

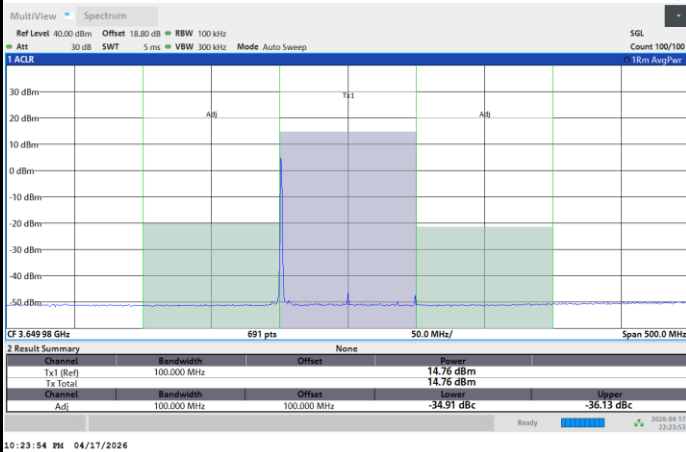


FR1 n77 / 100MHz / CP OFDM / QPSK

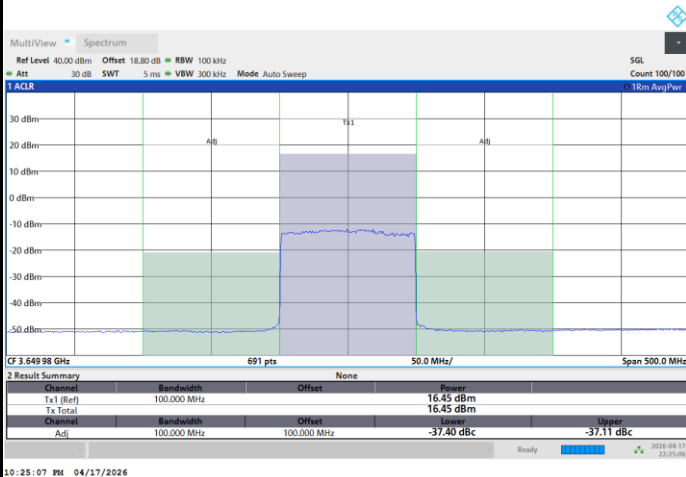
Highest Channel

1RB0

1RBmax



Full RB



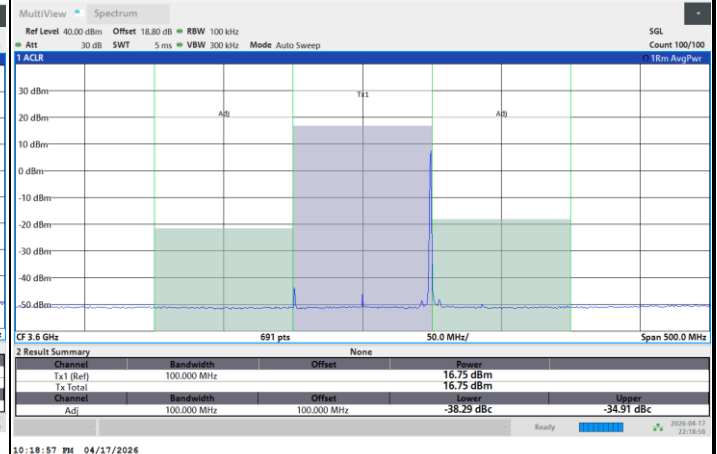
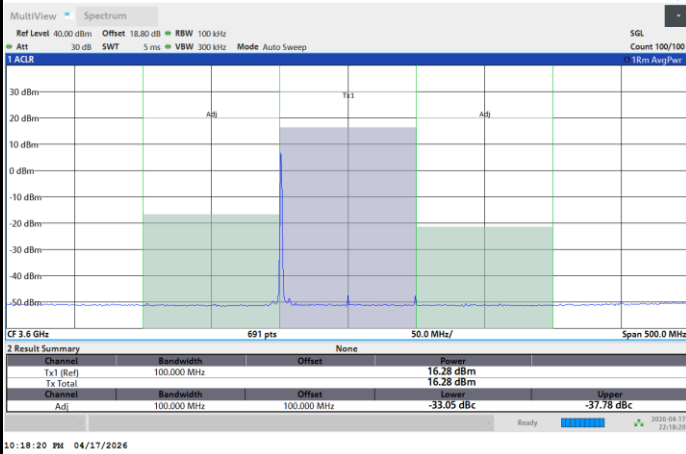


FR1 n77 / 100MHz / CP OFDM / 16QAM

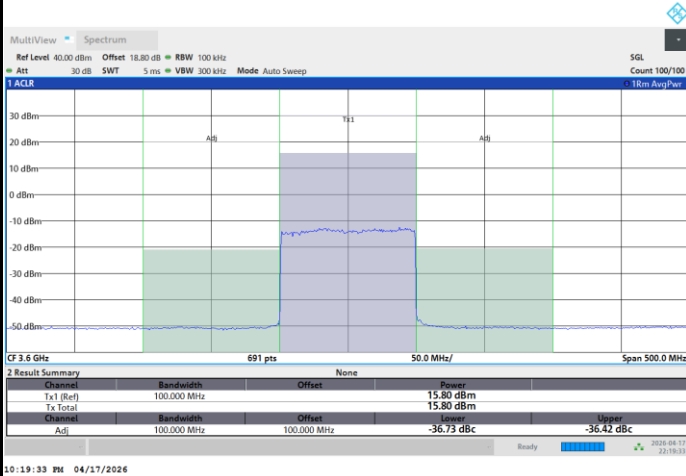
Lowest Channel

1RB0

1RBmax



Full RB



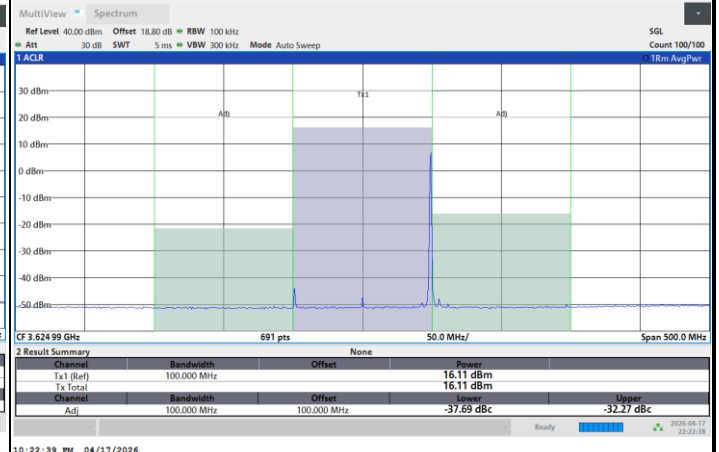
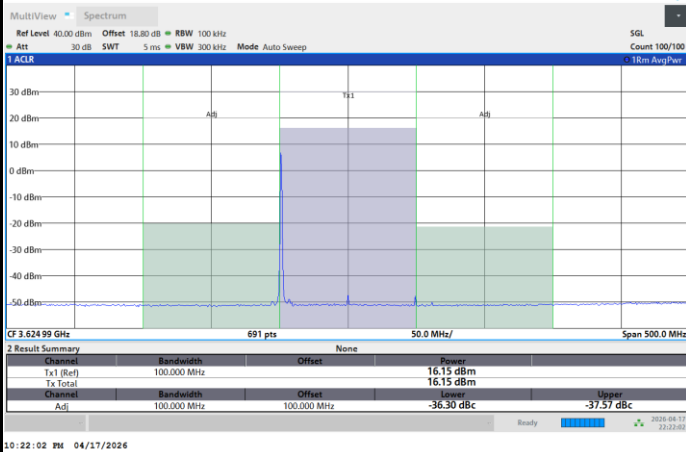


FR1 n77 / 100MHz / CP OFDM / 16QAM

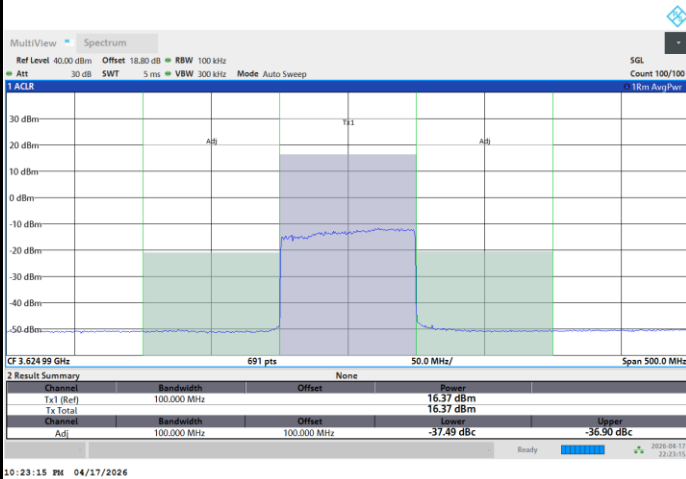
Middle Channel

1RB0

1RBmax



Full RB



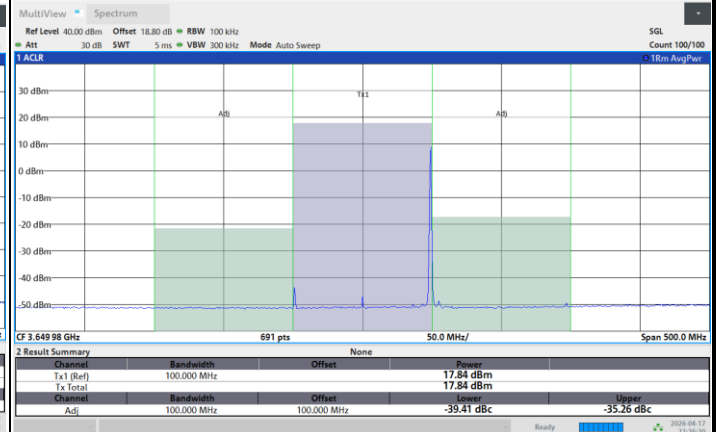


FR1 n77 / 100MHz / CP OFDM / 16QAM

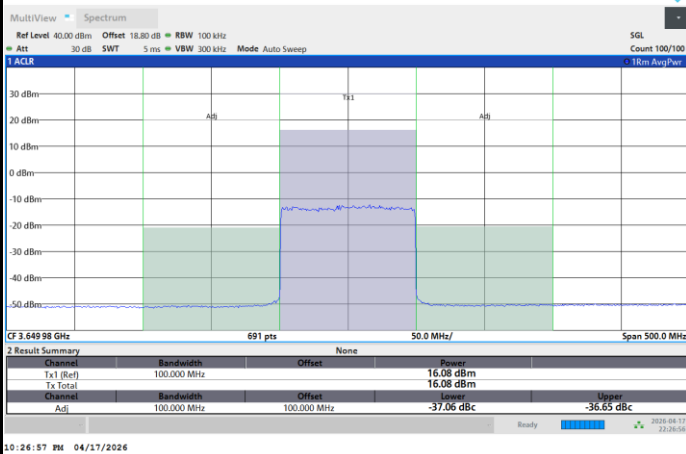
Highest Channel

1RB0

1RBmax



Full RB



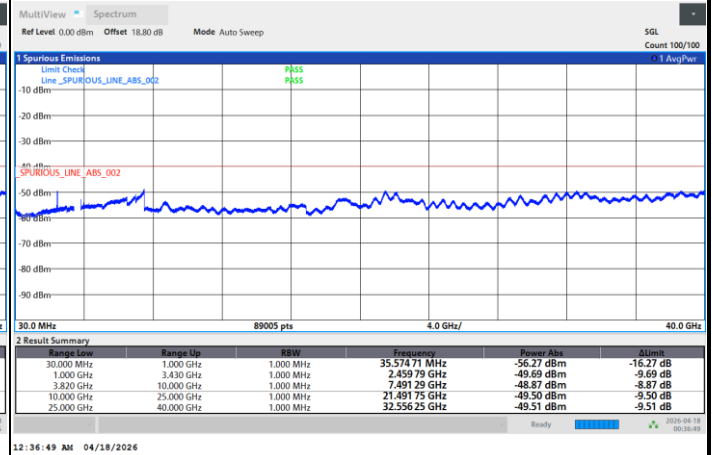
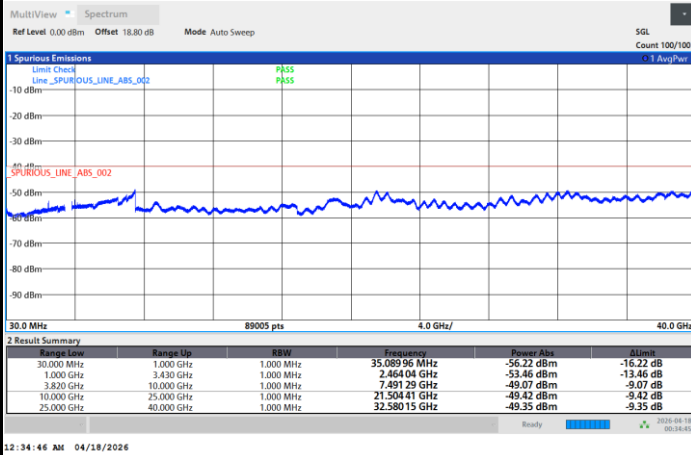


Conducted Spurious Emission

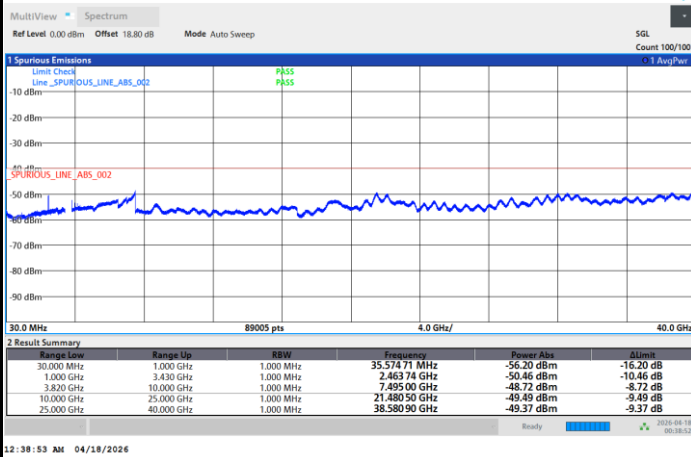
FR1 n77 / 10MHz / CP OFDM / QPSK / 1RB1

Lowest Channel

Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n77 (QPSK) / Middle Channel 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0009	-3.4	Yes	PASS
40	Normal Voltage	0.0007	-2.7	Yes	
30	Normal Voltage	0.0008	-3	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0012	-4.2	Yes	
0	Normal Voltage	0.0008	2.9	Yes	
-10	Normal Voltage	0.0001	-0.4	Yes	
-20	Normal Voltage	0.0006	-2.1	Yes	
-30	Normal Voltage	0.0019	6.8	Yes	
20	Maximum Voltage	0.0006	-2.1	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0018	-6.5	Yes	

Note:

1. Normal Voltage = 3.91 V. ; Minimum Voltage = 3.50 V. ; Maximum Voltage = 4.45 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.

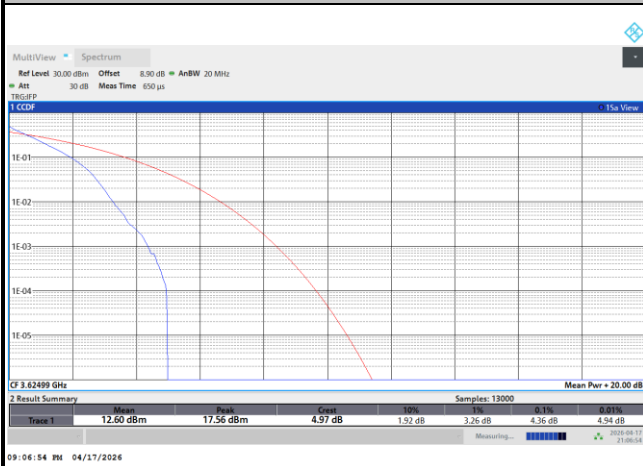
**FR1 n77_Part96****<SISO Mode>****Peak-to-Average Ratio**

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	4.36	5.02	5.72	6.32	PASS
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.30				PASS

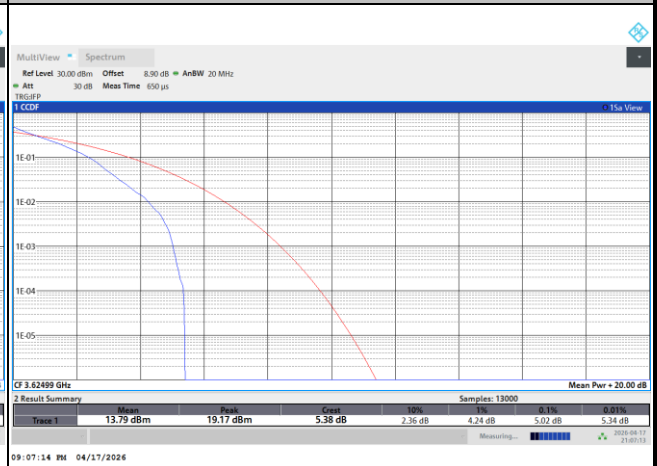


FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

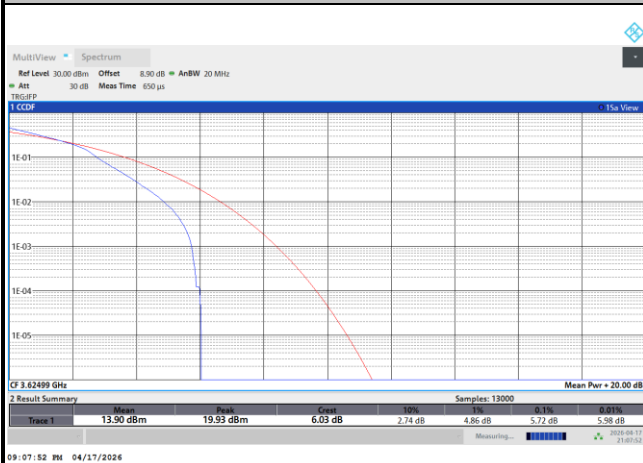
PI/2 BPSK



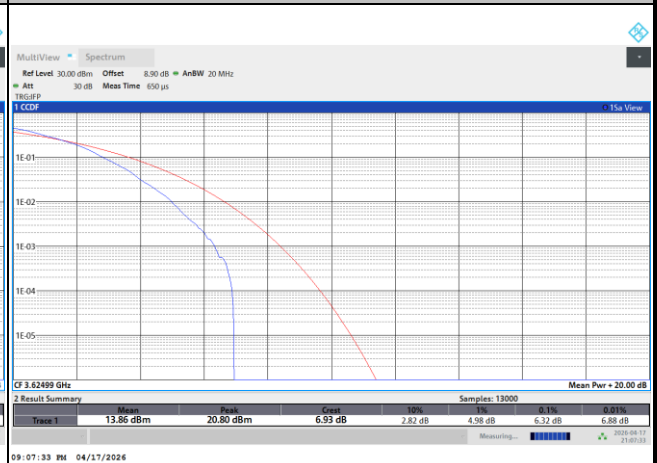
QPSK



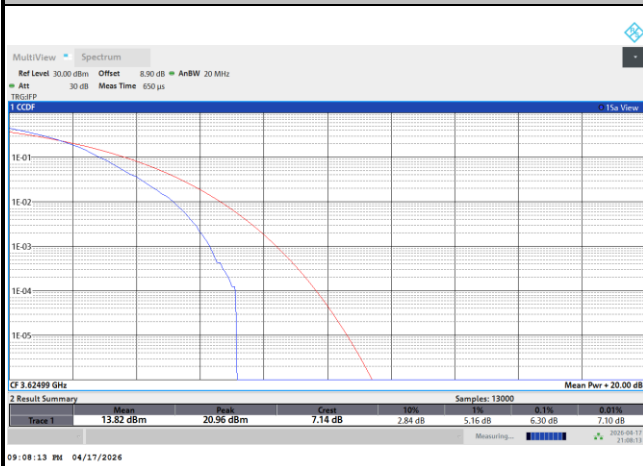
16QAM



64QAM



256QAM



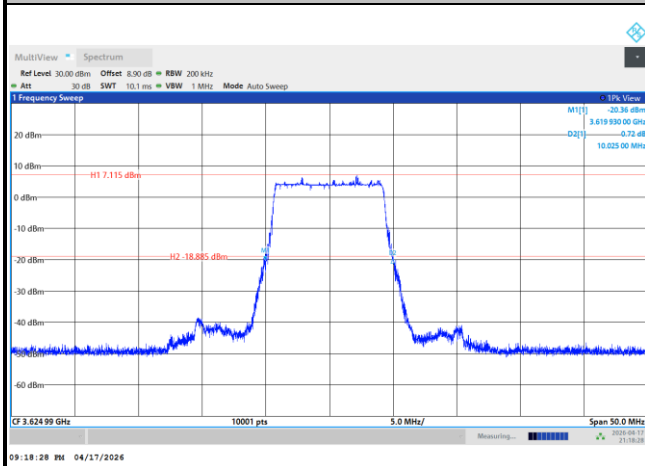
**26dB Bandwidth**

Mode	FR1 n77 : 26dB BW(MHz) / DFT-S OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	10.02	10.20	14.64	14.73	20.49	21.00	25.65	25.87
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	10.23		14.56		20.88		25.92	
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	29.75	29.82	38.77	38.81	48.81	48.77	62.68	62.68
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	29.92		38.51		48.49		62.95	
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	69.36	69.29	81.90	82.42	91.87	92.04	101.40	101.56
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	69.24		82.08		91.98		101.56	

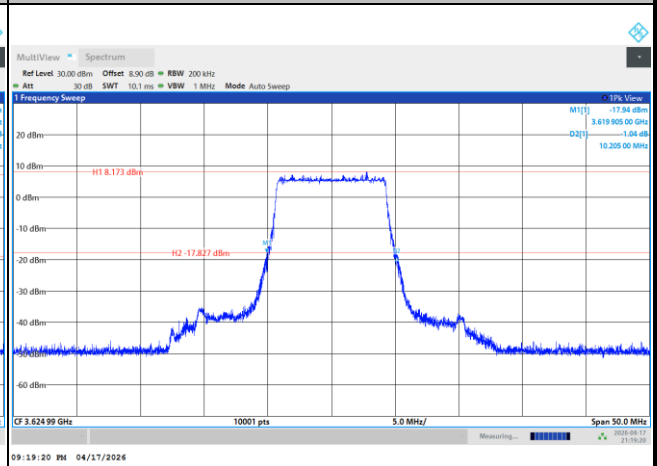


FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

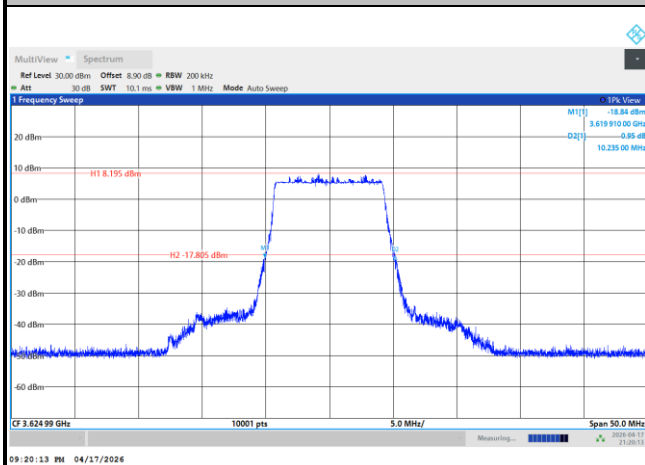
PI/2 BPSK



QPSK



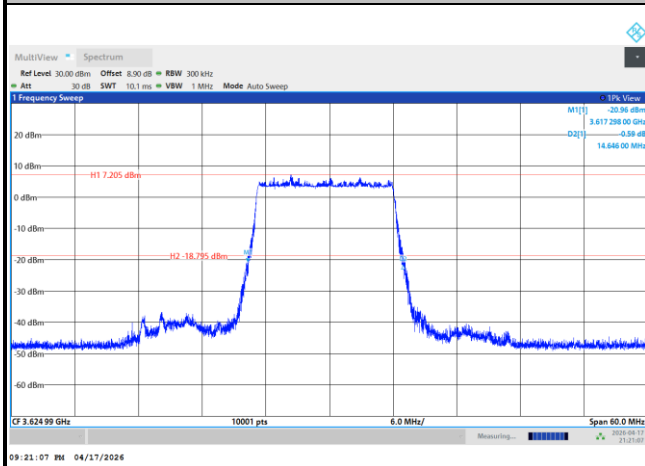
16QAM



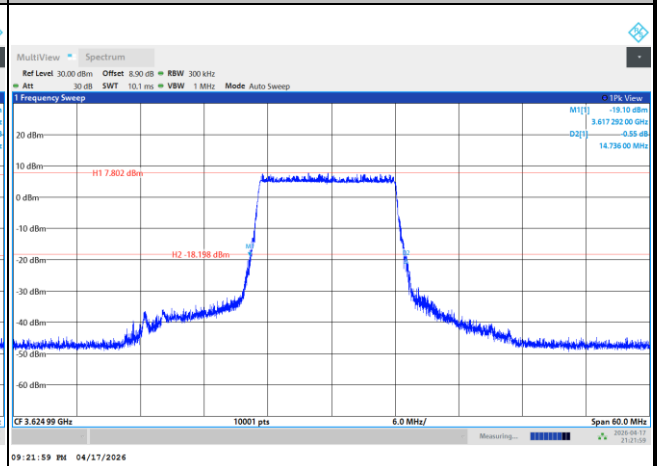


FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

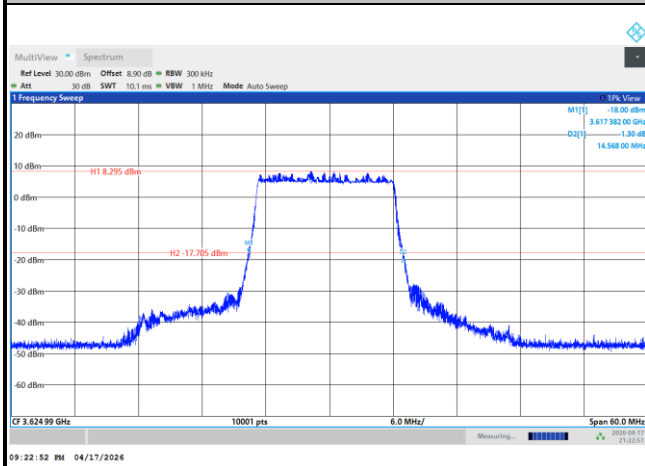
PI/2 BPSK



QPSK



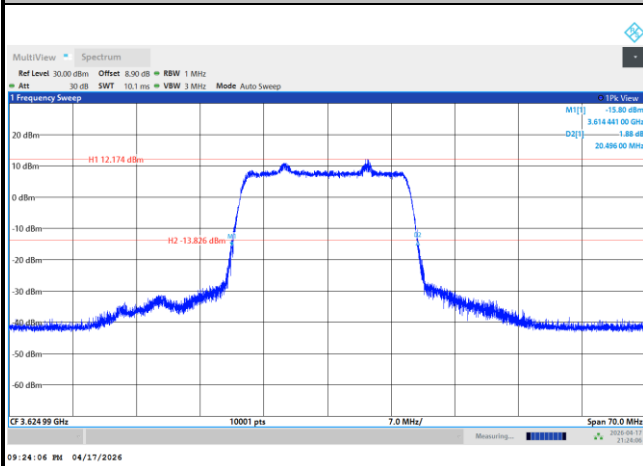
16QAM



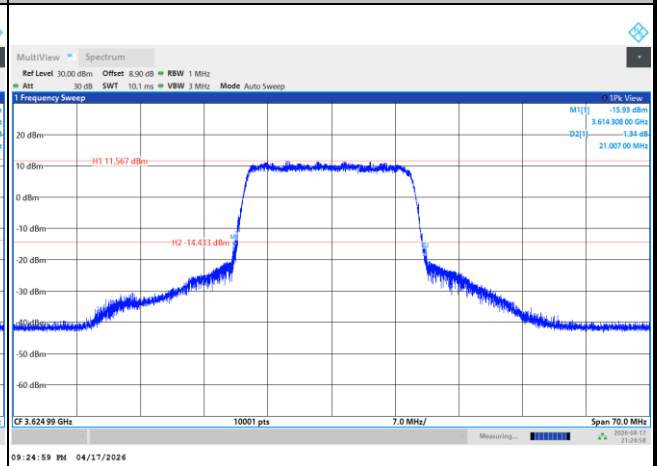


FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

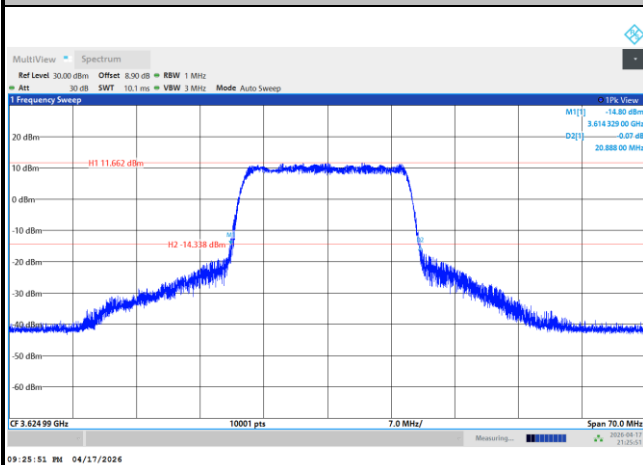
PI/2 BPSK



QPSK



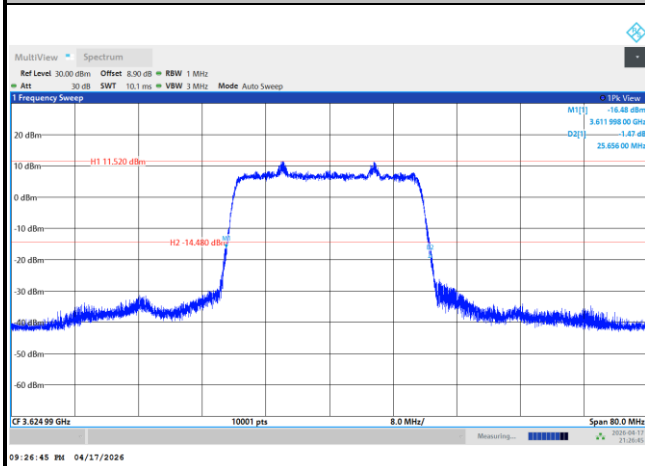
16QAM



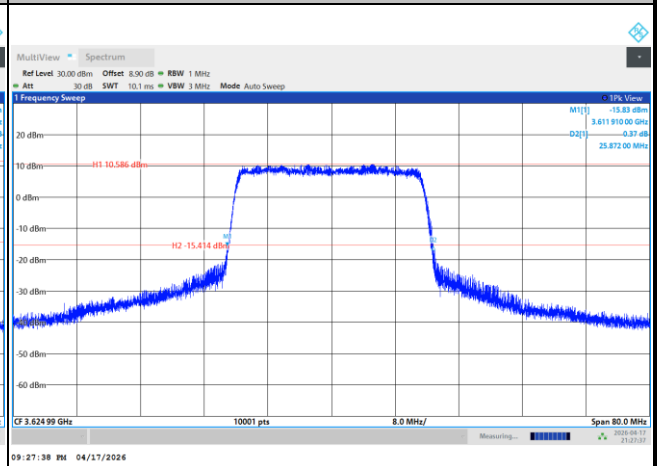


FR1 n77 / 25MHz / DFT-S OFDM / Middle Channel / Full RB

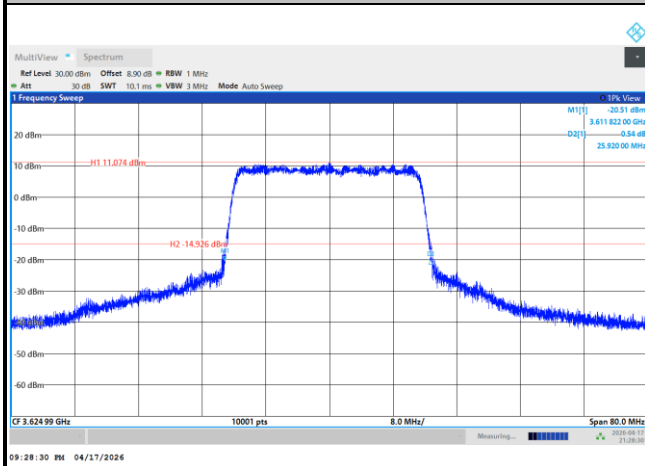
PI/2 BPSK



QPSK



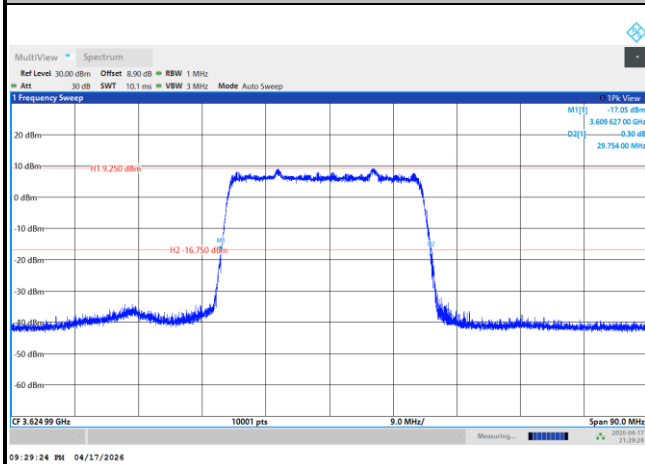
16QAM



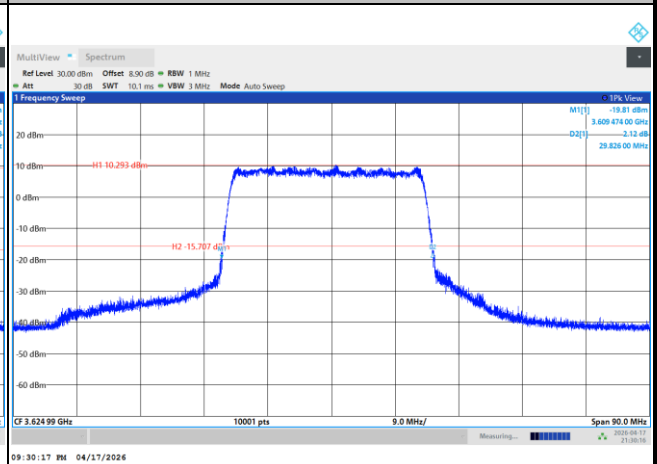


FR1 n77 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

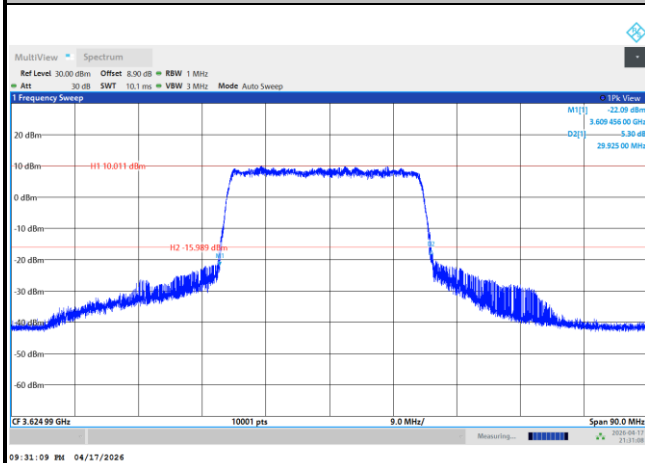
PI/2 BPSK



QPSK



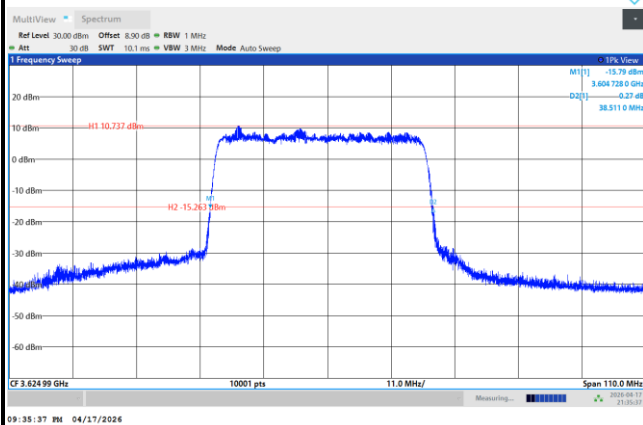
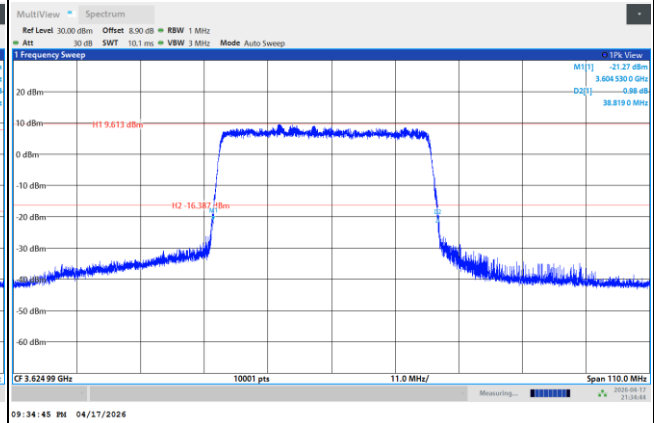
16QAM





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

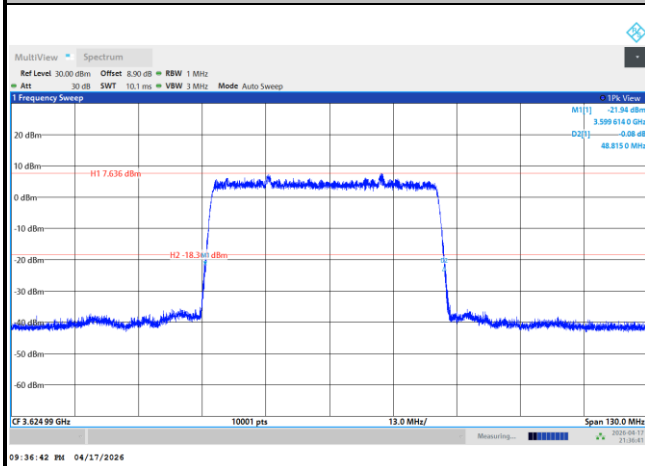
QPSK



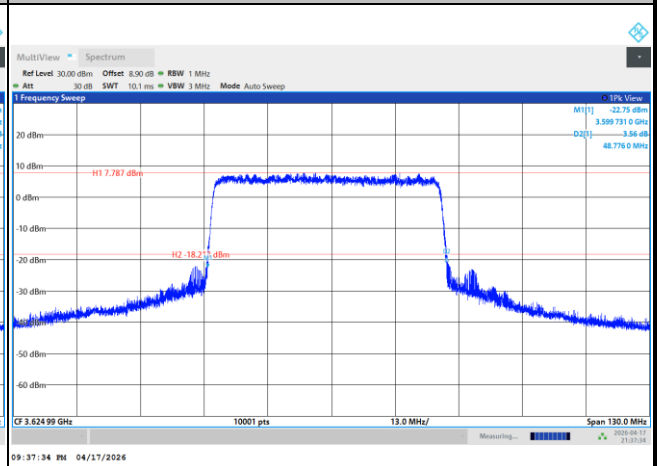


FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

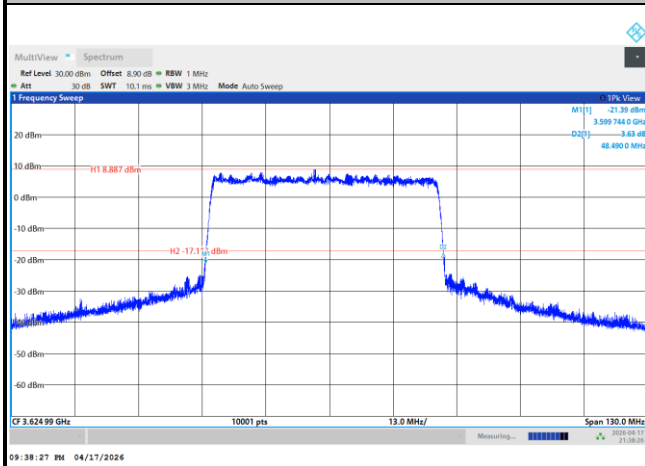
PI/2 BPSK



QPSK



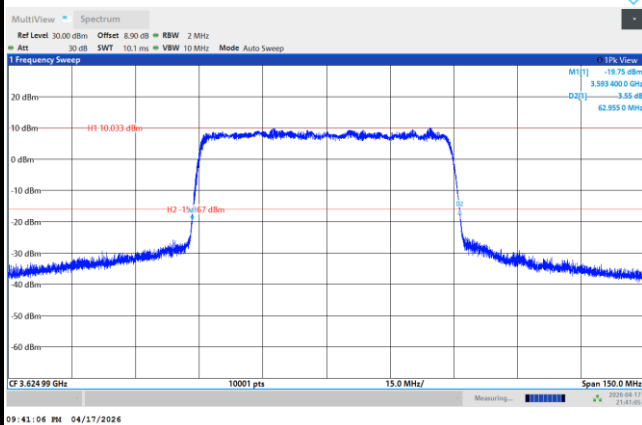
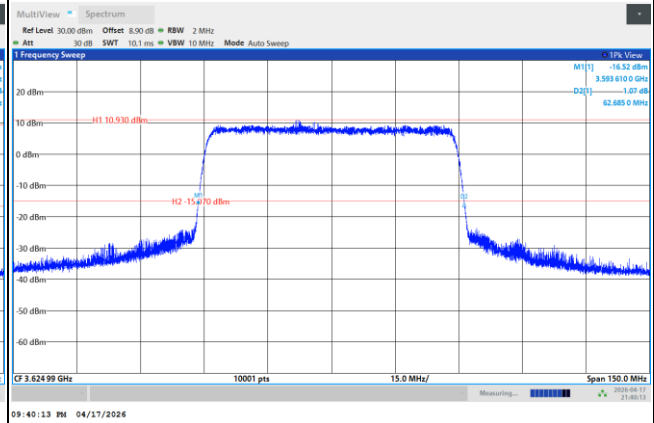
16QAM





FR1 n77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

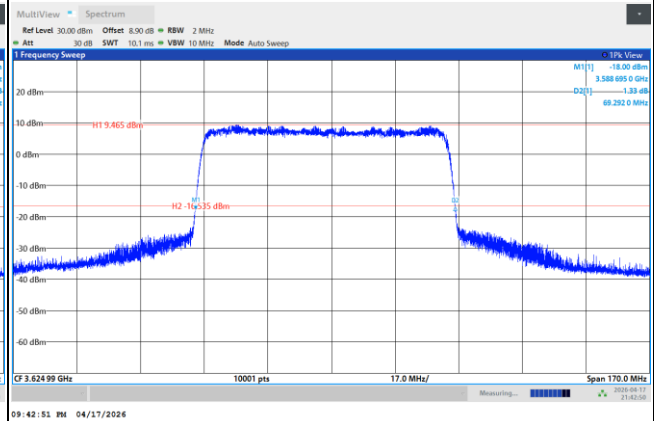
QPSK





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

QPSK



The screenshot shows a Spectrum Analyzer interface. The main display is a plot of power spectral density (PSD) in dBm versus frequency in MHz. The y-axis ranges from -60 dBm to 20 dBm, and the x-axis ranges from 3.6249 GHz to 3.6349 GHz. A blue trace shows a signal with a flat top and sloped sides. Two points are marked on the trace: H1 at the top of the flat region and H2 at the bottom of the flat region. The measurement results are displayed on the right side of the screen.

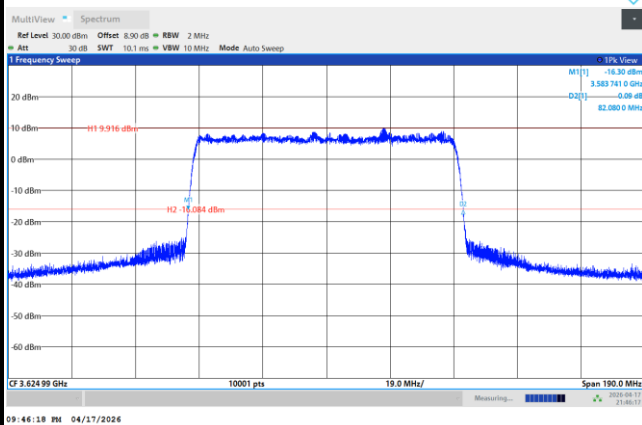
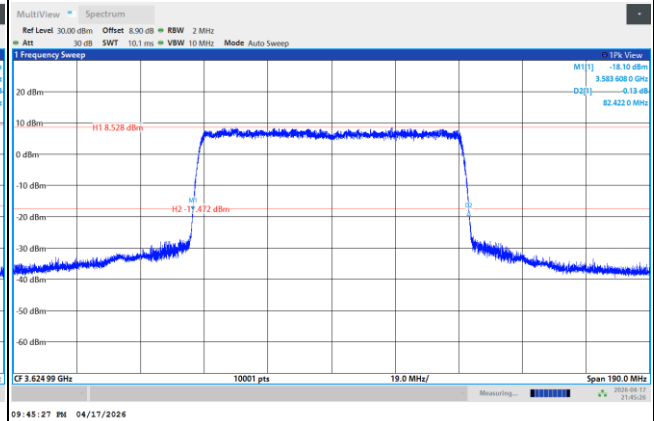
Marker	Frequency (MHz)	Power (dBm)
H1	3.629712	-16.52
H2	3.629712	-16.52

The measurement results are as follows:

- Ref Level: 30.00 dBm
- Offset: 8.00 dB
- RBW: 2.00 MHz
- Att: 30 dB
- SWT: 10.1 ms
- VBW: 10 MHz
- Mode: Auto Sweep
- Frequency Sweep: 3.6249 GHz to 3.6349 GHz
- Span: 170.0 MHz
- Resolution: 10001 pts
- Measurement: 2020-04-17 09:43:42 PM

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

QPSK

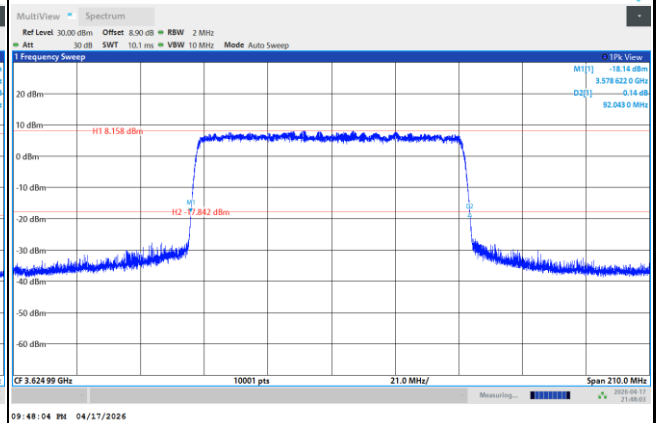
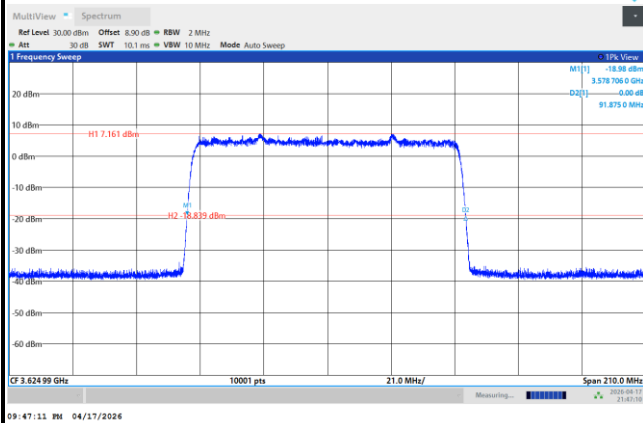




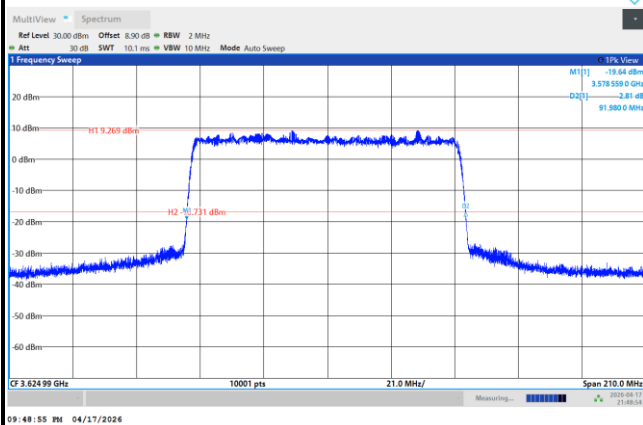
FR1 n77 / 90MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

QPSK



16QAM

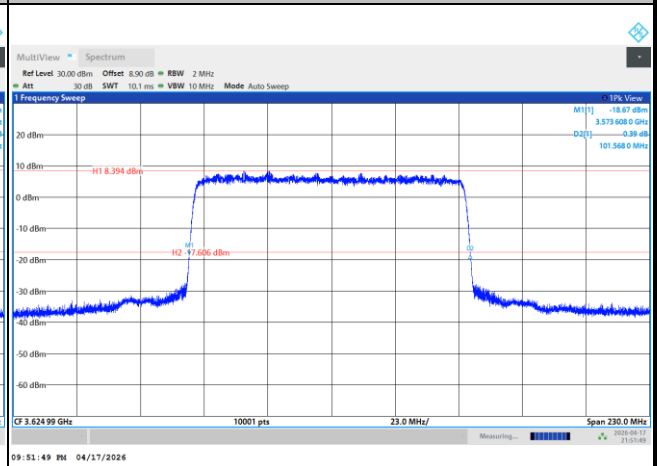
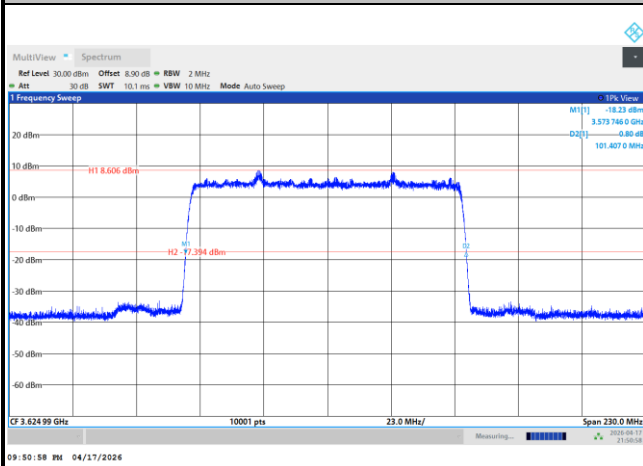




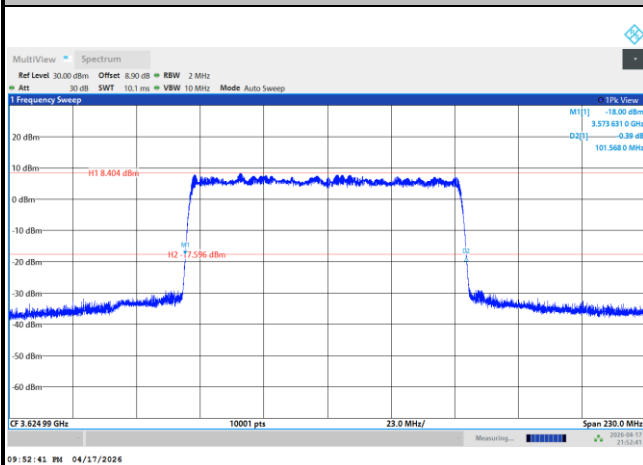
FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

QPSK



16QAM



**Occupied Bandwidth**

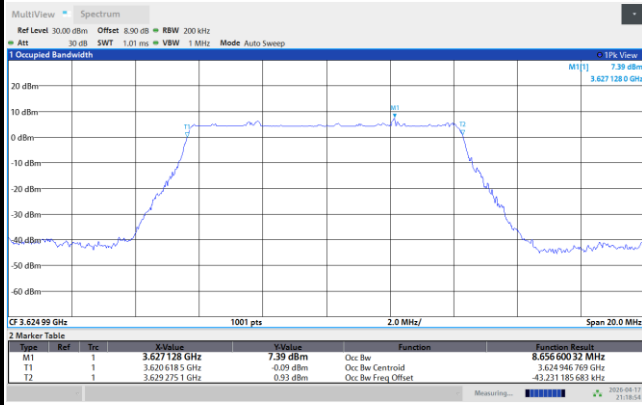
Mode	FR1 n77 : 99%OBW(MHz) / DFT-S OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	8.65	8.65	12.98	12.98	18.39	18.39	23.35	23.38
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	8.69		13.01		18.43		23.34	
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	27.29	27.19	36.03	36.02	45.82	45.94	58.44	58.26
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	27.19		35.79		46.01		58.72	
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	64.76	64.92	77.57	77.68	87.09	87.05	96.69	96.41
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	65.07		77.55		87.36		96.73	



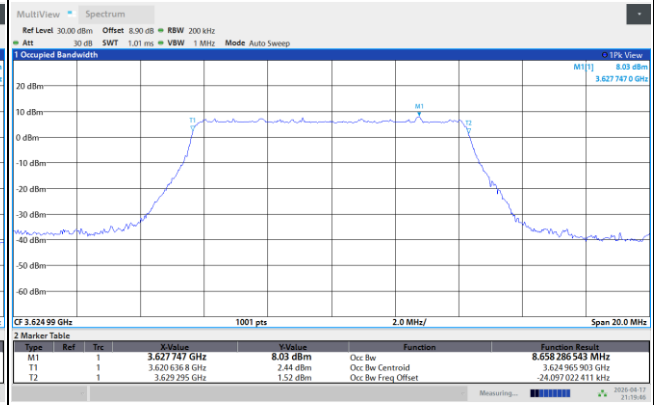
FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

QPSK

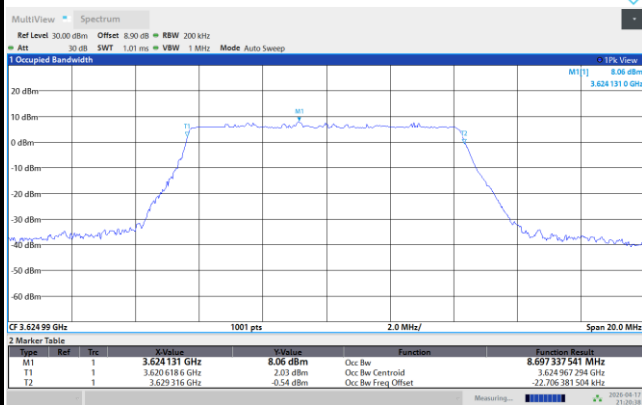


09:18:54 PM 04/17/2026



09:19:46 PM 04/17/2026

16QAM

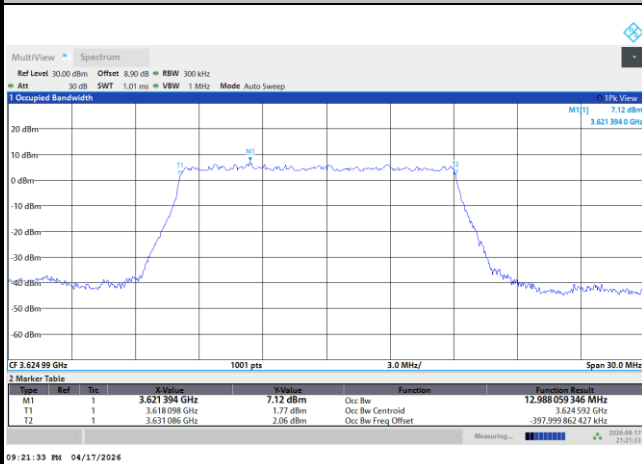


09:20:39 PM 04/17/2026



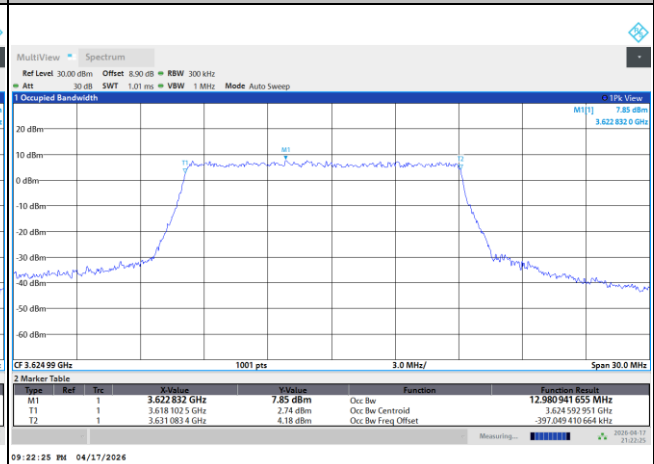
FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



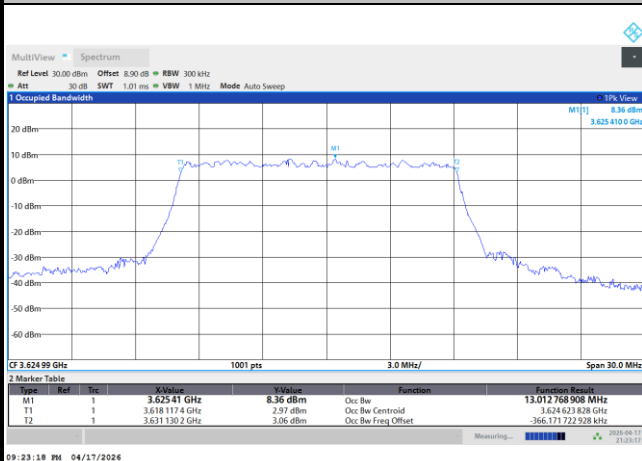
09:21:33 PM 04/17/2026

QPSK



09:22:25 PM 04/17/2026

16QAM

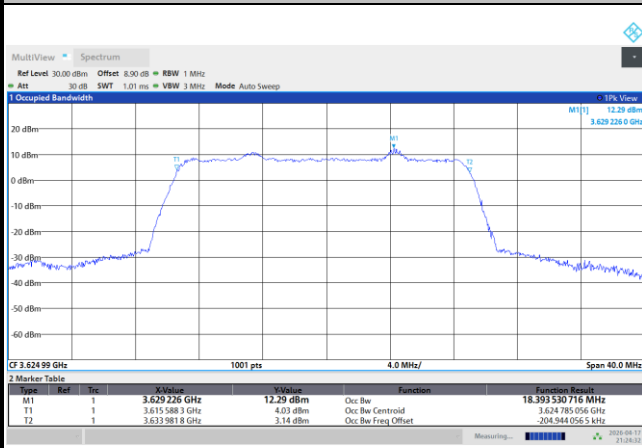


09:23:18 PM 04/17/2026



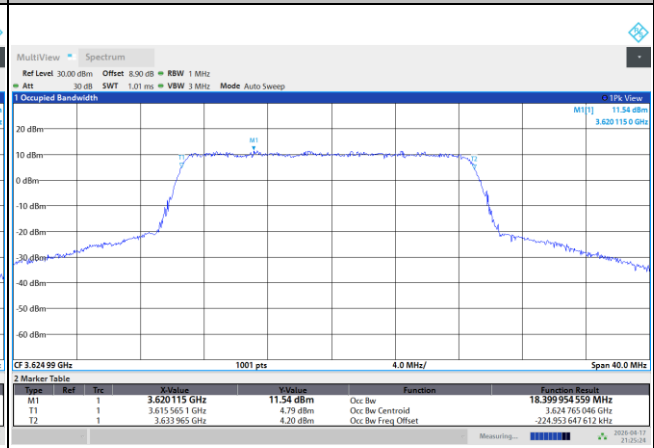
FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



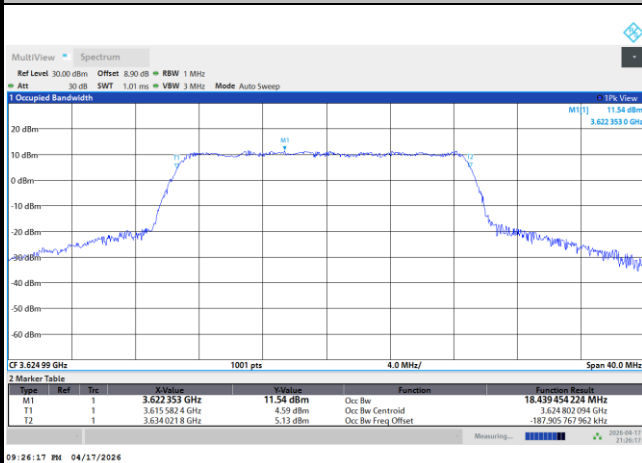
09:24:32 PM 04/17/2026

QPSK



09:25:25 PM 04/17/2026

16QAM

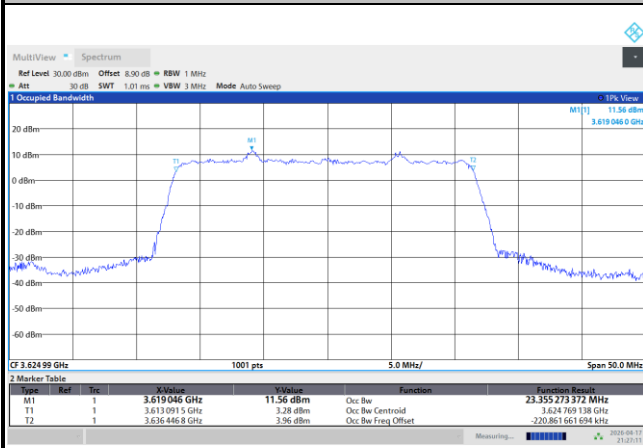


09:26:17 PM 04/17/2026



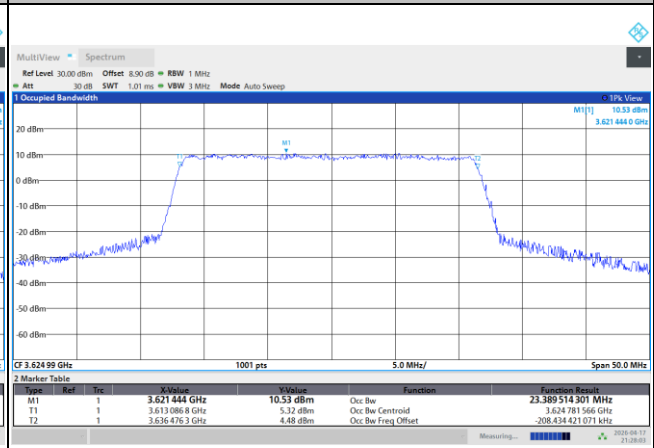
FR1 n77 / 25MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



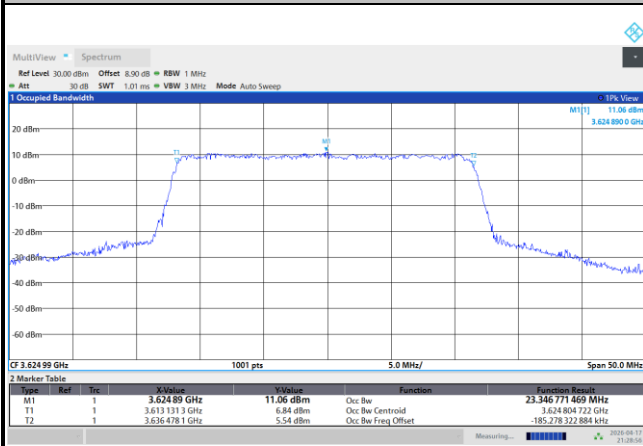
09:27:11 PM 04/17/2026

QPSK



09:28:04 PM 04/17/2026

16QAM

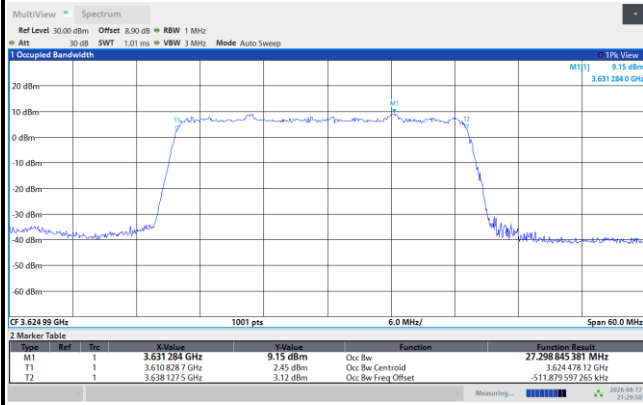


09:28:56 PM 04/17/2026



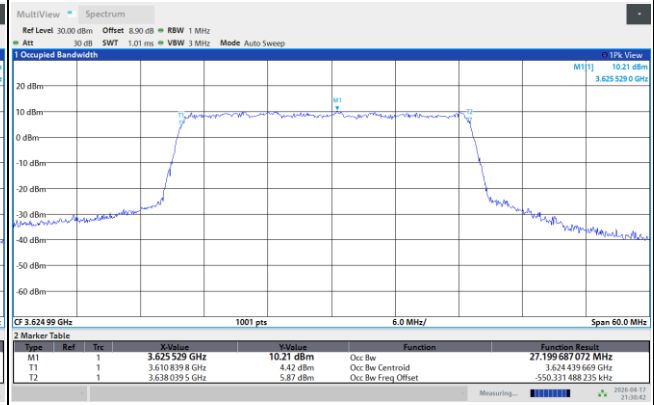
FR1 n77 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



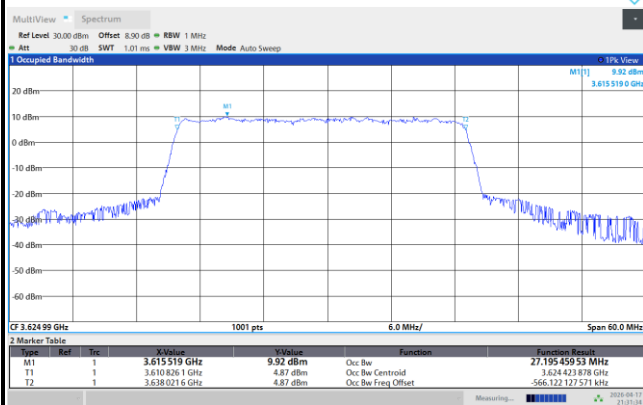
09:29:50 PM 04/17/2026

QPSK



09:30:43 PM 04/17/2026

16QAM



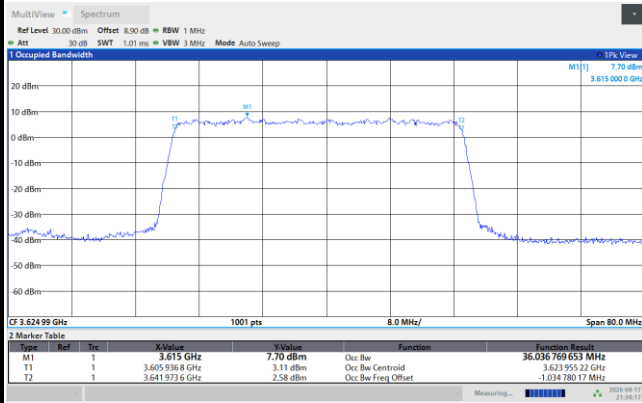
09:31:35 PM 04/17/2026



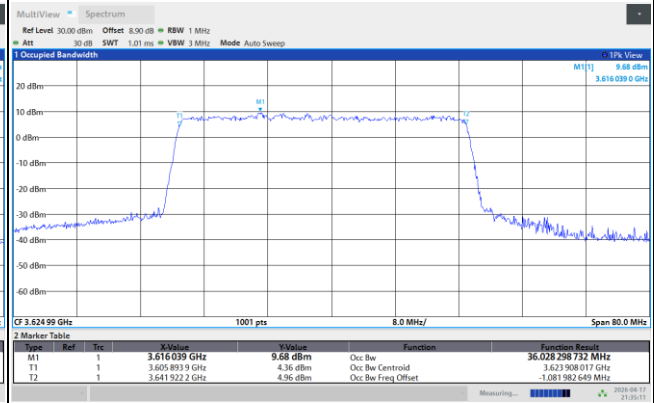
FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

QPSK

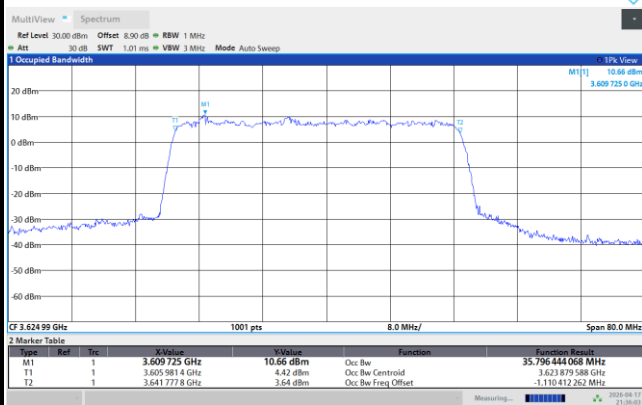


09:34:18 PM 04/17/2026



09:35:11 PM 04/17/2026

16QAM

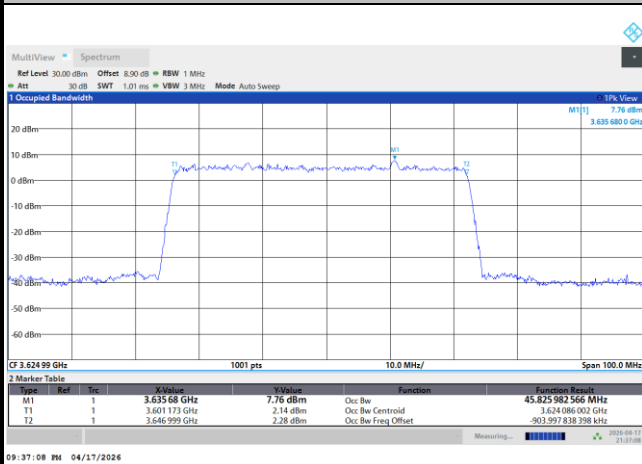


09:36:03 PM 04/17/2026



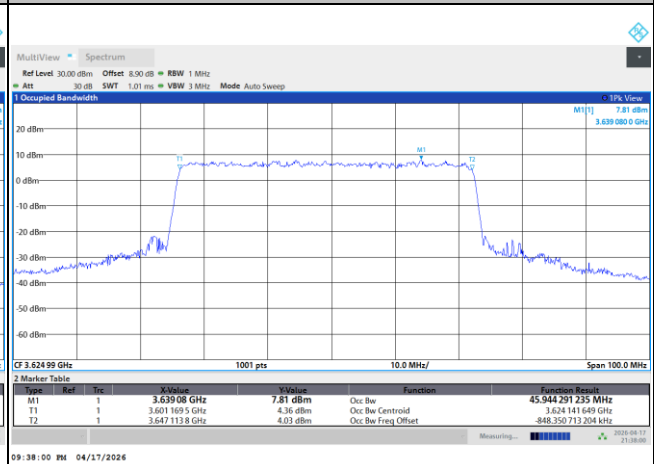
FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



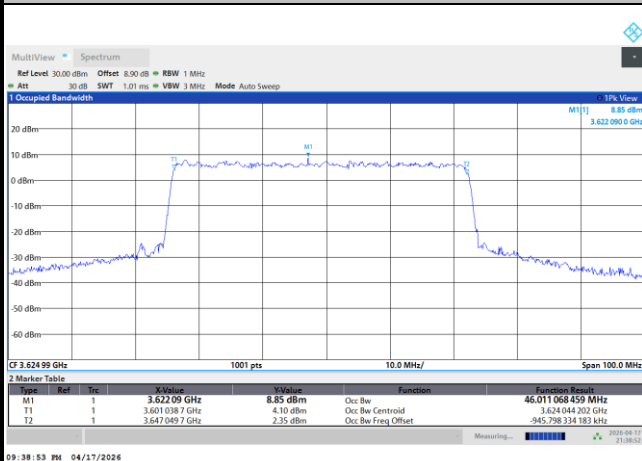
09:37:08 PM 04/17/2026

QPSK



09:38:00 PM 04/17/2026

16QAM

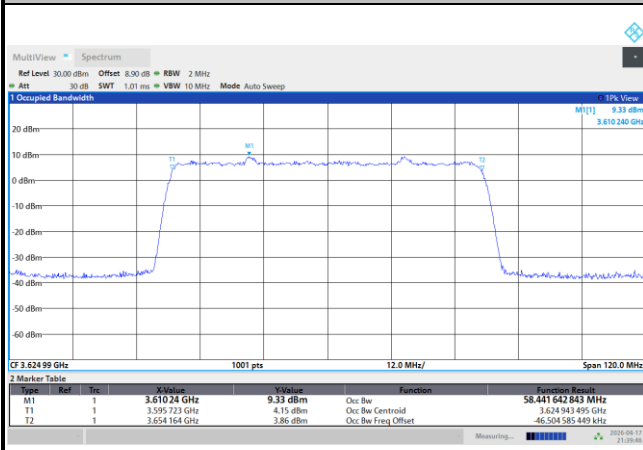


09:38:53 PM 04/17/2026



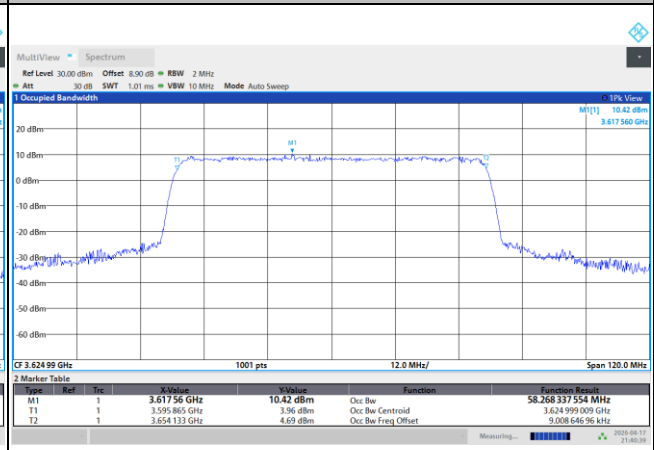
FR1 n77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



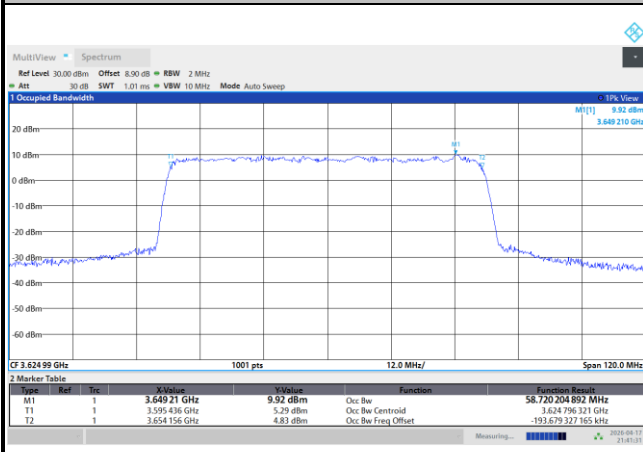
09:39:47 PM 04/17/2026

QPSK



09:40:39 PM 04/17/2026

16QAM

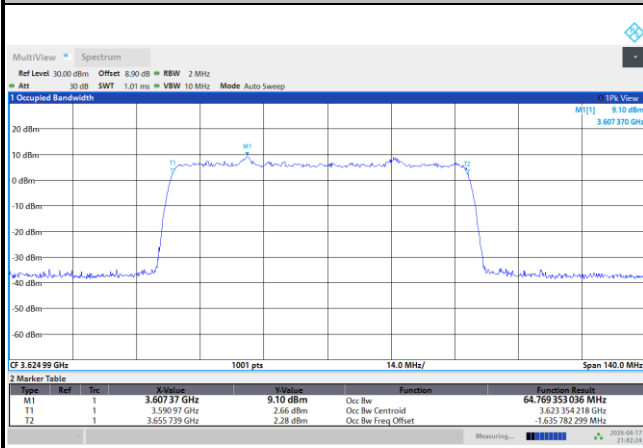


09:41:32 PM 04/17/2026



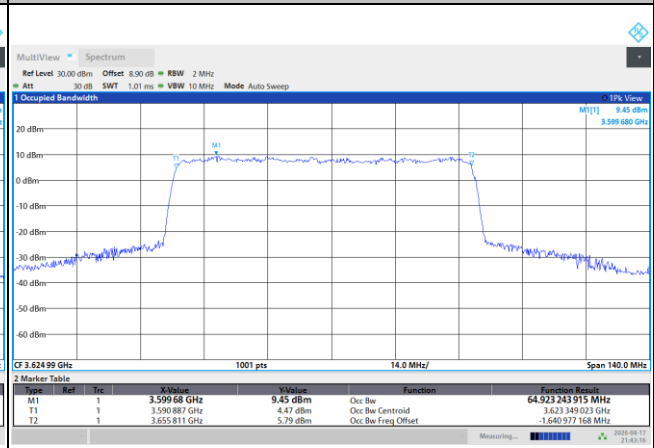
FR1 n77 / 70MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



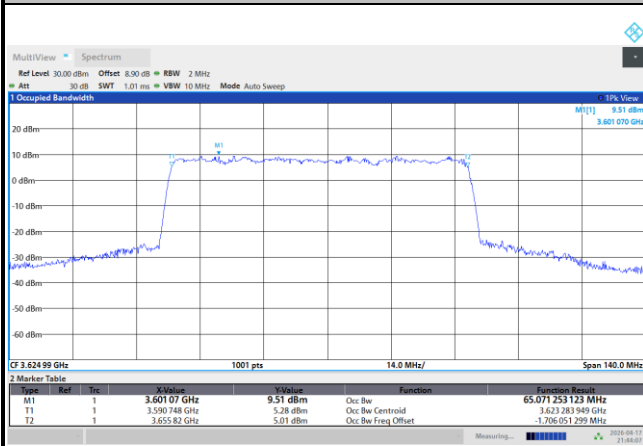
09:42:25 PM 04/17/2026

QPSK



09:43:16 PM 04/17/2026

16QAM

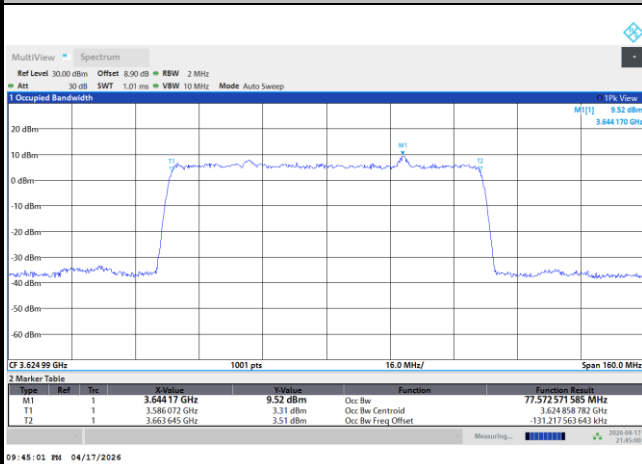


09:44:08 PM 04/17/2026



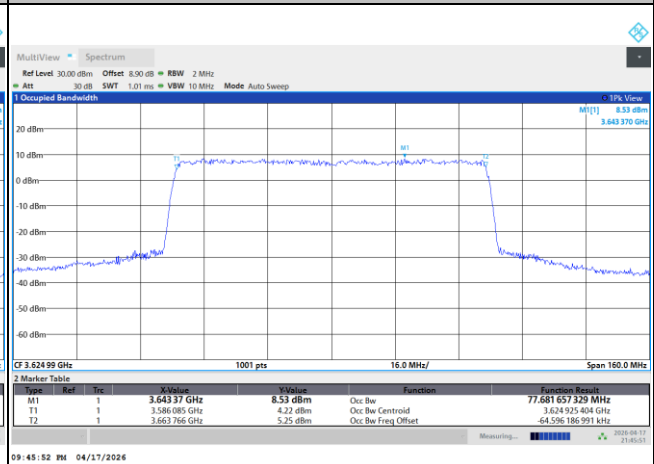
FR1 n77 / 80MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



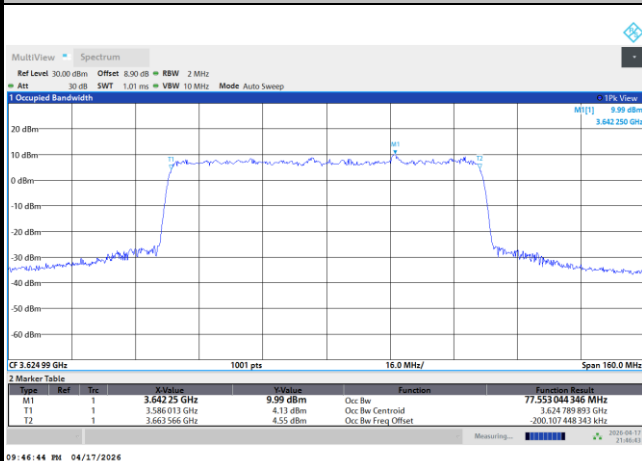
09:45:01 PM 04/17/2026

QPSK



09:45:52 PM 04/17/2026

16QAM

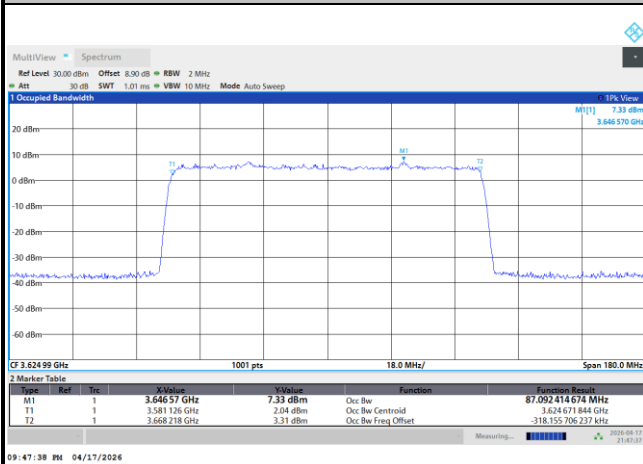


09:46:44 PM 04/17/2026



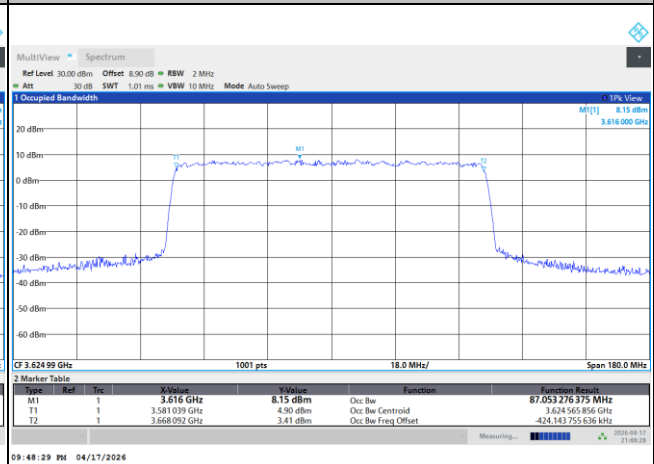
FR1 n77 / 90MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



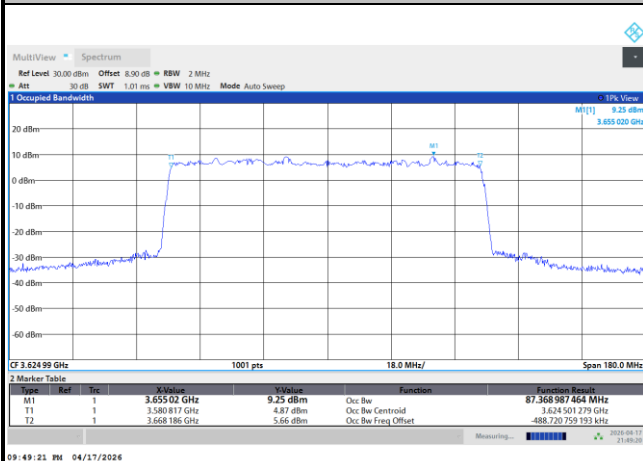
09:47:38 PM 04/17/2026

QPSK



09:48:29 PM 04/17/2026

16QAM



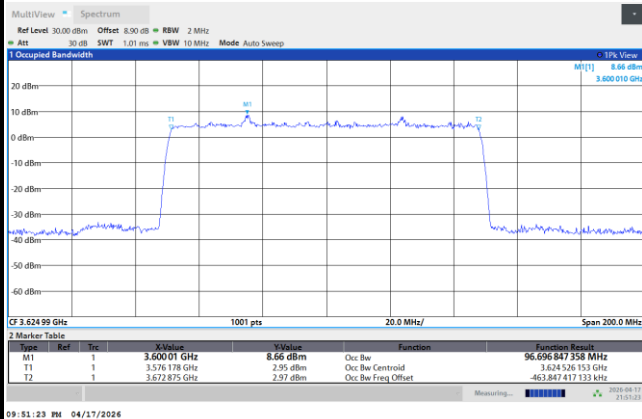
09:49:21 PM 04/17/2026



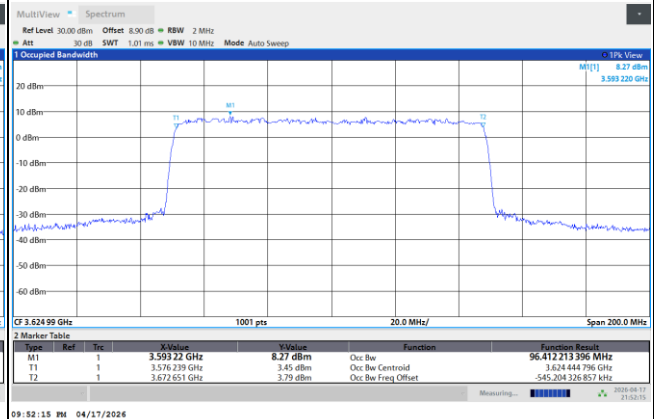
FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

QPSK

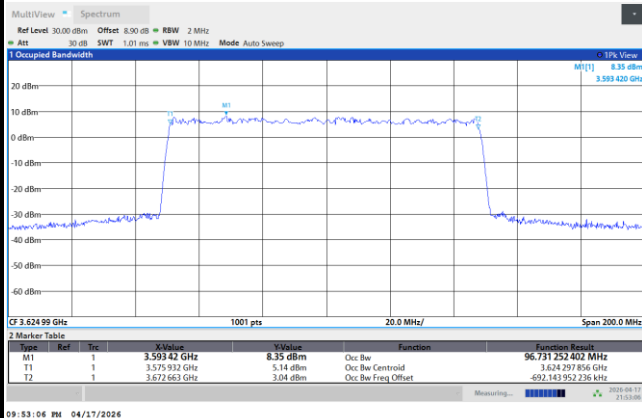


09:51:23 PM 04/17/2026



09:52:15 PM 04/17/2026

16QAM



09:53:06 PM 04/17/2026



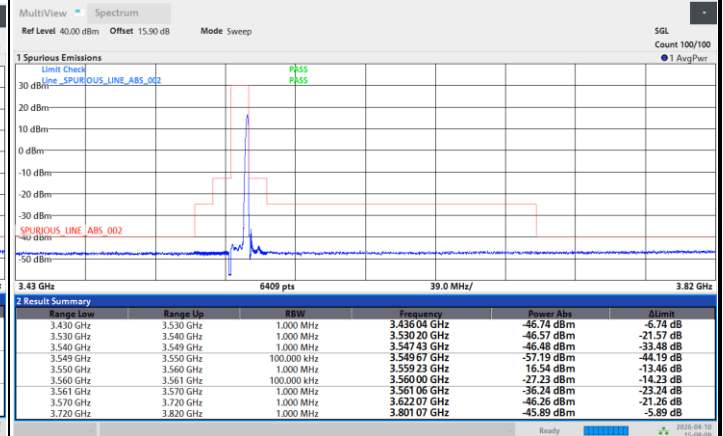
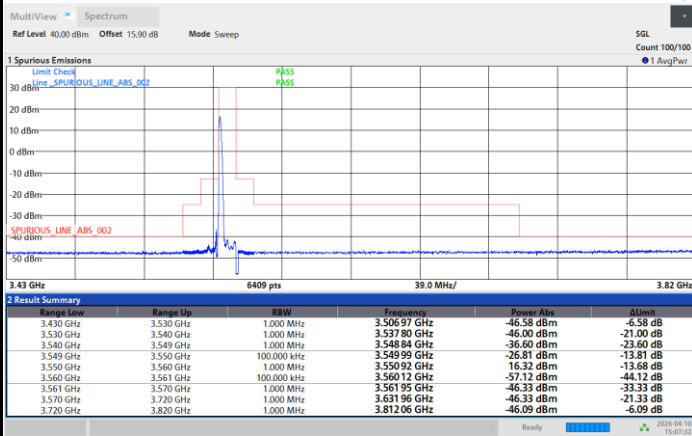
Unwanted Emission (MASK)

FR1 n77 Part96 / 10MHz / DFT-S OFDM / PI/2 BPSK

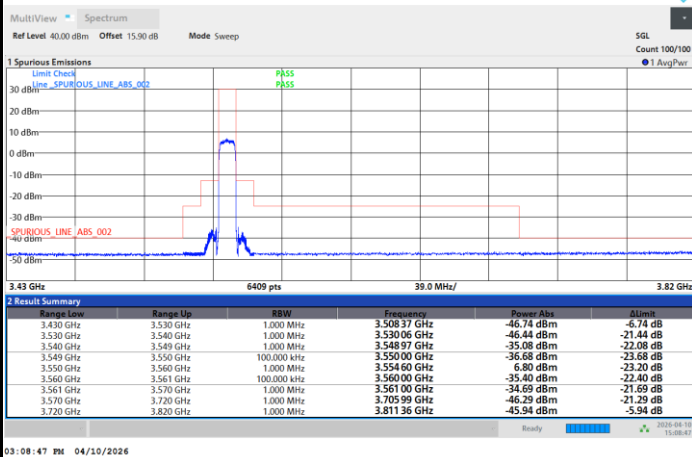
Lowest Channel

1RB0

1RBmax



Full RB

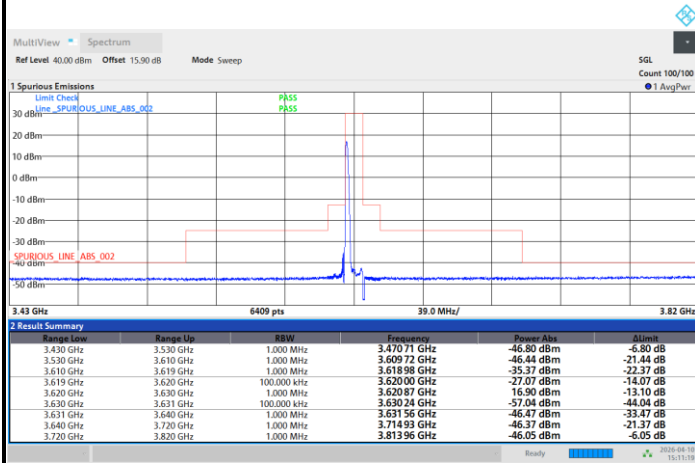




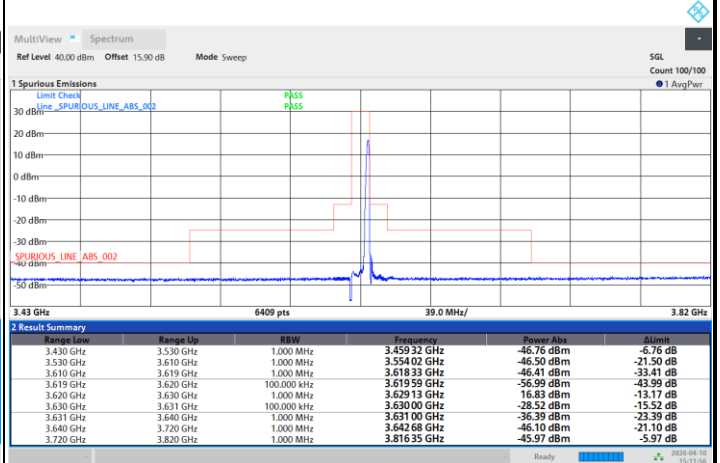
FR1 n77 Part96 / 10MHz / DFT-S OFDM / PI/2 BPSK

Middle Channel

1RB0



1RBmax



Full RB

