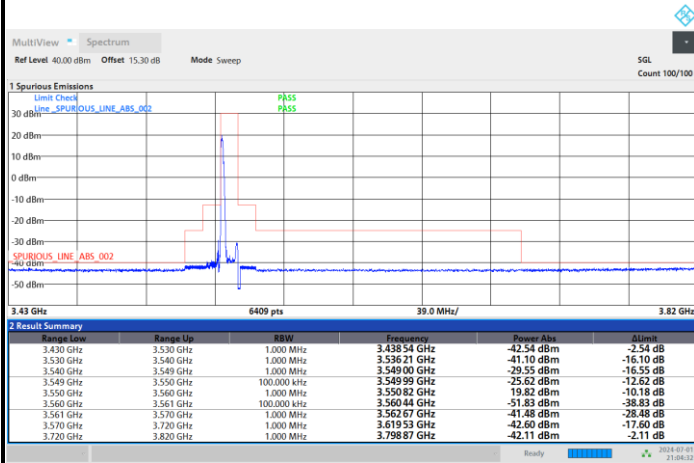




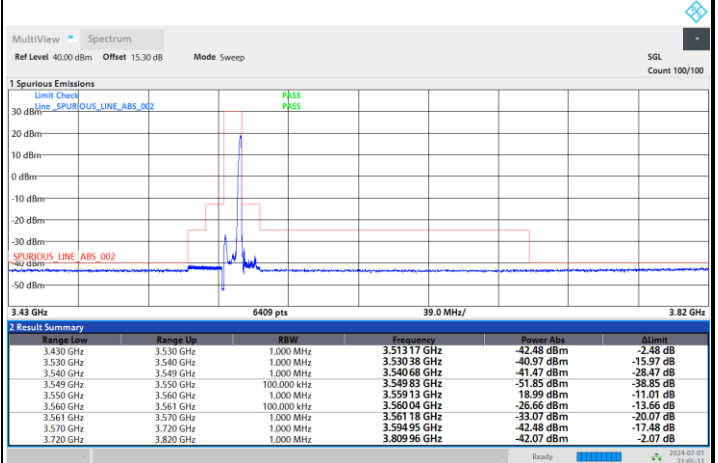
FR1 n48 / 10MHz / CP OFDM / 16QAM

Lowest Channel

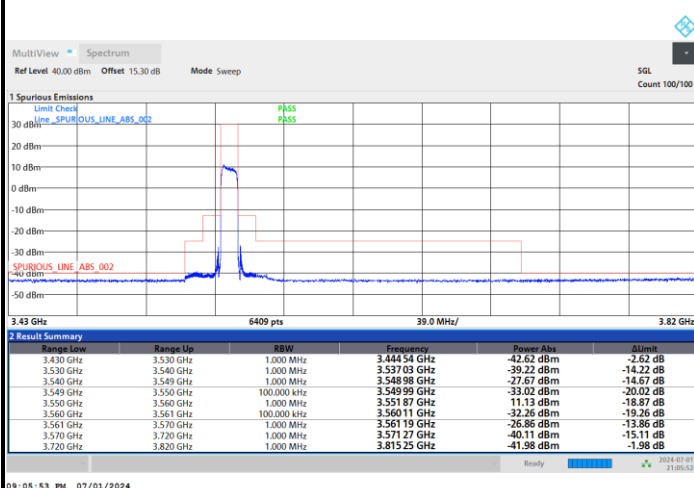
1RB0



1RBmax



Full RB

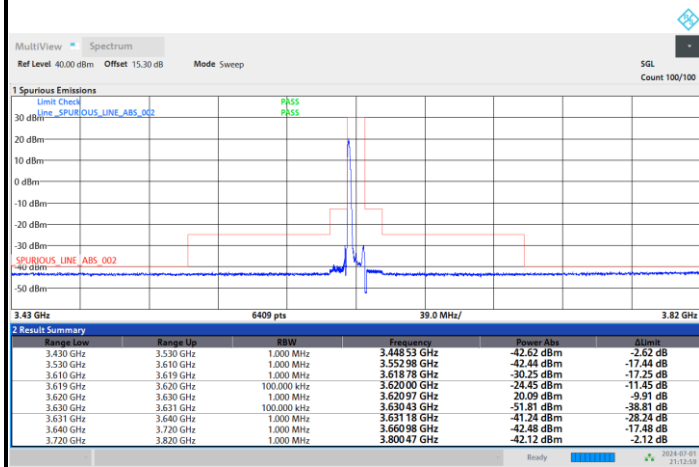




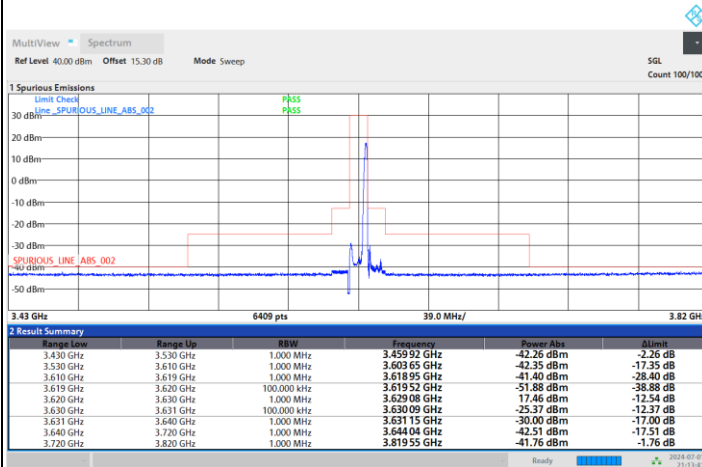
FR1 n48 / 10MHz / CP OFDM / 16QAM

Middle Channel

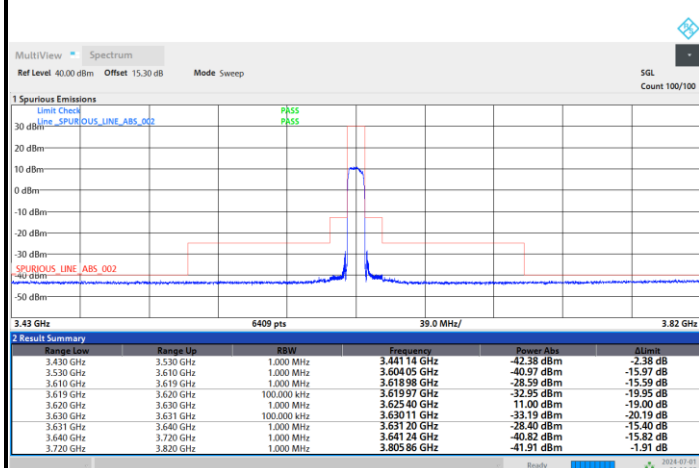
1RB0



1RBmax



Full RB

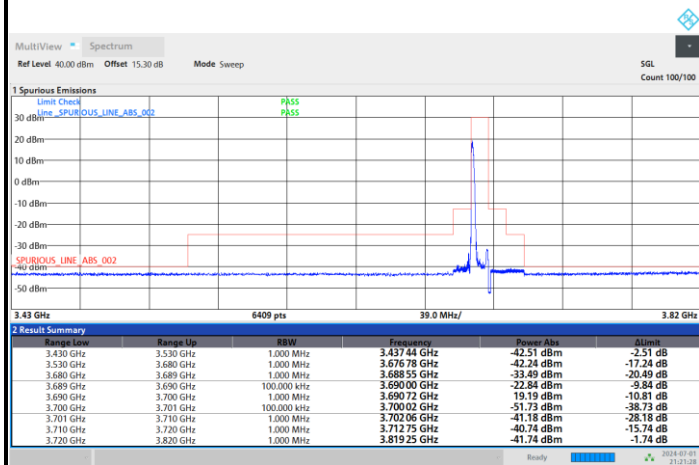




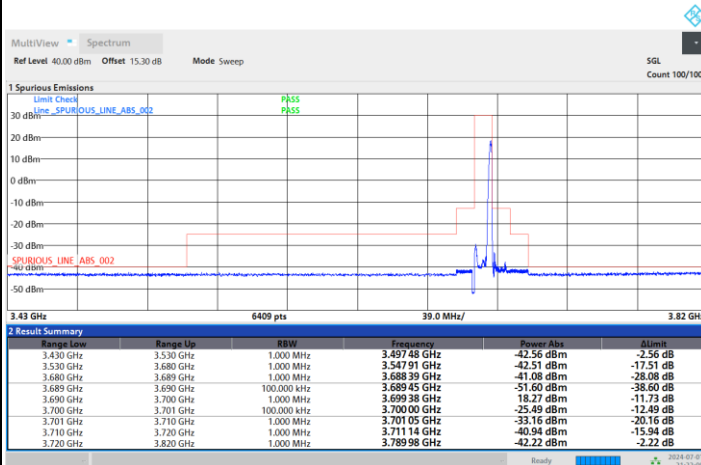
FR1 n48 / 10MHz / CP OFDM / 16QAM

Highest Channel

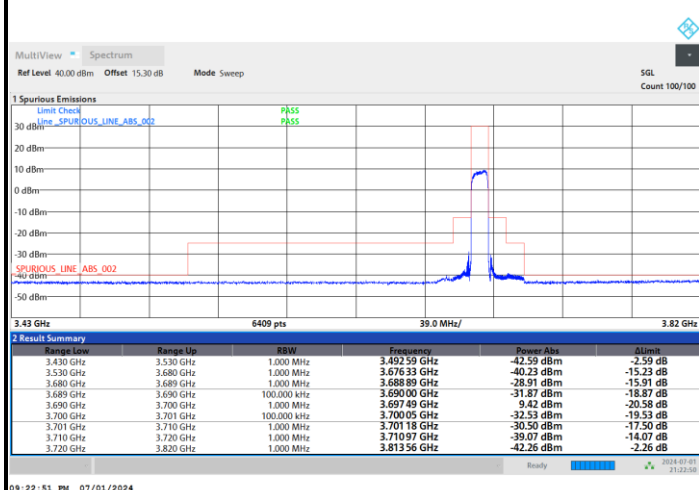
1RB0



1RBmax



Full RB

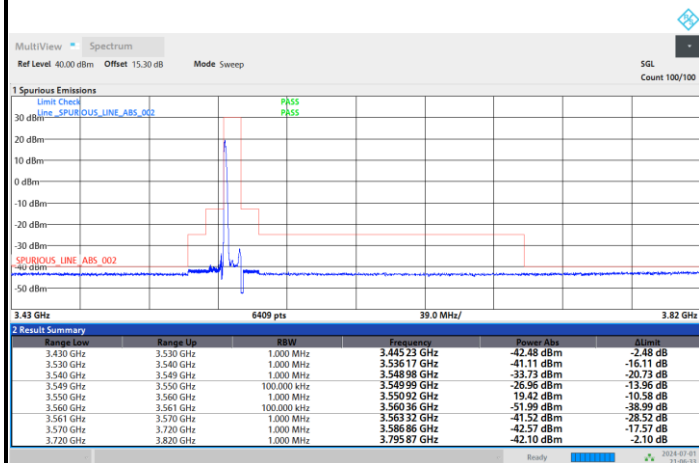




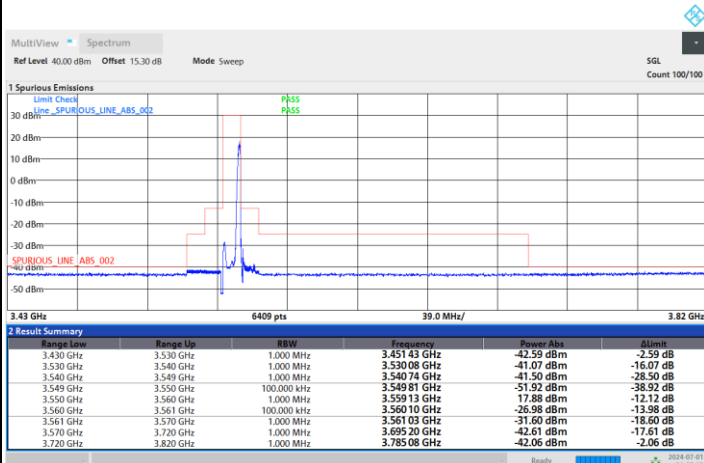
FR1 n48 / 10MHz / CP OFDM / 64QAM

Lowest Channel

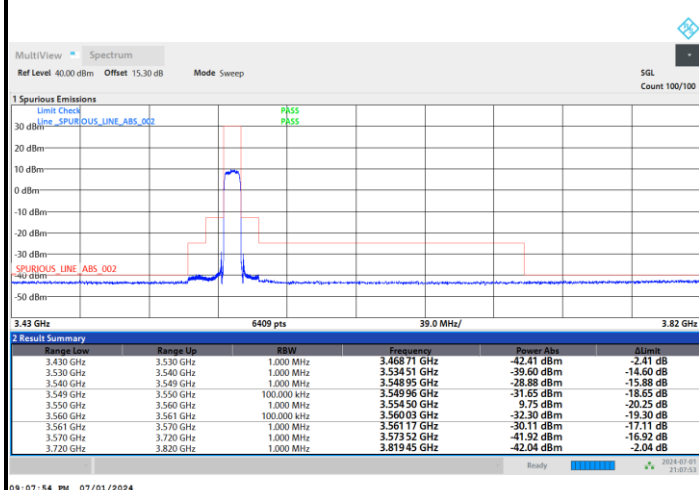
1RB0



1RBmax



Full RB



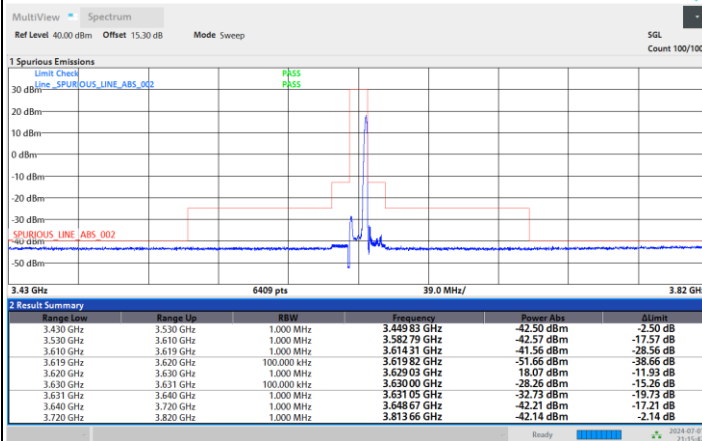
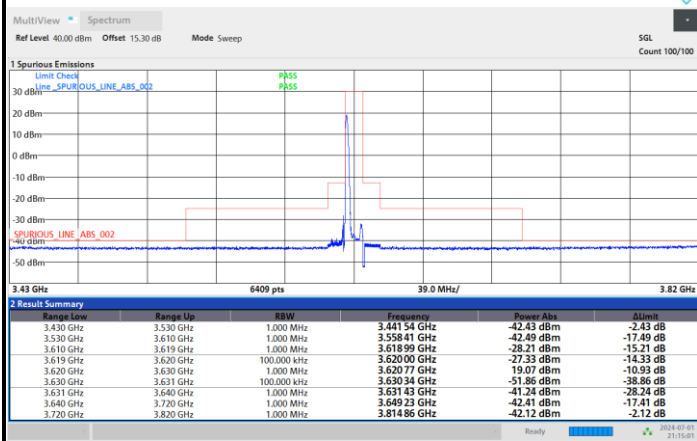


FR1 n48 / 10MHz / CP OFDM / 64QAM

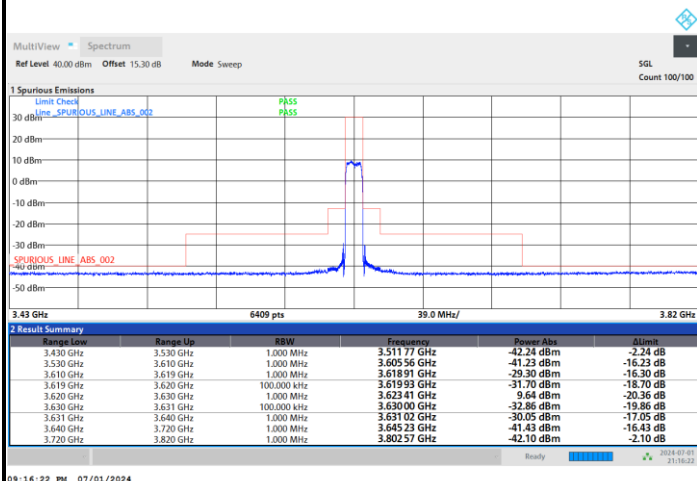
Middle Channel

1RB0

1RBmax



Full RB

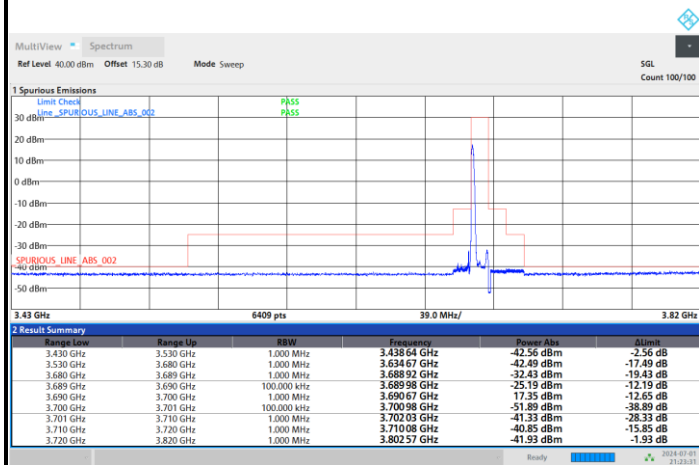




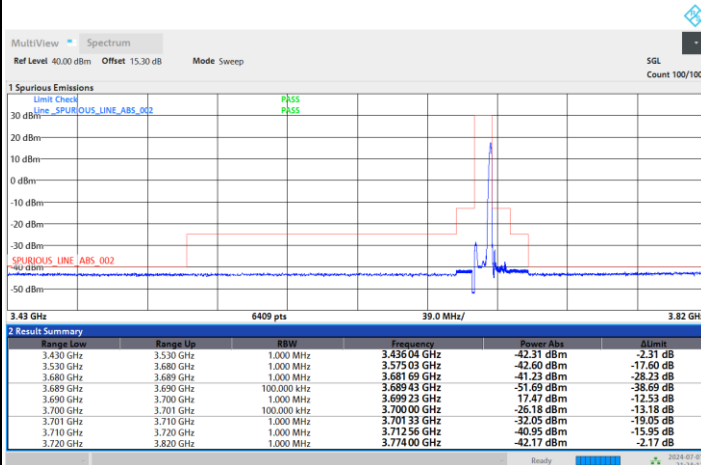
FR1 n48 / 10MHz / CP OFDM / 64QAM

Highest Channel

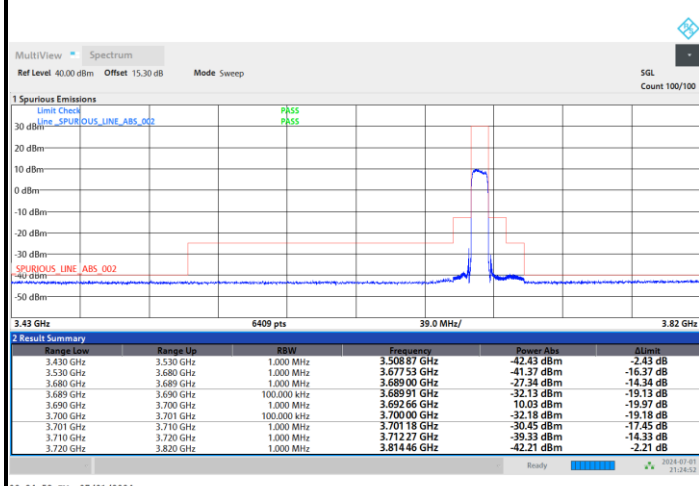
1RB0



1RBmax



Full RB

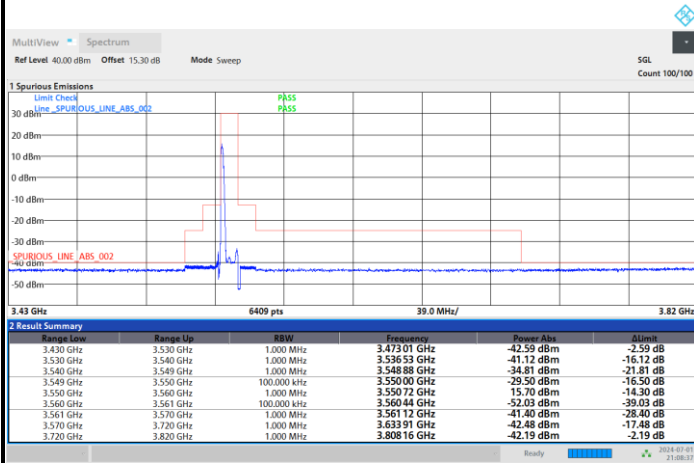




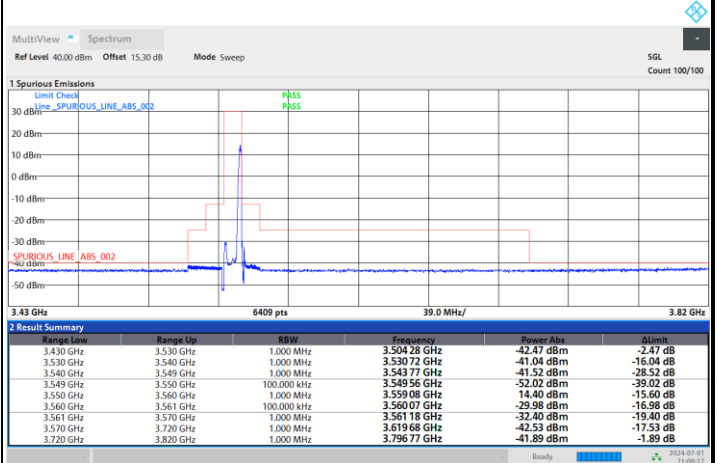
FR1 n48 / 10MHz / CP OFDM / 256QAM

Lowest Channel

1RB0



1RBmax



Full RB

