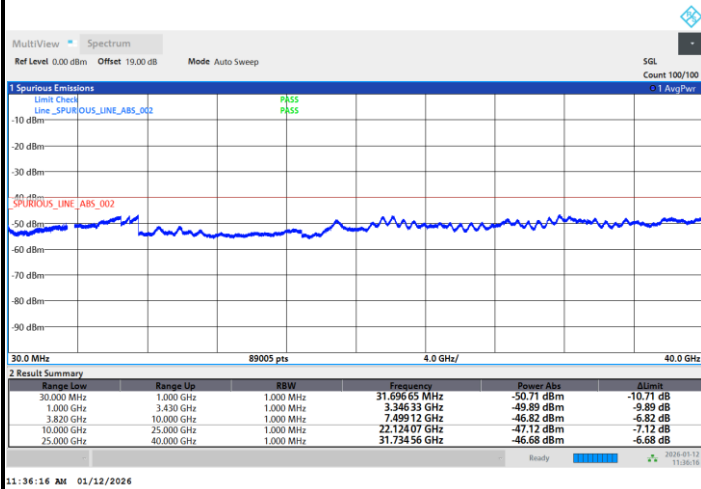


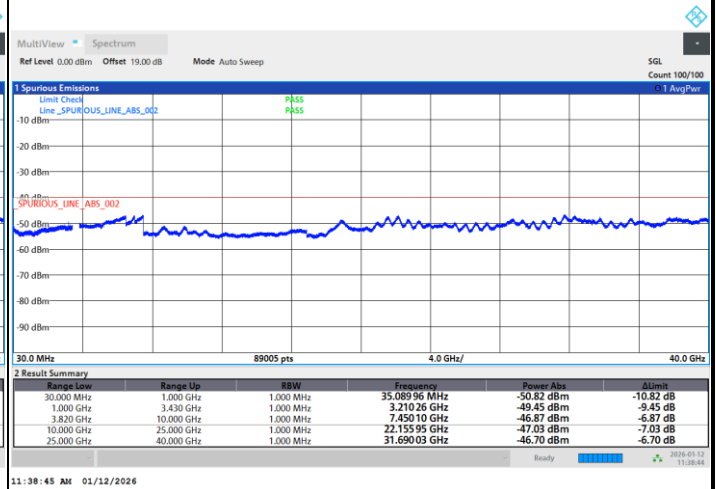


FR1 n48 / 15MHz / CP OFDM / QPSK / 1RB1

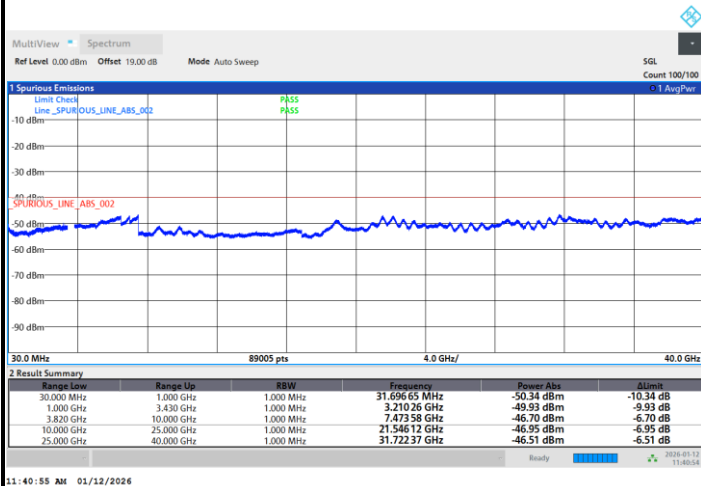
Lowest Channel



Middle Channel



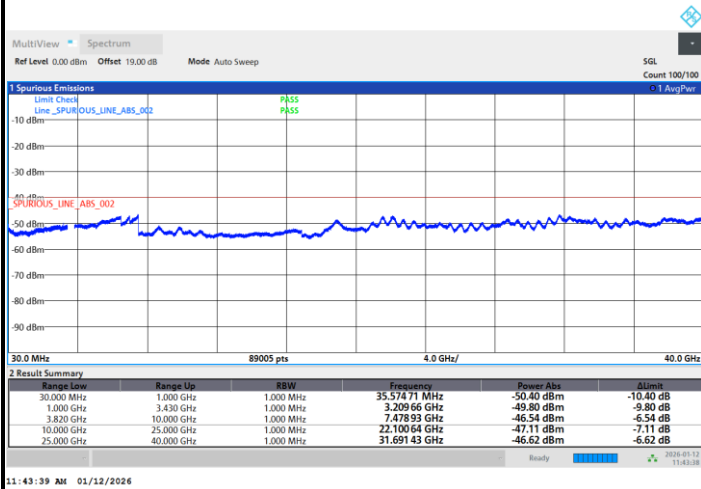
Highest Channel



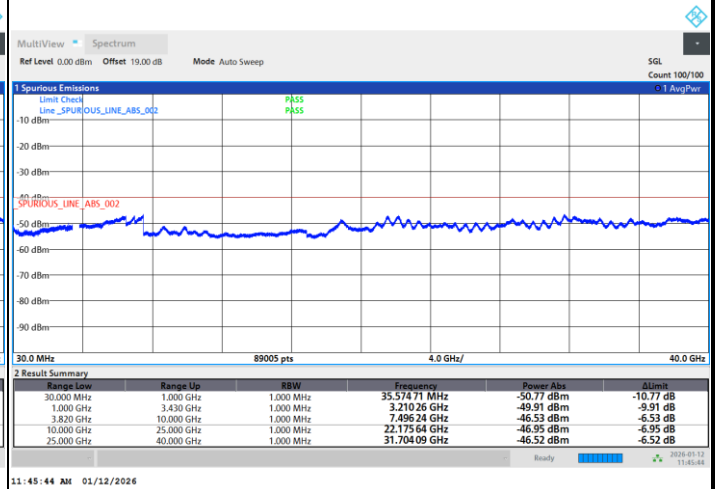


FR1 n48 / 20MHz / CP OFDM / QPSK / 1RB1

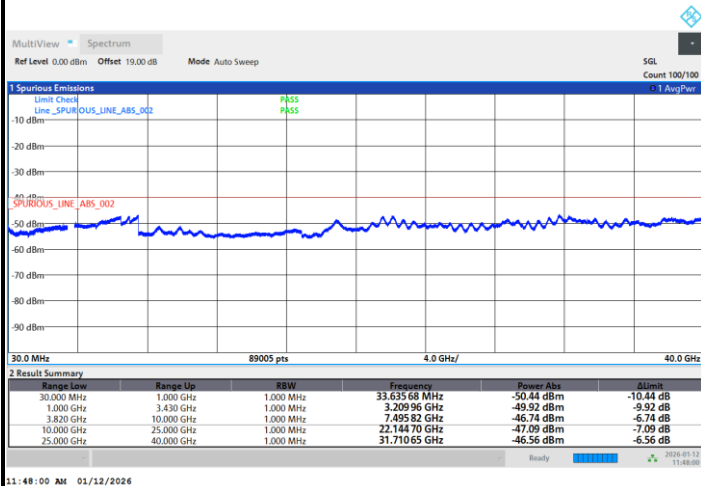
Lowest Channel



Middle Channel



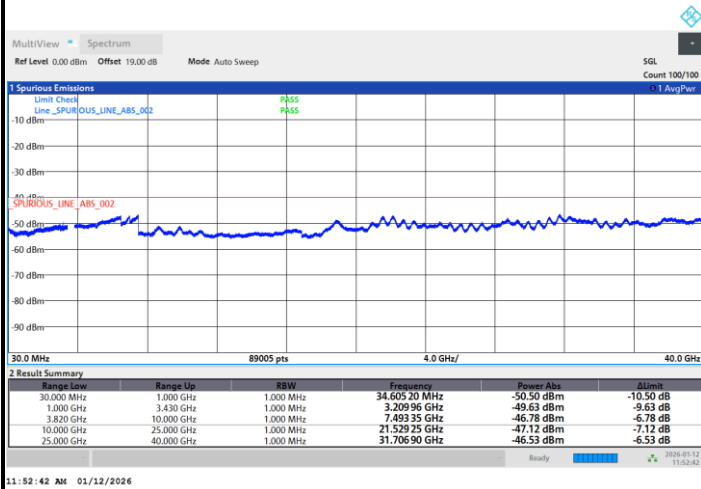
Highest Channel



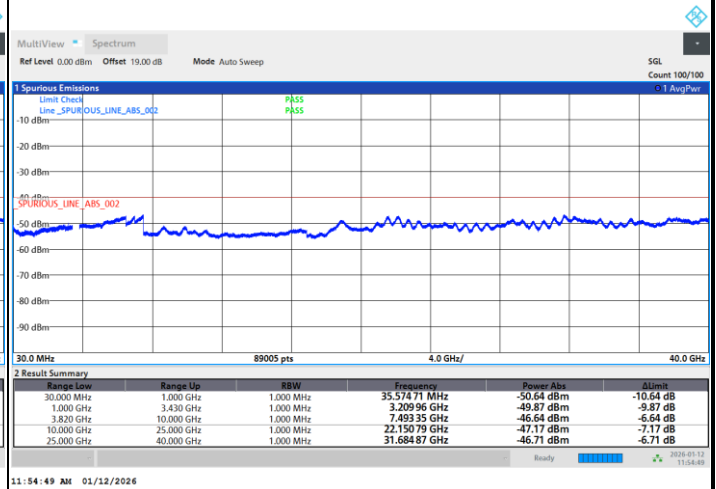


FR1 n48 / 30MHz / CP OFDM / QPSK / 1RB1

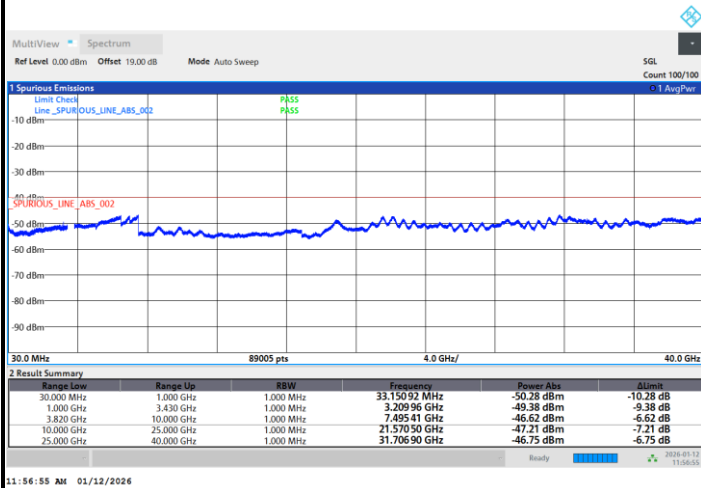
Lowest Channel



Middle Channel



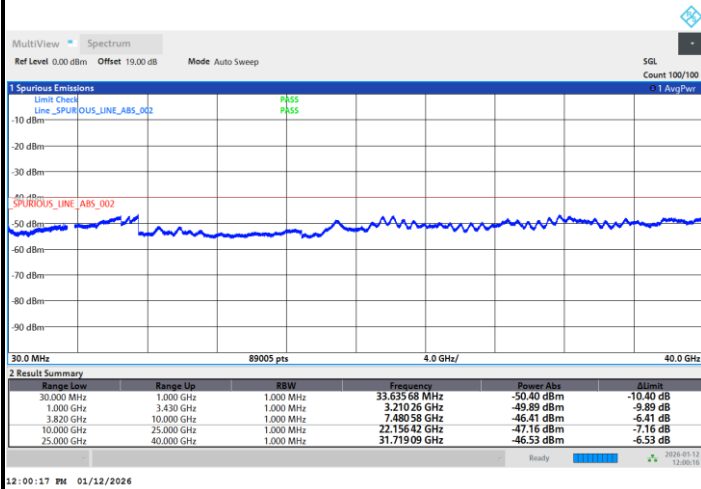
Highest Channel



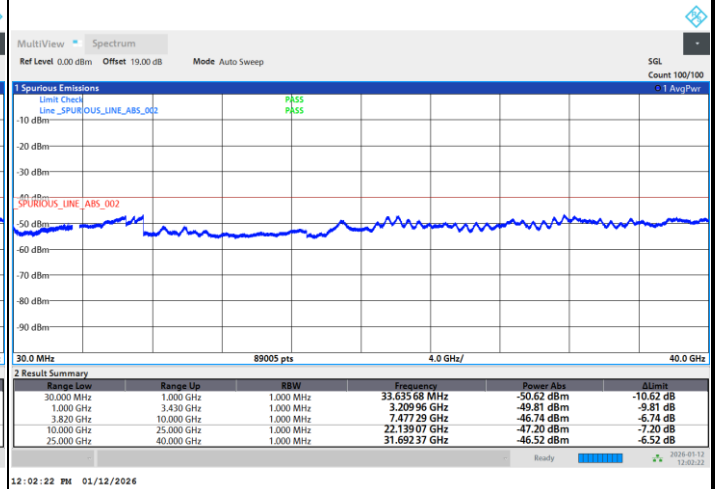


FR1 n48 / 40MHz / CP OFDM / QPSK / 1RB1

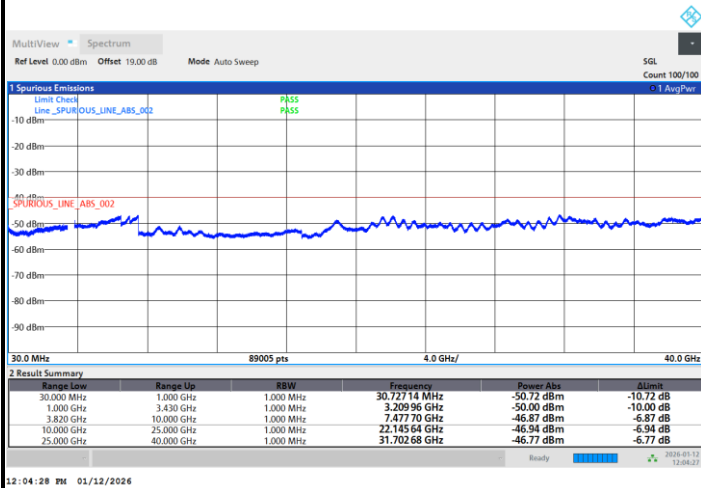
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n48 (QPSK) / Middle Channel 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0017	-9.7	Yes	PASS
40	Normal Voltage	0.0032	8.1	Yes	
30	Normal Voltage	0.0003	-2.6	Yes	
20(Ref.)	Normal Voltage	0.0000	-3.6	Yes	
10	Normal Voltage	0.0011	0.3	Yes	
0	Normal Voltage	0.0009	-0.3	Yes	
-10	Normal Voltage	0.0022	4.4	Yes	
-20	Normal Voltage	0.0001	-3.4	Yes	
20	Maximum Voltage	0.0040	10.8	Yes	
20	Normal Voltage	0.0009	-6.8	Yes	
20	Minimum Voltage	0.0015	-8.9	Yes	

Note:

1. Normal Voltage = 10.8 V. ; Minimum Voltage = 7.5 V. ; Maximum Voltage = 12.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. The frequency variation is sufficient to ensure that the occupied bandwidth of all operation channels stay within the operating frequency block or frequency block group.

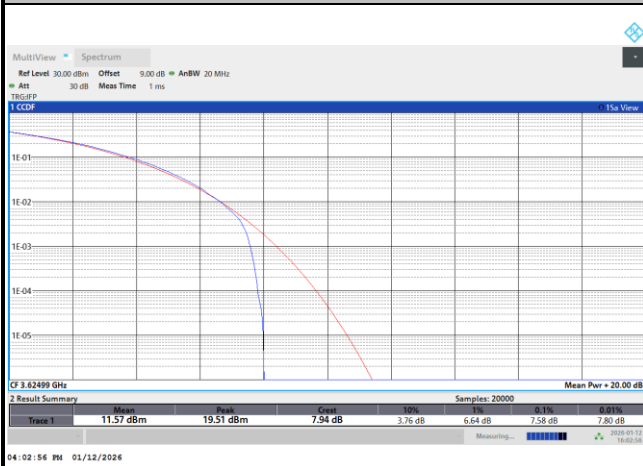
**FR1 n48****<CP MIMO>****MIMO <Ant. 3+1> (Ant. 1)****Peak-to-Average Ratio**

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	7.58	7.58	8.04	8.64	PASS

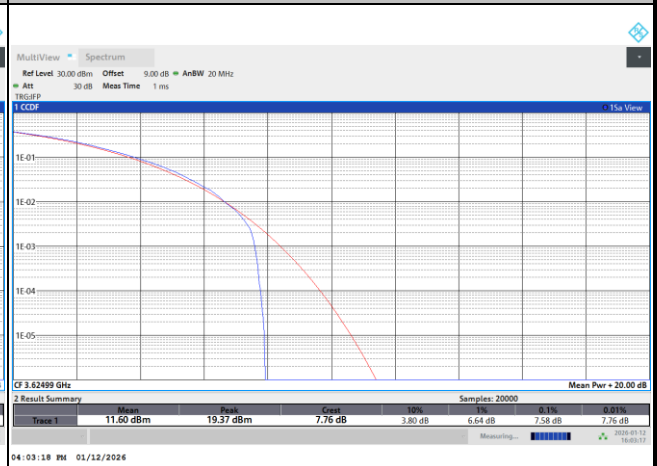


FR1 n48 / 20MHz / CP OFDM / Middle Channel / Full RB

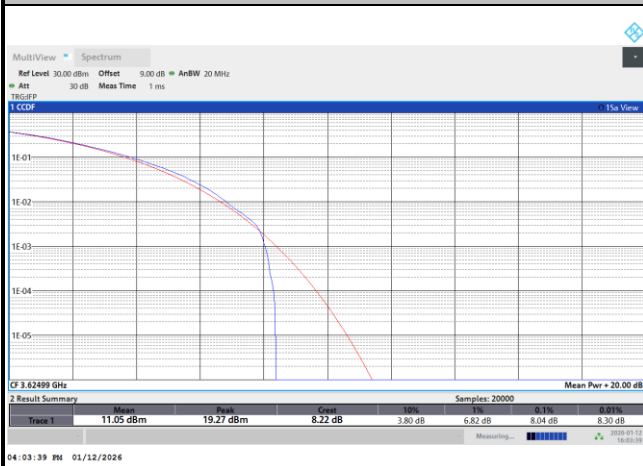
QPSK



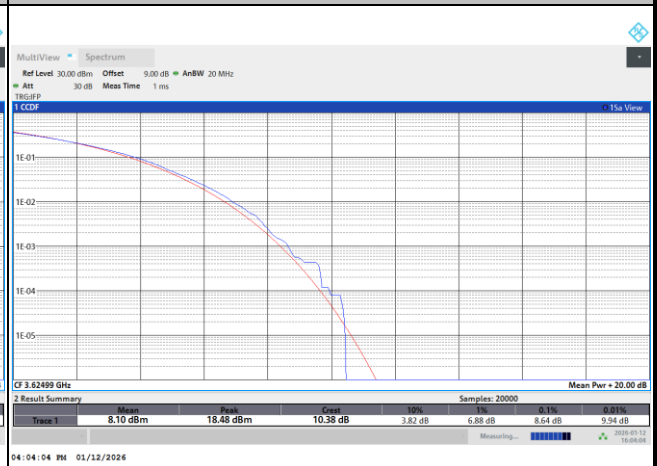
16QAM



64QAM



256QAM

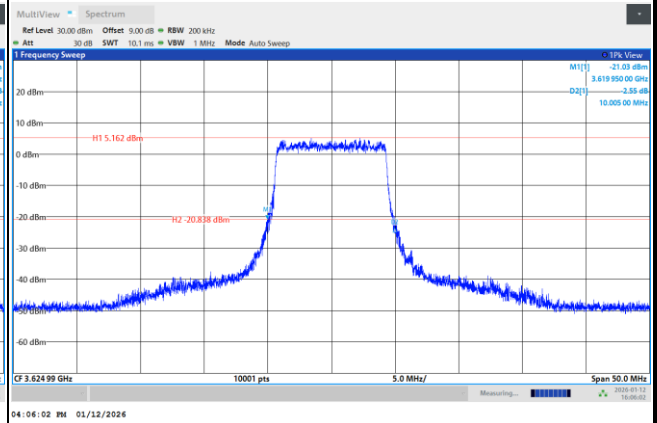


**26dB Bandwidth**

Mode	FR1 n48 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	10.30	10.00	15.58	15.52	20.41	20.29		
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	30.82	30.67	40.79	40.87	-	-	-	-
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	-	-	-	-

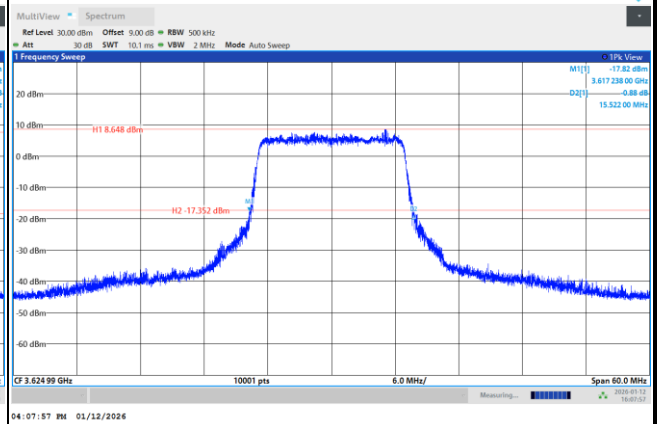


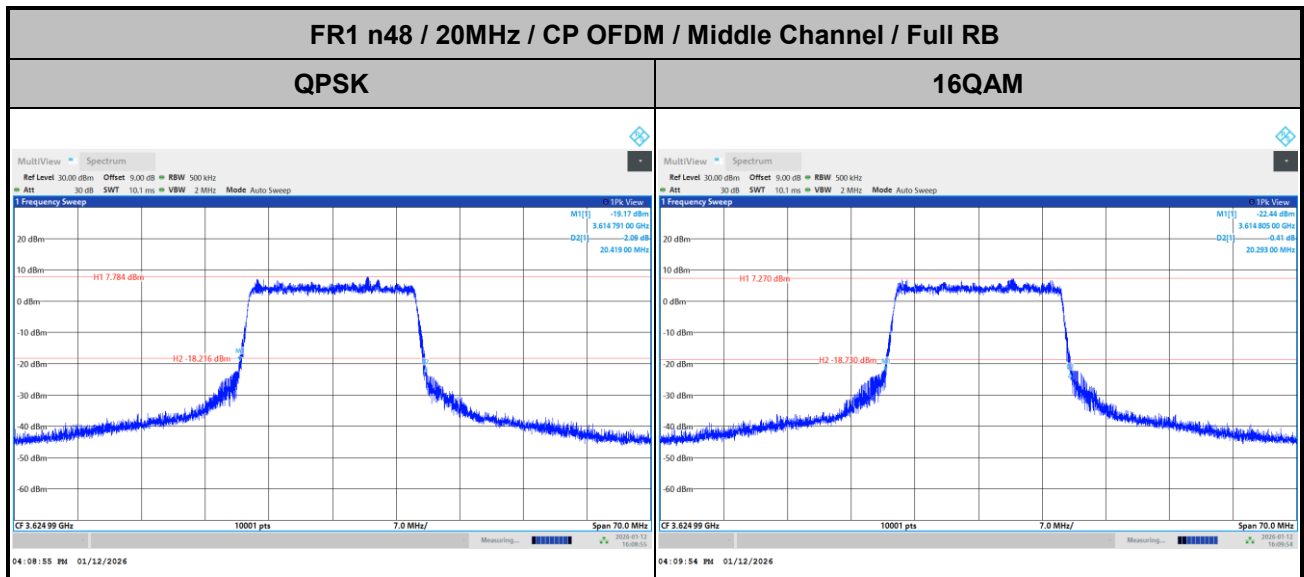
16QAM

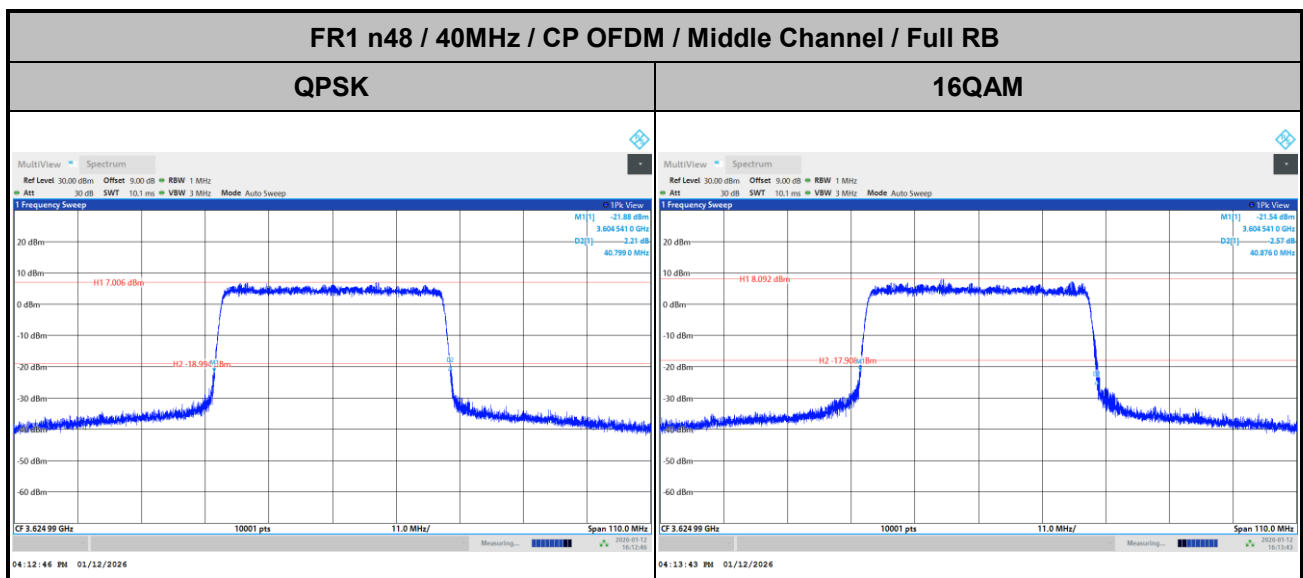
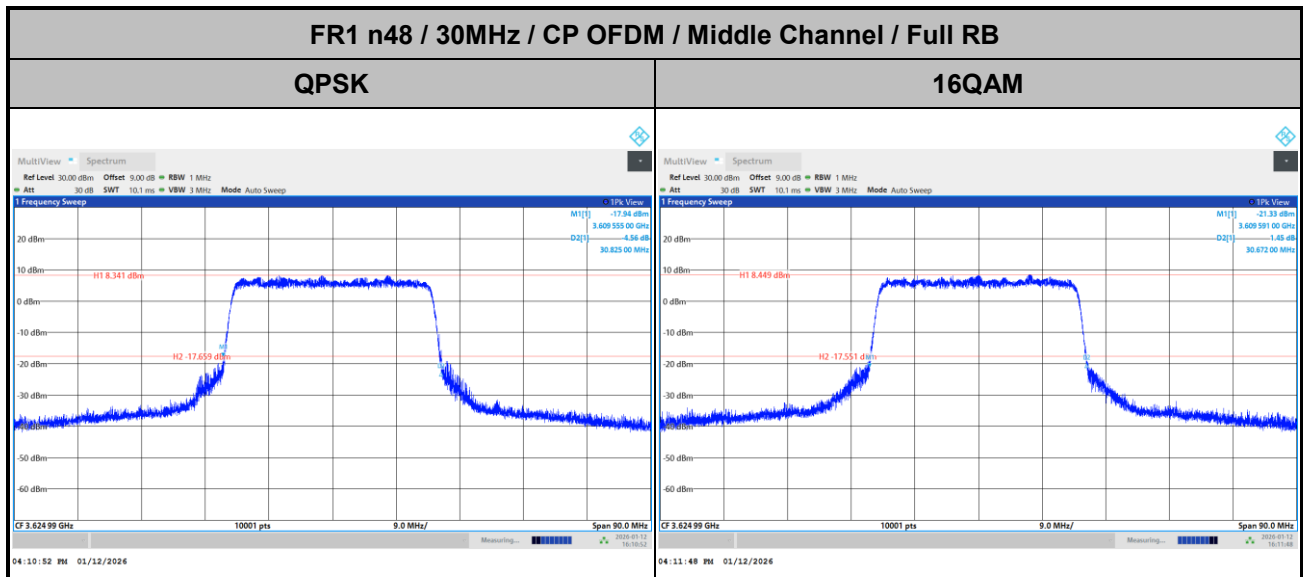


FR1 n48 / 15MHz / CP OFDM / Middle Channel / Full RB

16QAM







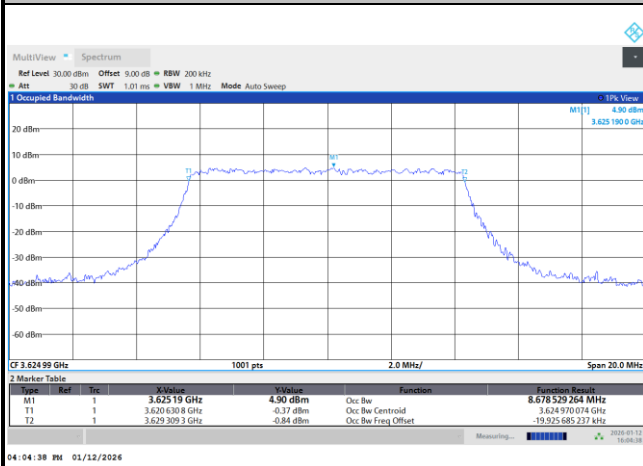
**Occupied Bandwidth**

Mode	FR1 n48 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	8.67	8.62	13.77	13.77	18.36	18.37		
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	28.13	28.12	38.01	38.04	-	-	-	-
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	-	-	-	-

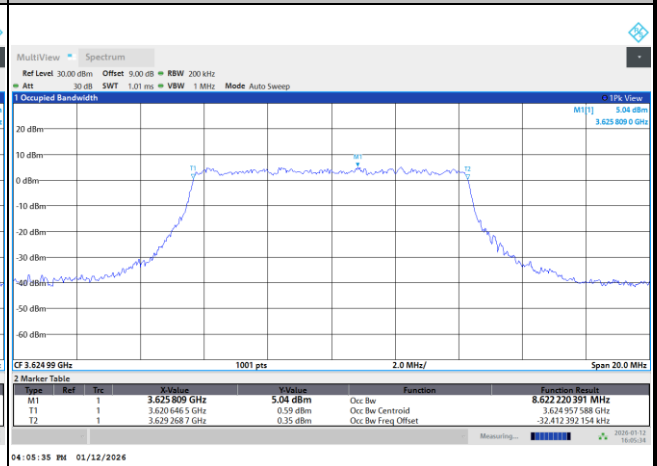


FR1 n48 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK

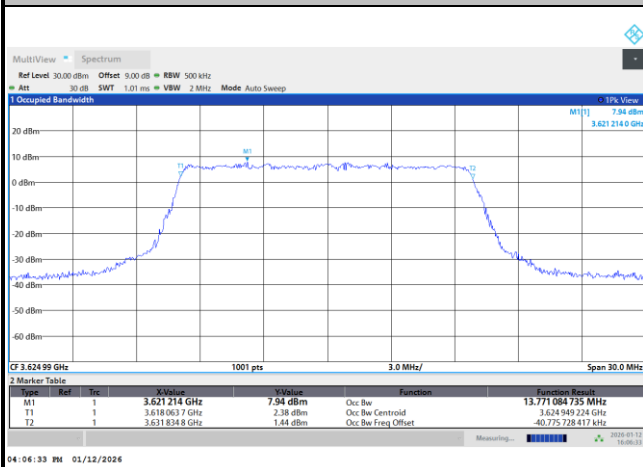


16QAM

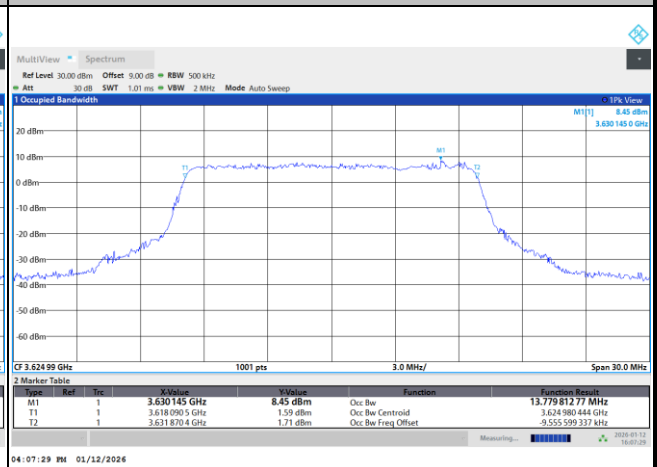


FR1 n48 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



16QAM

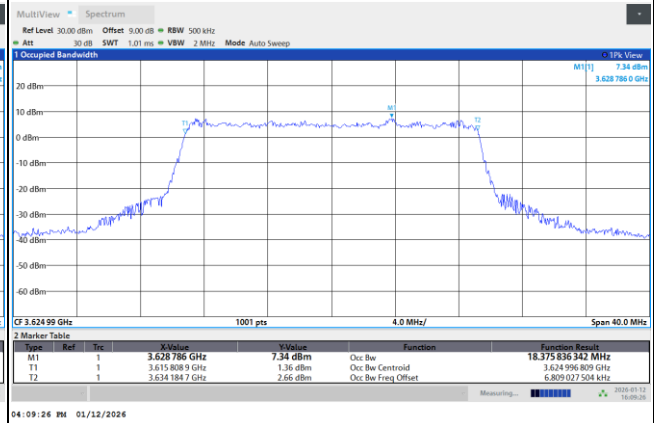
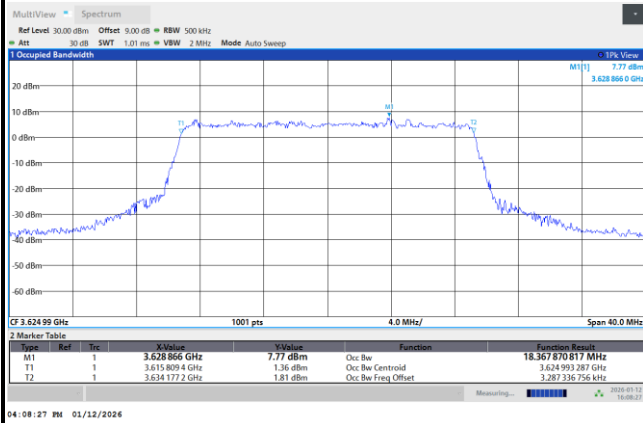




FR1 n48 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK

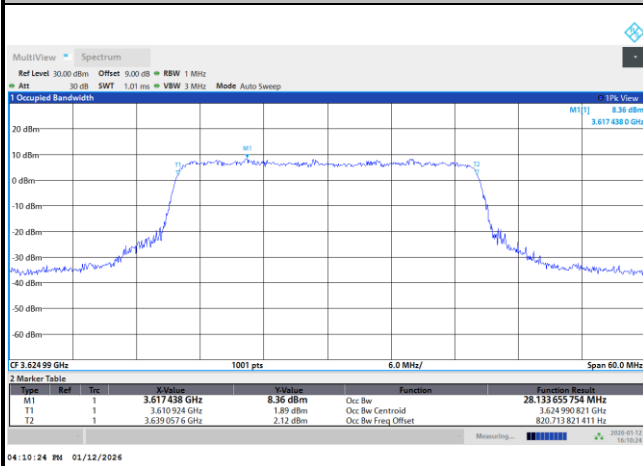
16QAM



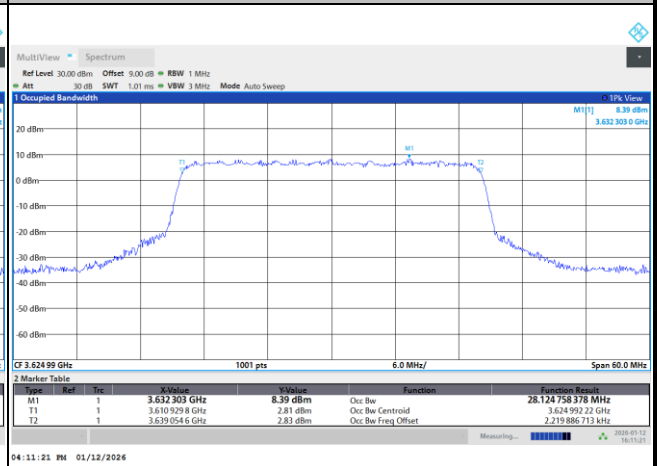


FR1 n48 / 30MHz / CP OFDM / Middle Channel / Full RB

QPSK

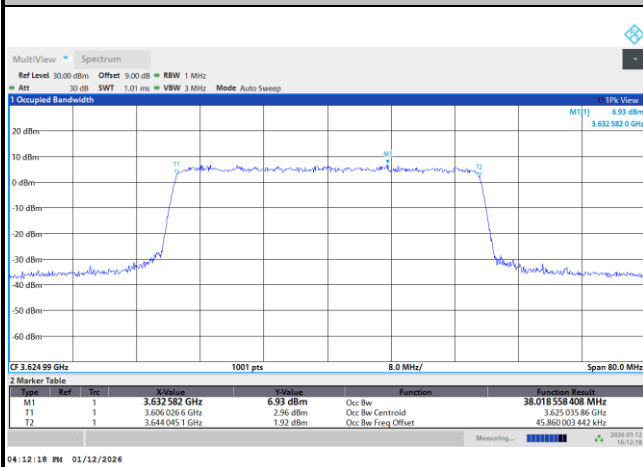


16QAM

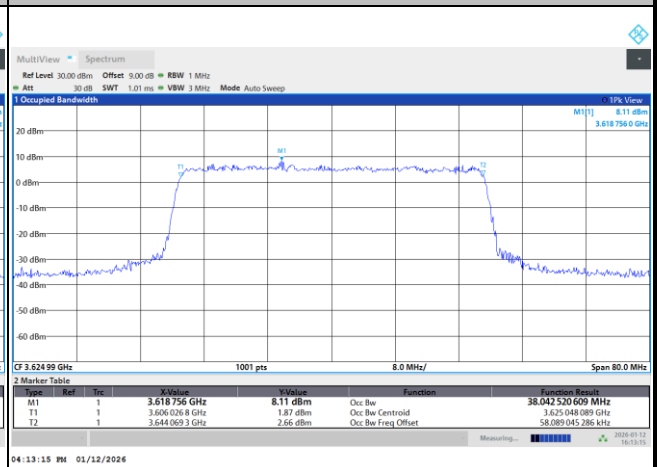


FR1 n48 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



16QAM





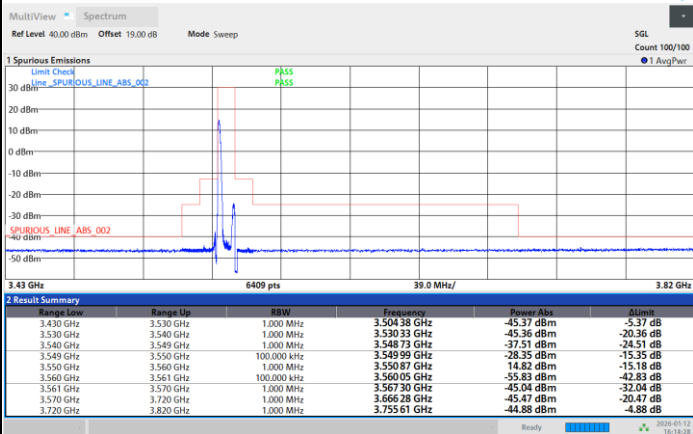
Unwanted Emission (MASK)

FR1 n48 / 10MHz / CP OFDM / QPSK

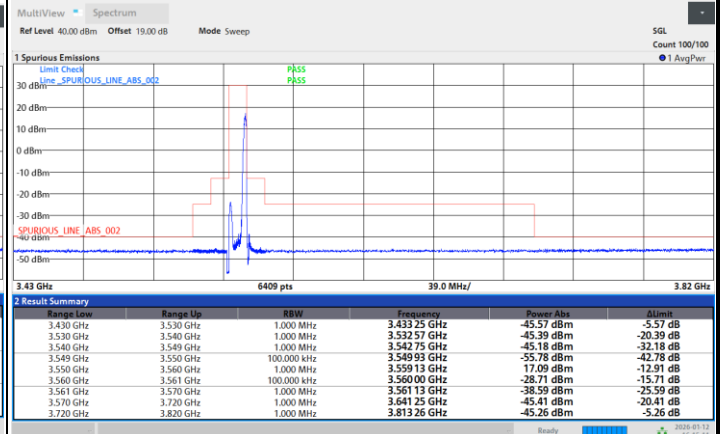
Lowest Channel

1RB0

1RBmax

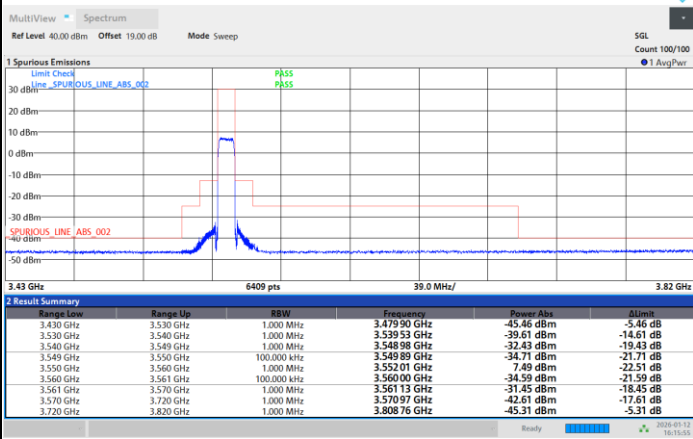


04:14:28 PM 01/12/2026



04:15:11 PM 01/12/2026

Full RB



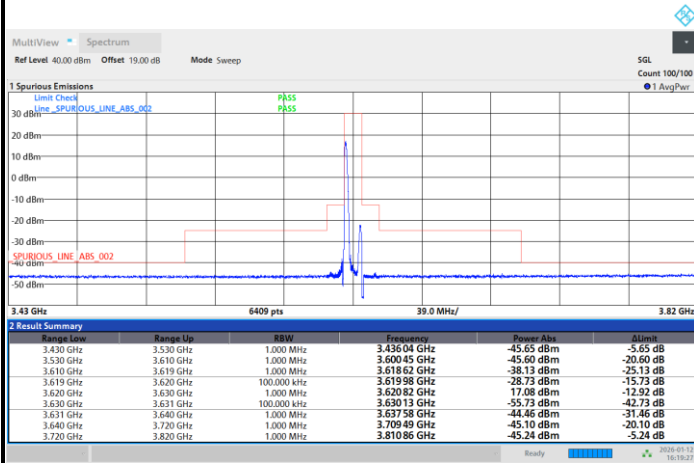
04:15:55 PM 01/12/2026



FR1 n48 / 10MHz / CP OFDM / QPSK

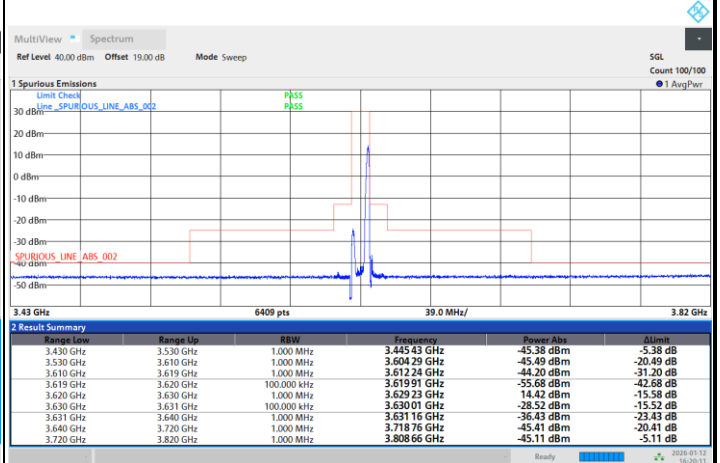
Middle Channel

1RB0



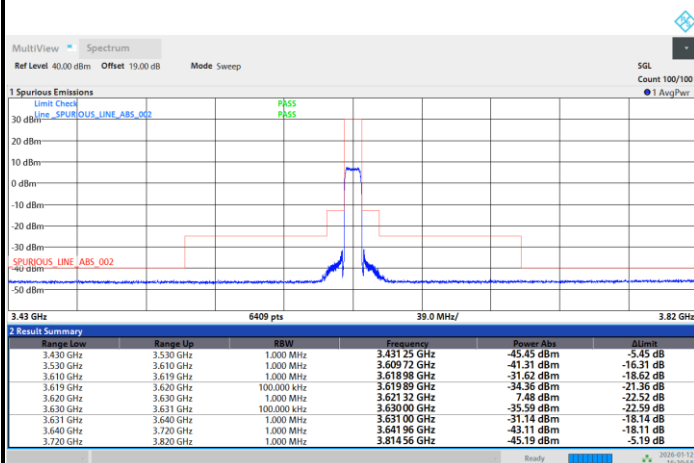
04:19:28 PM 01/12/2026

1RBmax



04:20:11 PM 01/12/2026

Full RB



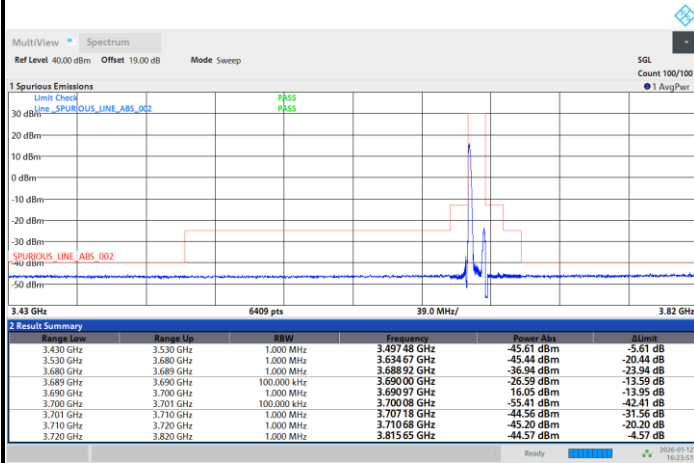
04:20:55 PM 01/12/2026



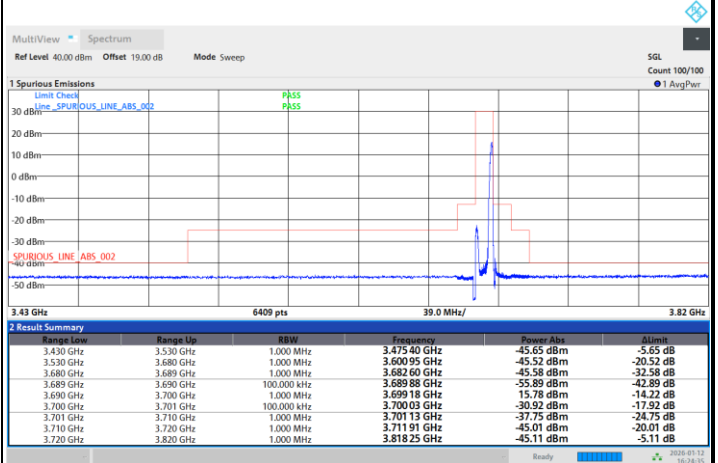
FR1 n48 / 10MHz / CP OFDM / QPSK

Highest Channel

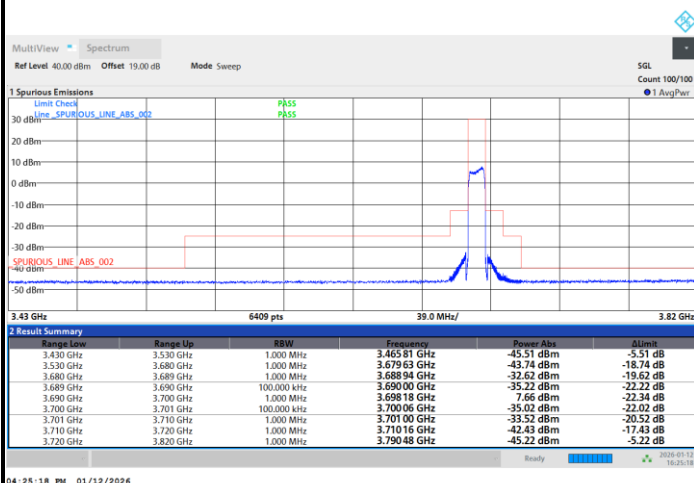
1RB0



1RBmax



Full RB

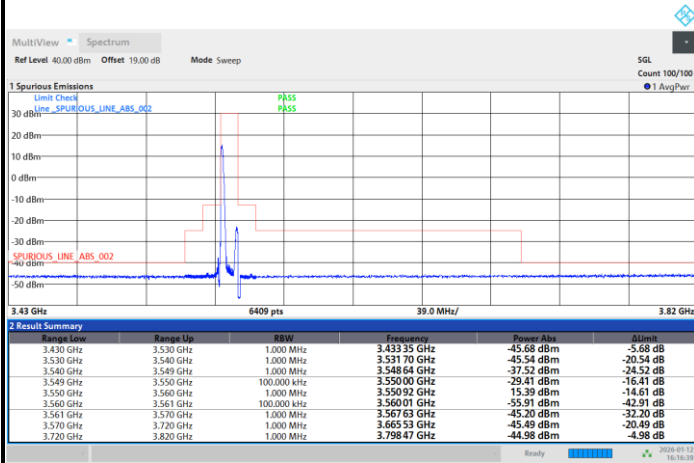




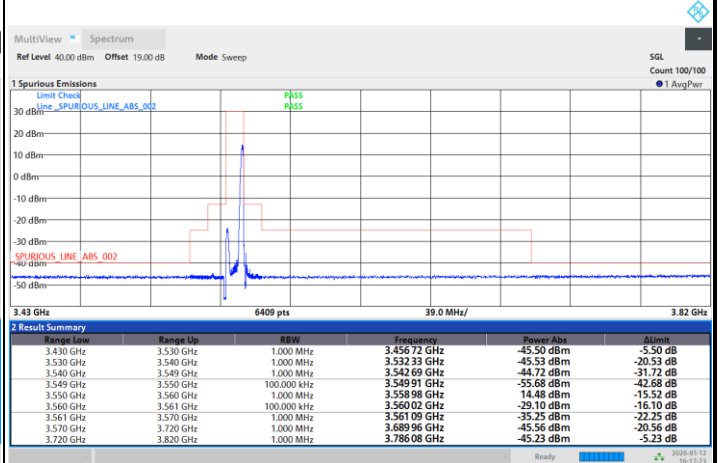
FR1 n48 / 10MHz / CP OFDM / 16QAM

Lowest Channel

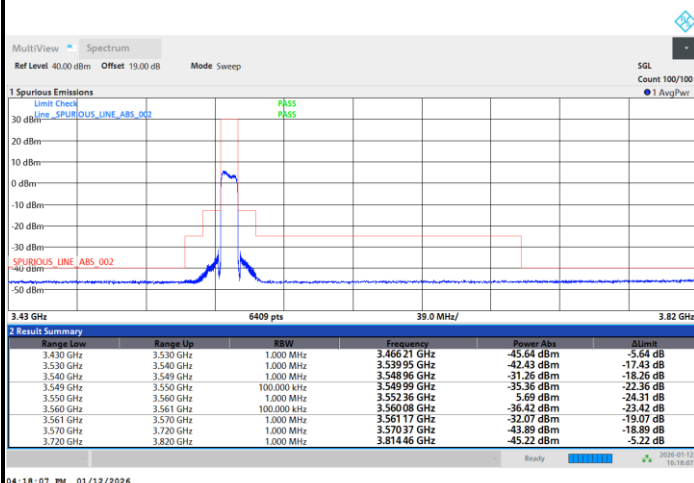
1RB0



1RBmax



Full RB

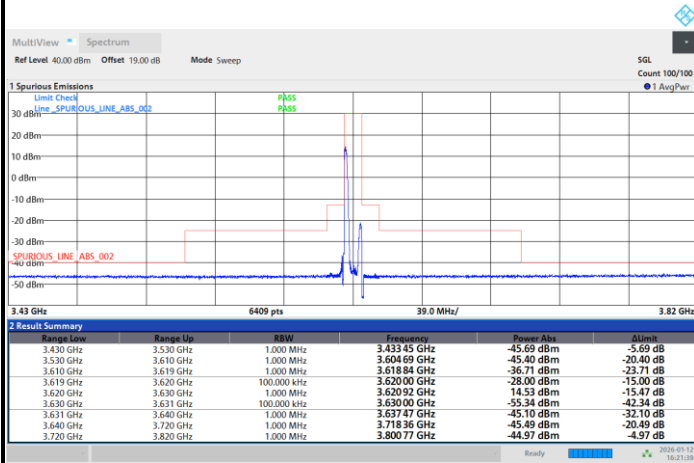




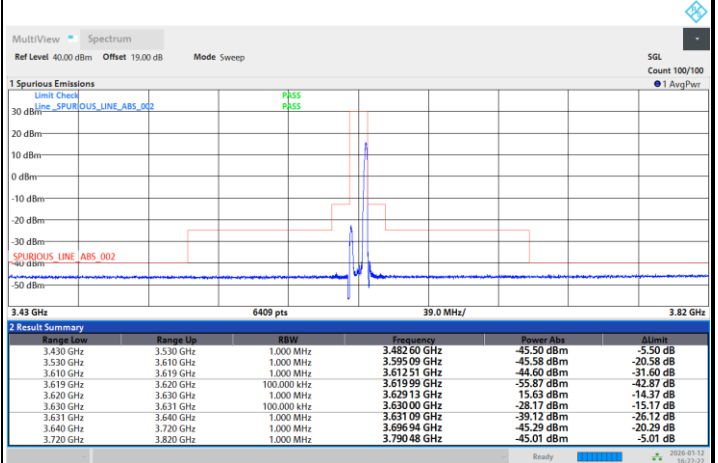
FR1 n48 / 10MHz / CP OFDM / 16QAM

Middle Channel

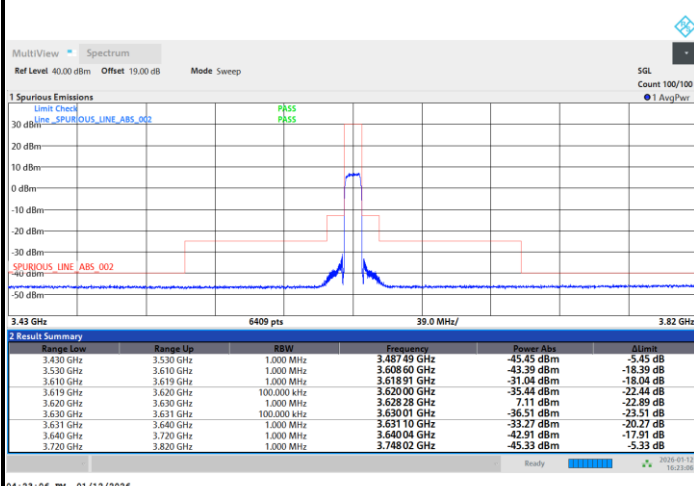
1RB0



1RBmax



Full RB

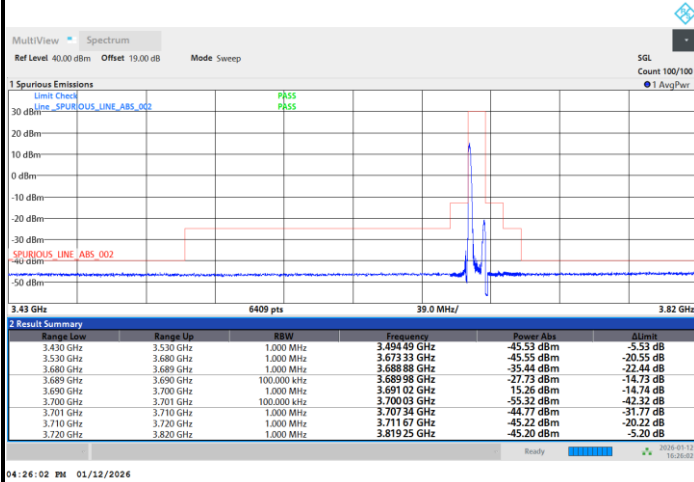




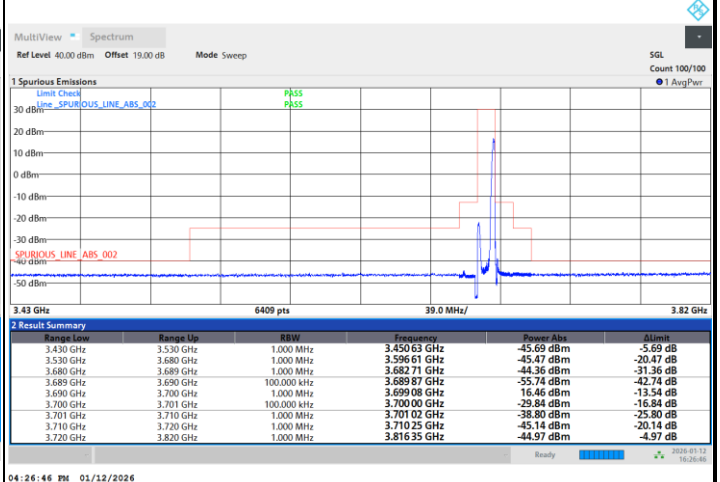
FR1 n48 / 10MHz / CP OFDM / 16QAM

Highest Channel

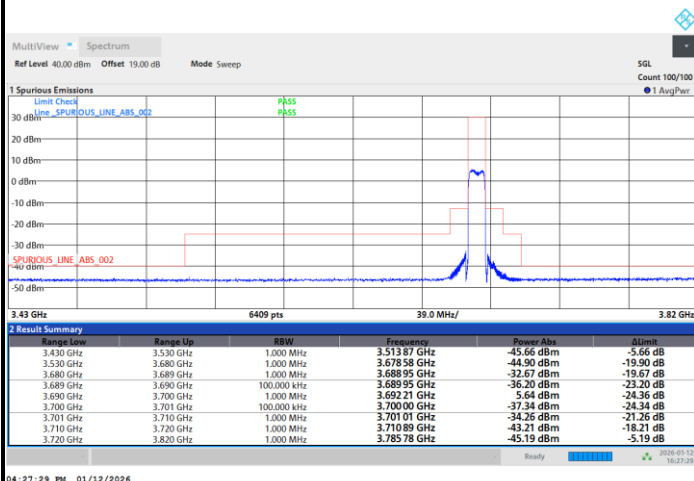
1RB0



1RBmax



Full RB

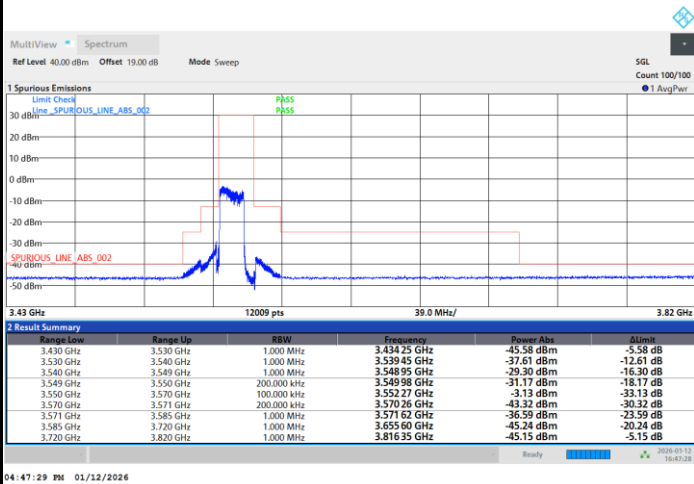




FR1 n48 / 15MHz / CP OFDM / QPSK

Lowest Channel

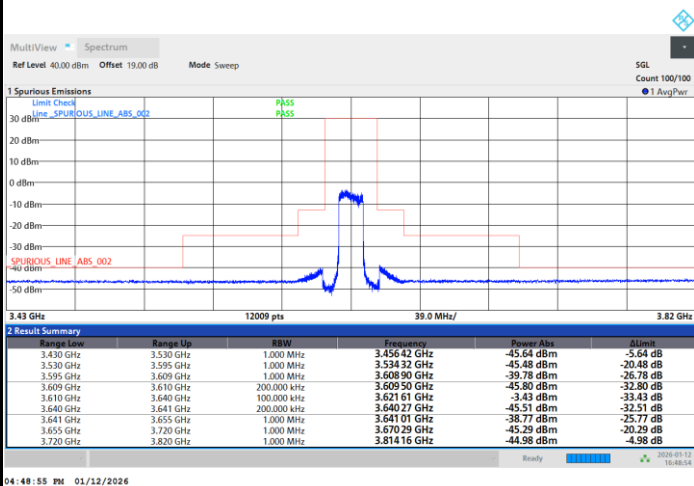
Full RB



FR1 n48 / 15MHz / CP OFDM / QPSK

Middle Channel

Full RB

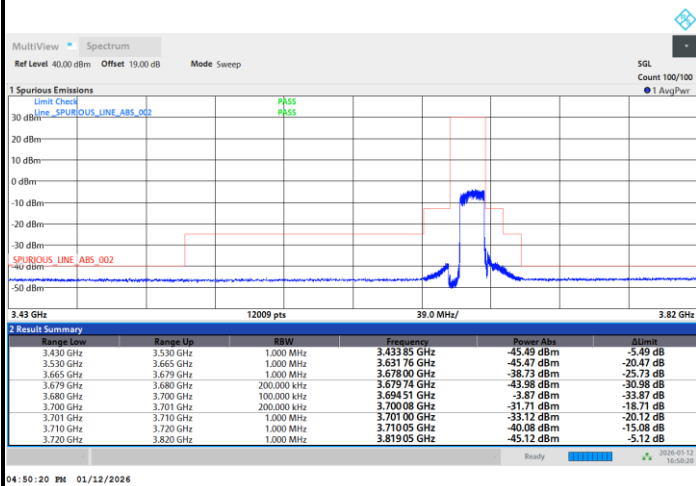




FR1 n48 / 15MHz / CP OFDM / QPSK

Highest Channel

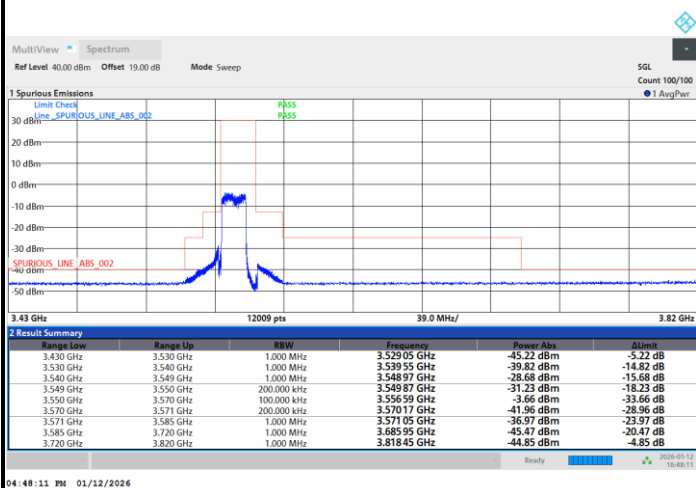
Full RB



FR1 n48 / 15MHz / CP OFDM / 16QAM

Lowest Channel

Full RB

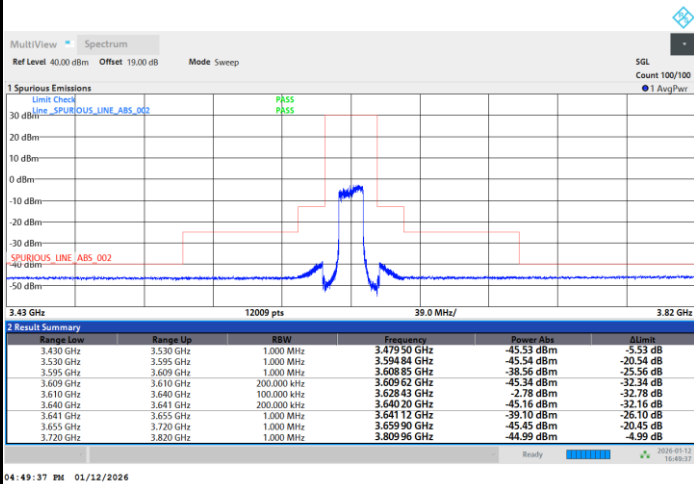




FR1 n48 / 15MHz / CP OFDM / 16QAM

Middle Channel

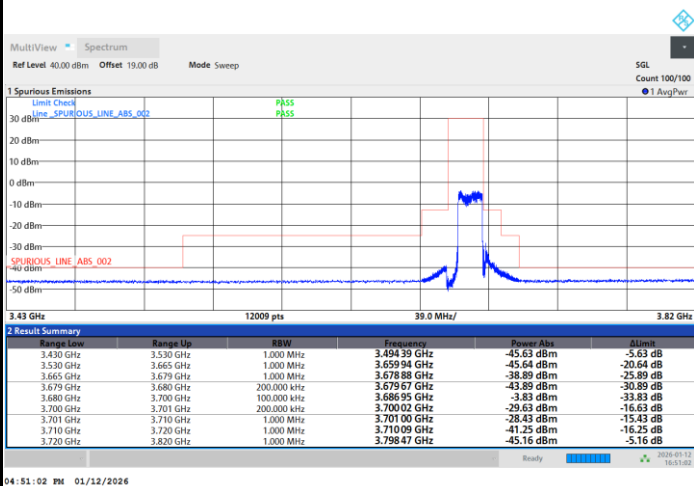
Full RB



FR1 n48 / 15MHz / CP OFDM / 16QAM

Highest Channel

Full RB

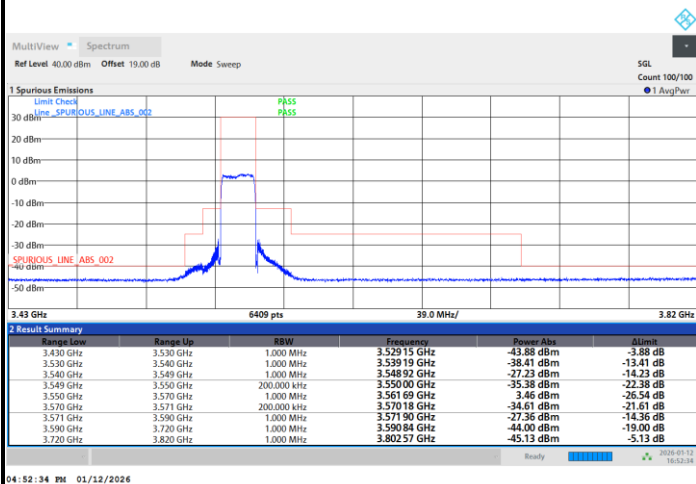




FR1 n48 / 20MHz / CP OFDM / QPSK

Lowest Channel

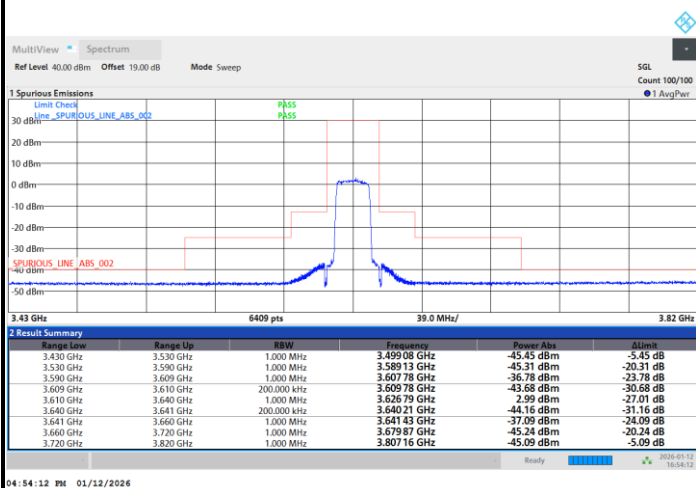
Full RB



FR1 n48 / 20MHz / CP OFDM / QPSK

Middle Channel

Full RB

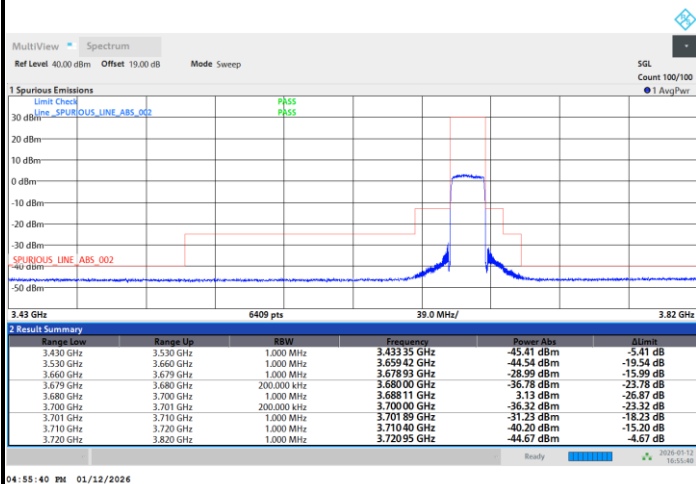




FR1 n48 / 20MHz / CP OFDM / QPSK

Highest Channel

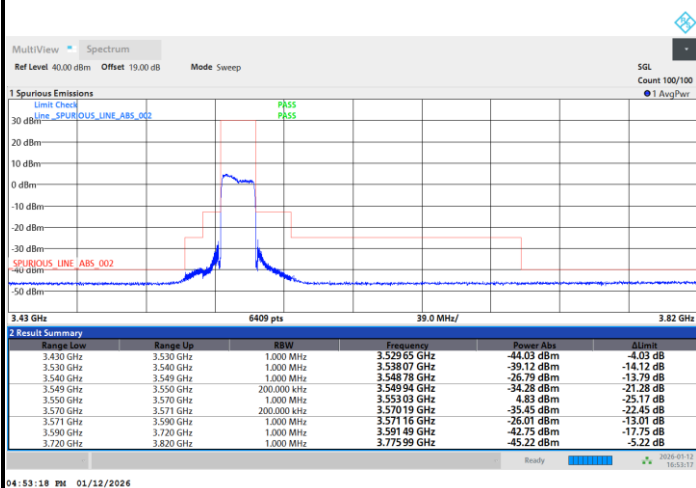
Full RB



FR1 n48 / 20MHz / CP OFDM / 16QAM

Lowest Channel

Full RB

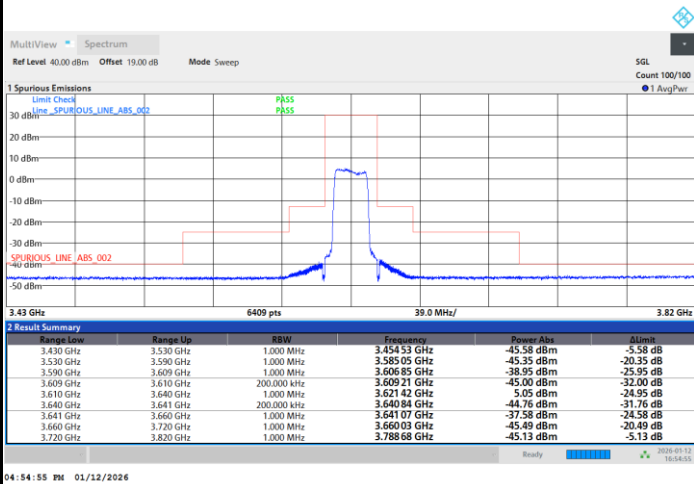




FR1 n48 / 20MHz / CP OFDM / 16QAM

Middle Channel

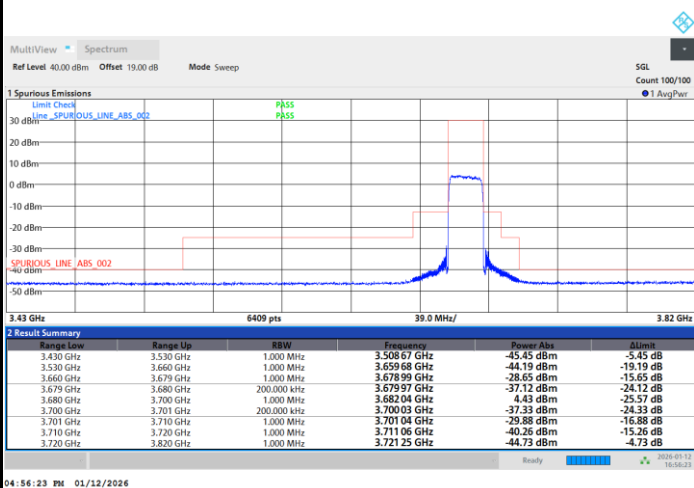
Full RB



FR1 n48 / 20MHz / CP OFDM / 16QAM

Highest Channel

Full RB

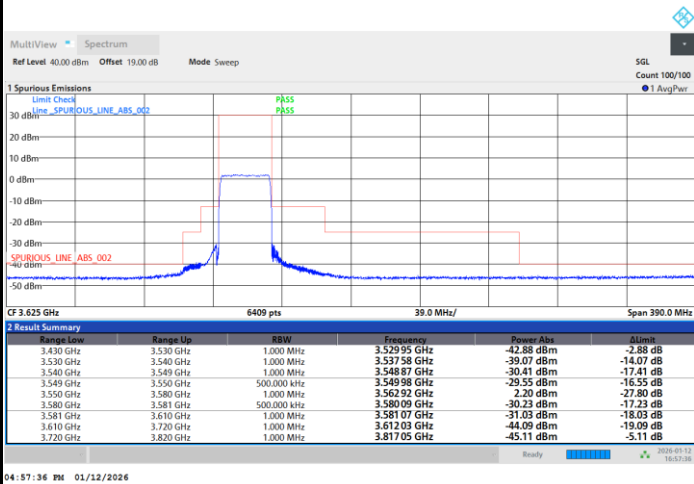




FR1 n48 / 30MHz / CP OFDM / QPSK

Lowest Channel

Full RB



FR1 n48 / 30MHz / CP OFDM / QPSK

Middle Channel

Full RB

