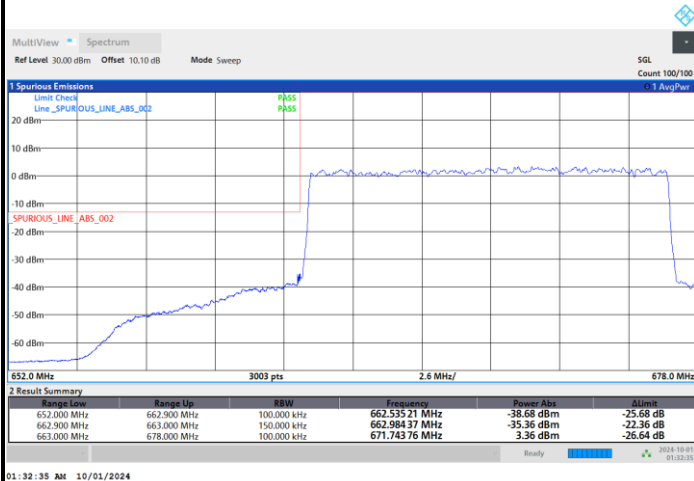


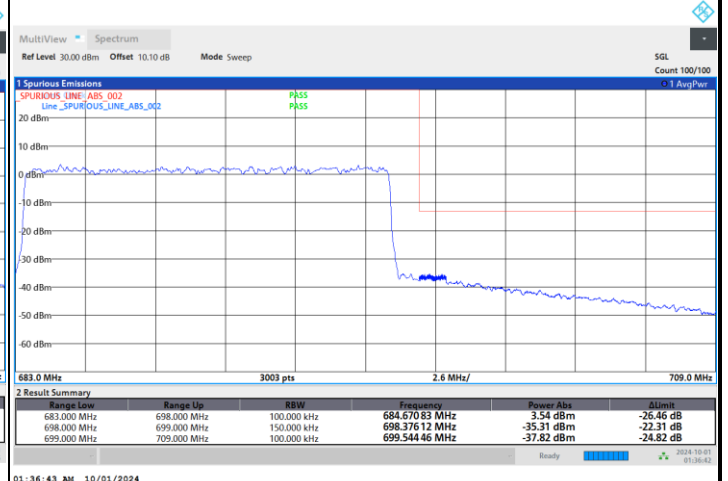


FR1 n71 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

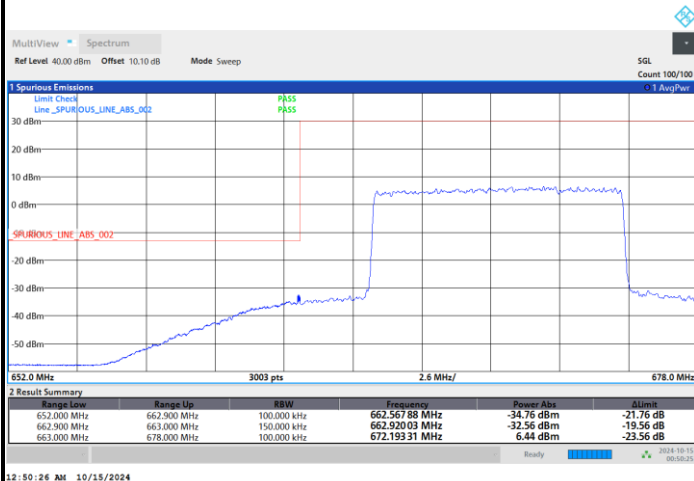


Highest Band Edge



FR1 n71 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



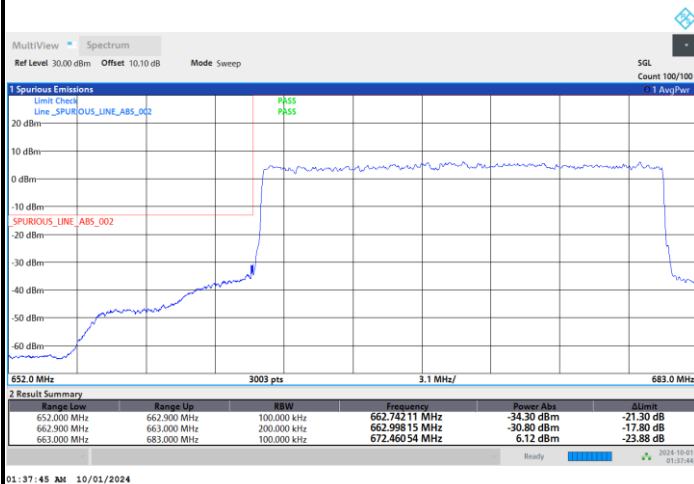
Highest Band Edge



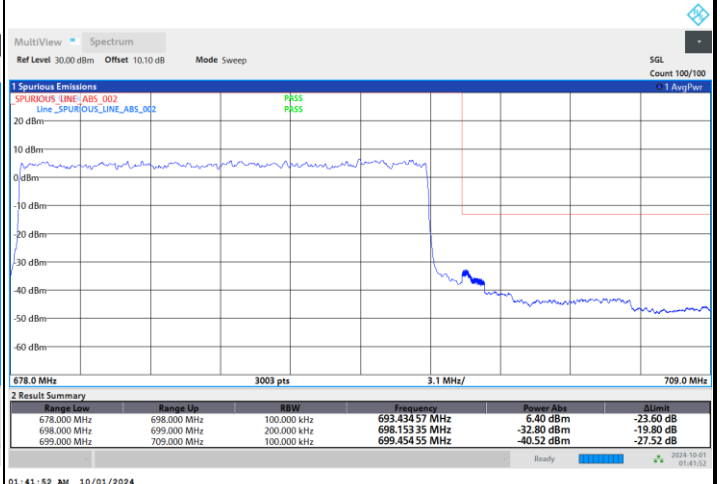


FR1 n71 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

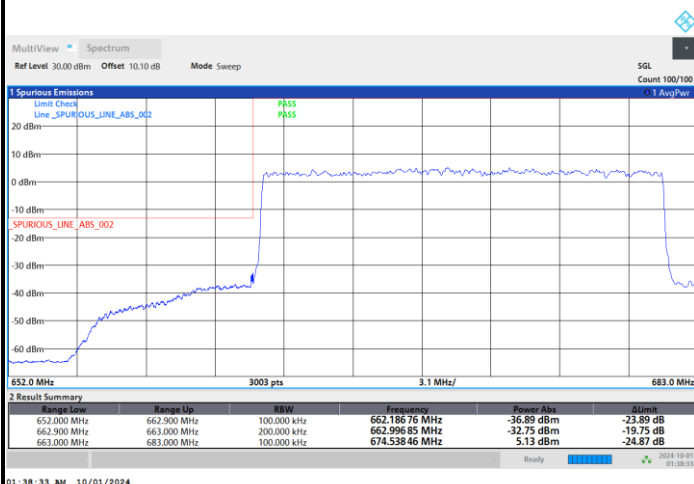


Highest Band Edge



FR1 n71 / 20MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



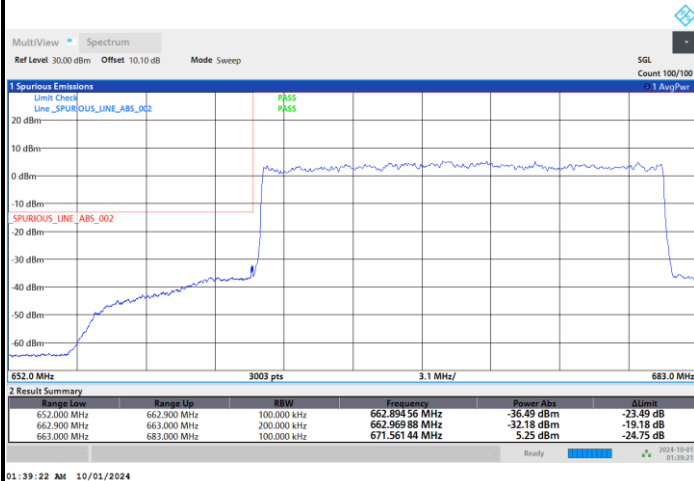
Highest Band Edge



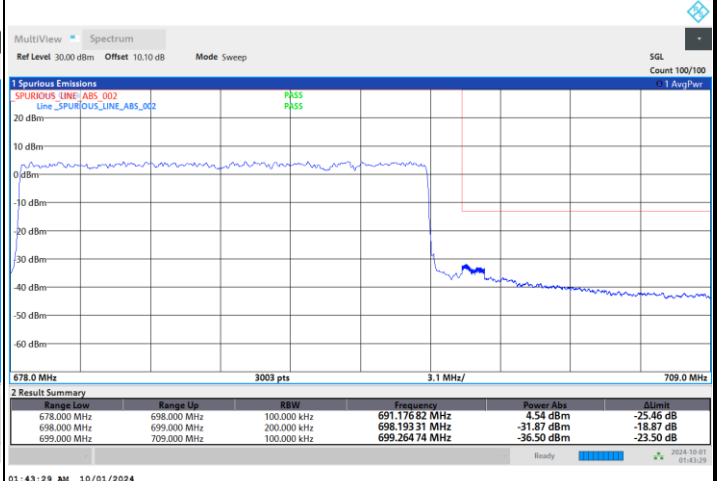


FR1 n71 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

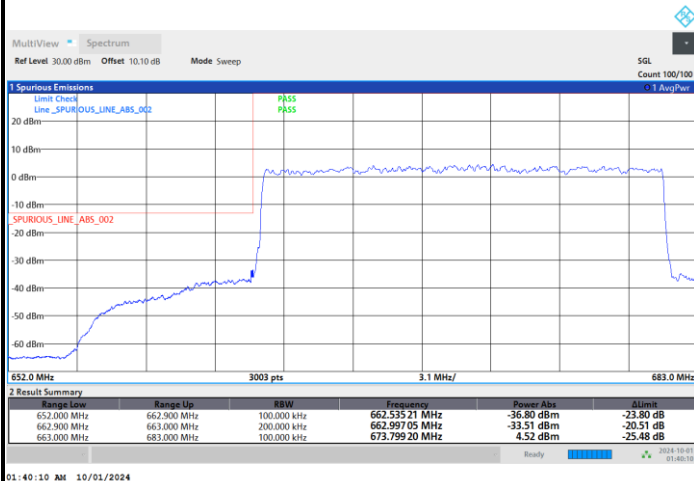


Highest Band Edge



FR1 n71 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



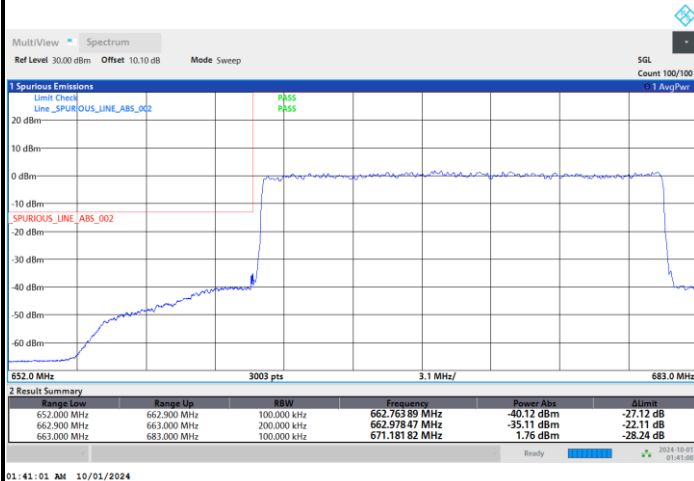
Highest Band Edge



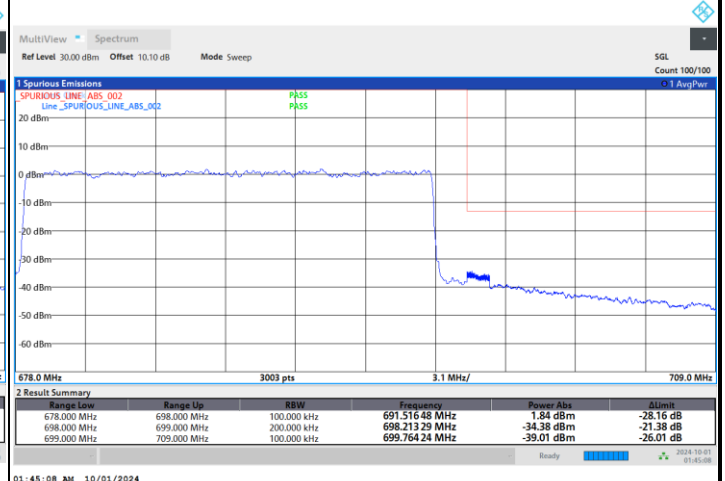


FR1 n71 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

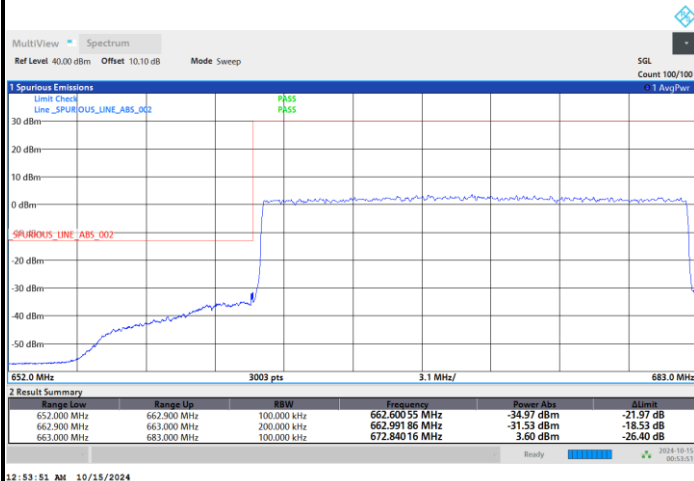


Highest Band Edge

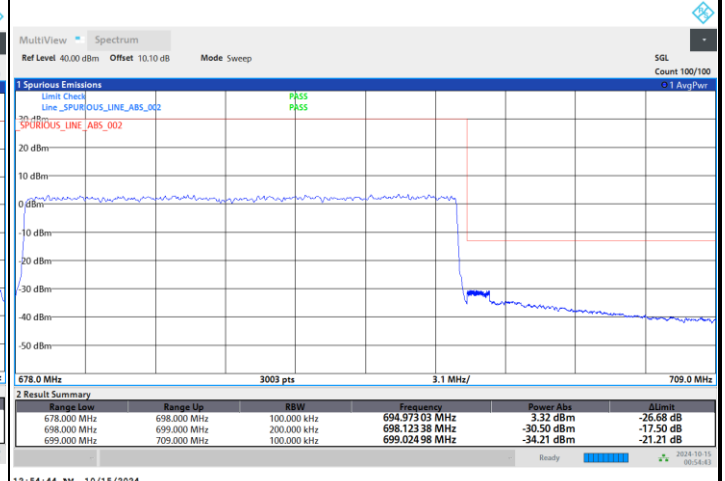


FR1 n71 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

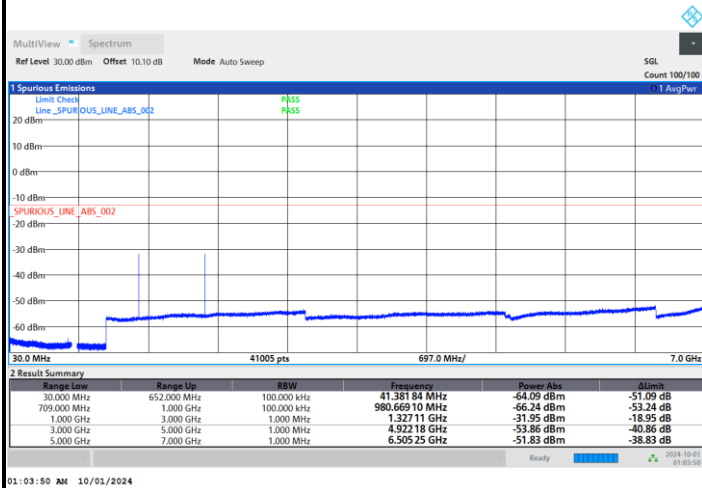




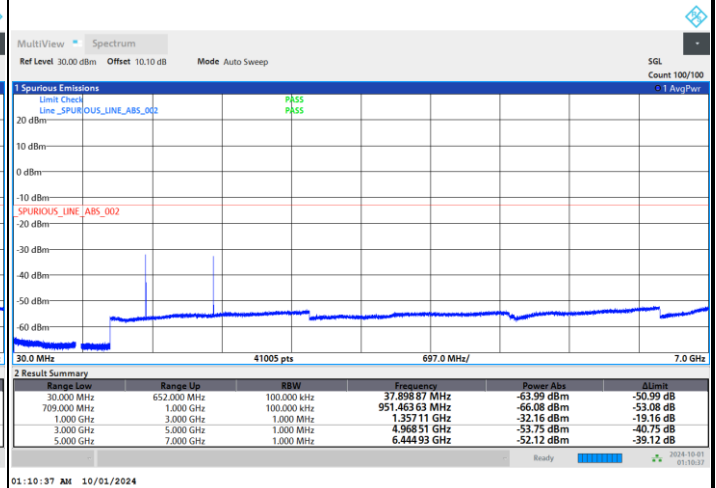
Conducted Spurious Emission

FR1 n71 / 5MHz / DFT-S OFDM / QPSK / 1RB1

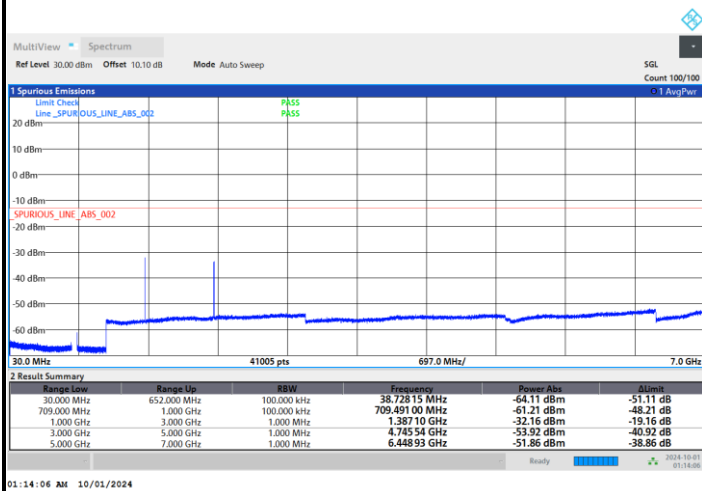
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n71 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0015	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0058	
-10	Normal Voltage	0.0044	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0031	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0024	
20	Minimum Voltage	0.0047	

Note:

1. Normal Voltage = 4.2 V. ; Minimum Voltage = 3.4 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

Test Conditions		FR1 n71 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Frequency Offset (Δf) (Hz)	Result
50	Normal Voltage	6.2	PASS
40	Normal Voltage	9.8	
30	Normal Voltage	2.8	
20(Ref.)	Normal Voltage	6.7	
10	Normal Voltage	-8.1	
0	Normal Voltage	-6.1	
-10	Normal Voltage	9.6	
-20	Normal Voltage	-8	
-30	Normal Voltage	-3.2	
20	Maximum Voltage	-0.1	
20	Normal Voltage	-2.6	
20	Minimum Voltage	0.6	

Note:

1. Normal Voltage = 4.2 V. ; Minimum Voltage = 3.4 V. ; Maximum Voltage = 4.4 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.

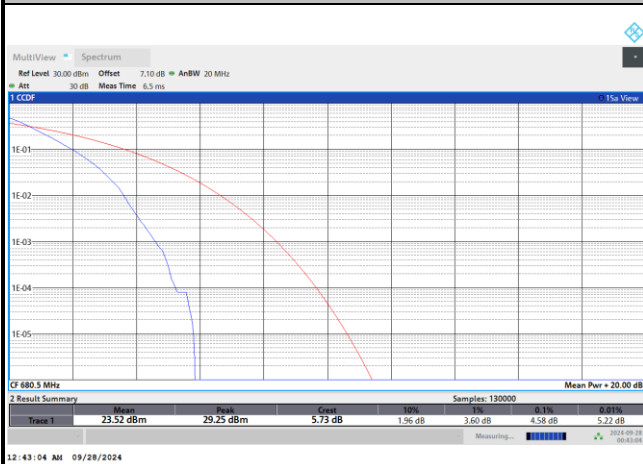
**FR1 n71 MIMO ANT2****Peak-to-Average Ratio**

Mode	FR1 n71 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.58	5.60	6.34	6.56	PASS
Mode	FR1 n71 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.66				PASS

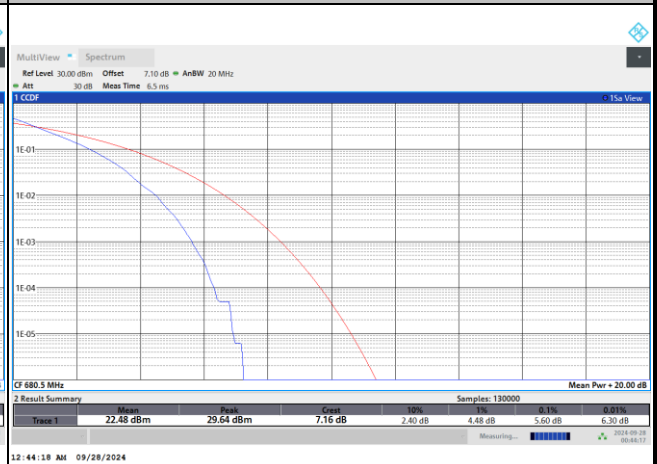


FR1 n71 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

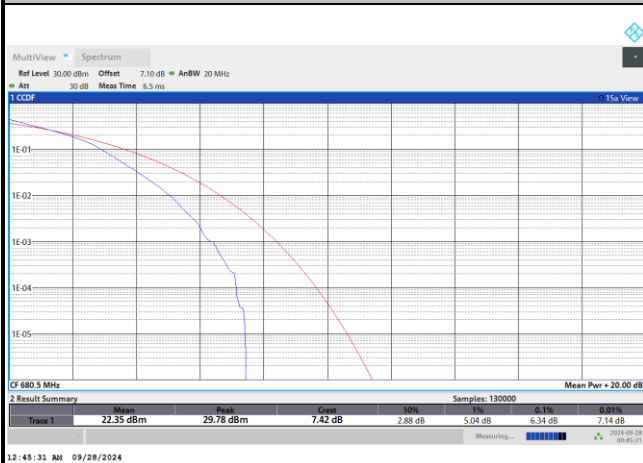
PI/2 BPSK



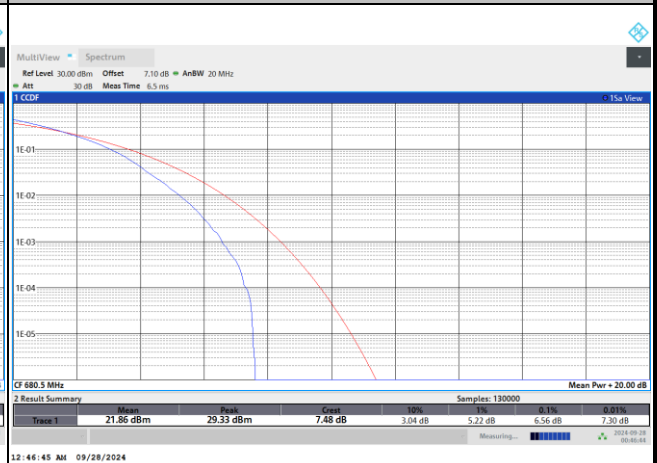
QPSK



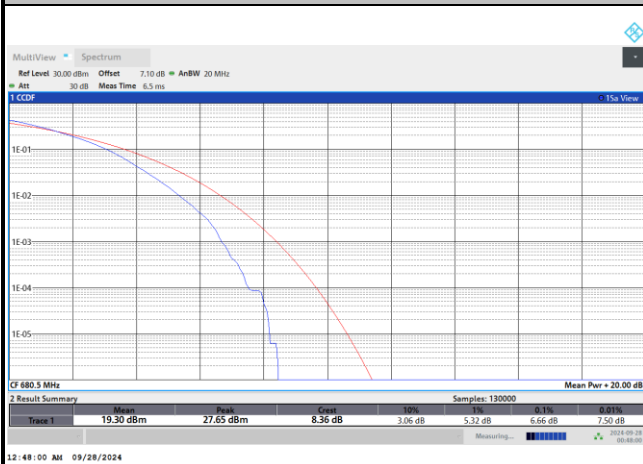
16QAM



64QAM



256QAM



**26dB Bandwidth**

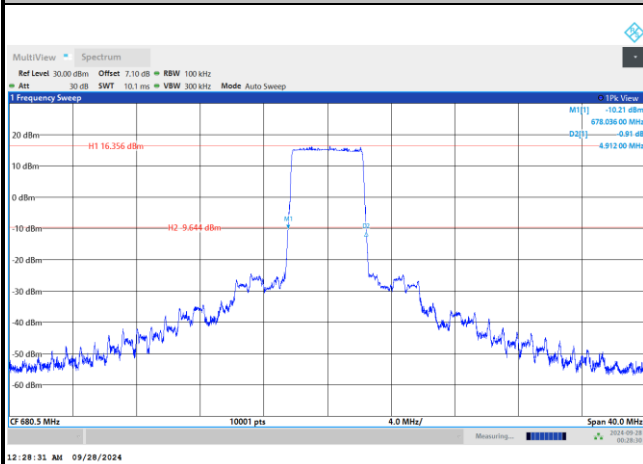
Mode	FR1 n71 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.91		9.57		14.23		19.12	

Mode	FR1 n71 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.88	4.91	9.97	9.93	14.97	14.94	20.20	20.21
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.93	4.90	9.86	9.92	14.97	14.97	20.22	20.24



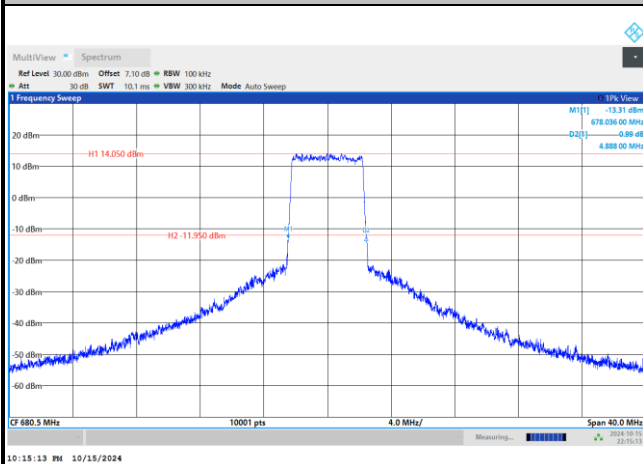
FR1 n71 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

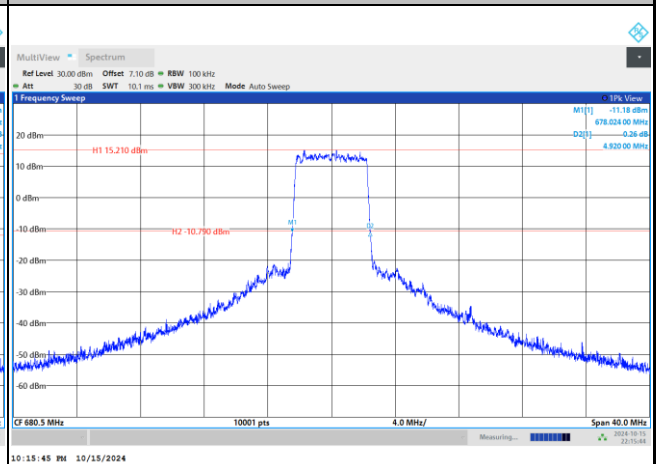


FR1 n71 / 5MHz / CP OFDM / Middle Channel / Full RB

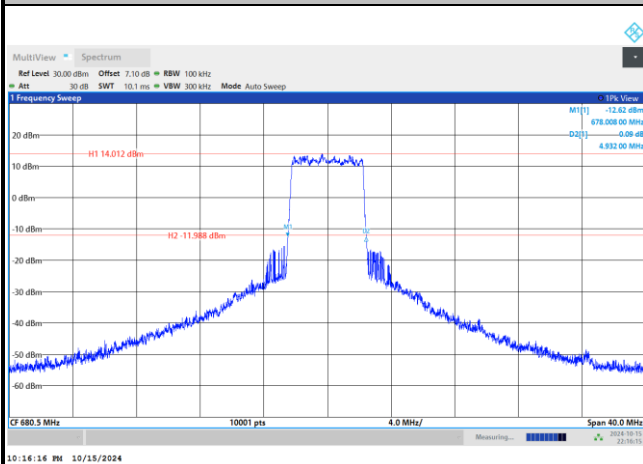
QPSK



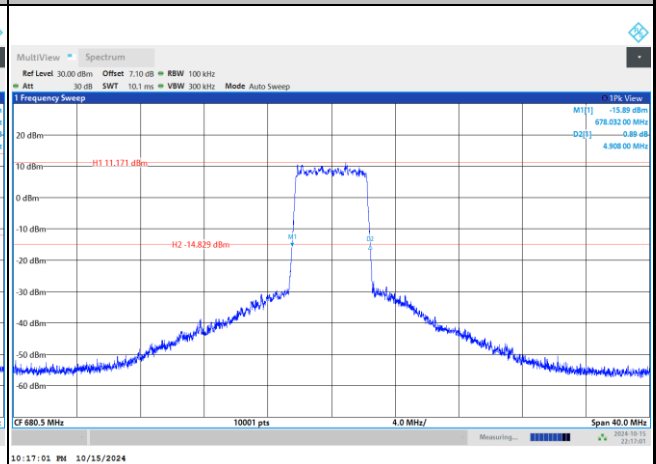
16QAM



64QAM



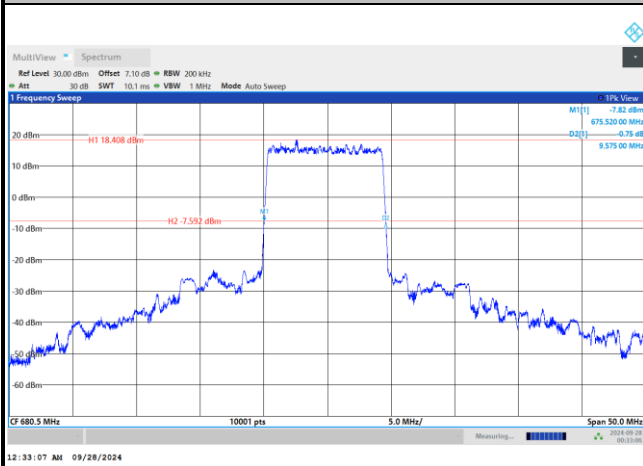
256QAM





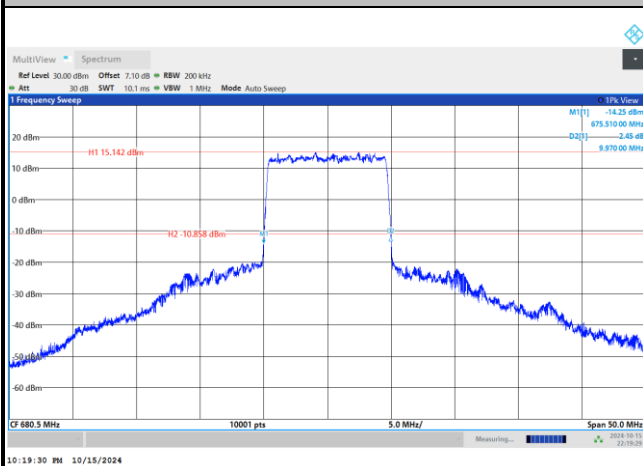
FR1 n71 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

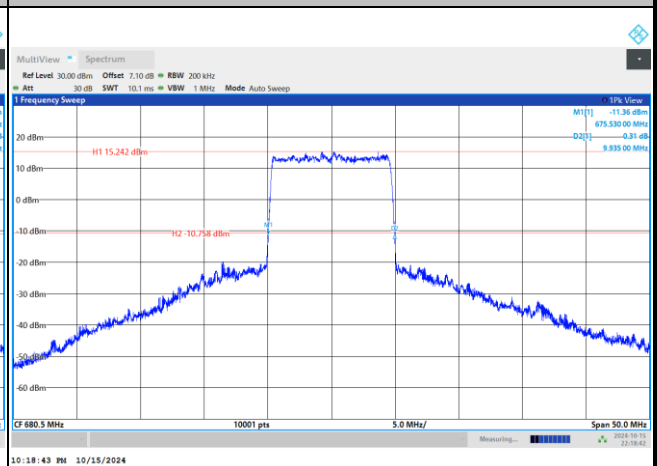


FR1 n71 / 10MHz / CP OFDM / Middle Channel / Full RB

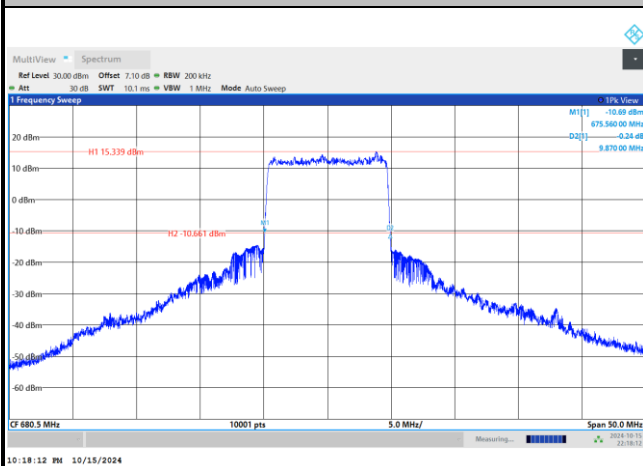
QPSK



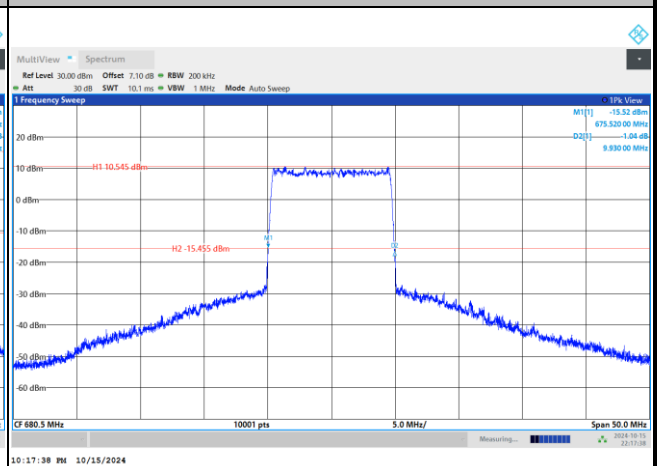
16QAM



64QAM



256QAM





MultiView Spectrum

Ref Level 30.00 dBm Offset 7.10 dB RBW 300 kHz

Att 30 dB SWT 10.1 ms VBW 1 MHz Mode Auto Sweep

1 Frequency Sweep

20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-60 dBm

H1 19.370 dBm
H2 6.630 dBm

10001 pts 6.0 MHz/

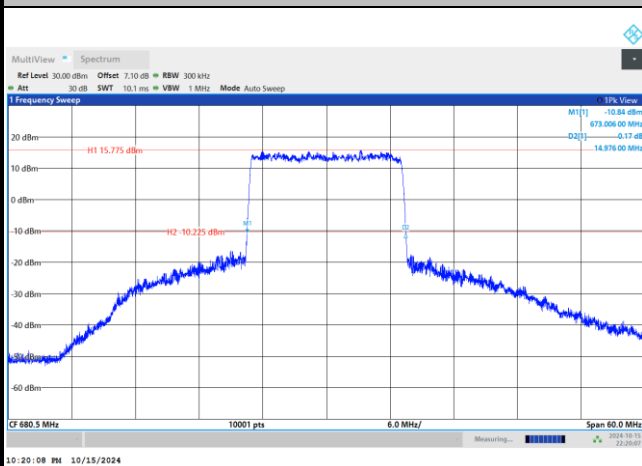
CF 680.5 MHz

Span 60.0 MHz

Measuring...

12:37:42 AM 09/28/2024

QPSK



MultiView Spectrum

Ref Level 30.00 dBm Offset 7.10 dB RBW 300 kHz

Att 30 dB SWT 10.1 ms VBW 1 MHz Mode Auto Sweep

1 Frequency Sweep

16.191 dBm

-0.809 dBm

CF 680.5 MHz 10001 pts 6.0 MHz/ Span 60.0 MHz

10:20:41 PM 10/15/2024

MultiView Spectrum

Ref Level 30.00 dBm Offset 7.10 dB RBW 300 kHz

Att 30 dB SWT 10.1 ms VBW 1 MHz Mode Auto Sweep

1 Frequency Sweep

10% View

M1[1] +13.59 dBm
673.812 000 MHz
D3[0] -0.04 dB
14.876 000 MHz

20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-60 dBm

H1 15.026 dBm
H2 -10.974 dBm

680.5 MHz 10001 pts 6.0 MHz/ Span 60.0 MHz

Measuring 2024-10-15 22:21:19

10:21:20 PM 10/15/2024

MultView Spectrum
 Ref Level 30.00 dBm Offset 7.10 dB RBW 300 kHz
 Att 30 dB SWT 10.1 ms VBW 1 MHz Mode Auto Sweep
 1 Frequency Sweep

20 dBm
 10 dBm
 0 dBm
 -10 dBm
 -20 dBm
 -30 dBm
 -40 dBm
 -50 dBm
 -60 dBm

H1 11.836 dBm
 H2 -14.164 dBm

M1[1] -14.00 dBm
 672.888 00 MHz
 D0[1] 0.11 dB
 14.970 00 MHz

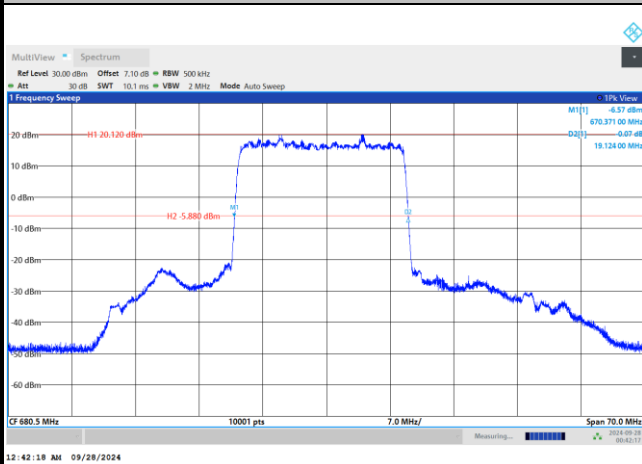
CF 680.5 MHz 10001 pts 6.0 MHz/ Span 60.0 MHz

10:21:55 PM 10/15/2024



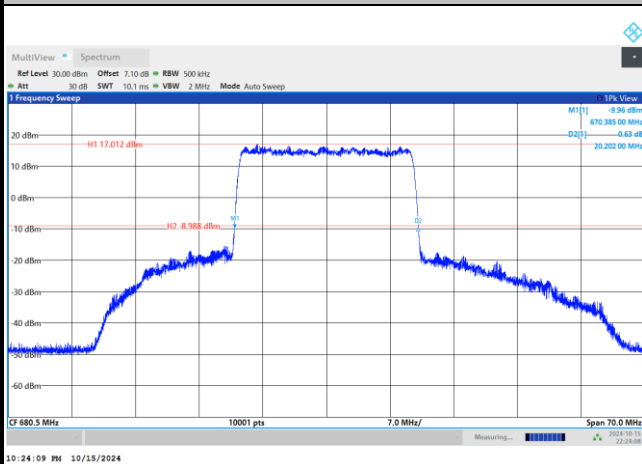
FR1 n71 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

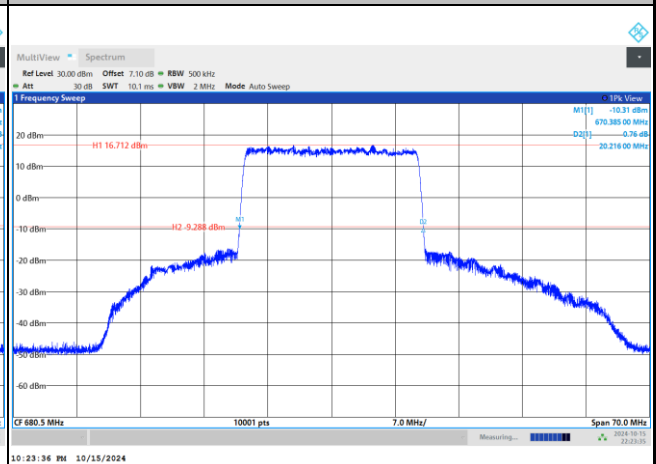


FR1 n71 / 20MHz / CP OFDM / Middle Channel / Full RB

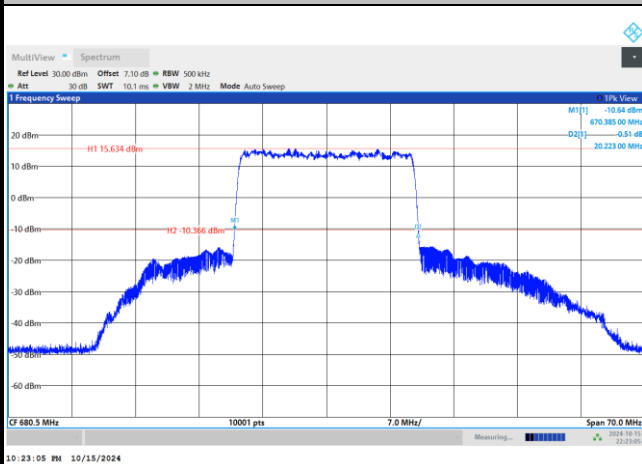
QPSK



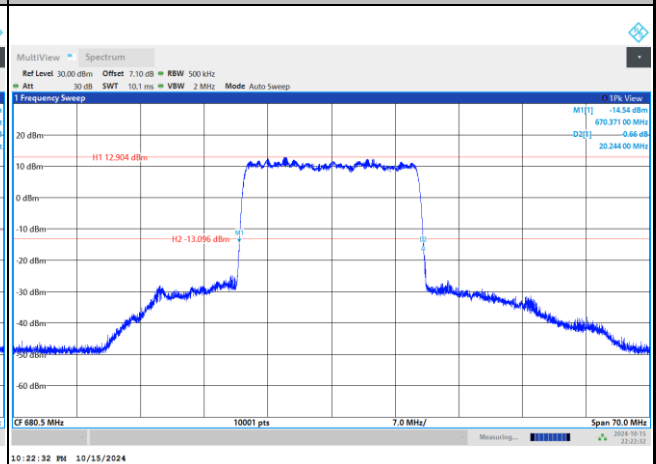
16QAM



64QAM



256QAM



**Occupied Bandwidth**

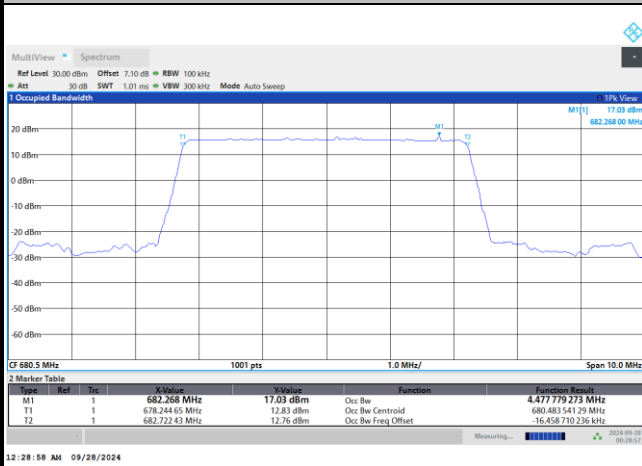
Mode	FR1 n71 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.47		8.99		13.49		18.07	

Mode	FR1 n71 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.47	4.50	9.31	9.32	14.17	14.14	19.01	19.04
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.50	4.48	9.33	9.29	14.18	14.13	19.07	19.01



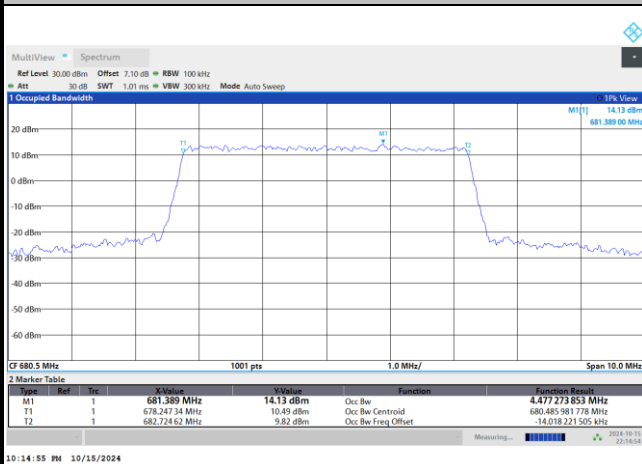
FR1 n71 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

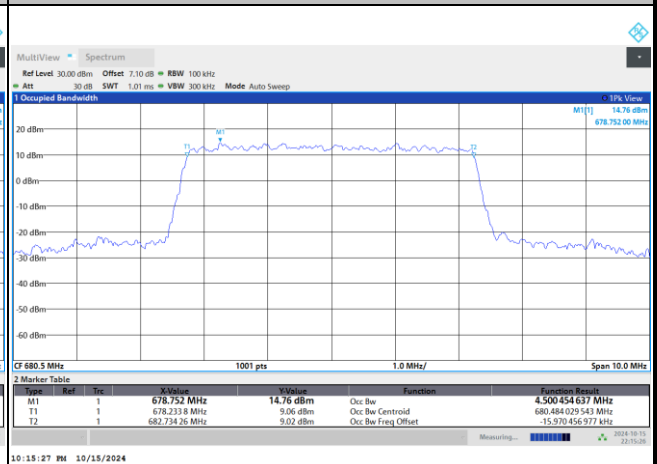


FR1 n71 / 5MHz / CP OFDM / Middle Channel / Full RB

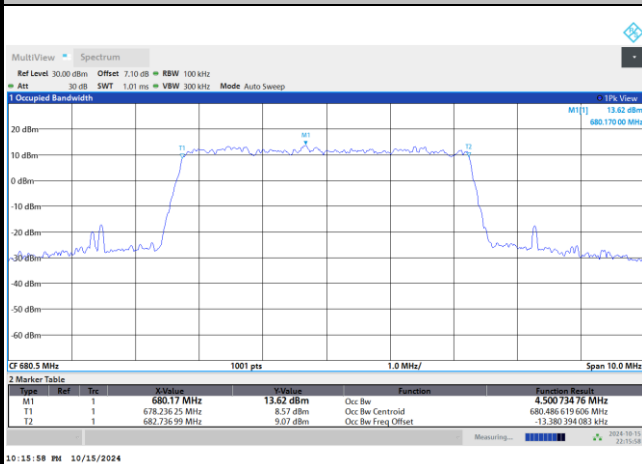
QPSK



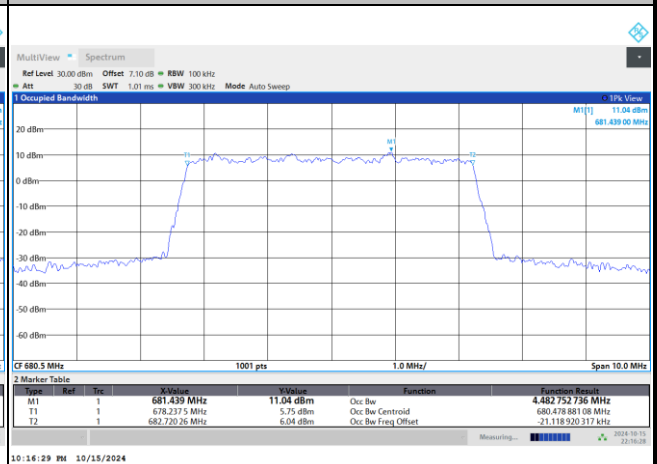
16QAM



64QAM



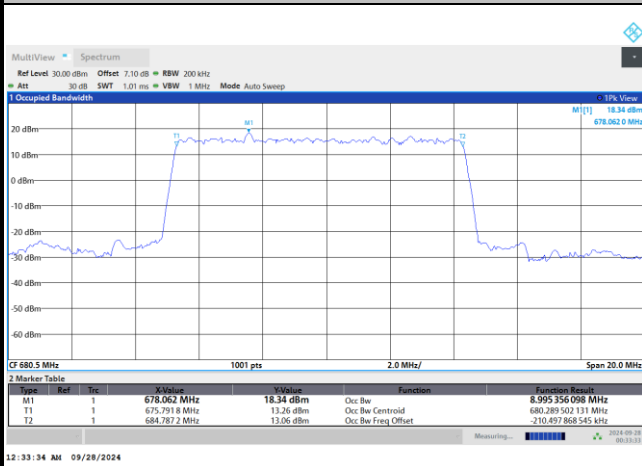
256QAM





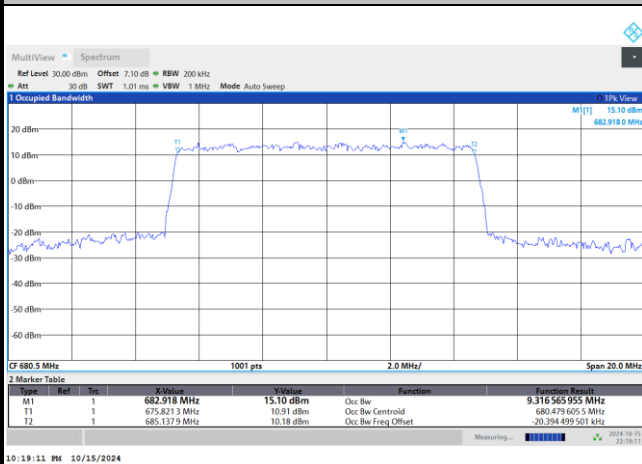
FR1 n71 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

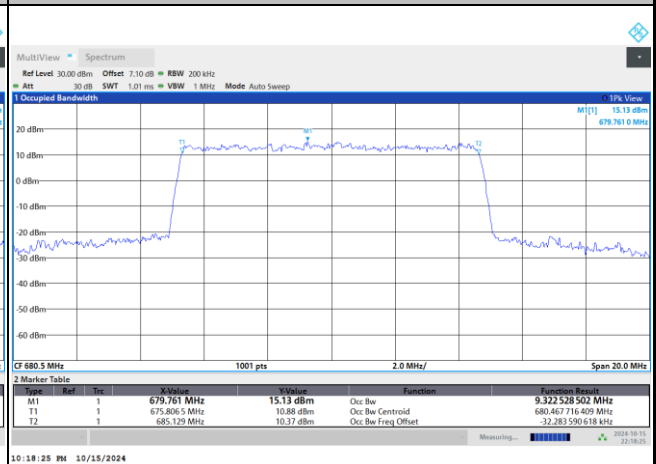


FR1 n71 / 10MHz / CP OFDM / Middle Channel / Full RB

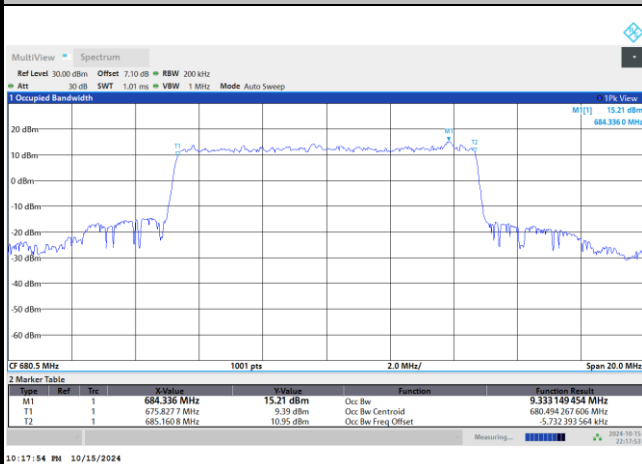
QPSK



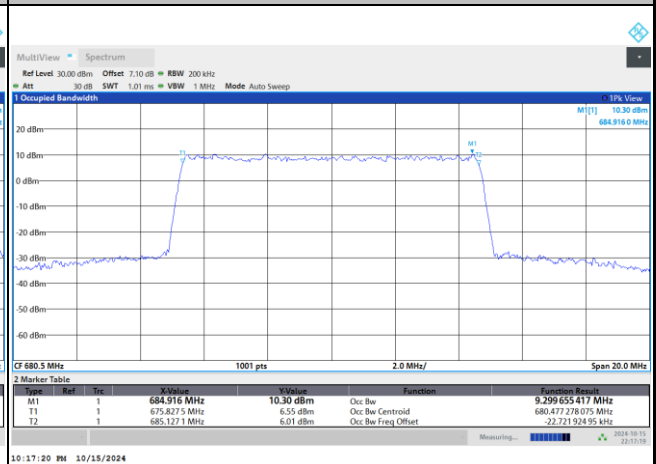
16QAM



64QAM



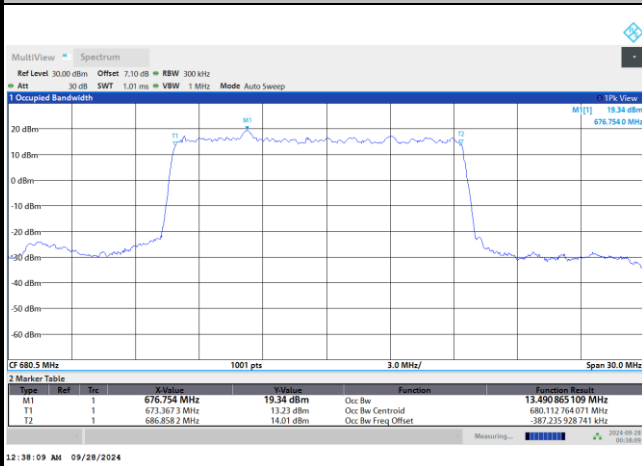
256QAM





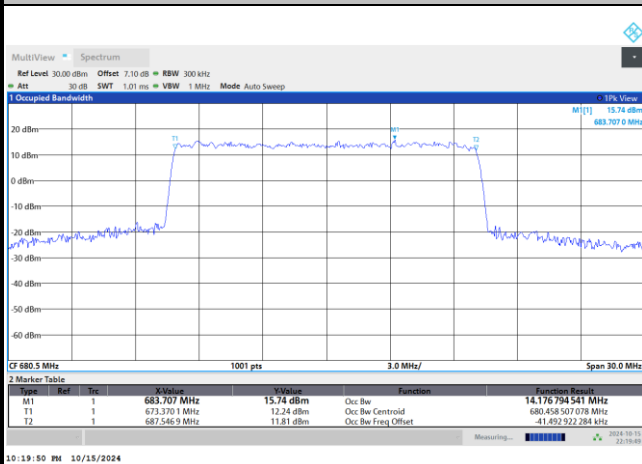
FR1 n71 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

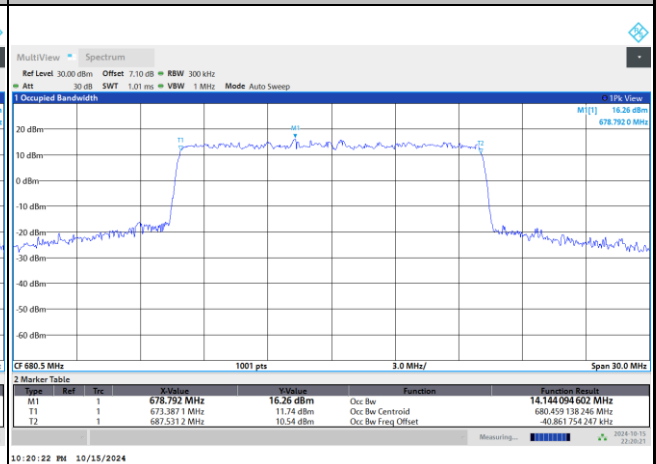


FR1 n71 / 15MHz / CP OFDM / Middle Channel / Full RB

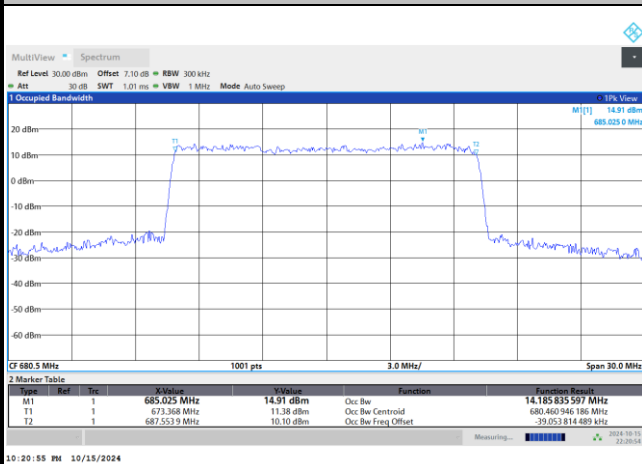
QPSK



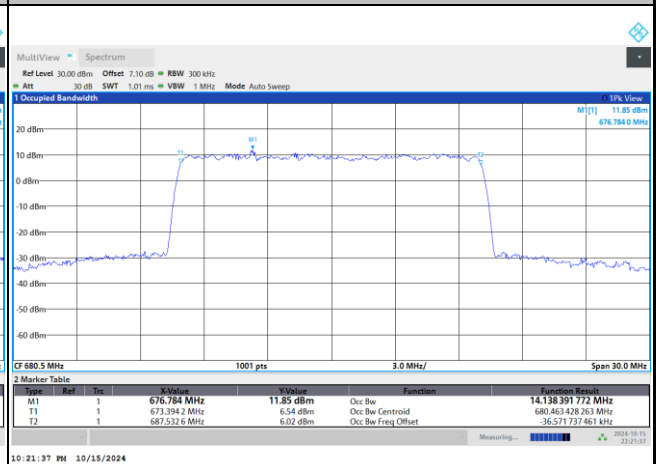
16QAM



64QAM

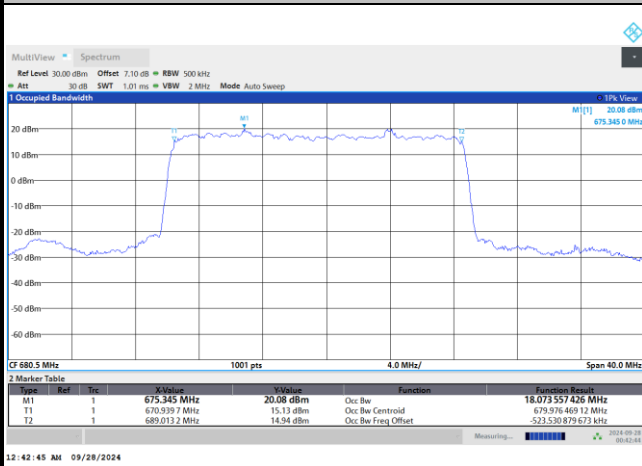


256QAM



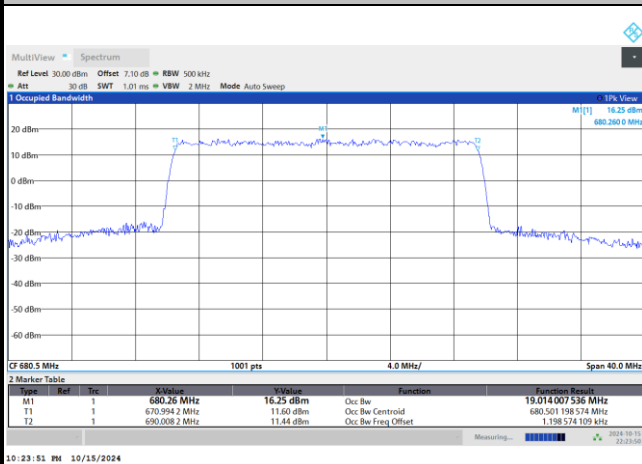
FR1 n71 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

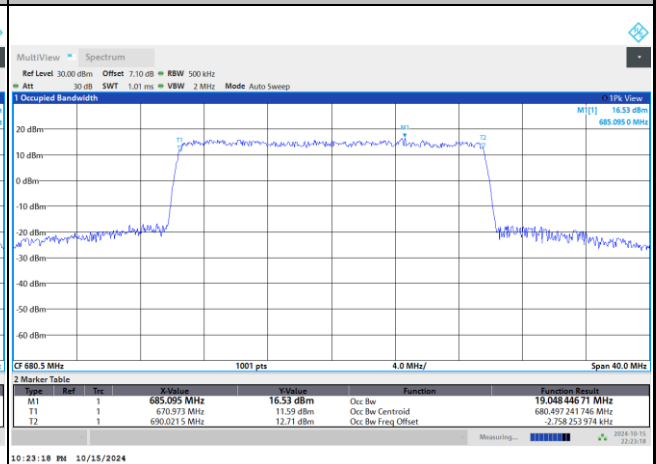


FR1 n71 / 20MHz / CP OFDM / Middle Channel / Full RB

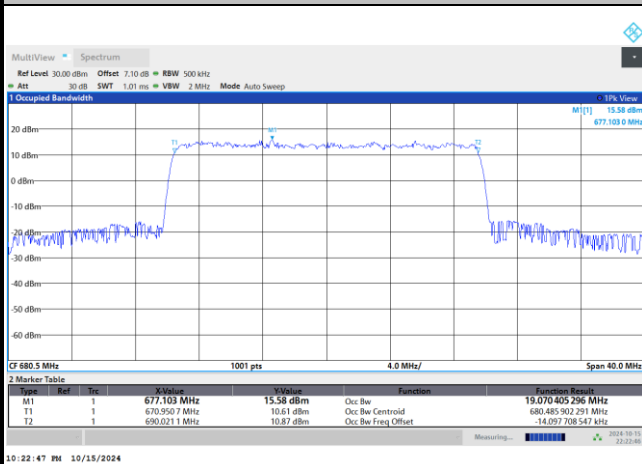
QPSK



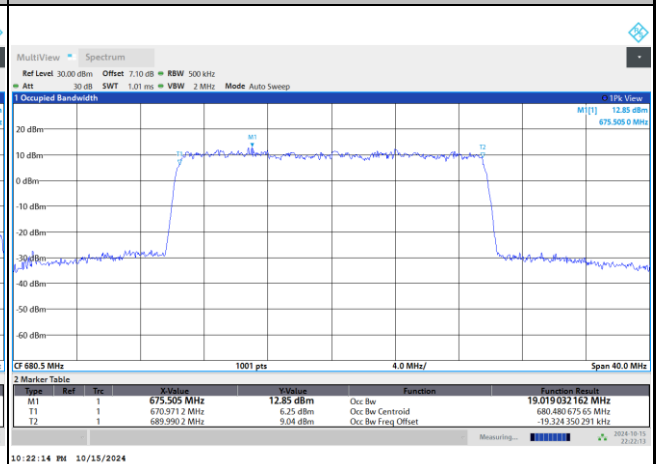
16QAM



64QAM



256QAM

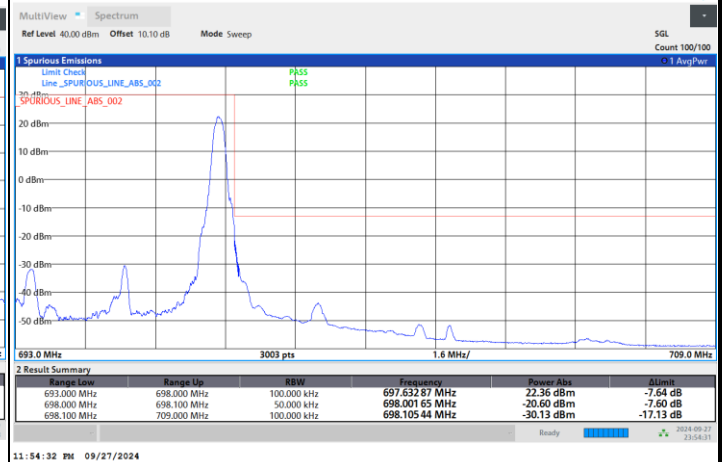
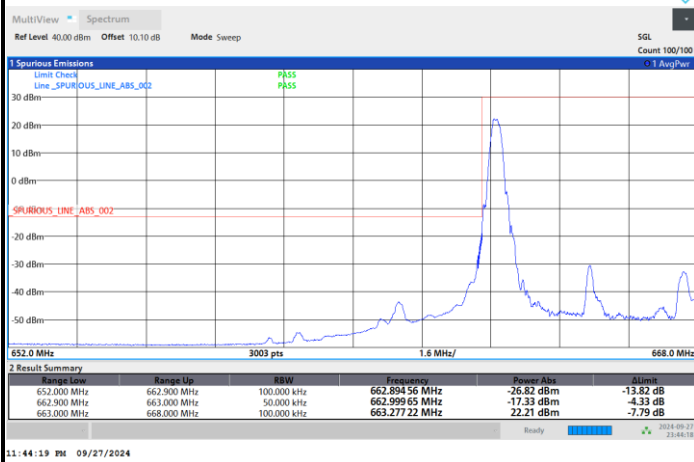


**Conducted Band Edge**

FR1 n71 / 5MHz / DFT-S OFDM / PI/2 BPSK

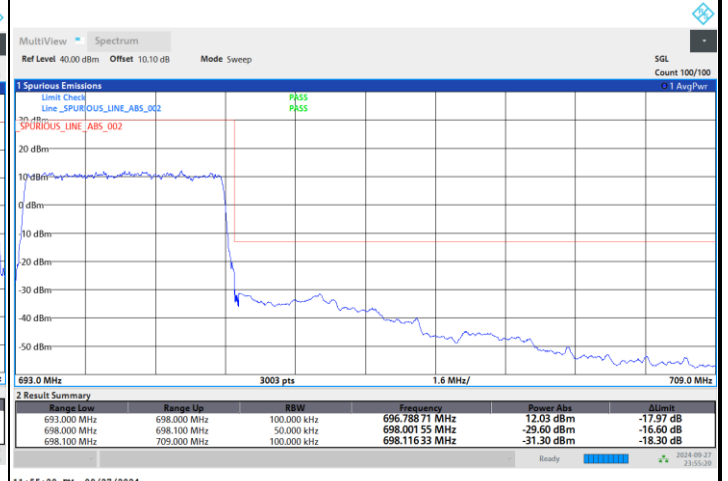
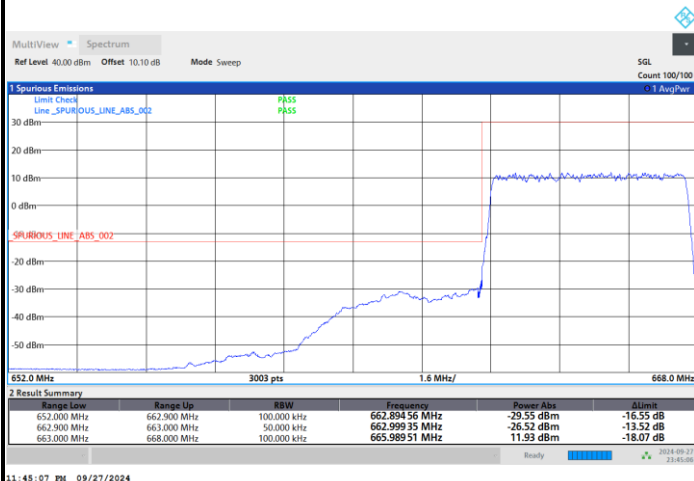
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

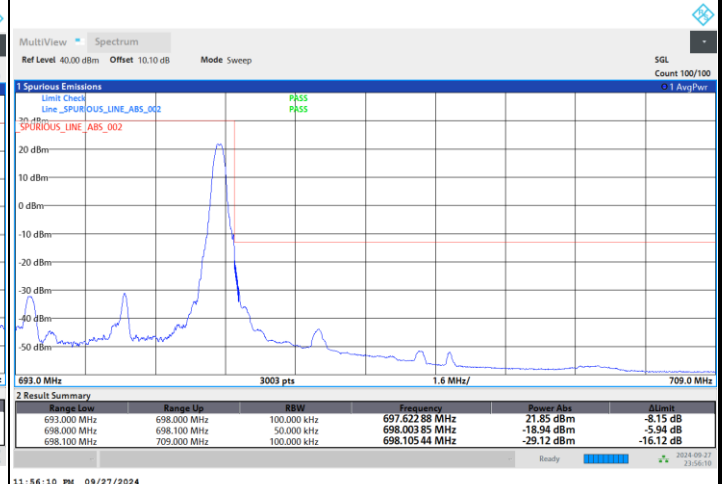
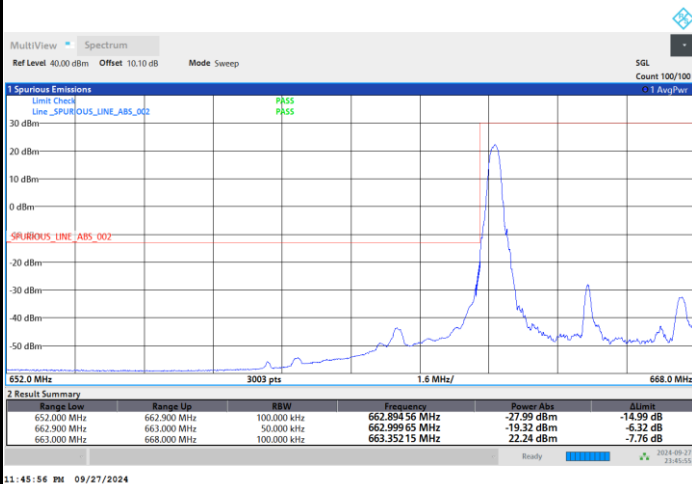




FR1 n71 / 5MHz / DFT-S OFDM / QPSK

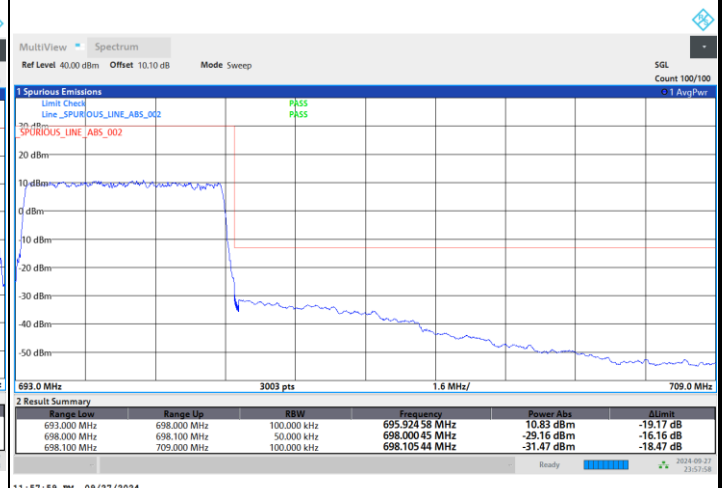
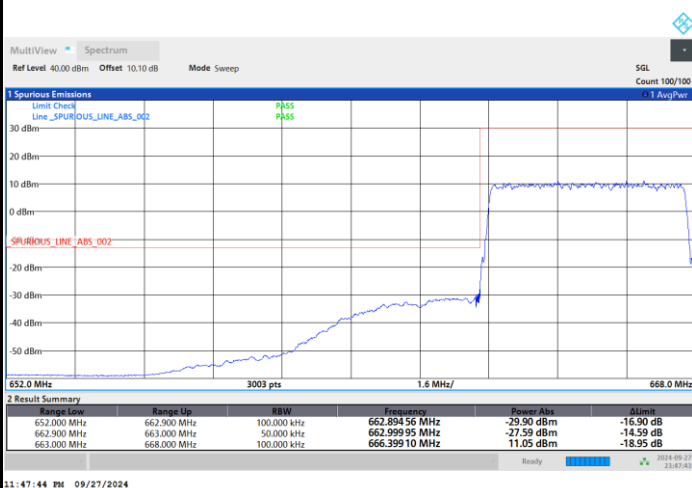
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

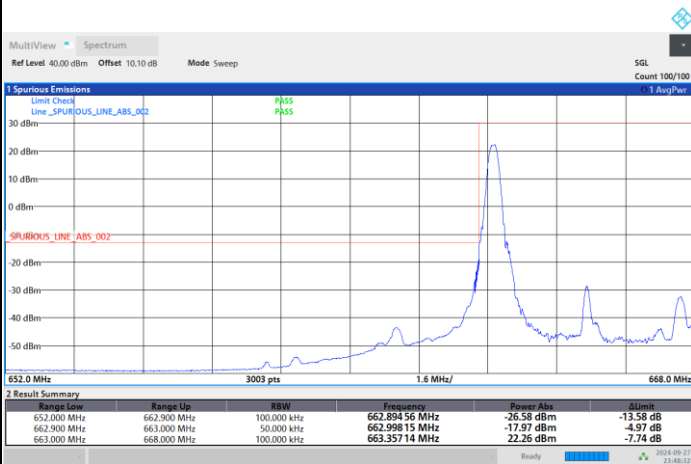




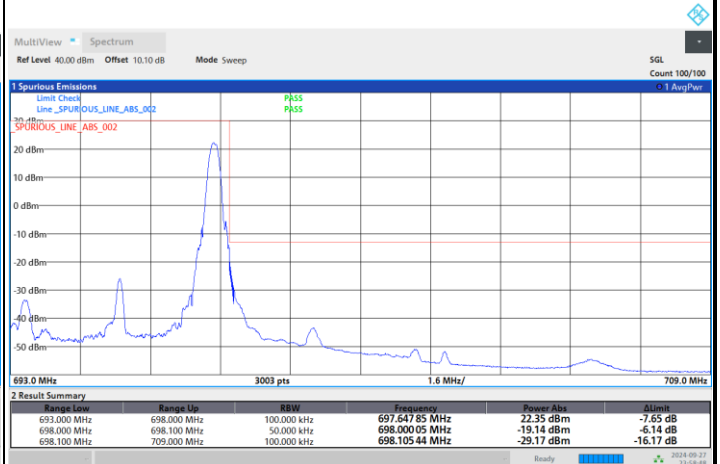
FR1 n71 / 5MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



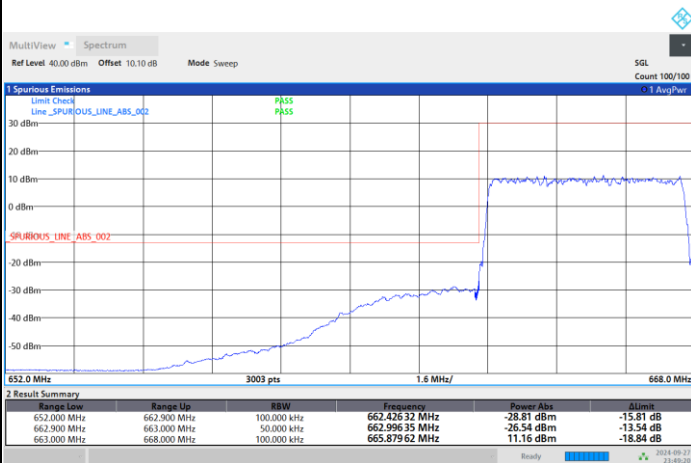
11:48:33 PM 09/27/2024



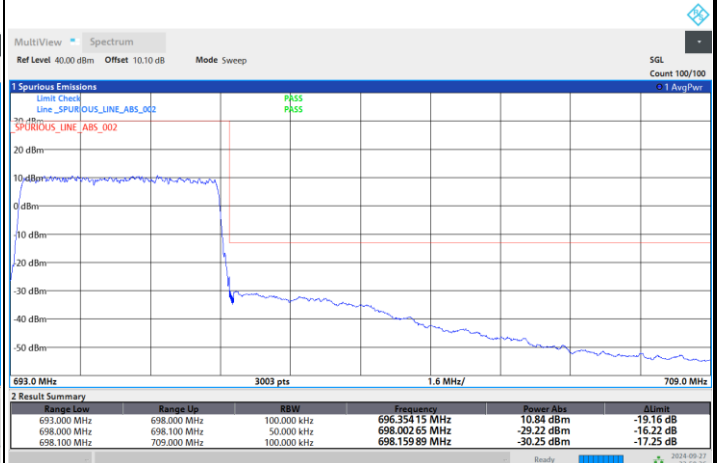
11:58:48 PM 09/27/2024

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



11:49:21 PM 09/27/2024



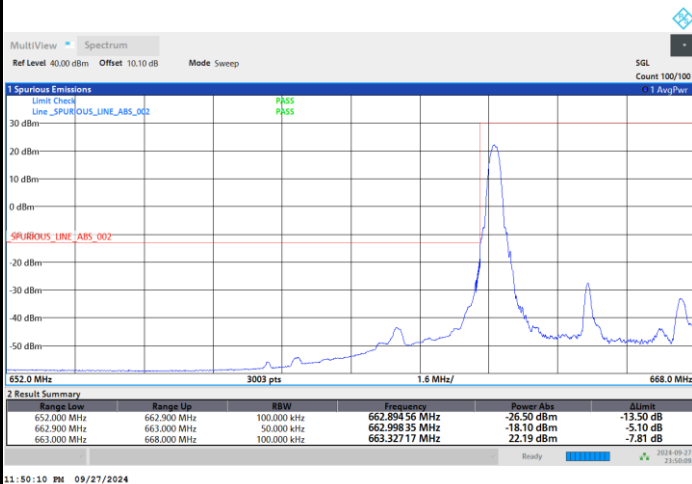
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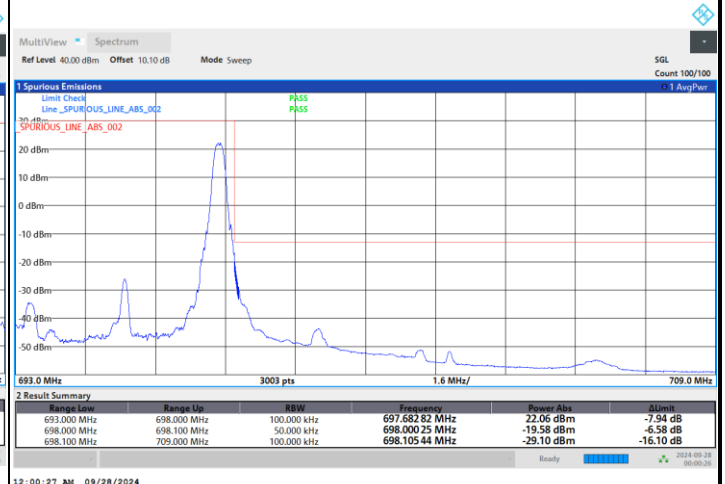
FR1 n71 / 5MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



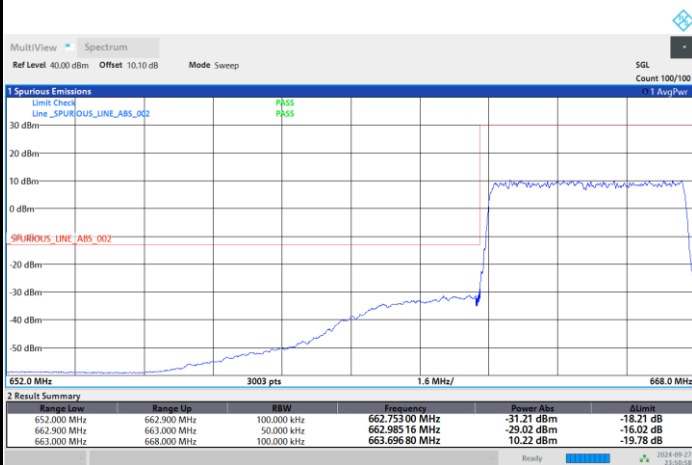
11:50:10 PM 09/27/2024



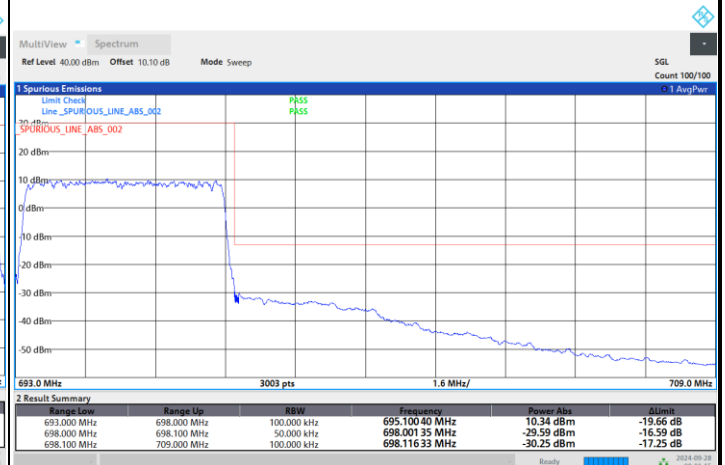
12:00:27 AM 09/28/2024

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



11:50:58 PM 09/27/2024



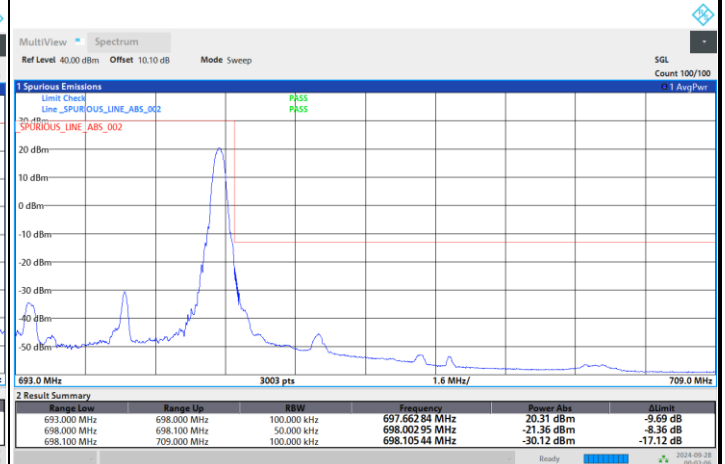
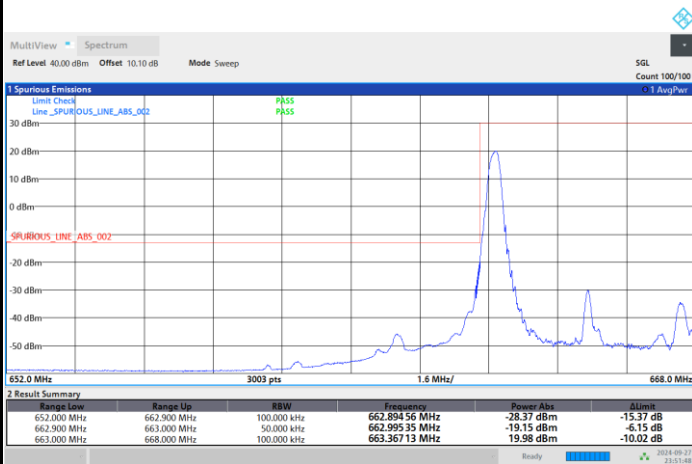
12:01:15 AM 09/28/2024



FR1 n71 / 5MHz / DFT-S OFDM / 256QAM

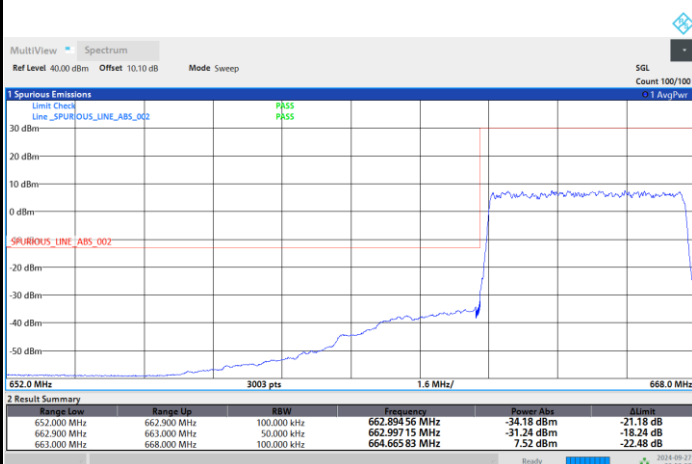
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

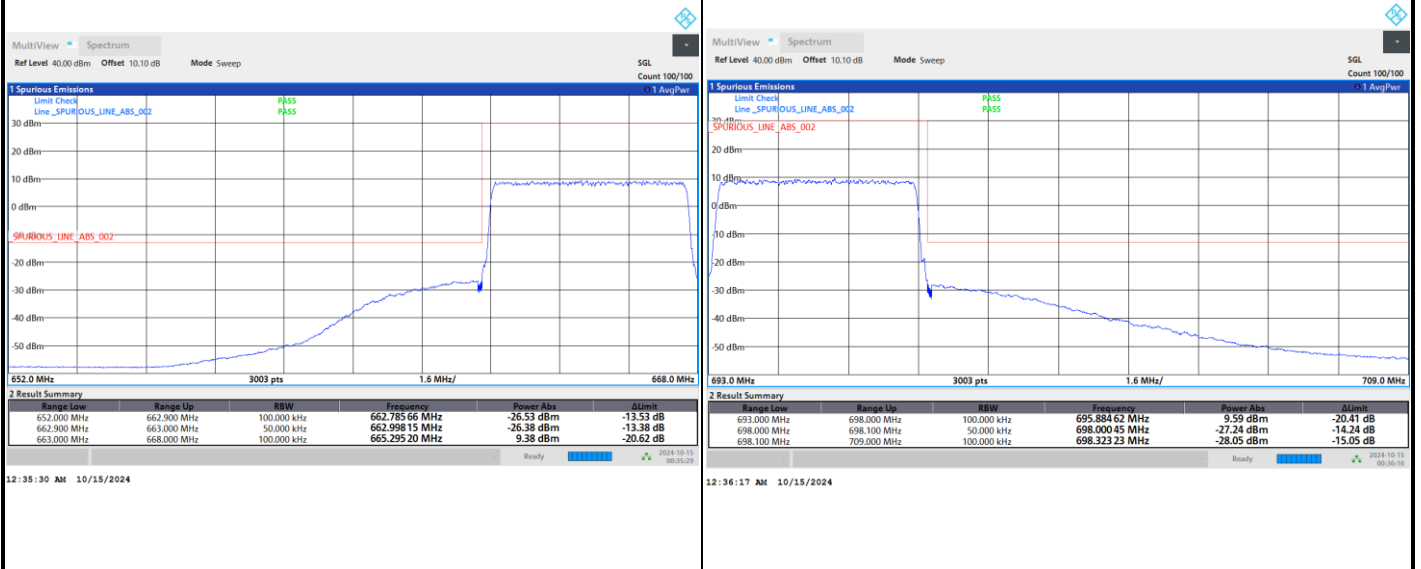




FR1 n71 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

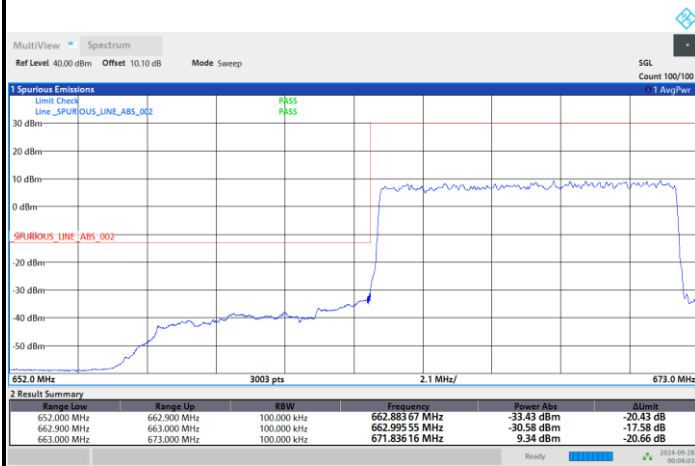
Highest Band Edge



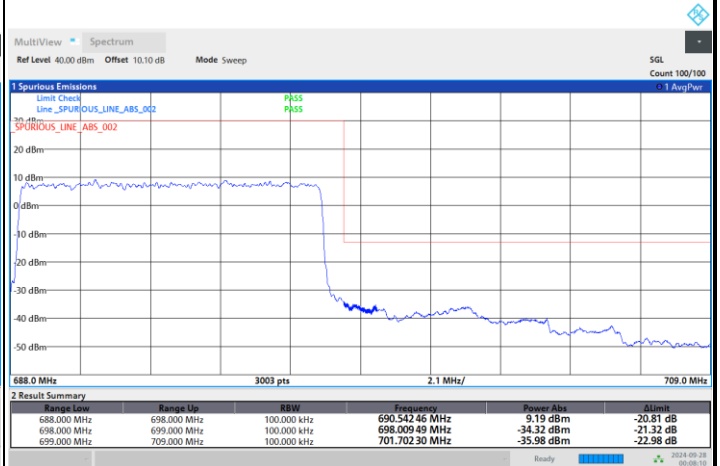


FR1 n71 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

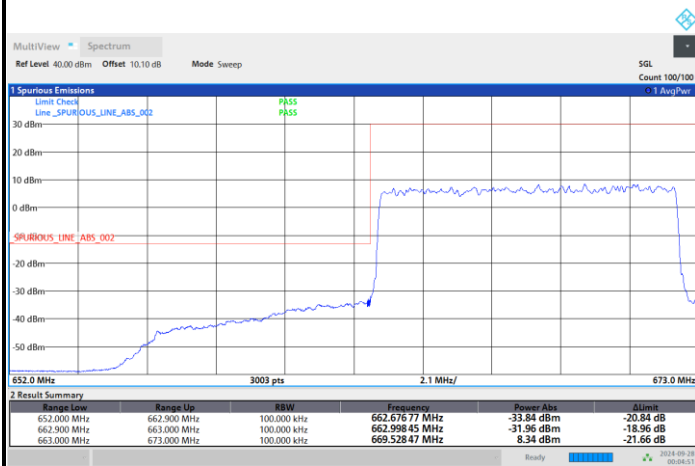


Highest Band Edge



FR1 n71 / 10MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

