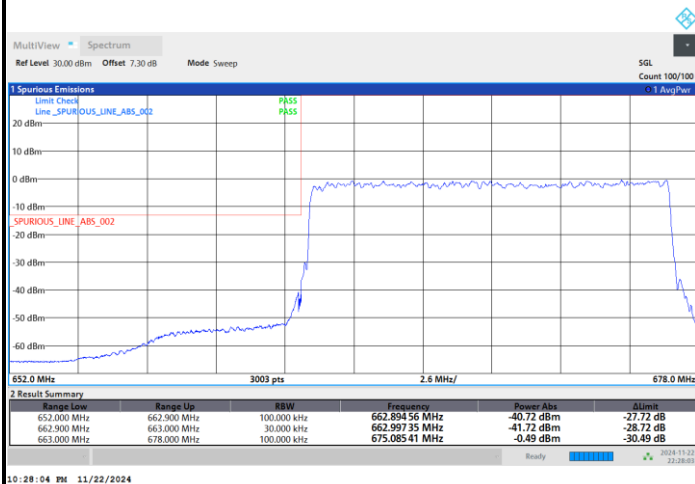


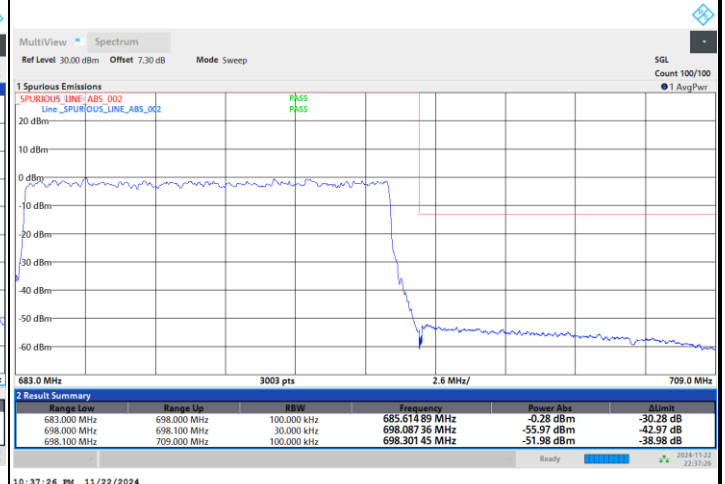


FR1 n71 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

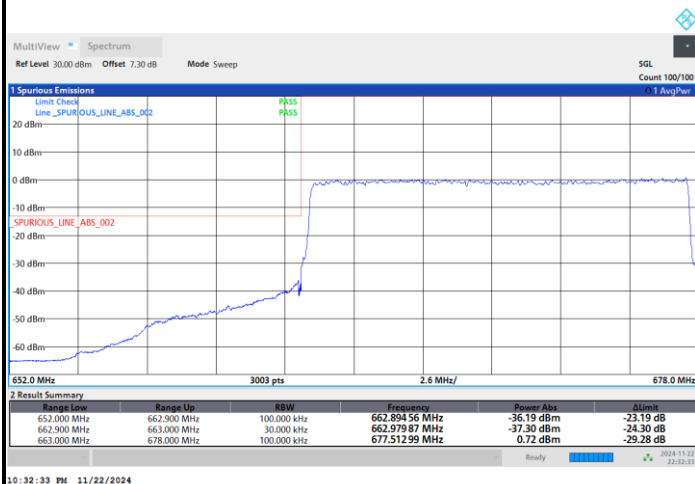


Highest Band Edge

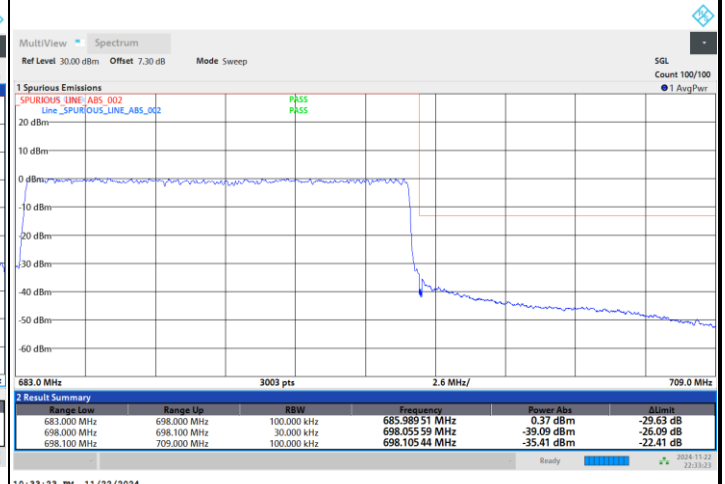


FR1 n71 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



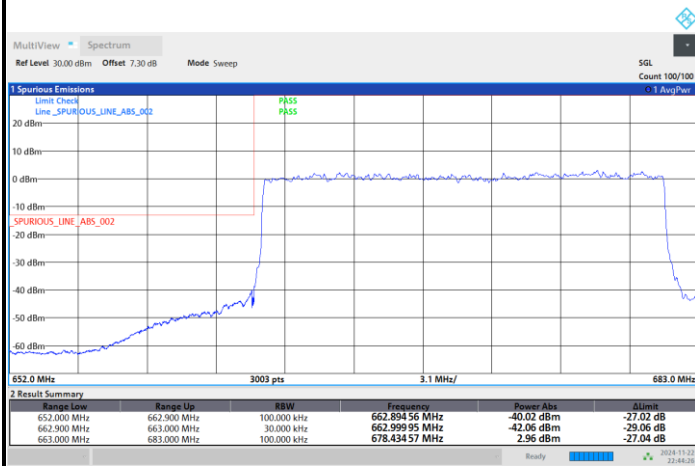
Highest Band Edge





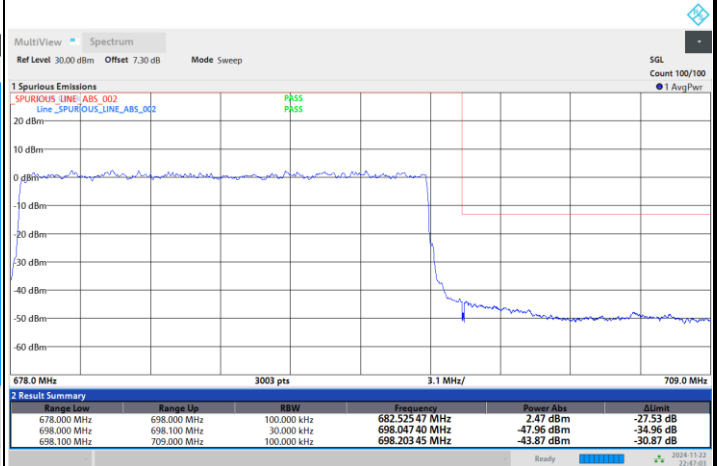
FR1 n71 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge



10:44:26 PM 11/22/2024

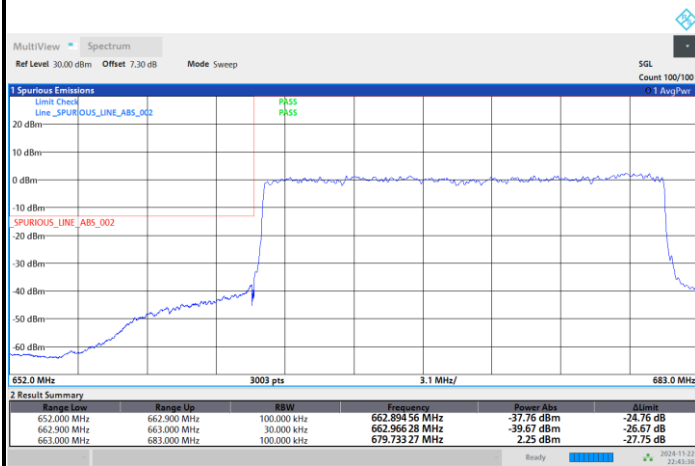
Highest Band Edge



10:47:04 PM 11/22/2024

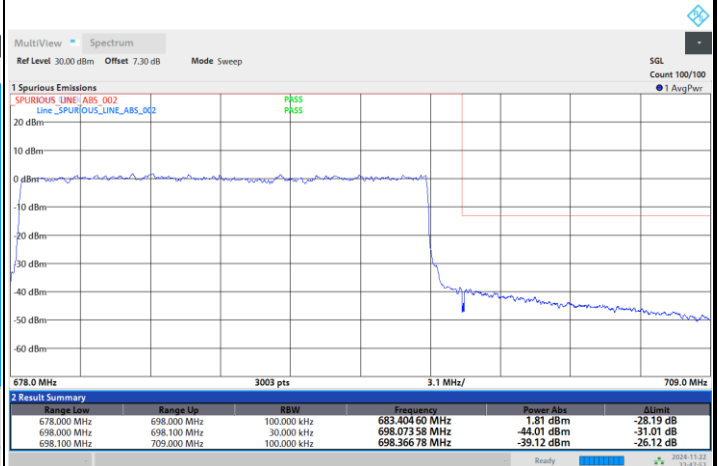
FR1 n71 / 20MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



10:43:37 PM 11/22/2024

Highest Band Edge

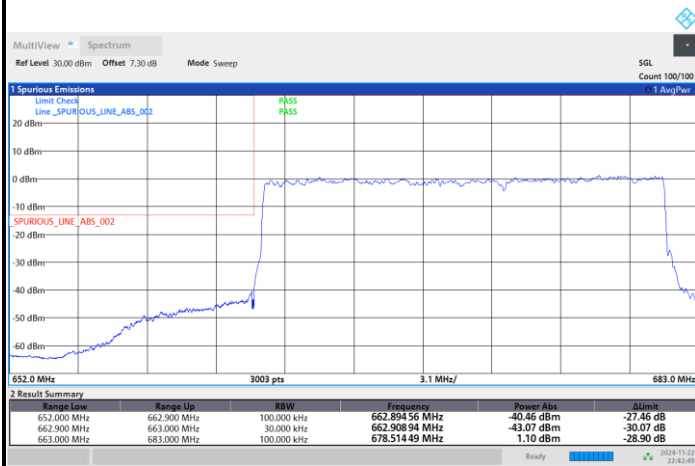


10:47:52 PM 11/22/2024



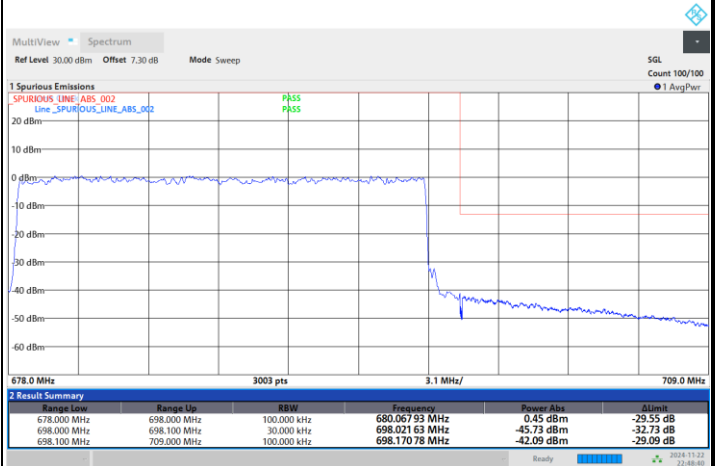
FR1 n71 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge



10:42:49 PM 11/22/2024

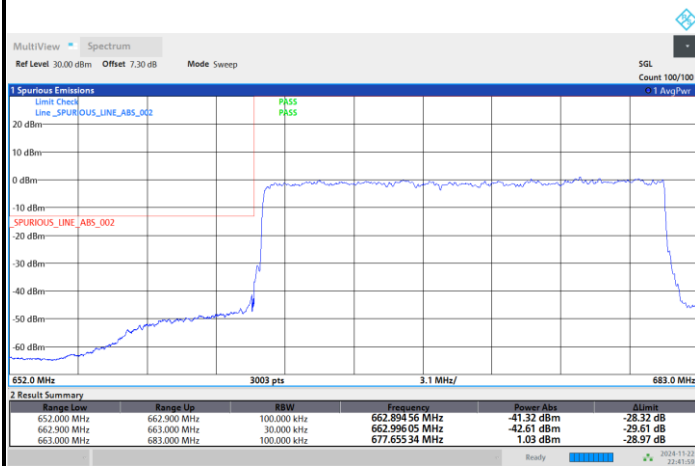
Highest Band Edge



10:48:41 PM 11/22/2024

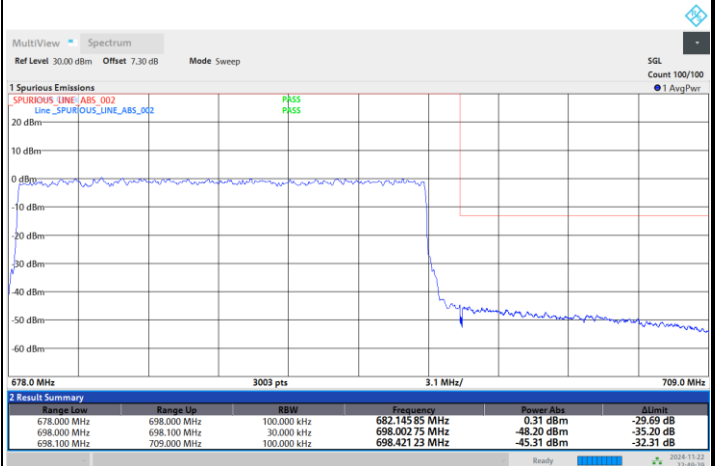
FR1 n71 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

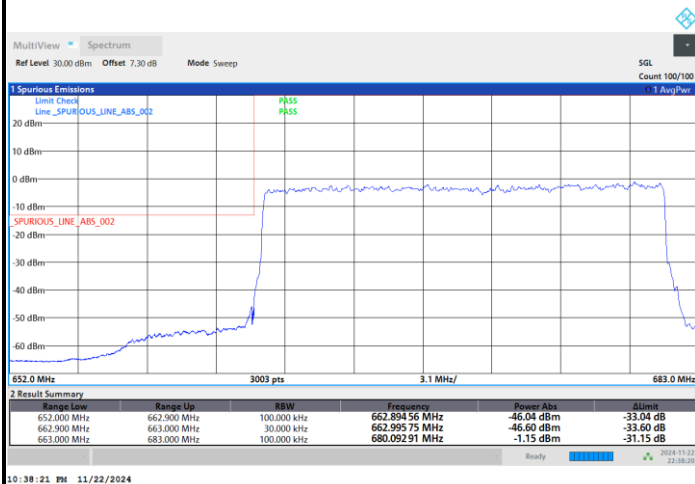


10:42:00 PM 11/22/2024

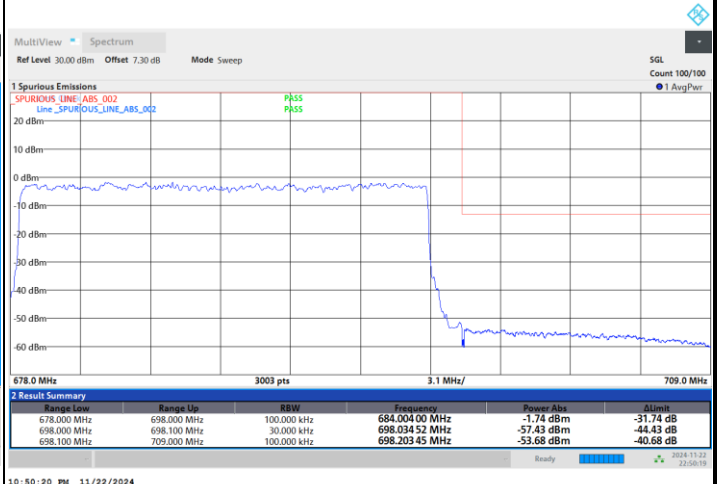
Highest Band Edge



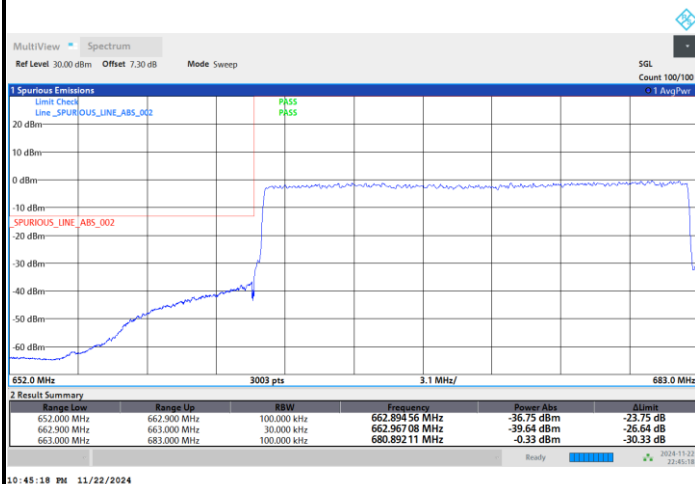
10:49:29 PM 11/22/2024

**FR1 n71 / 20MHz / DFT-s-OFDM / 256QAM / Full RB****Lowest Band Edge**

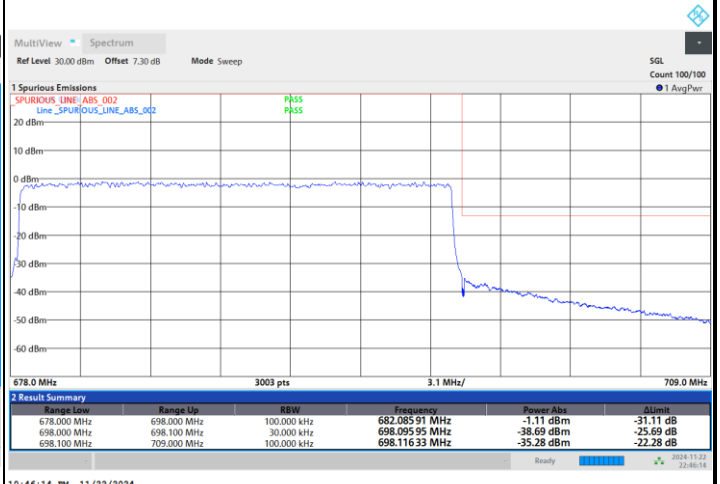
10:38:21 PM 11/22/2024

Highest Band Edge

10:50:20 PM 11/22/2024

FR1 n71 / 20MHz / CP OFDM / QPSK / Full RB**Lowest Band Edge**

10:45:18 PM 11/22/2024

Highest Band Edge

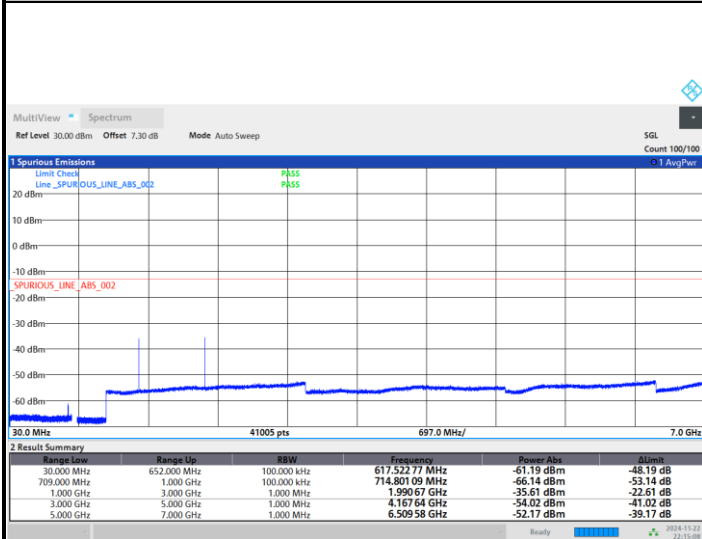
10:46:14 PM 11/22/2024



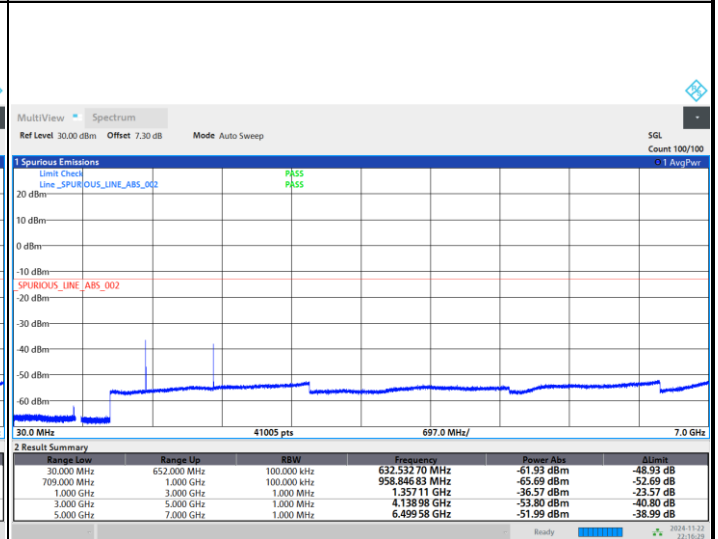
Conducted Spurious Emission

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

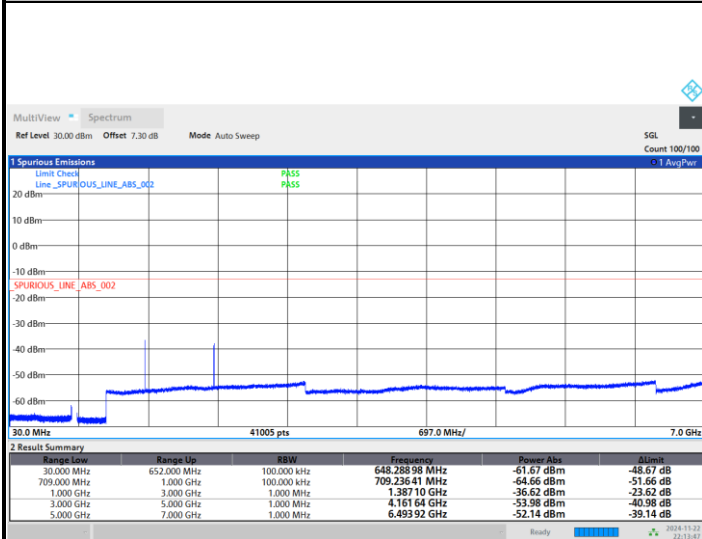
Lowest Channel



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	0.0041	PASS
40	Normal Voltage	0.0078	
30	Normal Voltage	0.0172	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0088	
0	Normal Voltage	0.0041	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0103	
20	Maximum Voltage	0.0179	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0195	

Note:

1. Normal Voltage = 3.8 V. Minimum Voltage = 3.6 V. : Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

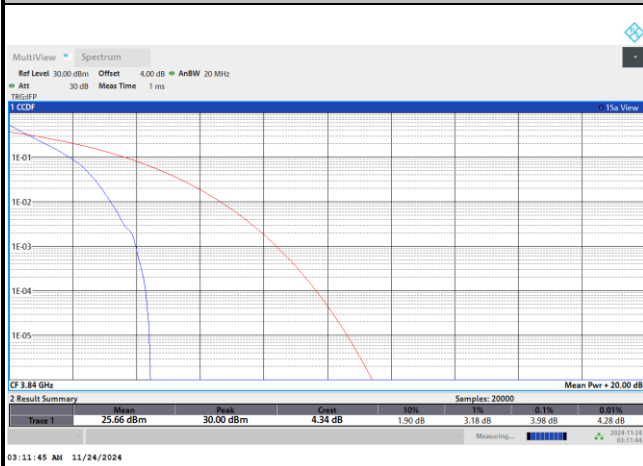
**FR1 n77(Part 270) SISO ANT8****Peak-to-Average Ratio**

Mode	FR1 n77 / 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	3.98	4.60	5.52	5.82	PASS
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.34				PASS

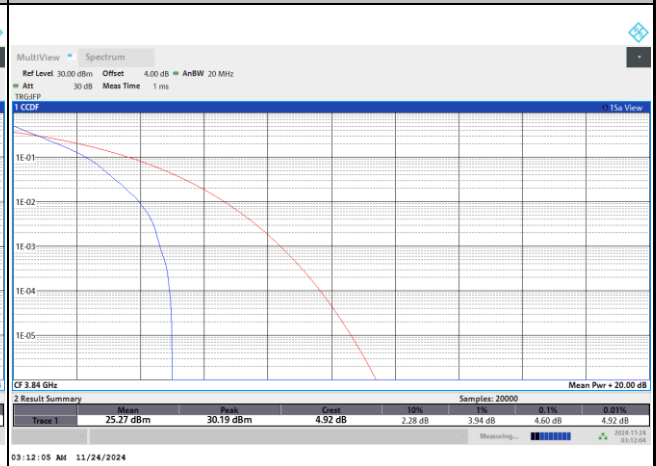


FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

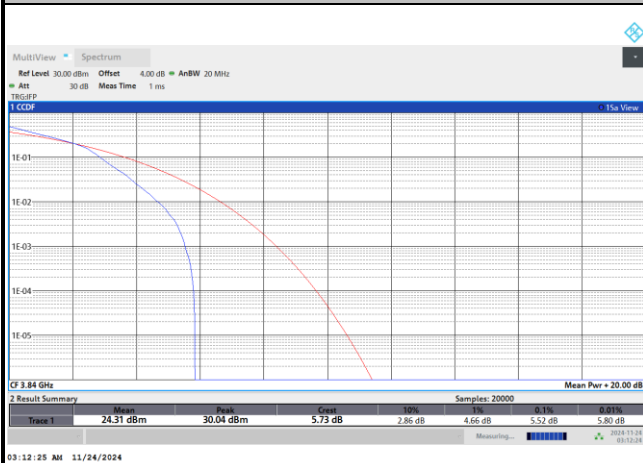
PI/2 BPSK



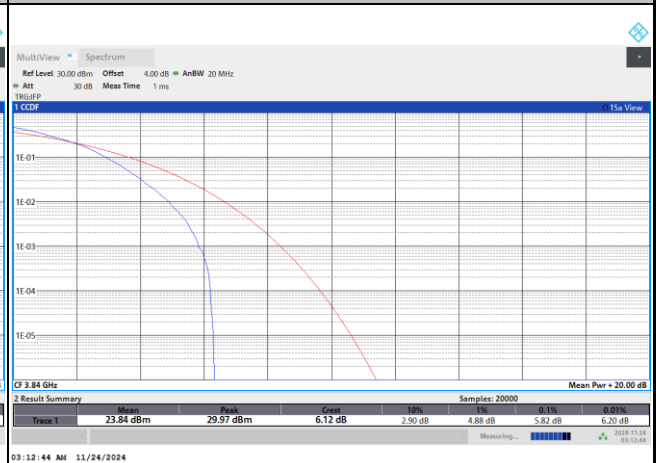
QPSK



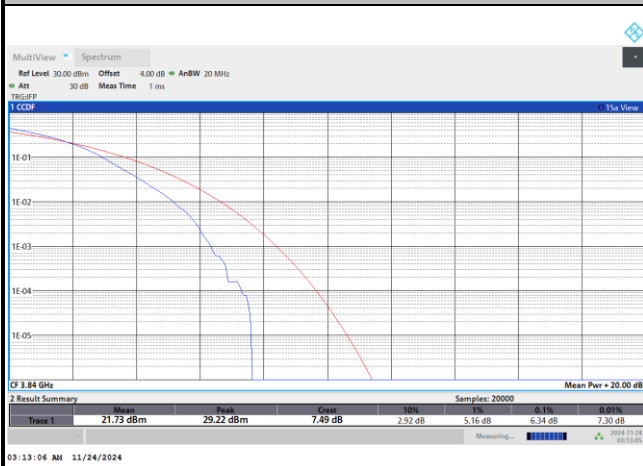
16QAM



64QAM



256QAM



**26dB Bandwidth**

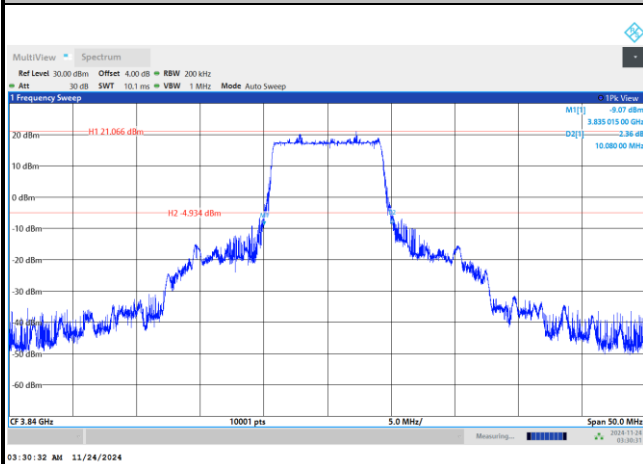
Mode	FR1 n77 : 26dB BW(MHz) / DFT-S OFDM							
BW	10MHz	15MHz	20MHz	25MHz	30MHz	40MHz	50MHz	60MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	10.08	14.78	19.82	-	32.20	39.30	52.31	64.07
BW	70MHz	80MHz	90MHz	100MHz				
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK				
Middle CH	70.54	80.23	91.83	101.93				

Mode	FR1 n77 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	10.34	10.87	15.91	17.39	23.79	22.89	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	12.23	10.35	16.85	15.50	22.55	20.30	-	-
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	34.53	33.31	42.11	43.40	51.12	52.49	62.95	63.01
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	32.55	33.62	41.08	42.63	56.53	50.86	65.38	64.12
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	73.60	76.97	82.15	81.03	93.03	93.49	103.17	103.26
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	75.39	72.94	82.21	81.14	93.95	92.63	104.18	102.69



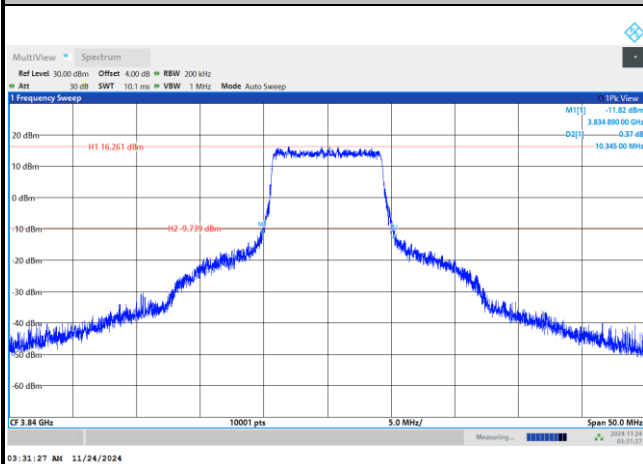
FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

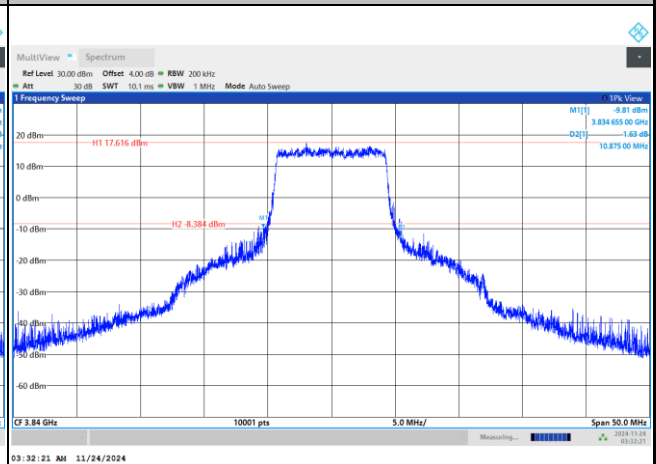


FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

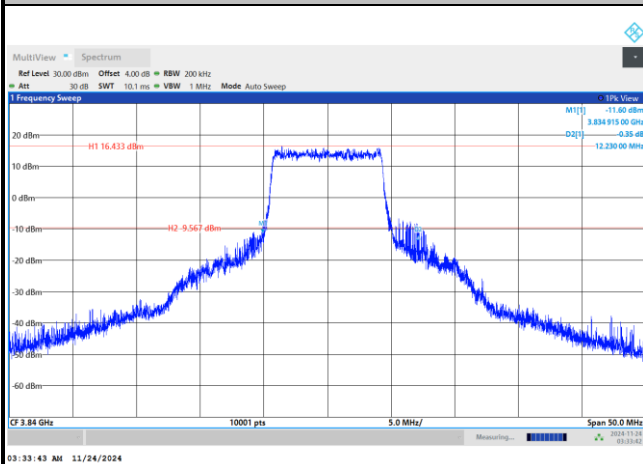
QPSK



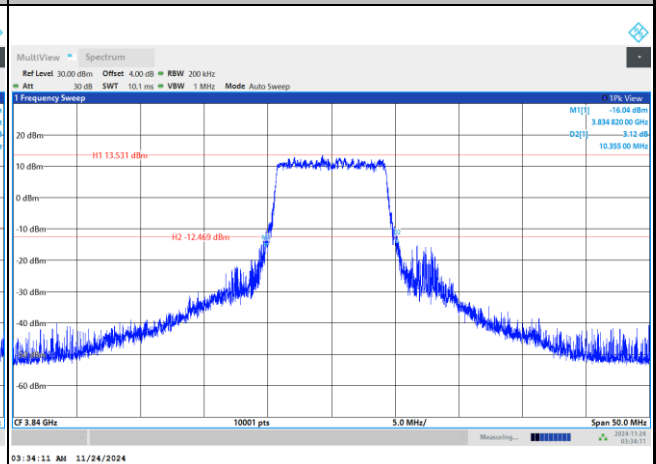
16QAM



64QAM

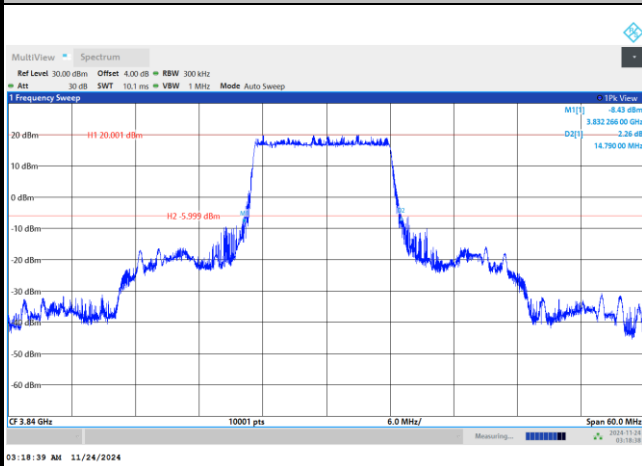


256QAM



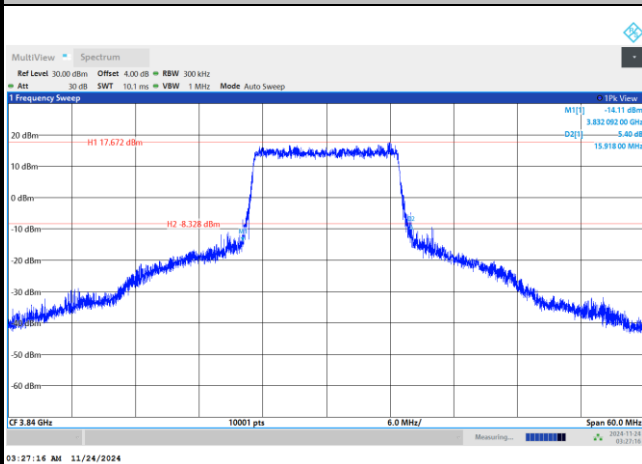
FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

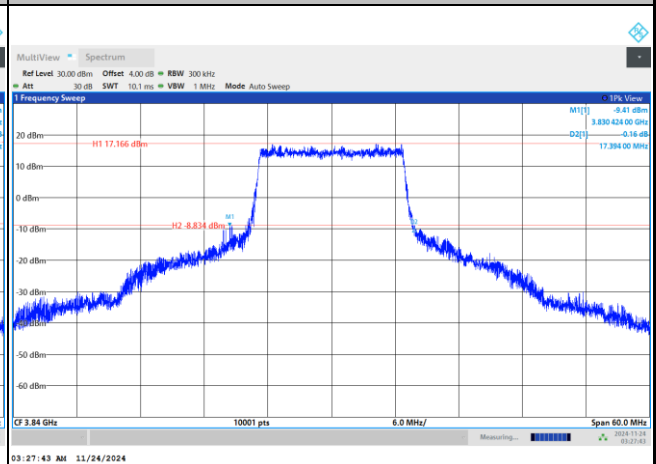


FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

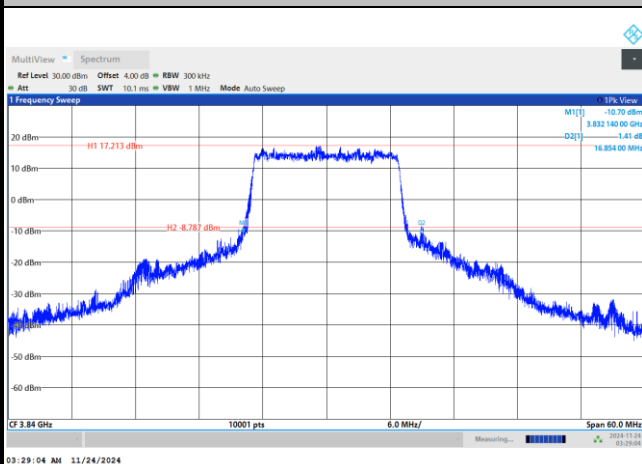
QPSK



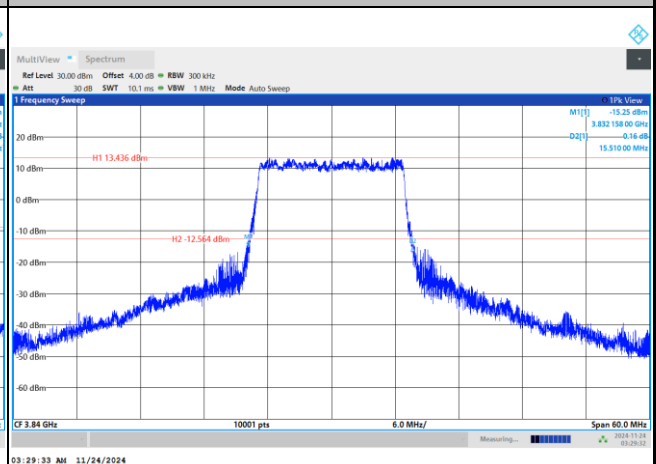
16QAM



64QAM



256QAM





MultiView Spectrum

Ref Level 30.00 dBm Offset 4.00 dB RBW 500 kHz

Att 30 dB SWT 10.1 ms VBW 2 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 21.369 dBm
H2 -4.631 dBm

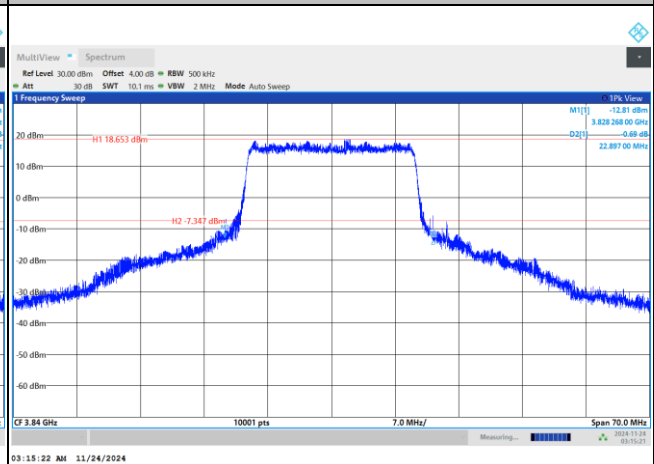
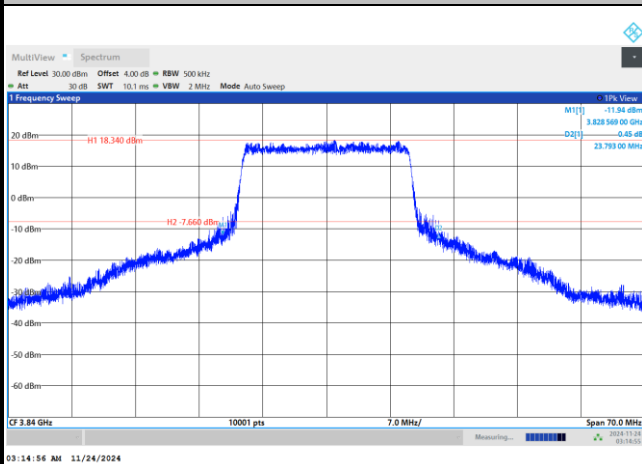
3.829 899 00 GHz
-1.00 dB
19.824 00 MHz

CF 3.84 GHz 10001 pts 7.0 MHz/ Span 7.0 MHz

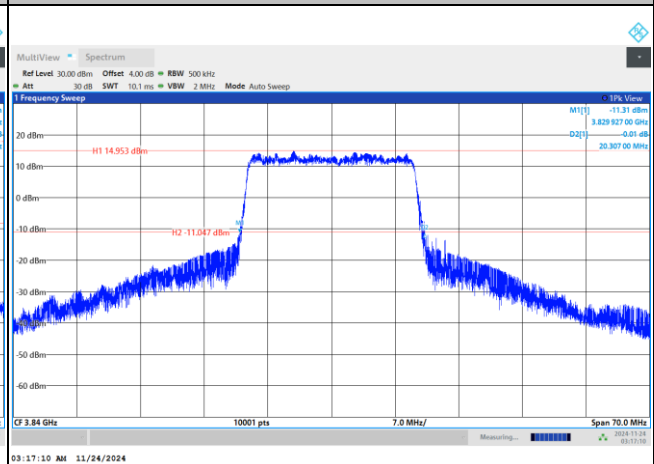
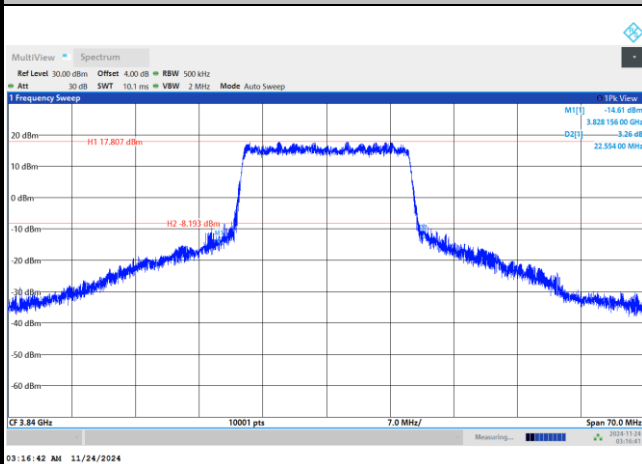
Measuring...

03:13:34 AM 11/24/2024

16QAM



256QAM





MultiView Spectrum

Ref Level 30.00 dBm Offset 4.00 dB RBW 1 MHz

Att 30 dB SWT 10.1 ms VBW 3 kHz 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 -22.919 dBm

H2 -3.081 dBm

CF 3.84 GHz

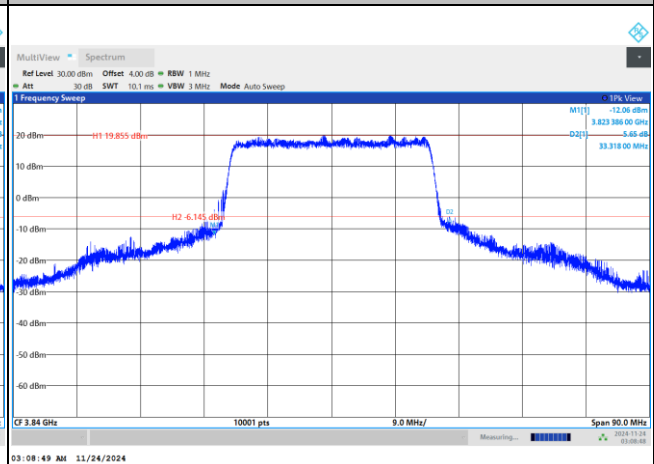
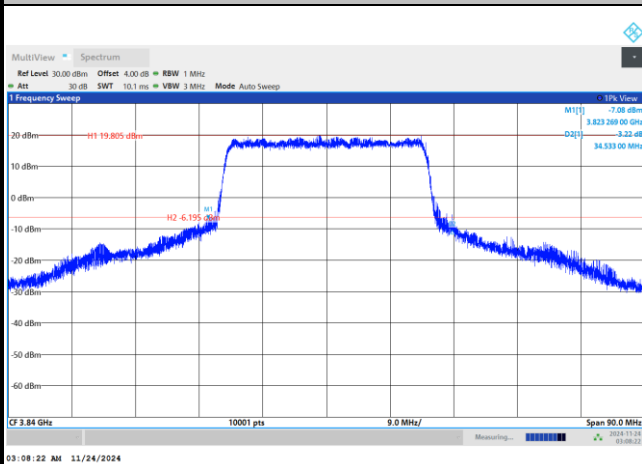
10001 pts

9.0 MHz/

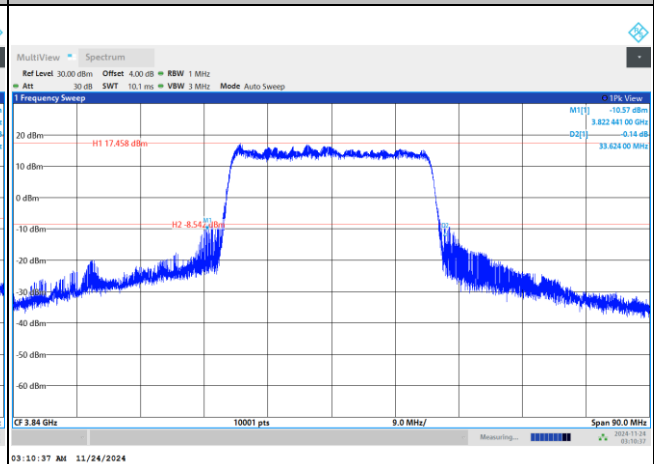
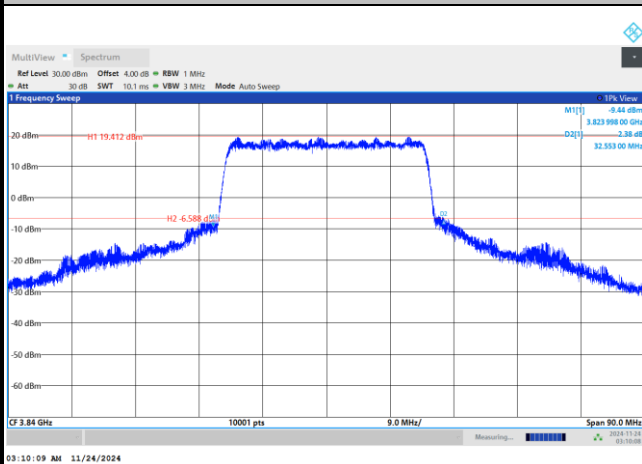
Span 90.0 MHz

03:04:20 AM 11/24/2024

16QAM



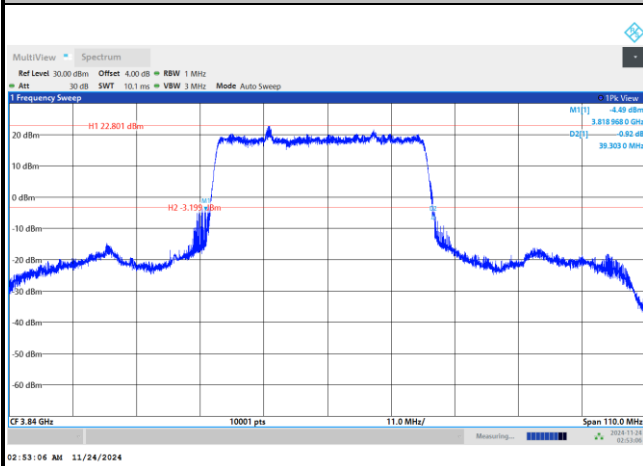
256QAM





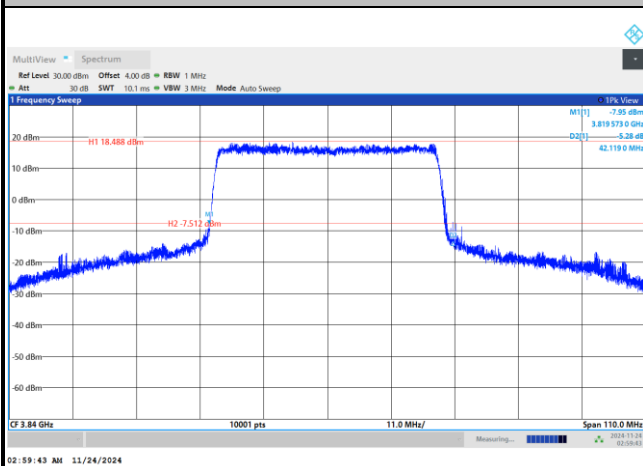
FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

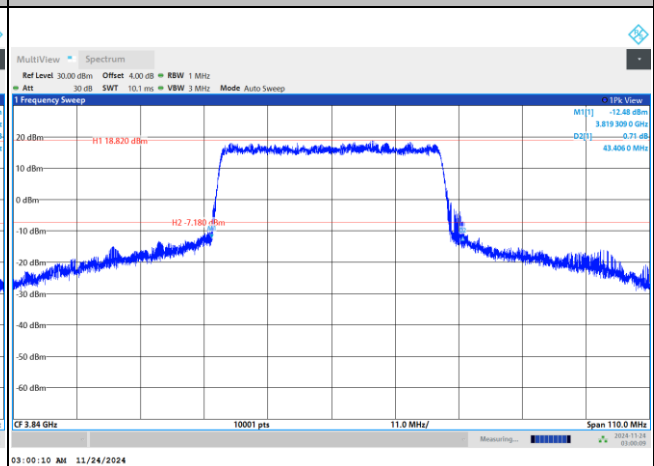


FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

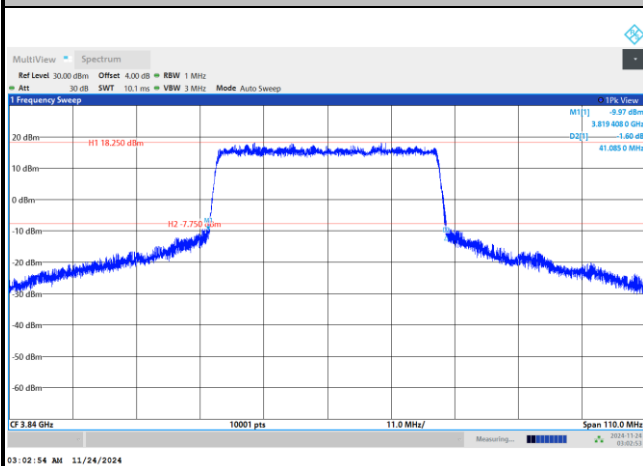
QPSK



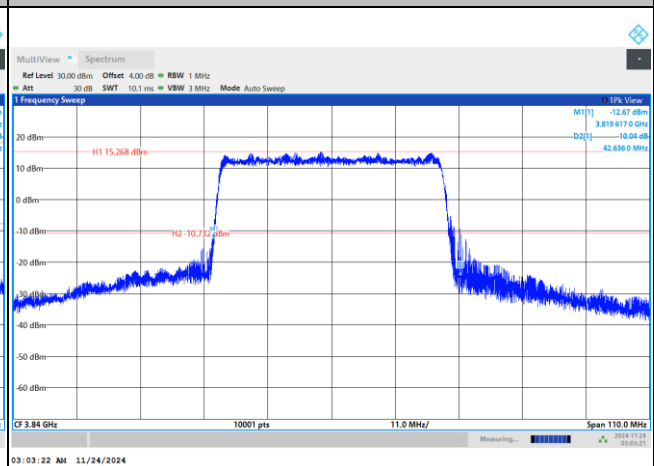
16QAM



64QAM



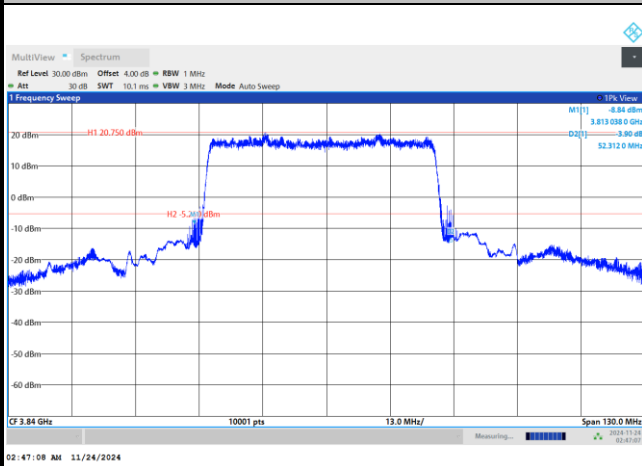
256QAM





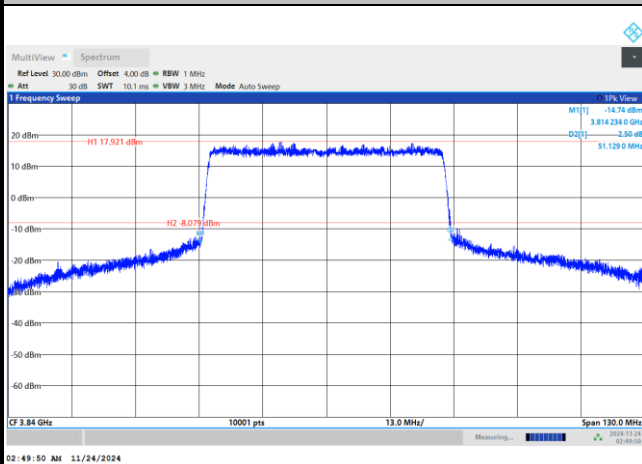
FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

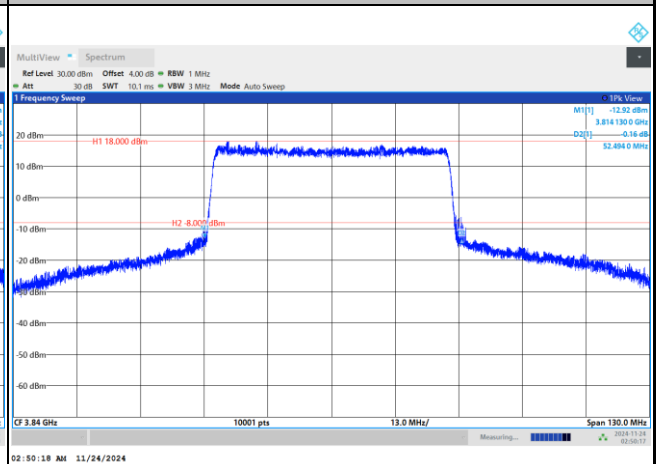


FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

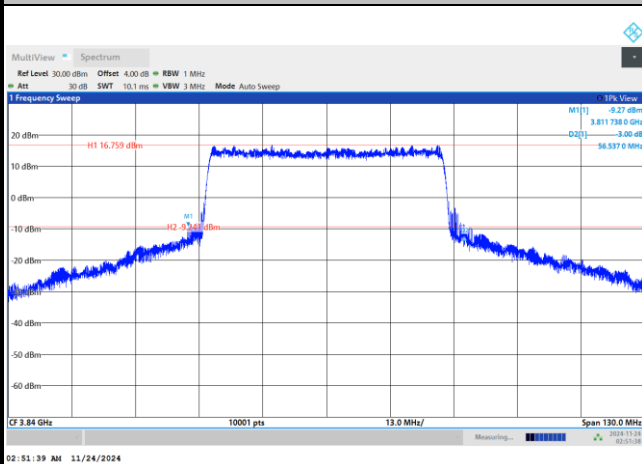
QPSK



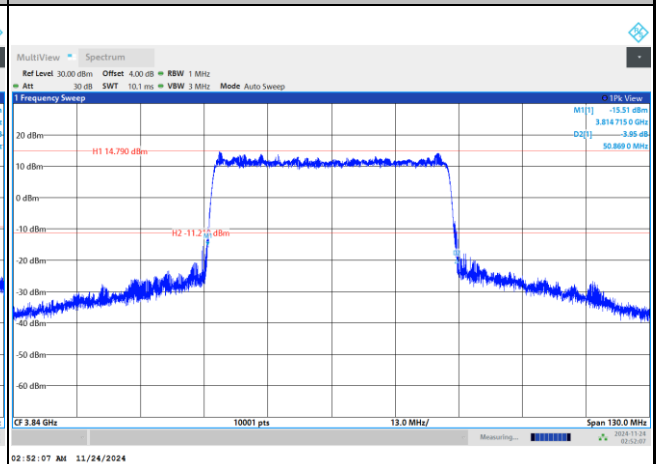
16QAM



64QAM



256QAM





MultiView Spectrum

Ref Level 30.00 dBm Offset 4.00 dB RBW 2 MHz

Att 30 dB SWT 105.1 ms VBW 10 MHz Mode Auto Sweep

1 Frequency Sweep

20 dBm H1 22.458 dBm

10 dBm

0 dBm

-10 dBm H2 -3.542 dBm

-20 dBm

-30 dBm

-40 dBm

-50 dBm

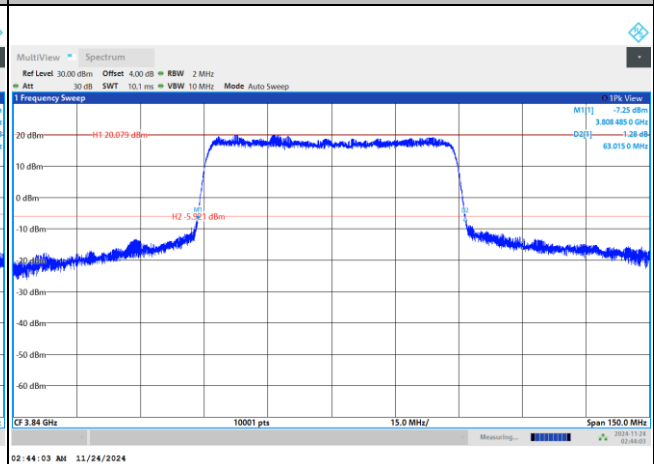
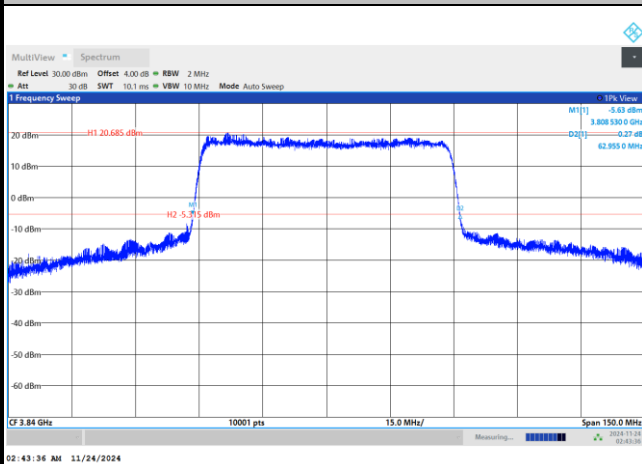
-60 dBm

CF 3.84 GHz 10001 pts 15.0 MHz/Span 150.0 MHz

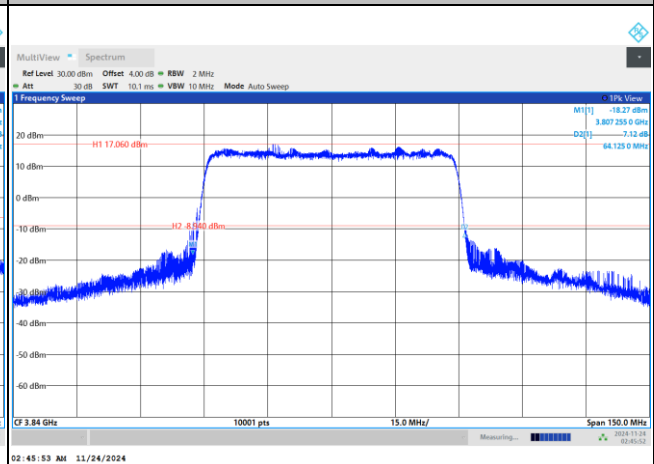
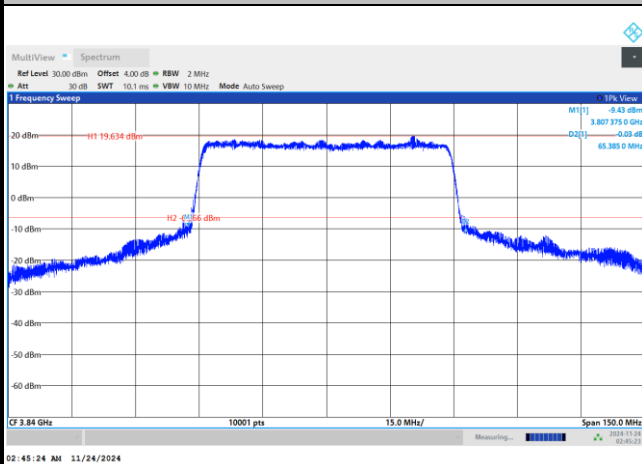
Measuring

2024/11/24 02:40:21

16QAM



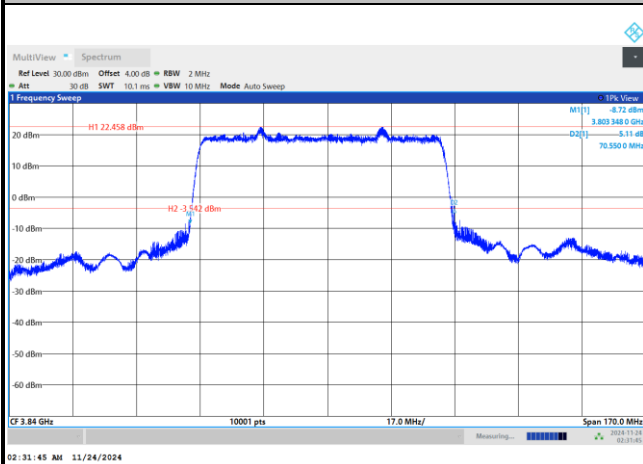
256QAM





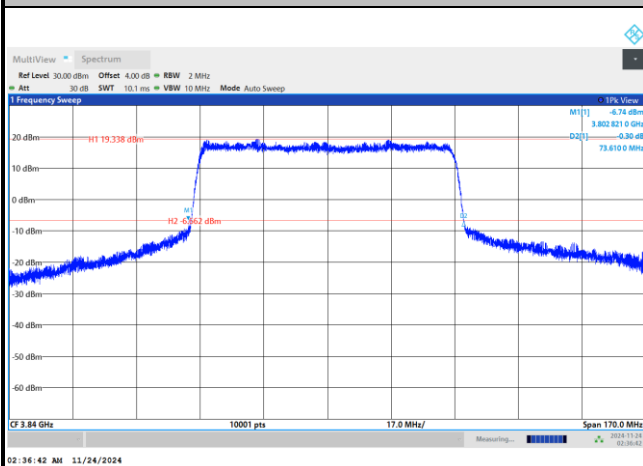
FR1 n77 / 70MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

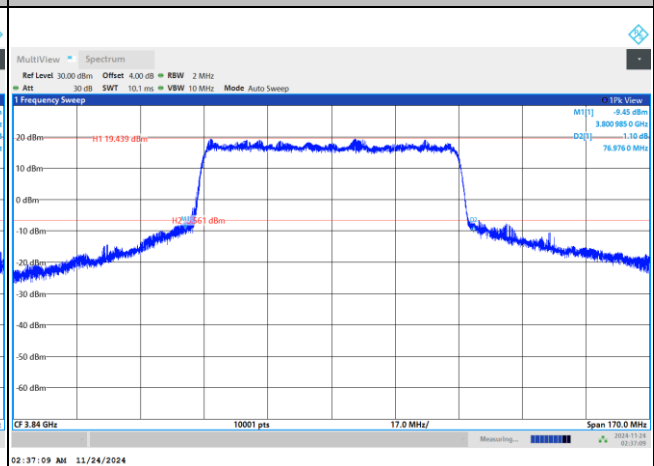


FR1 n77 / 70MHz / CP OFDM / Middle Channel / Full RB

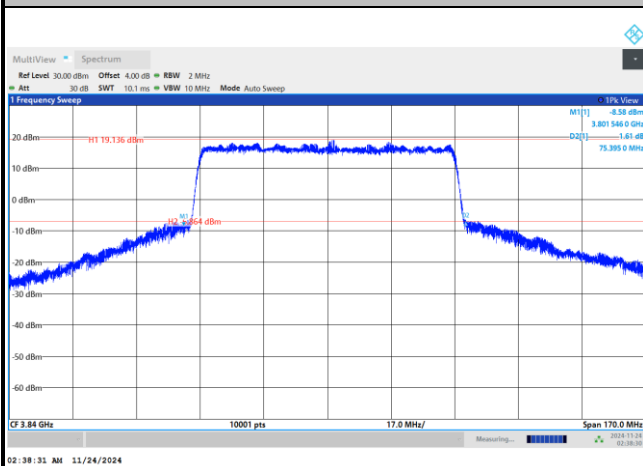
QPSK



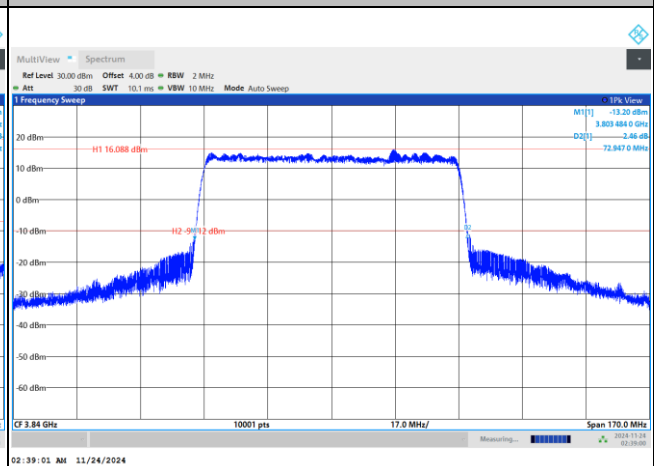
16QAM



64QAM

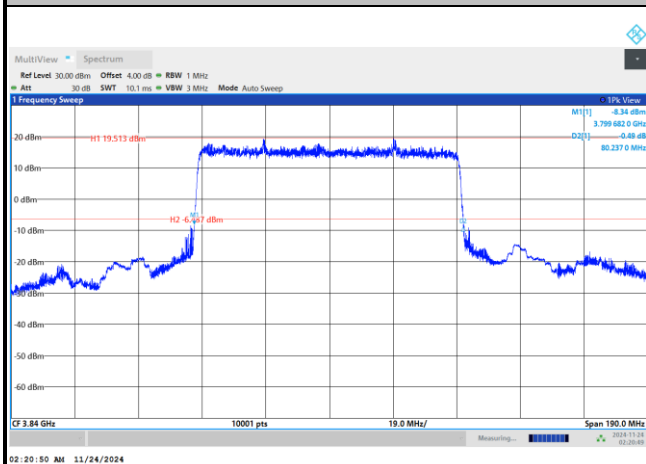


256QAM



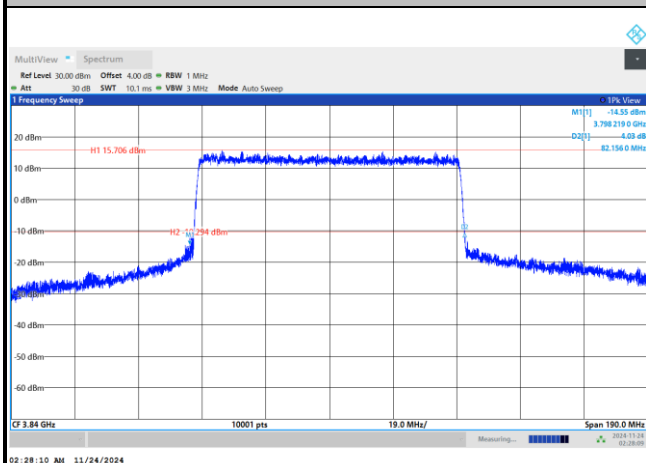
**FR1 n77 / 80MHz / DFT-S OFDM / Middle Channel / Full RB**

PI/2 BPSK

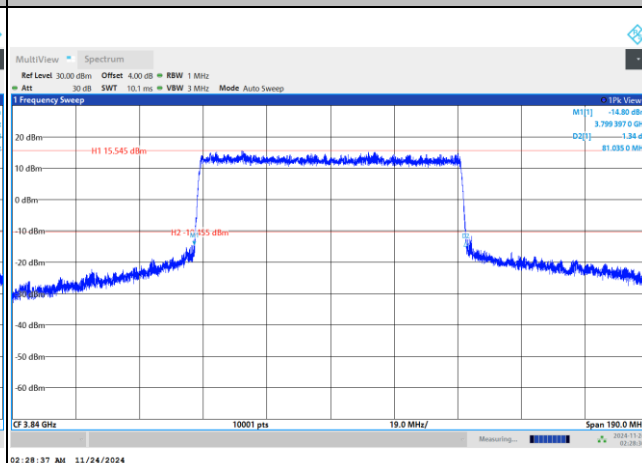


FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

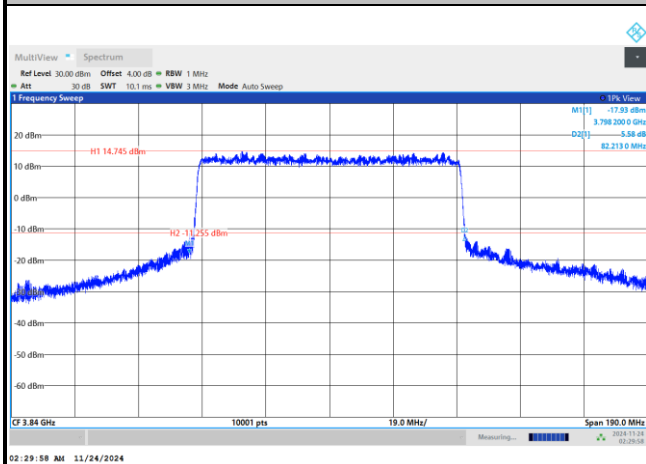
QPSK



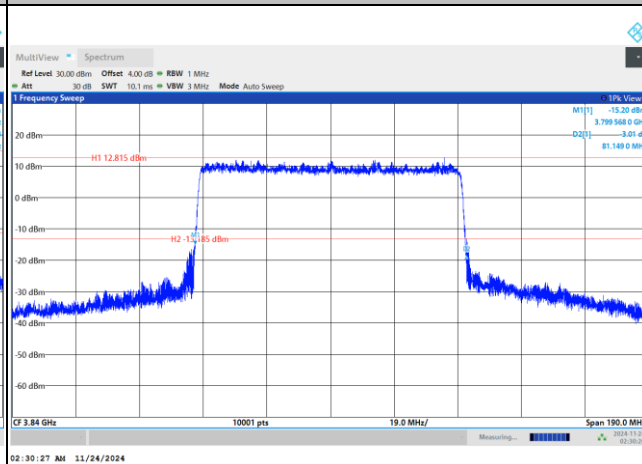
16QAM



64QAM



256QAM

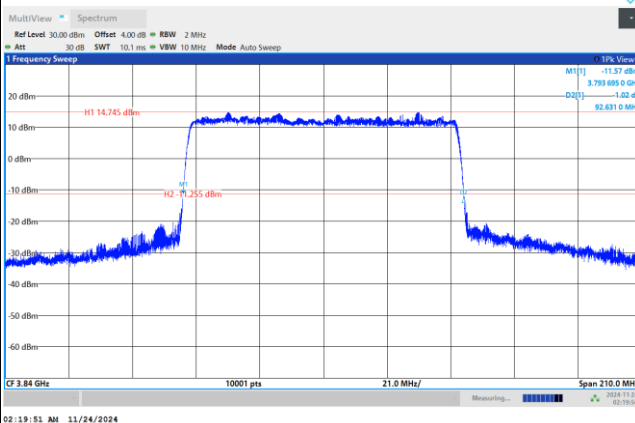




PI/2 BPSK



QPSK





MultiView Spectrum

Ref Level 30.00 dBm Offset 4.00 dB RBW 2 MHz

Att 30 dB SWT 10.1 ms VBW 10 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 20.822 dBm

H2 -11.78 dBm

H3 -15.6 dBm

3.84 GHz

10001 pts

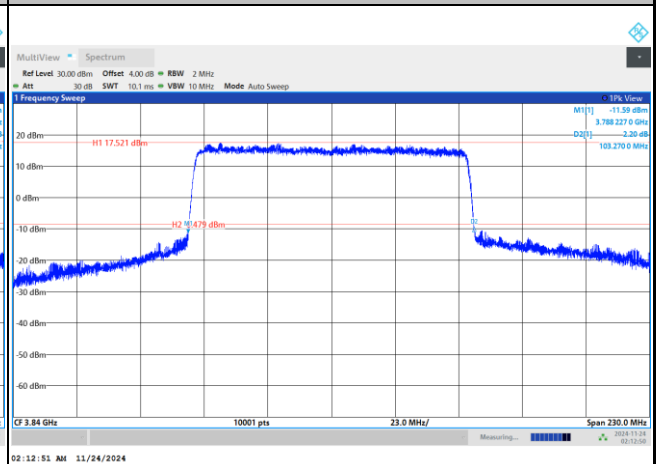
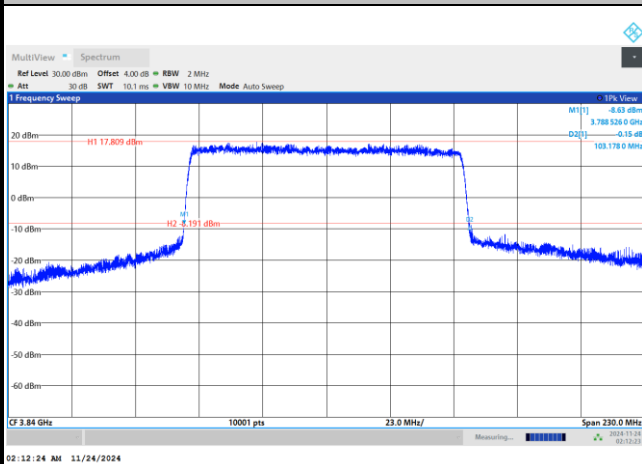
23.0 MHz

Span 230.0 MHz

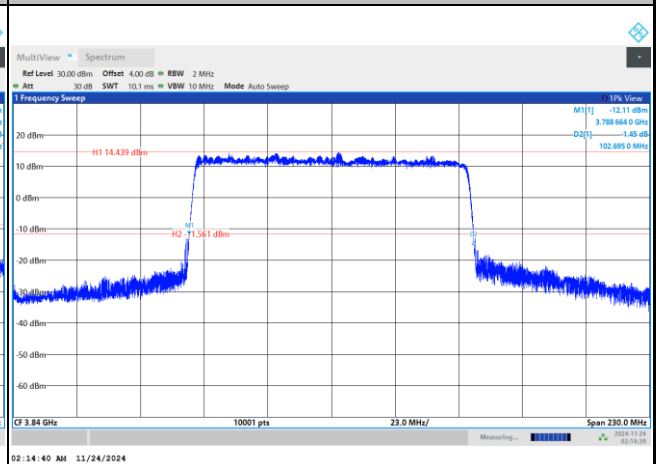
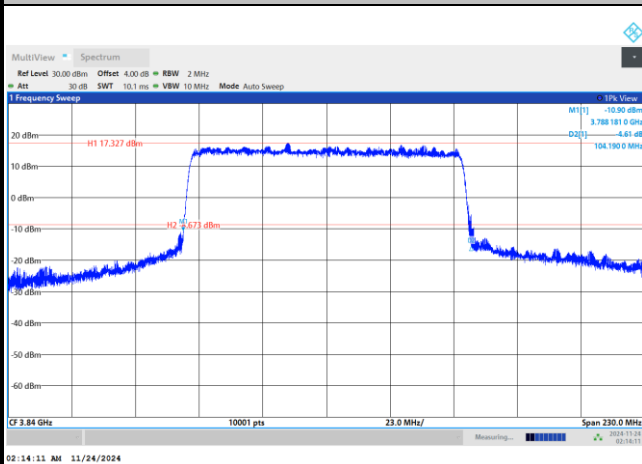
Measuring

2024.11.21 02:10:57 AM 11/24/2024

16QAM



256QAM



**Occupied Bandwidth**

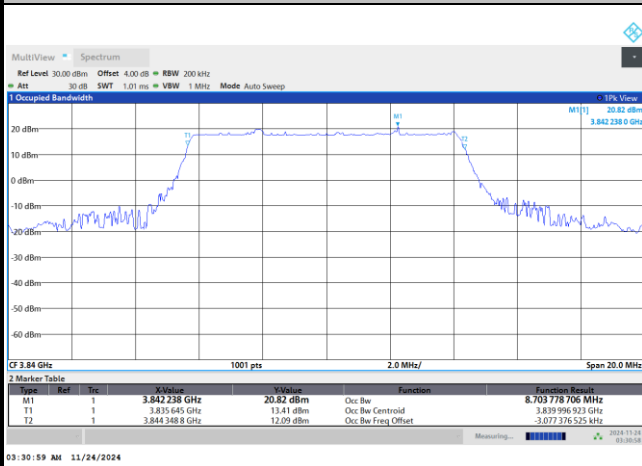
Mode	FR1 n77 : OB BW(MHz) / DFT-S OFDM							
BW	10MHz	15MHz	20MHz	25MHz	30MHz	40MHz	50MHz	60MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	8.70	13.01	18.04	-	27.24	35.93	45.94	58.60
BW	70MHz	80MHz	90MHz	100MHz				
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK				
Middle CH	64.98	77.38	87.14	96.79				

Mode	FR1 n77 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	8.69	8.71	13.68	13.71	18.41	18.40	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	8.69	8.68	13.75	13.67	18.36	18.35	-	-
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	28.31	28.28	38.04	38.13	47.67	47.73	58.59	58.34
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	28.23	28.21	38.18	38.20	47.67	47.67	58.67	58.46
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	67.59	68.09	77.89	78.14	87.81	87.69	97.78	97.70
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	68.22	67.97	77.93	77.64	87.89	87.94	97.54	97.83



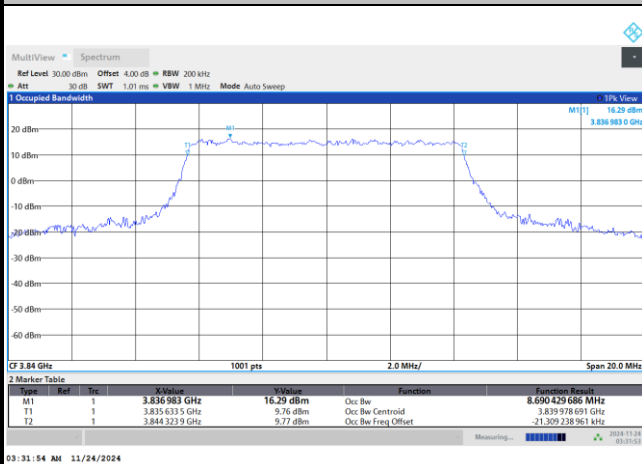
FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

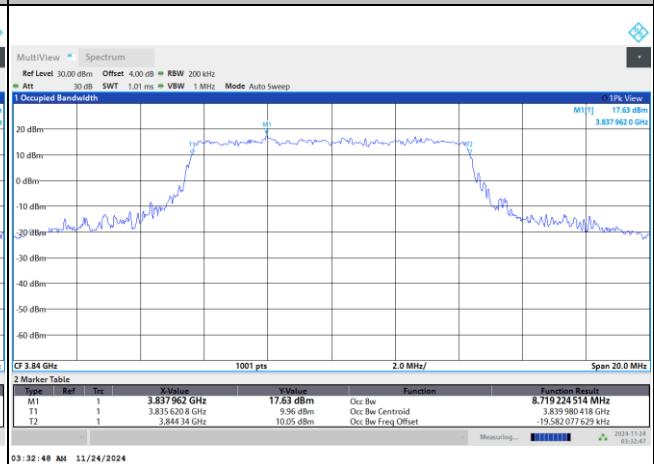


FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

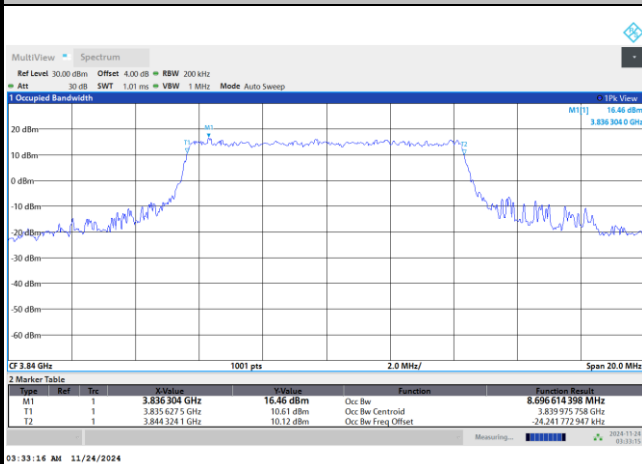
QPSK



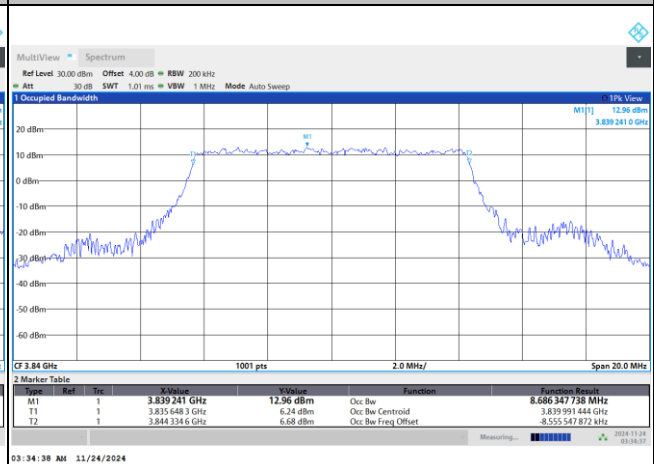
16QAM



64QAM



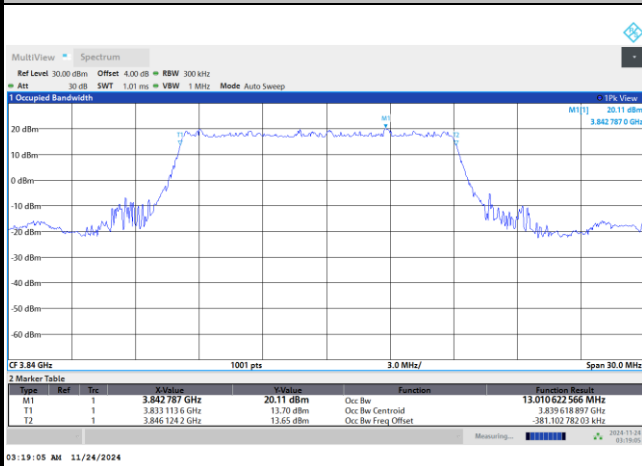
256QAM





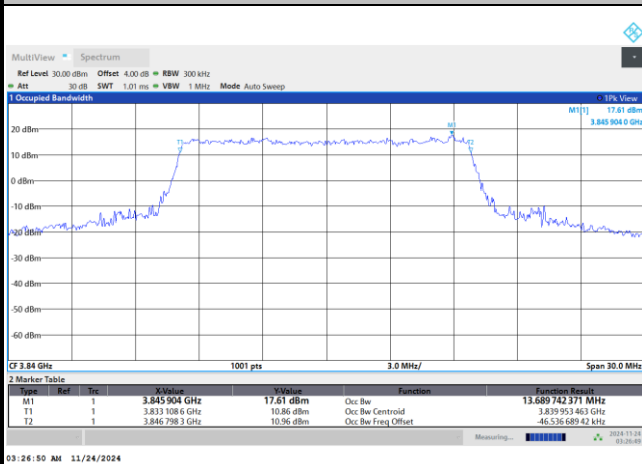
FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

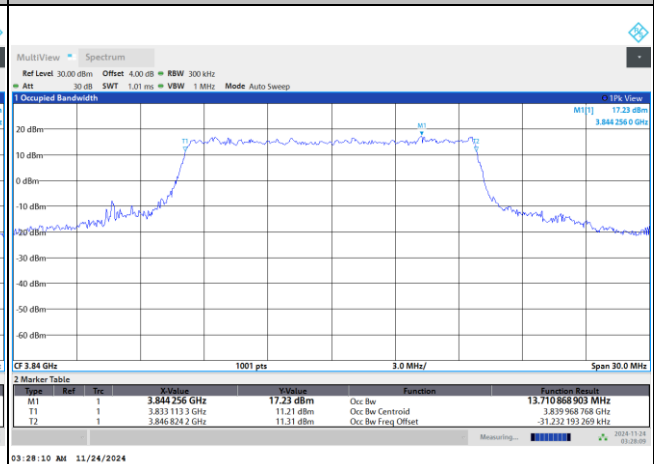


FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

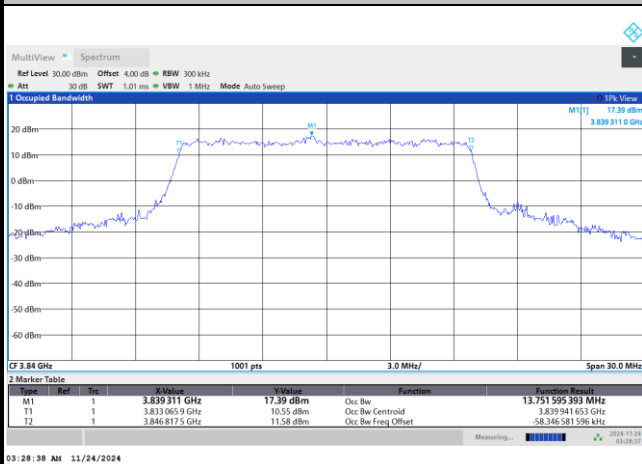
QPSK



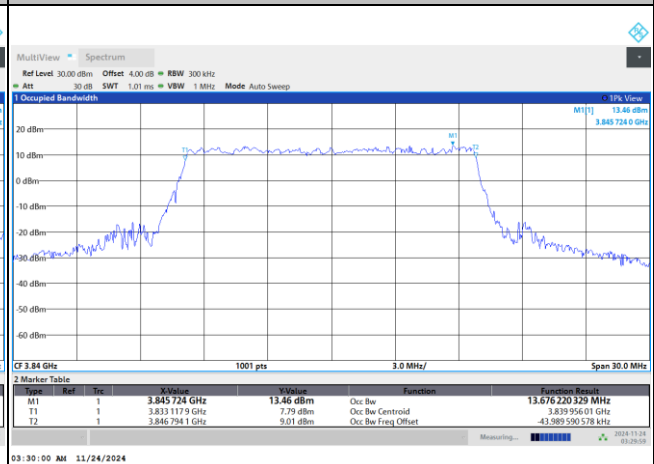
16QAM



64QAM



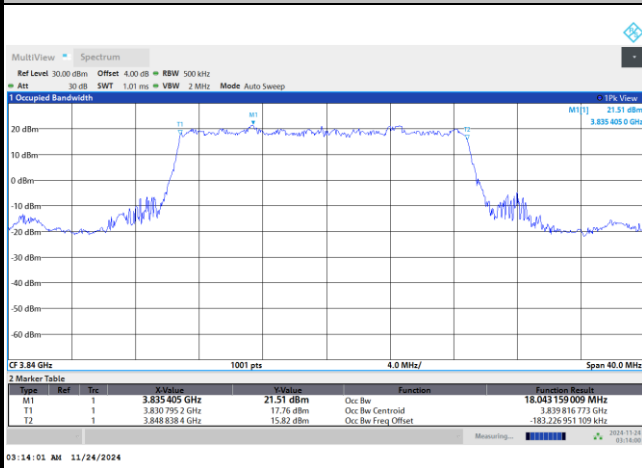
256QAM





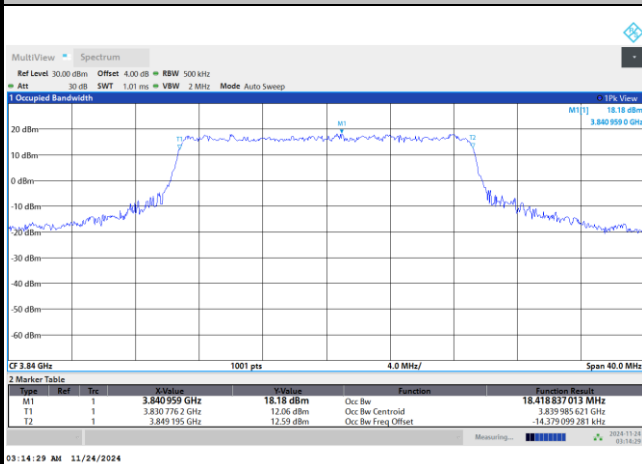
FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

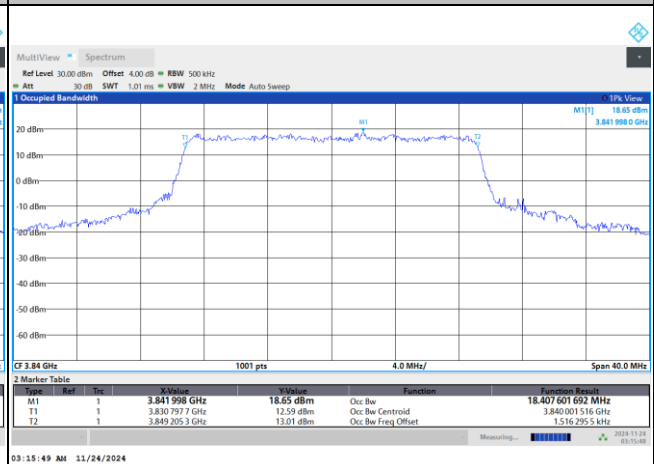


FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

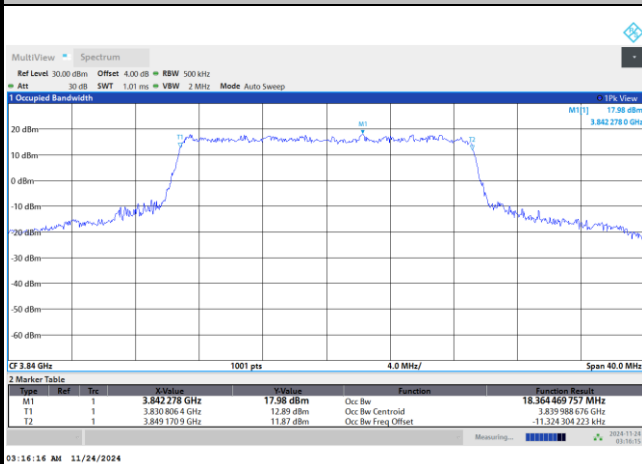
QPSK



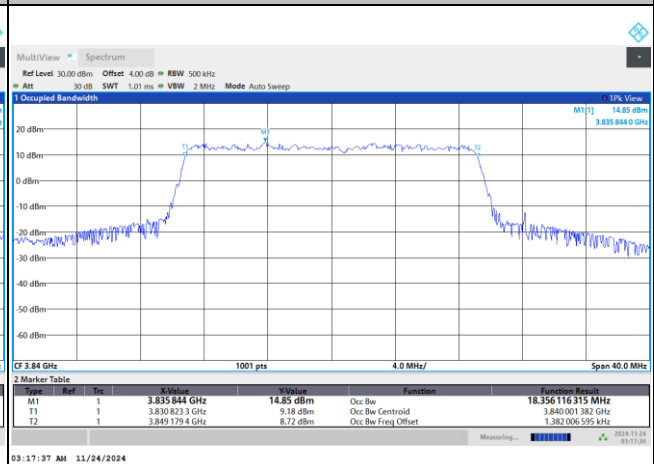
16QAM



64QAM



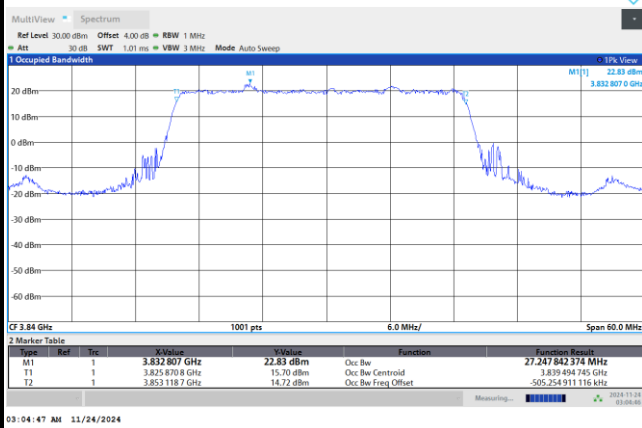
256QAM





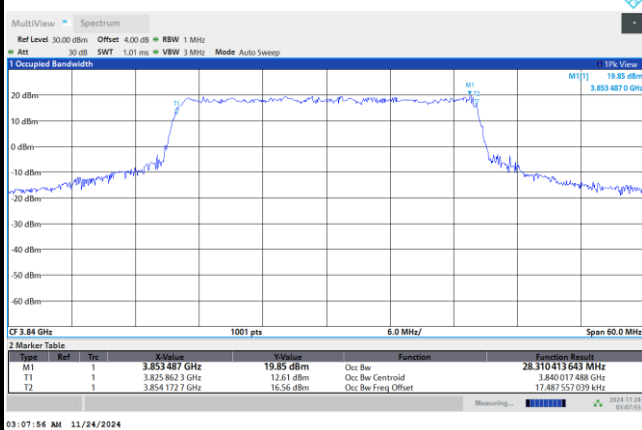
FR1 n77 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

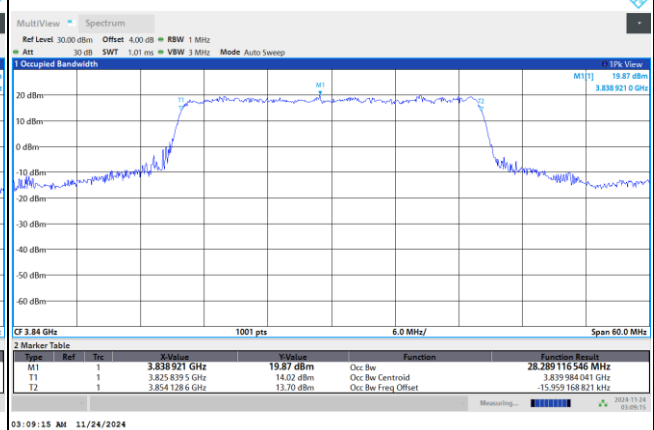


FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

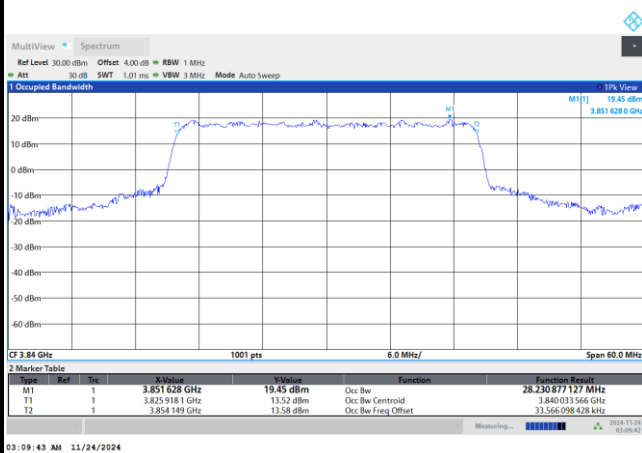
QPSK



16QAM



64QAM



256QAM

