

Frequency Stability

Test Conditions		FR1 n48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0043	
30	Normal Voltage	0.0052	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0034	
-20	Normal Voltage	0.0055	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

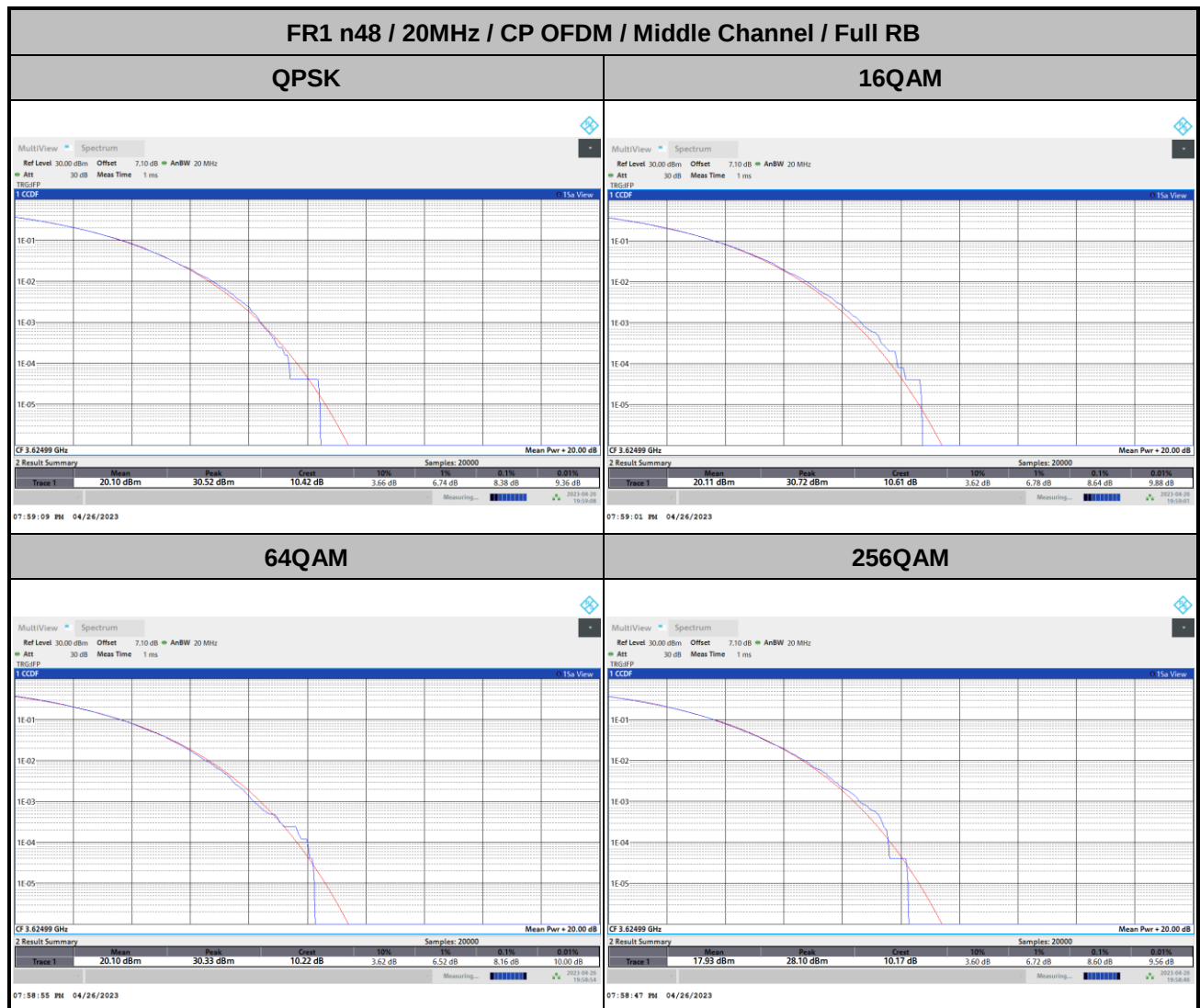
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



MIMO <Ant. 7>

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	8.38	8.64	8.16	8.60	PASS



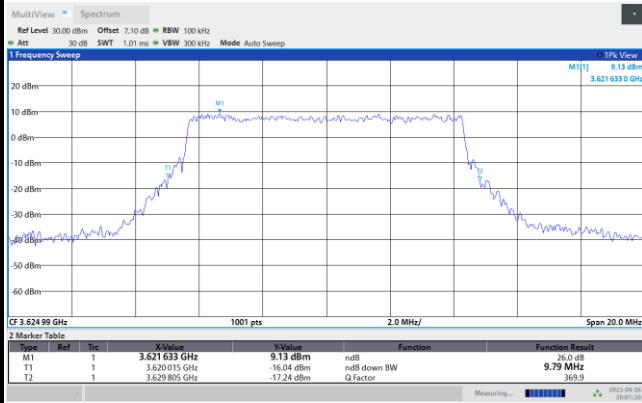
**26dB Bandwidth**

Mode	FR1 n48 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	9.79	9.63	15.17	14.75	19.78	19.98	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	9.47	9.59	14.90	15.05	20.02	19.94	-	-
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	41.80	40.76	-	-	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	40.76	40.68	-	-	-	-
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	-	-	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	-	-	-	-

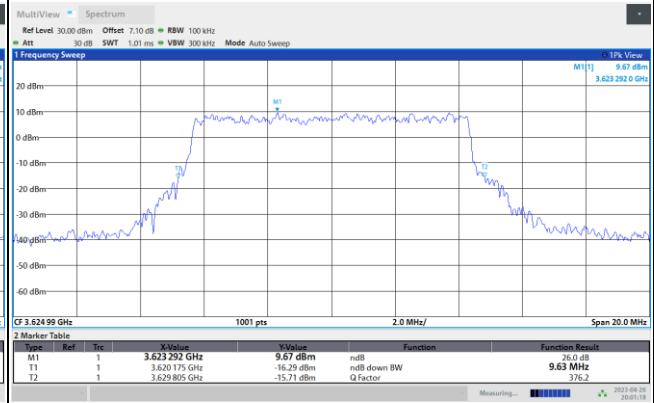


FR1 n48 / 10MHz / CP OFDM / Middle Channel / Full RB

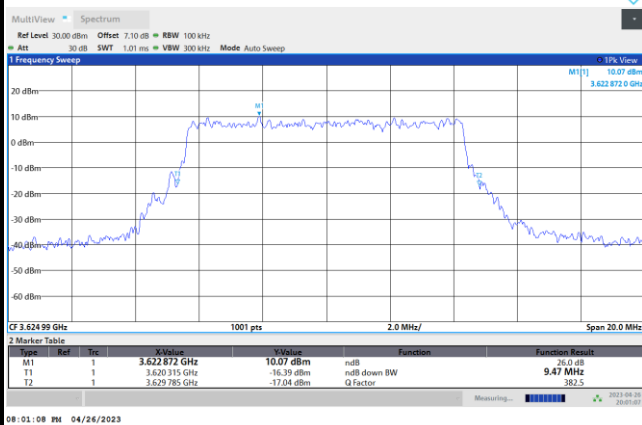
QPSK



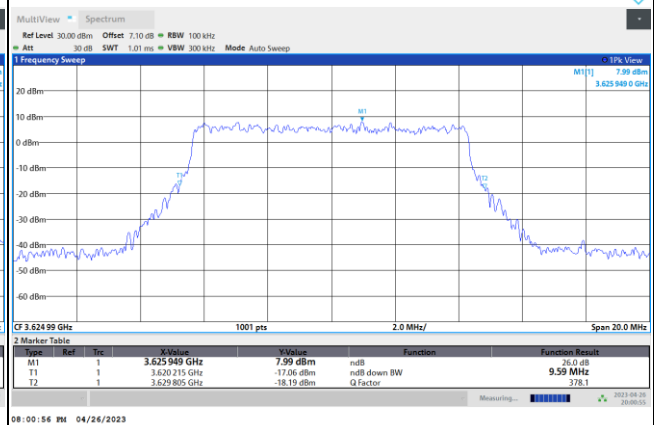
16QAM



64QAM



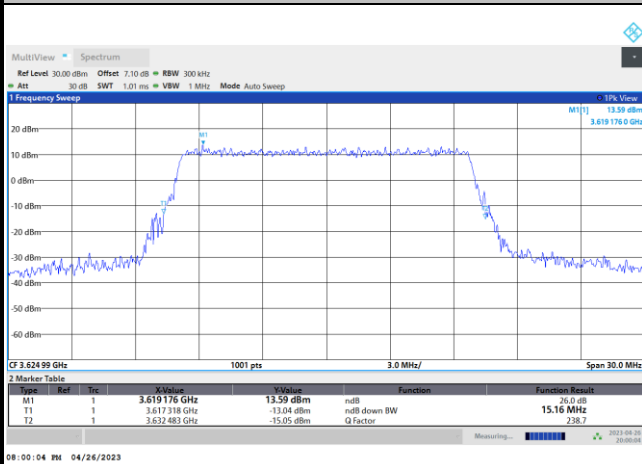
256QAM



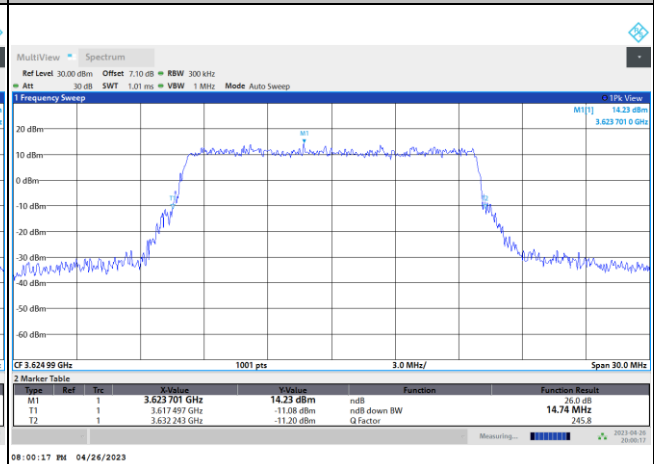


FR1 n48 / 15MHz / CP OFDM / Middle Channel / Full RB

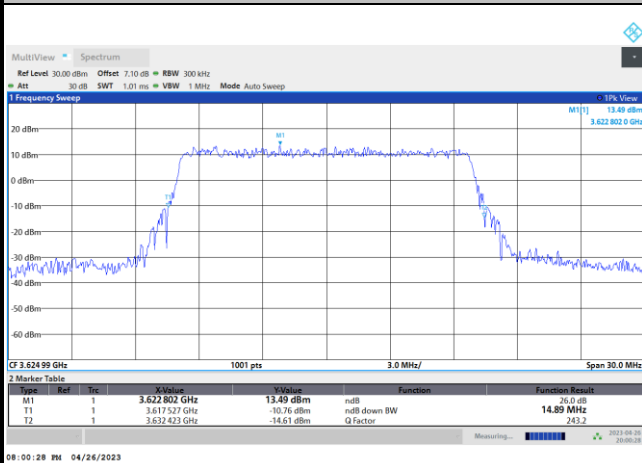
QPSK



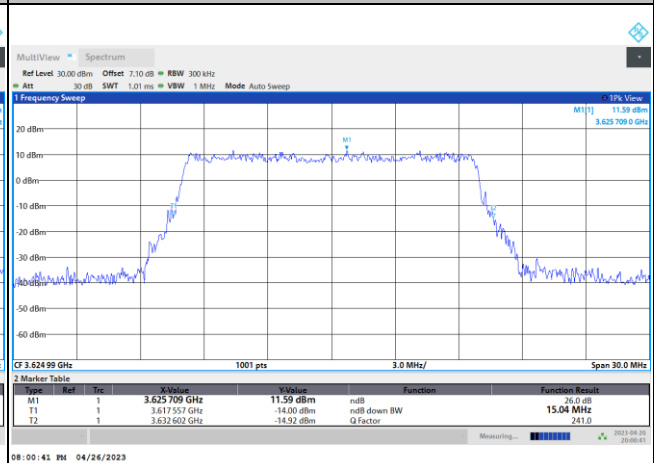
16QAM



64QAM



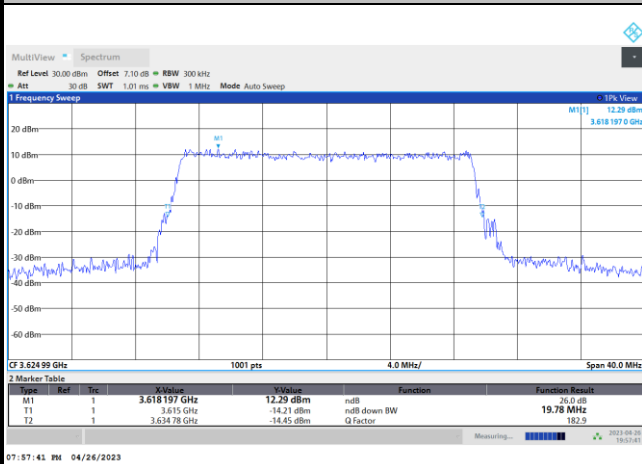
256QAM



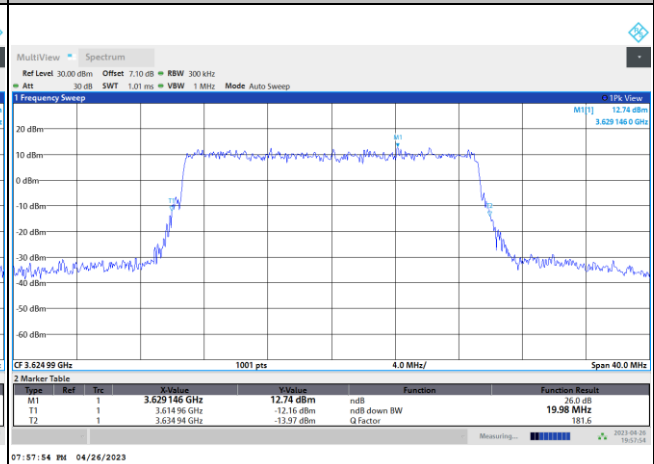


FR1 n48 / 20MHz / CP OFDM / Middle Channel / Full RB

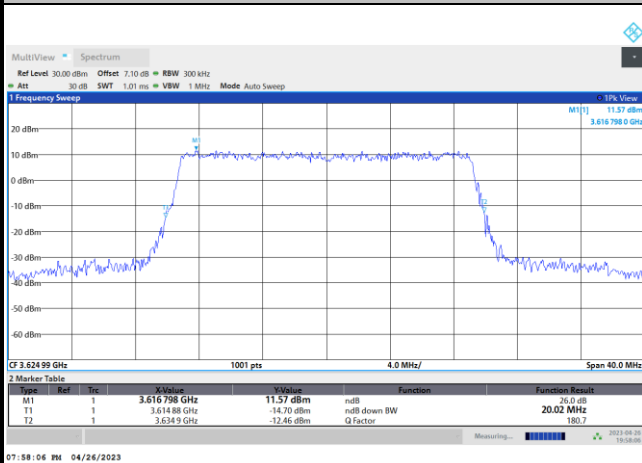
QPSK



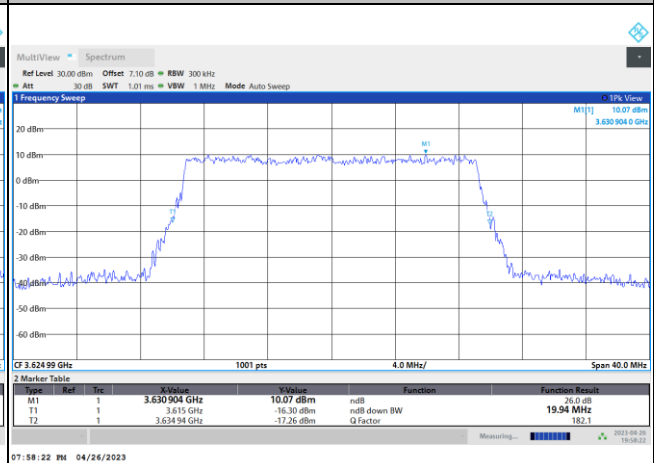
16QAM



64QAM



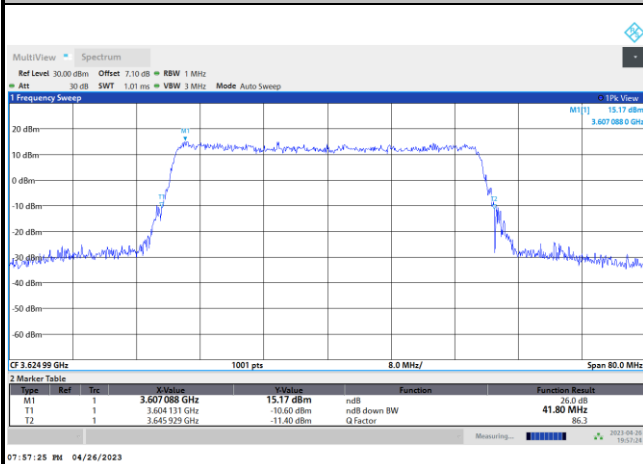
256QAM



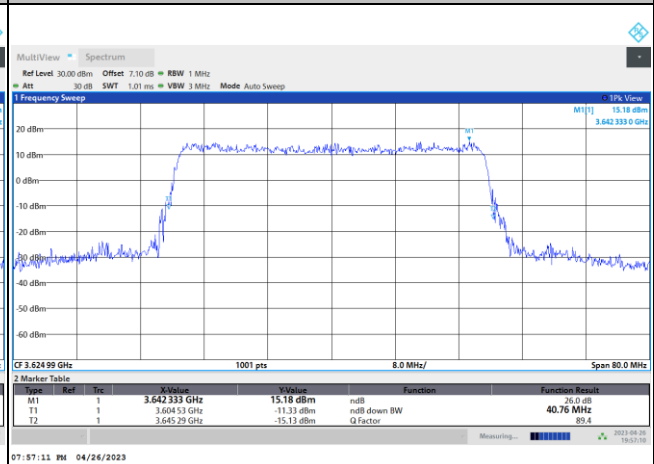


FR1 n48 / 40MHz / CP OFDM / Middle Channel / Full RB

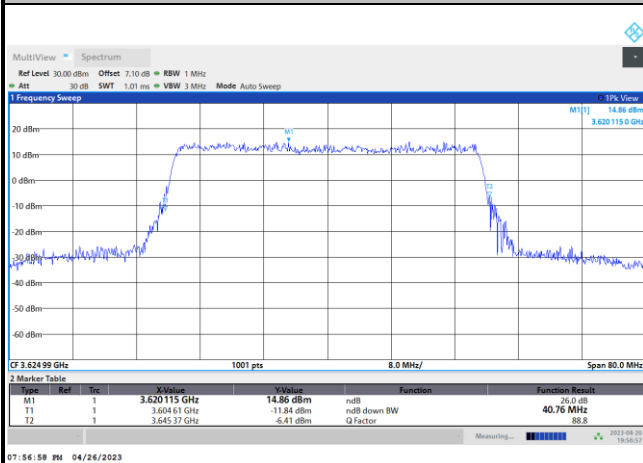
QPSK



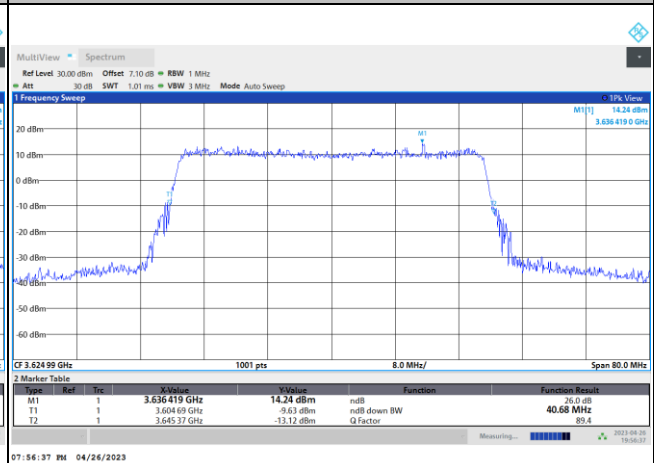
16QAM



64QAM



256QAM



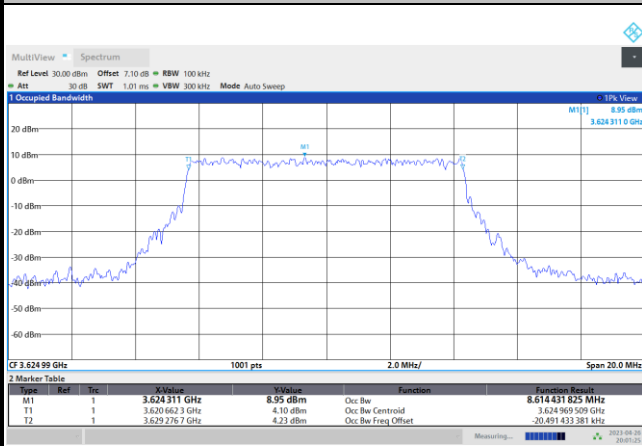
**Occupied Bandwidth**

Mode	FR1 n48 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	8.61	8.58	13.67	13.66	18.27	18.28	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	8.61	8.59	13.62	13.71	18.25	18.30	-	-
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	38.29	38.20	-	-	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	38.15	38.11	-	-	-	-
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	-	-	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	-	-	-	-

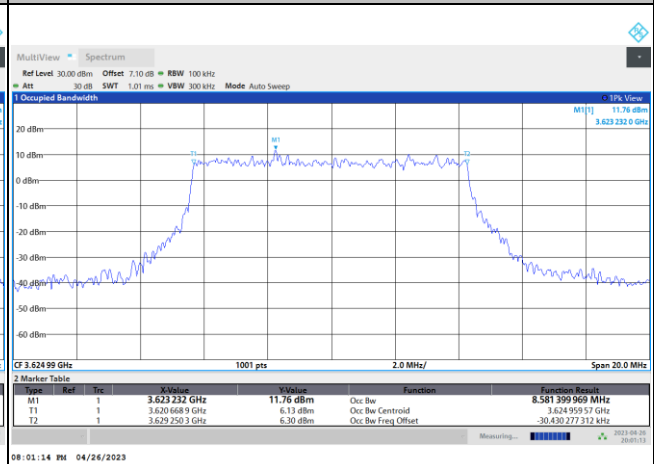


FR1 n48 / 10MHz / CP OFDM / Middle Channel / Full RB

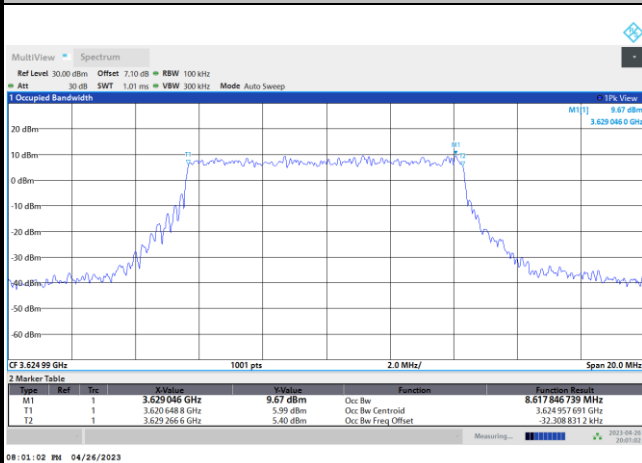
QPSK



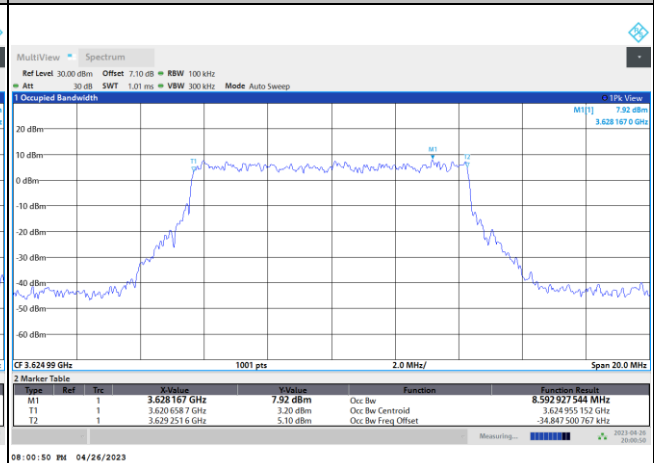
16QAM



64QAM



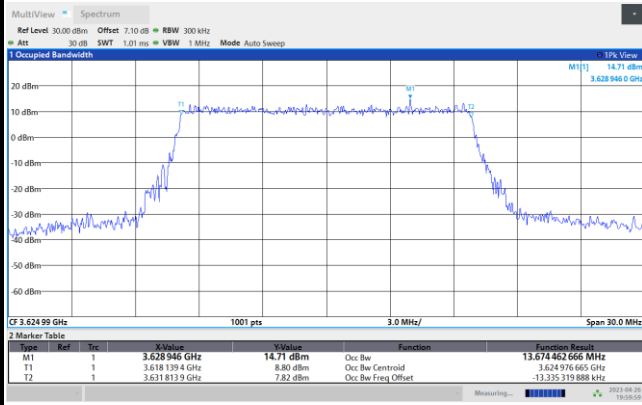
256QAM



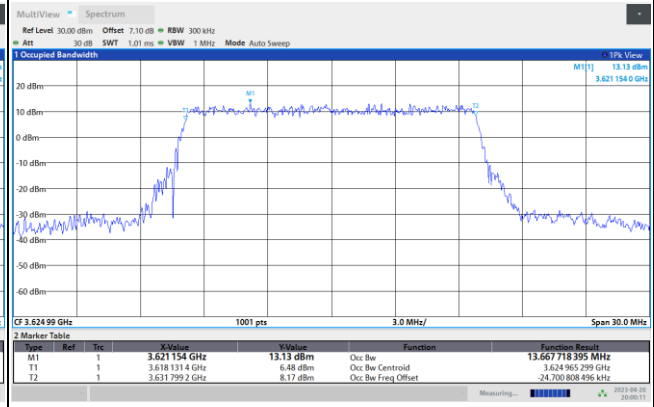


FR1 n48 / 15MHz / CP OFDM / Middle Channel / Full RB

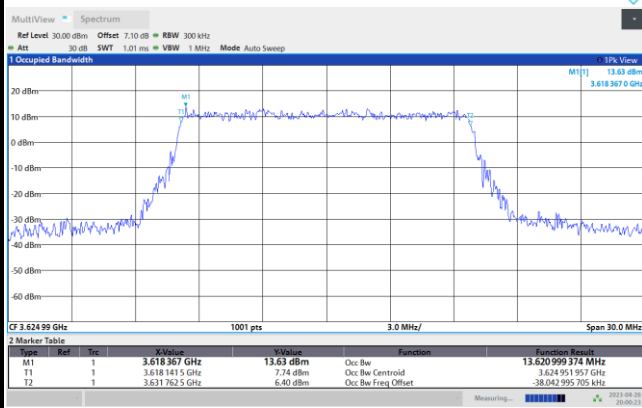
QPSK



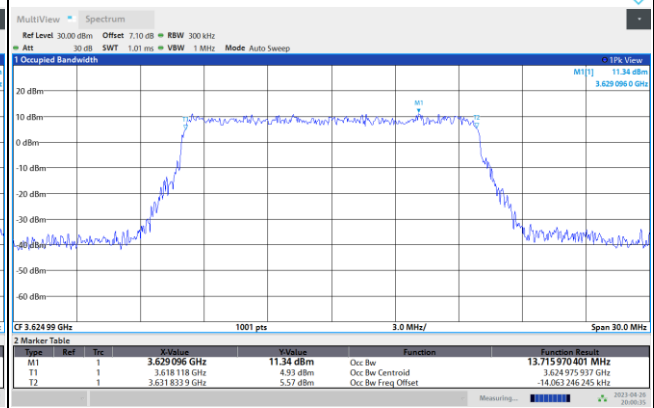
16QAM



64QAM



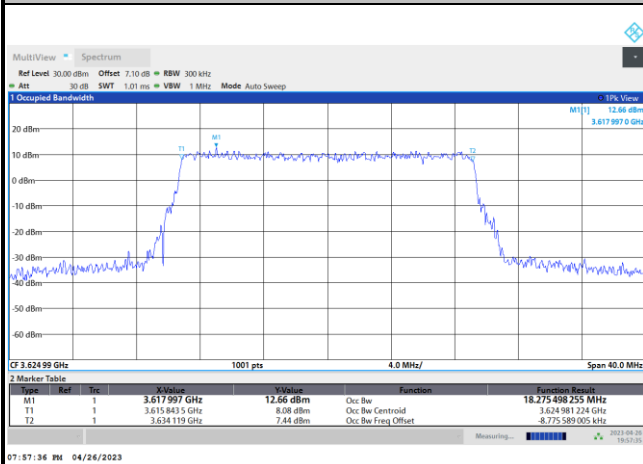
256QAM





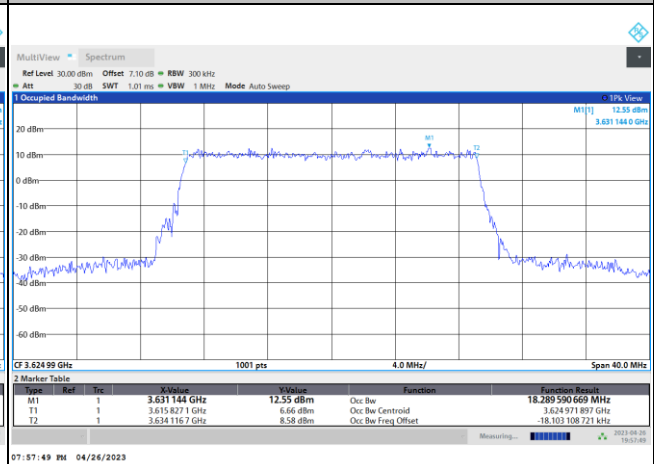
FR1 n48 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



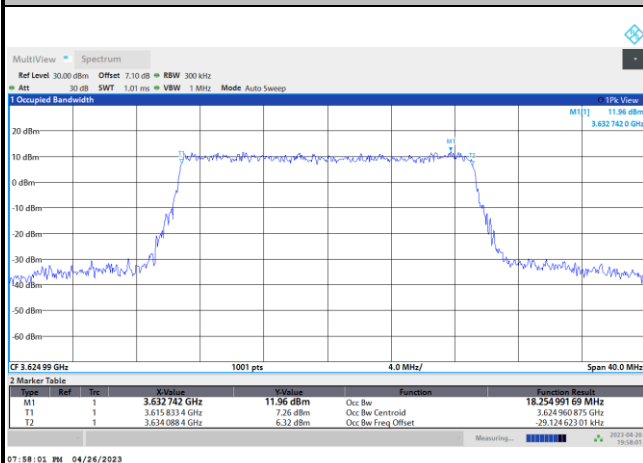
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16QAM



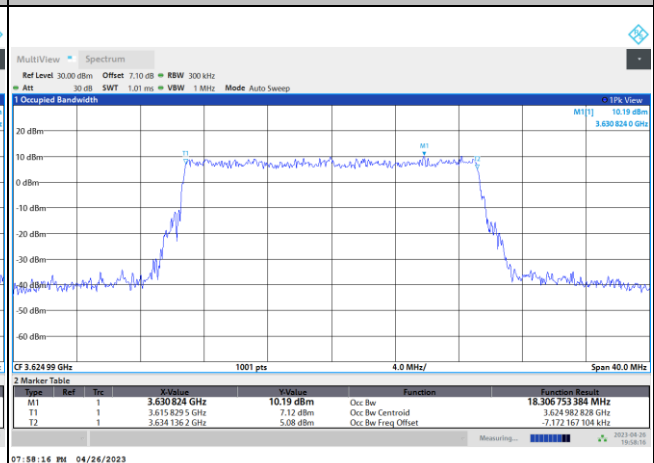
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64QAM



07:58:01 PM 04/26/2023

256QAM

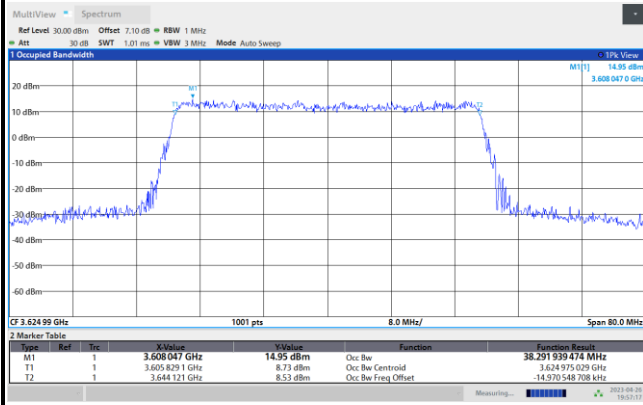


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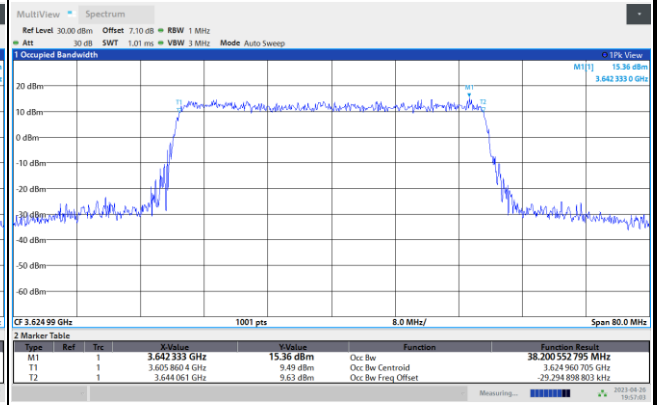
FR1 n48 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



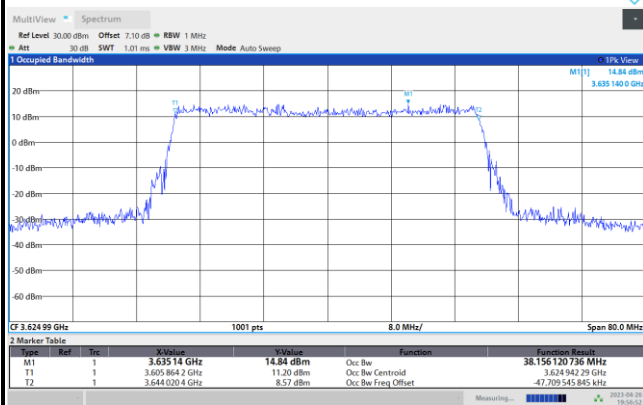
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16QAM



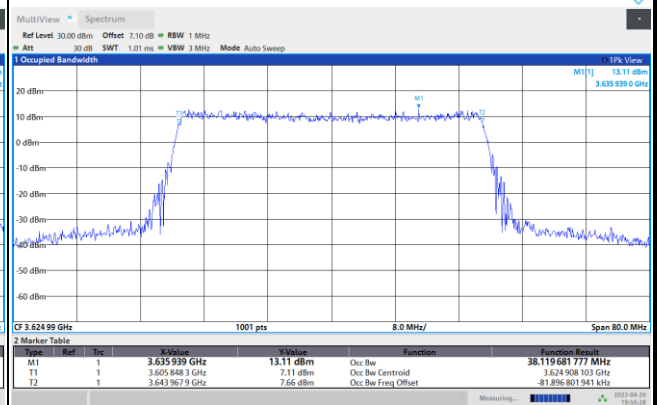
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64QAM



07:56:52 PM 04/26/2023

256QAM



07:56:29 PM 04/26/2023

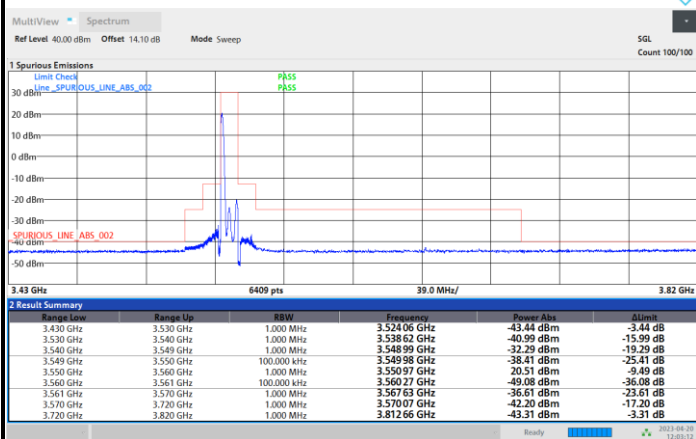
**Unwanted Emission (MASK)**

FR1 n48 / 10MHz / CP OFDM / QPSK

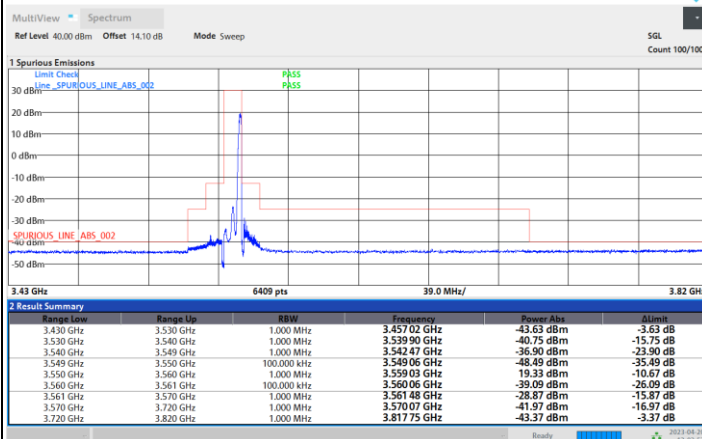
Lowest Channel

1RB0

1RBmax

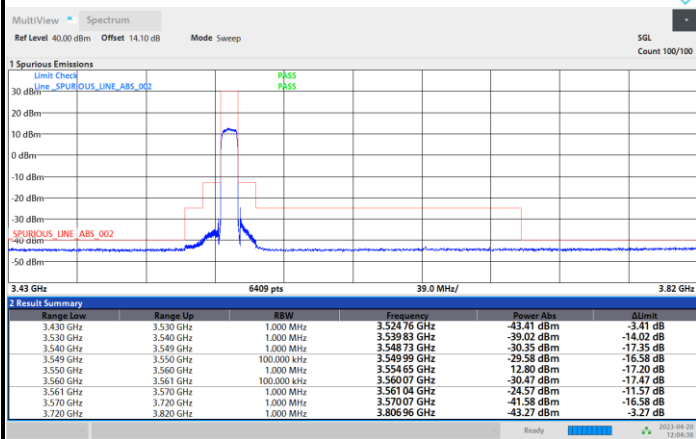


12:03:12 PM 04/20/2023



12:03:55 PM 04/20/2023

Full RB



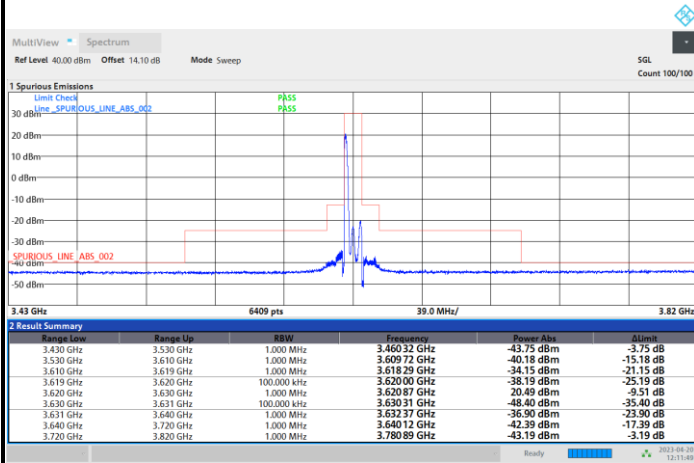
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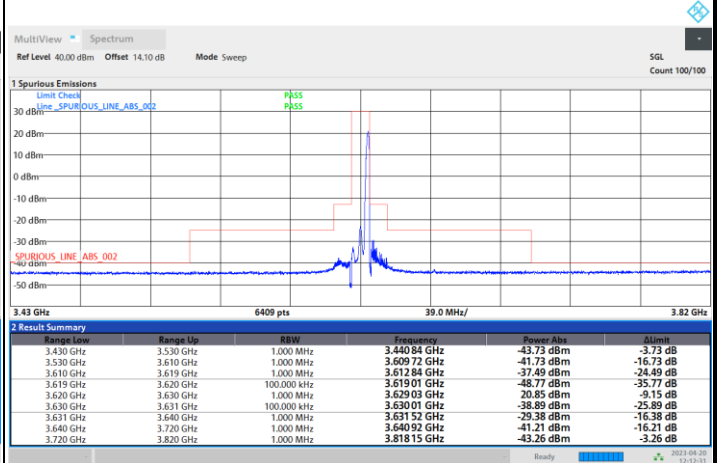
FR1 n48 / 10MHz / CP OFDM / QPSK

Middle Channel

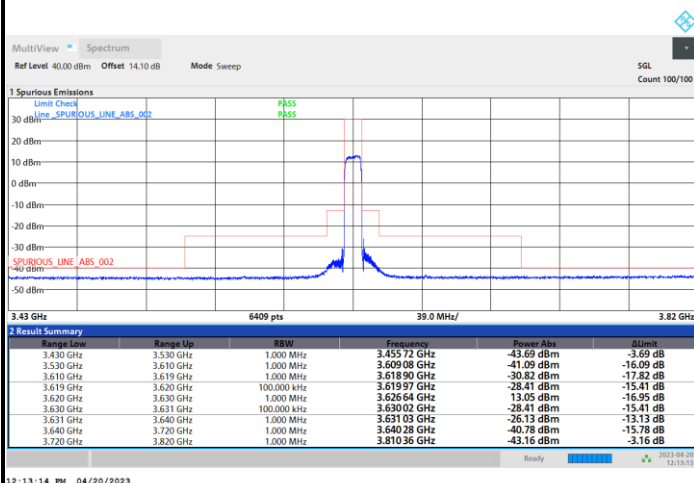
1RB0



1RBmax



Full RB

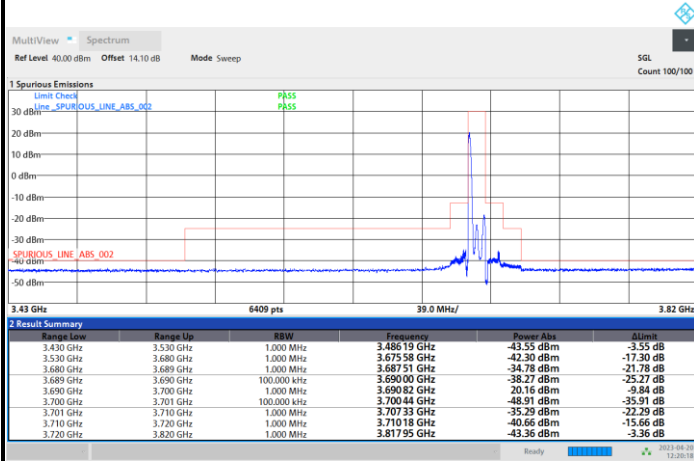




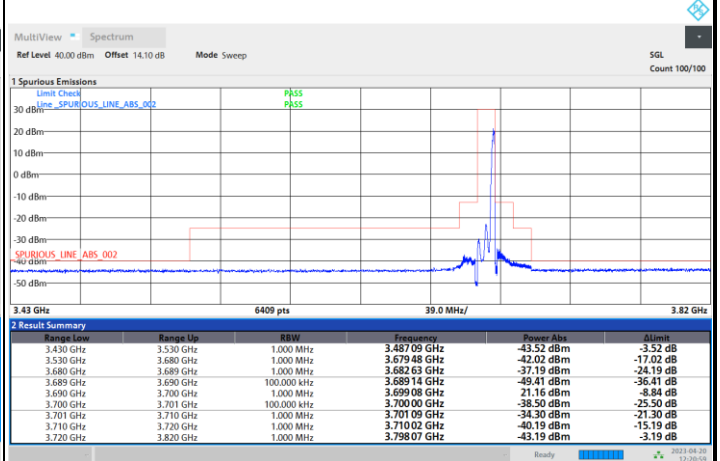
FR1 n48 / 10MHz / CP OFDM / QPSK

Highest Channel

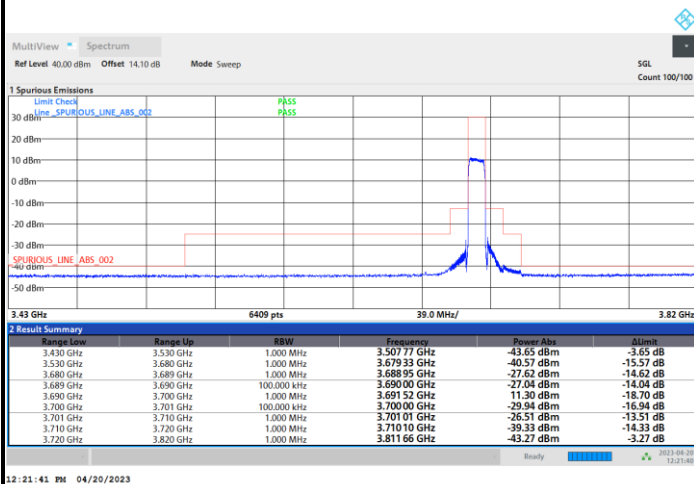
1RB0



1RBmax



Full RB

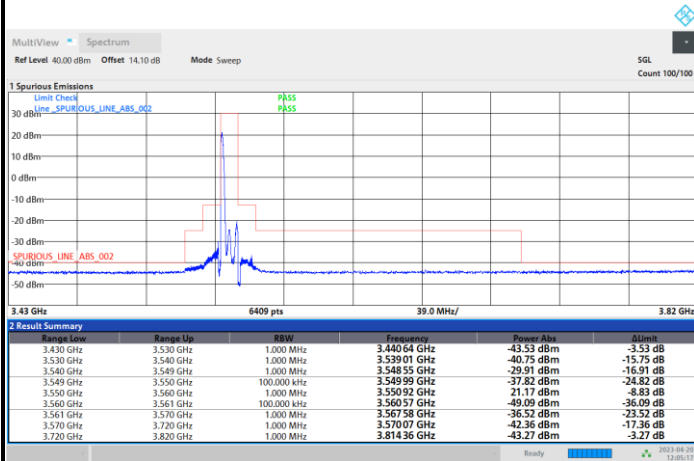




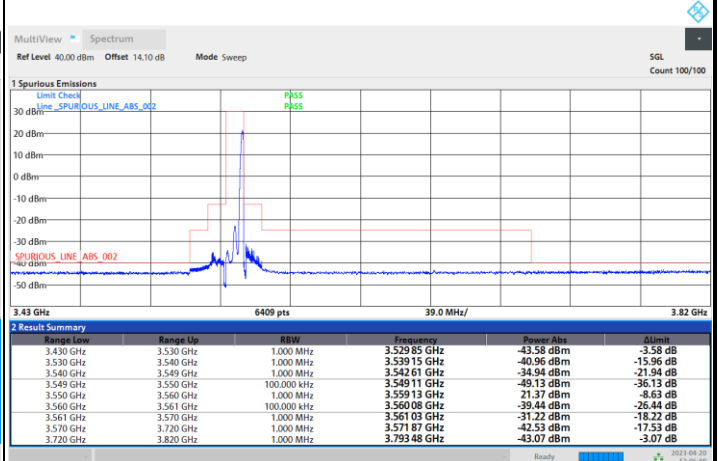
FR1 n48 / 10MHz / CP OFDM / 16QAM

Lowest Channel

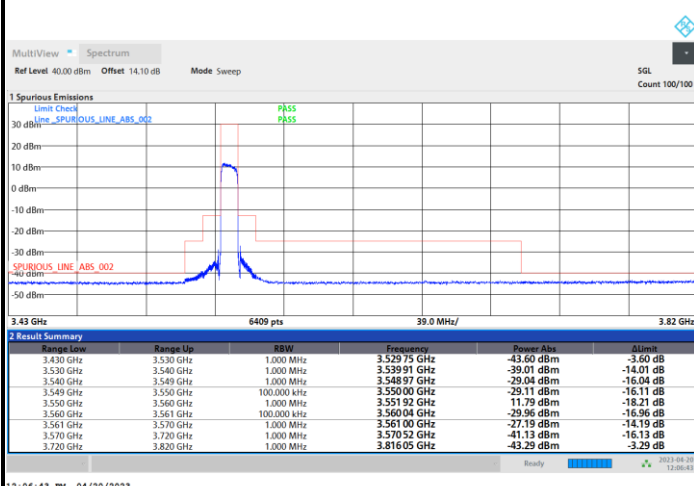
1RB0



1RBmax



Full RB

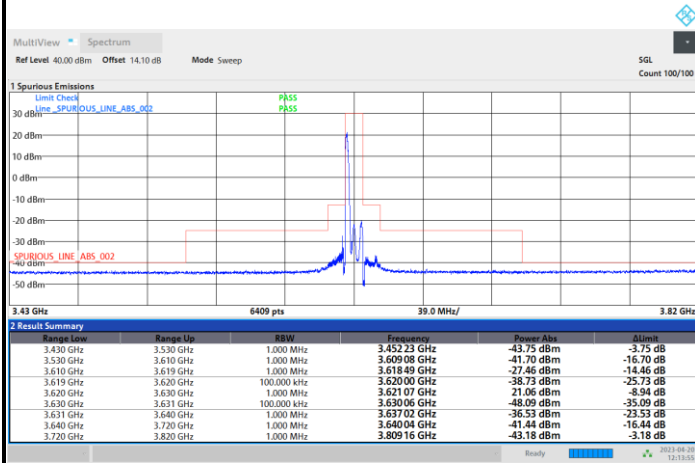




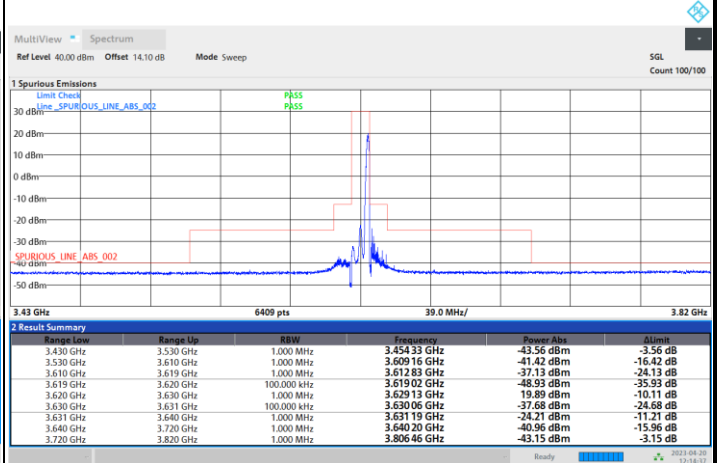
FR1 n48 / 10MHz / CP OFDM / 16QAM

Middle Channel

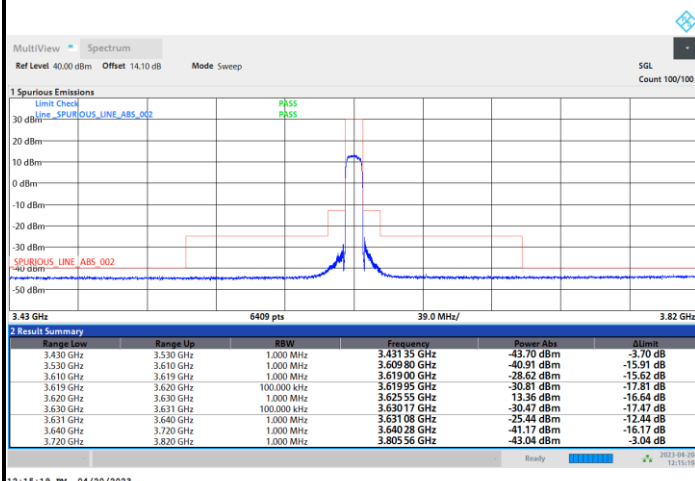
1RB0



1RBmax



Full RB

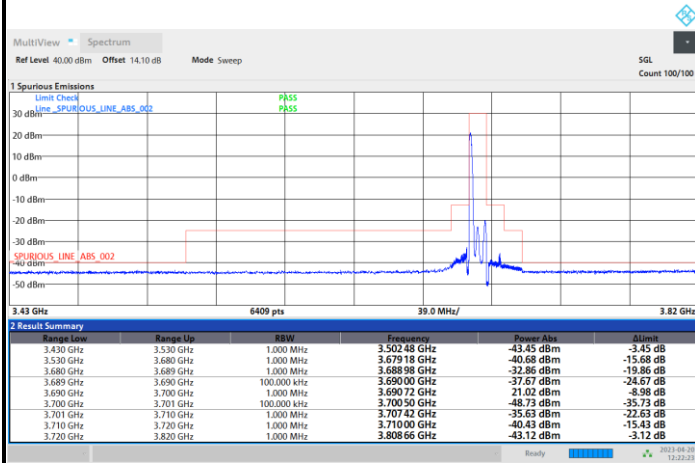




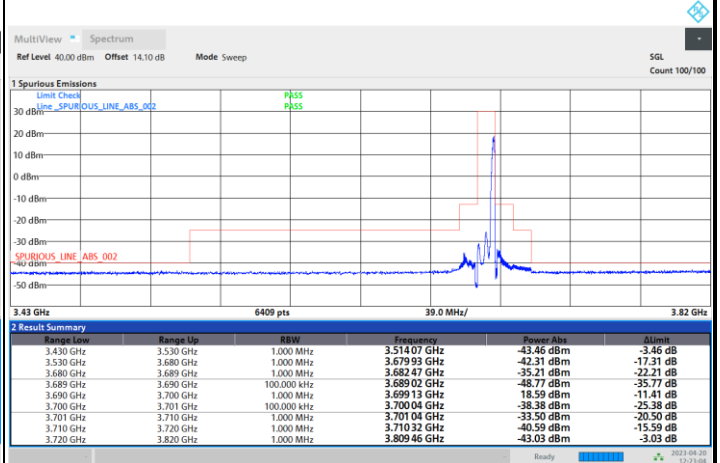
FR1 n48 / 10MHz / CP OFDM / 16QAM

Highest Channel

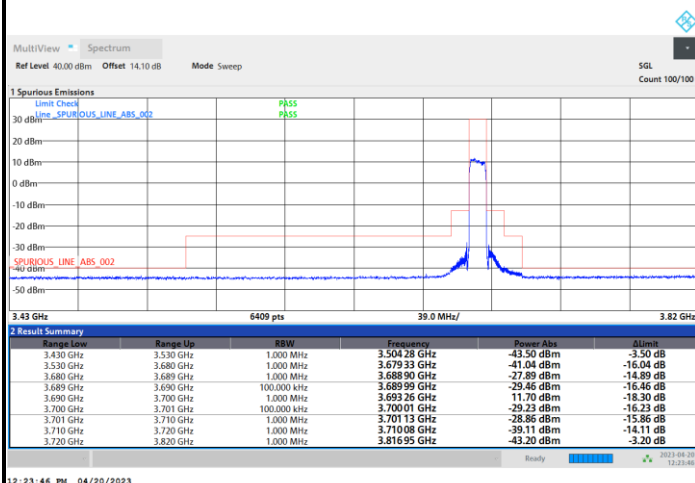
1RB0



1RBmax



Full RB

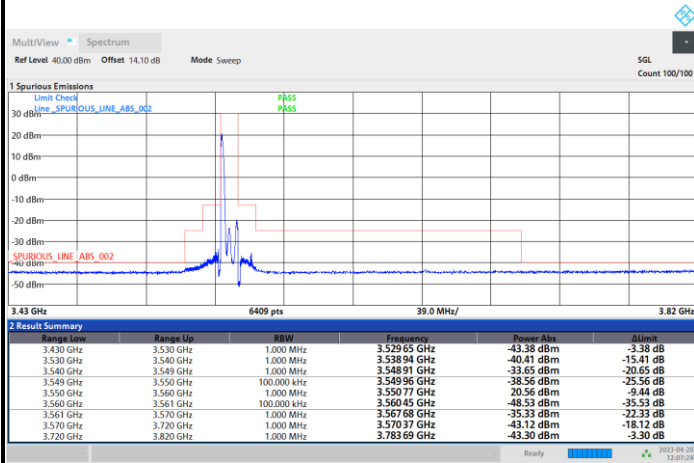




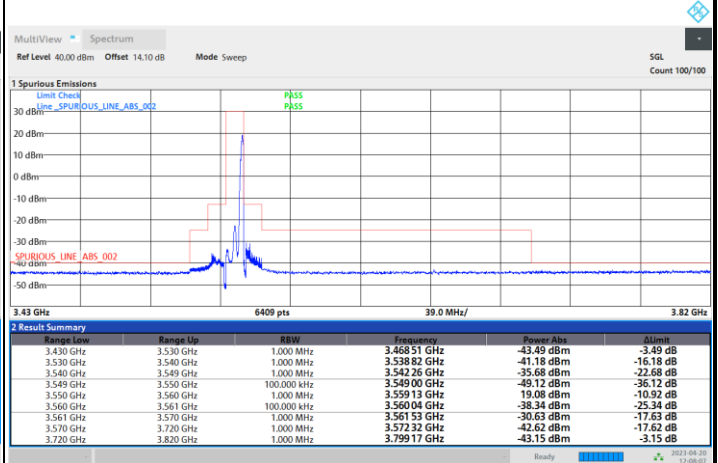
FR1 n48 / 10MHz / CP OFDM / 64QAM

Lowest Channel

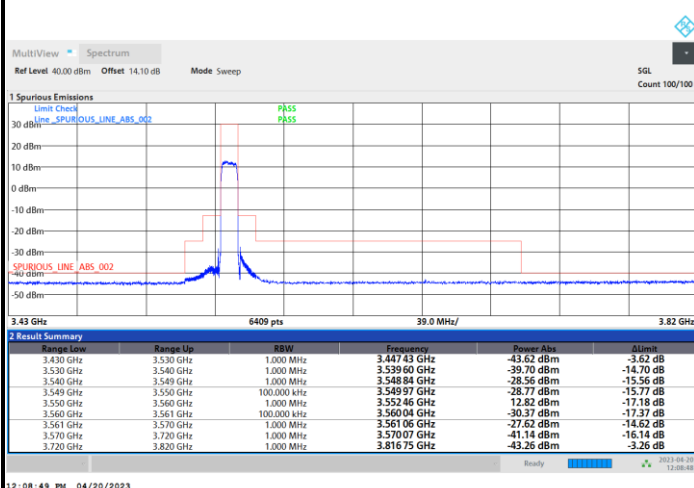
1RB0



1RBmax



Full RB



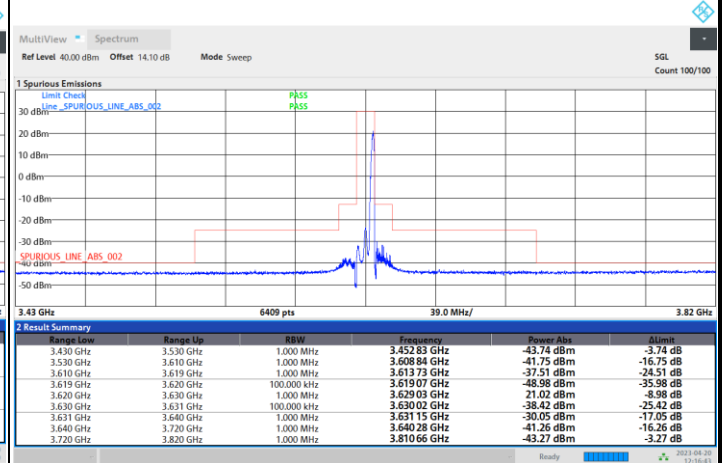
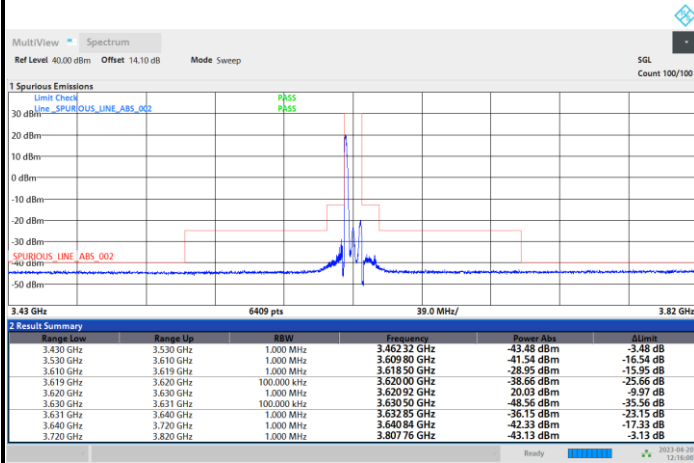


FR1 n48 / 10MHz / CP OFDM / 64QAM

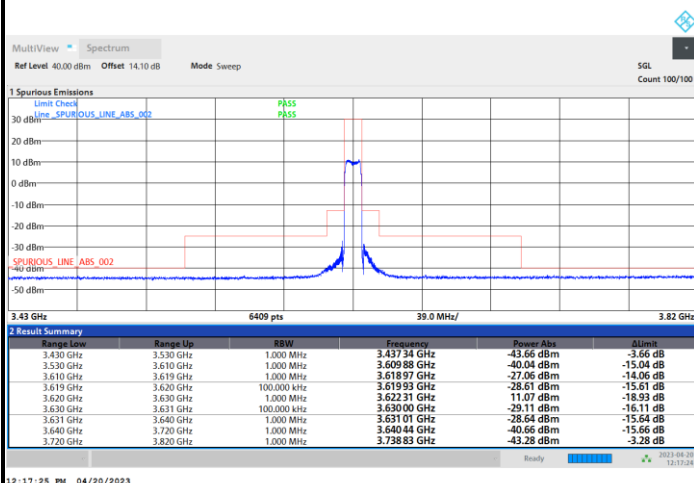
Middle Channel

1RB0

1RBmax



Full RB

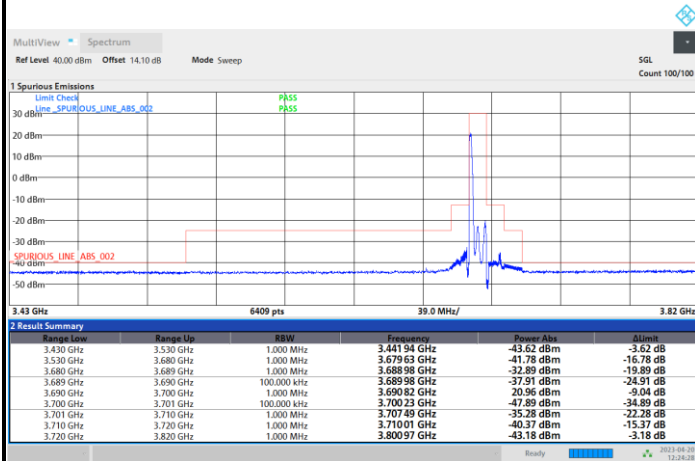




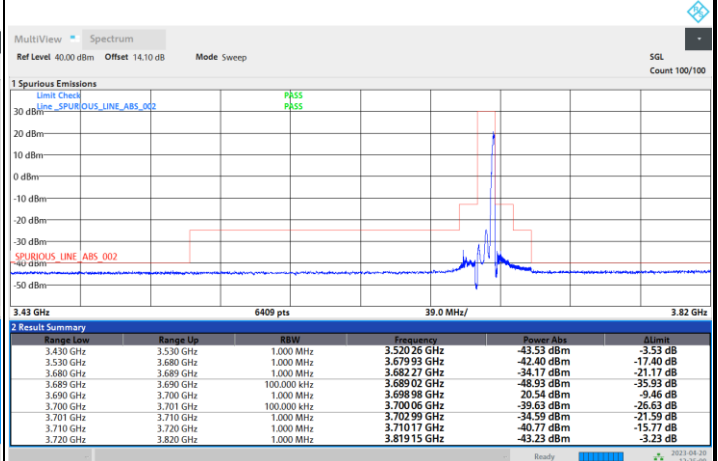
FR1 n48 / 10MHz / CP OFDM / 64QAM

Highest Channel

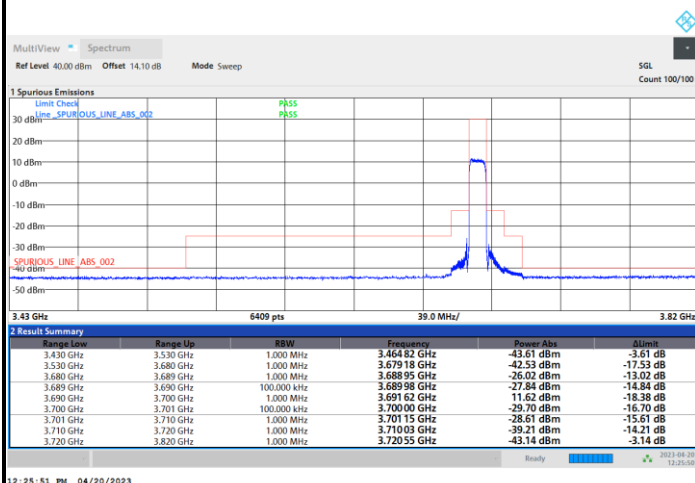
1RB0



1RBmax



Full RB

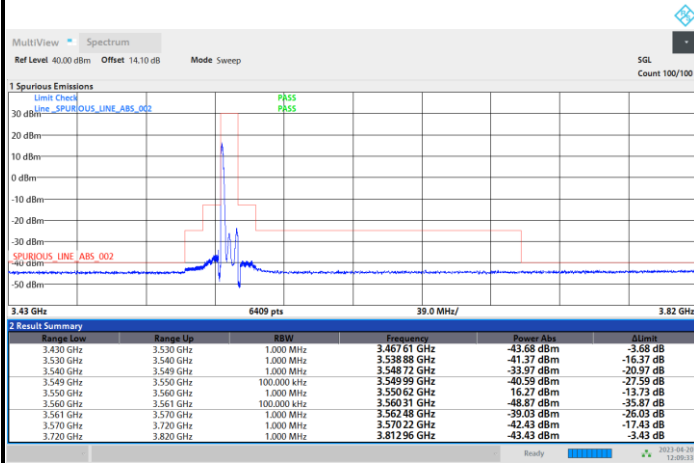




FR1 n48 / 10MHz / CP OFDM / 256QAM

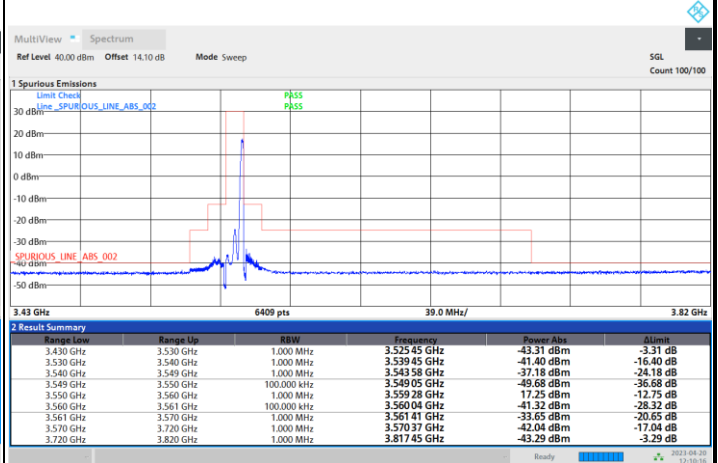
Lowest Channel

1RB0



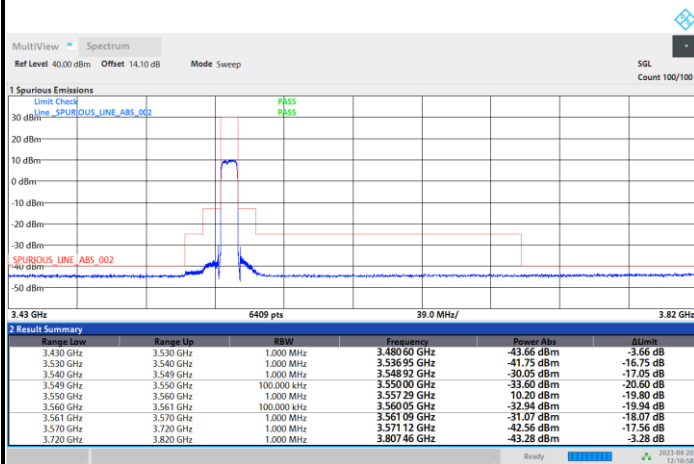
12:09:34 PM 04/20/2023

1RBmax



12:10:16 PM 04/20/2023

Full RB



12:10:59 PM 04/20/2023

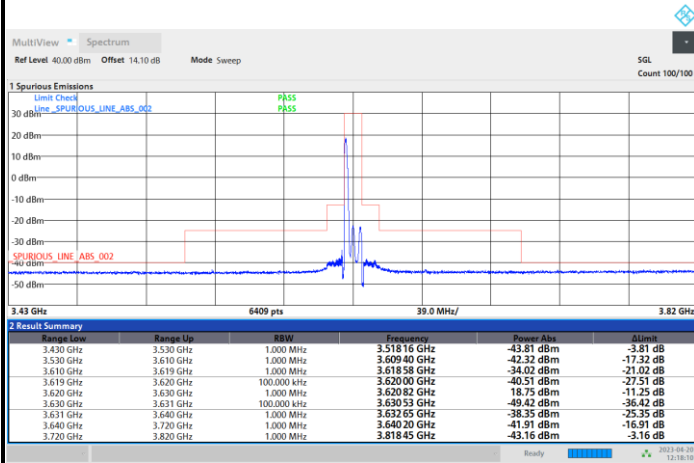


FR1 n48 / 10MHz / CP OFDM / 256QAM

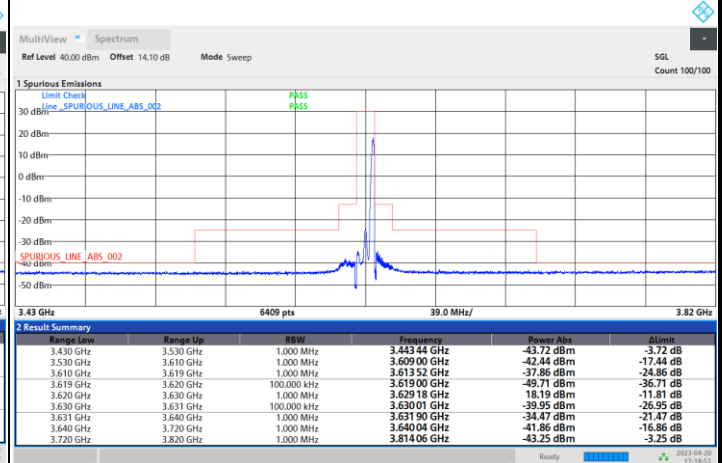
Middle Channel

1RB0

1RBmax

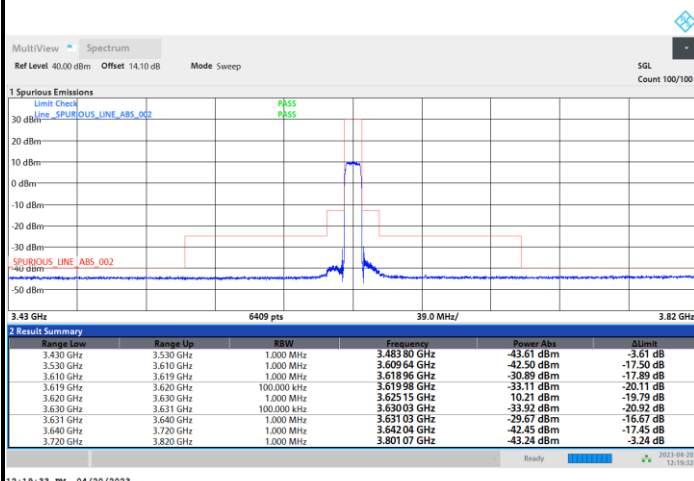


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12:18:51 PM 04/20/2023

Full RB



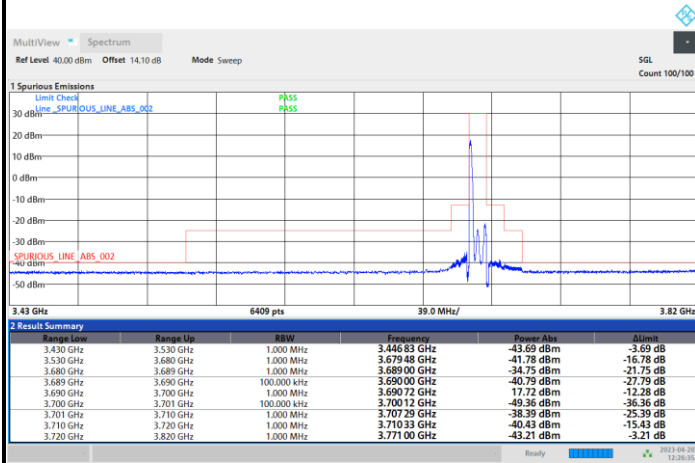
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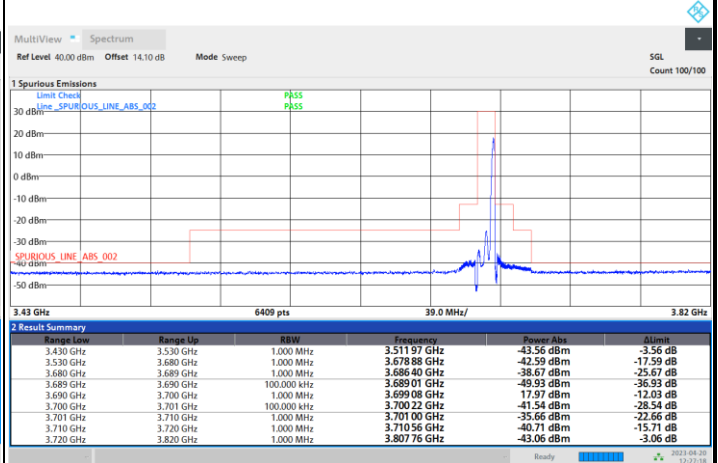
FR1 n48 / 10MHz / CP OFDM / 256QAM

Highest Channel

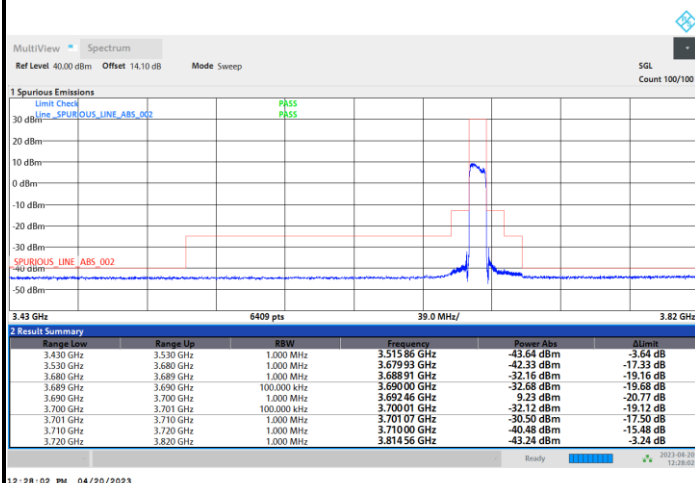
1RB0



1RBmax



Full RB

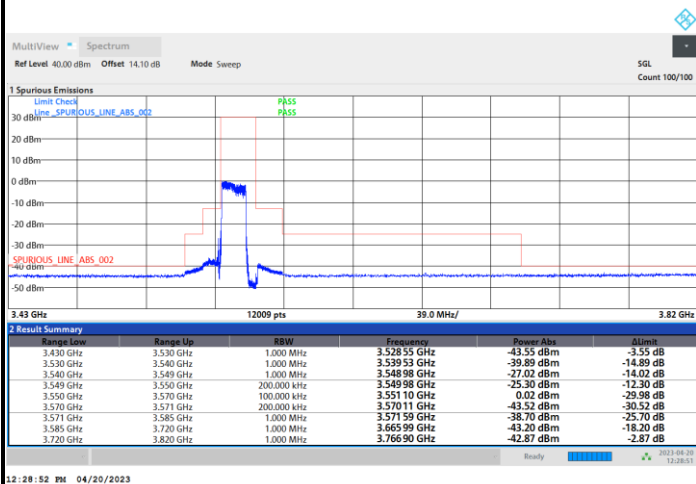




FR1 n48 / 15MHz / CP OFDM / QPSK

Lowest Channel

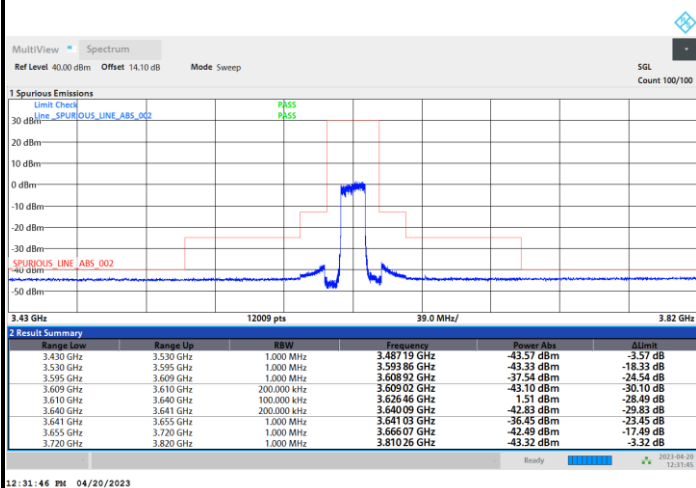
Full RB



FR1 n48 / 15MHz / CP OFDM / QPSK

Middle Channel

Full RB

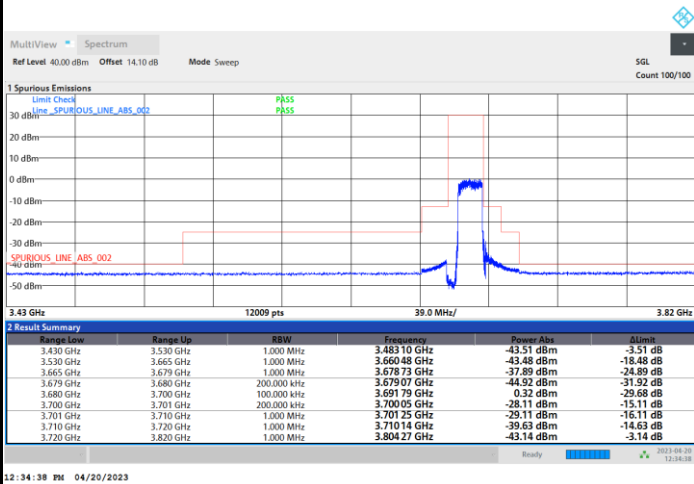




FR1 n48 / 15MHz / CP OFDM / QPSK

Highest Channel

Full RB



FR1 n48 / 15MHz / CP OFDM / 16QAM

Lowest Channel

Full RB

