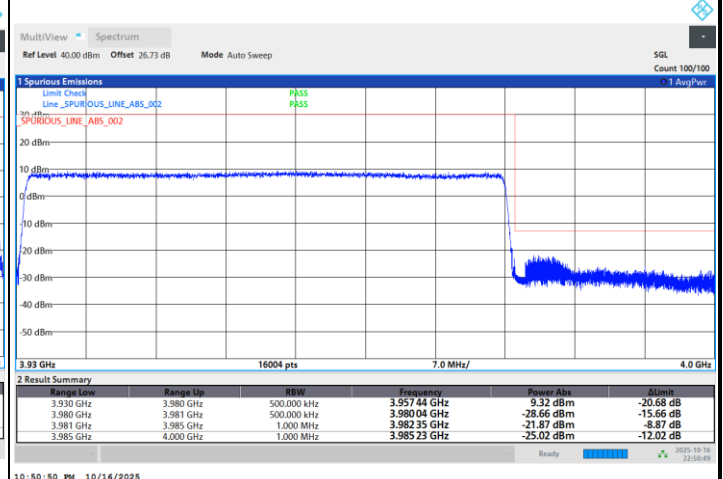
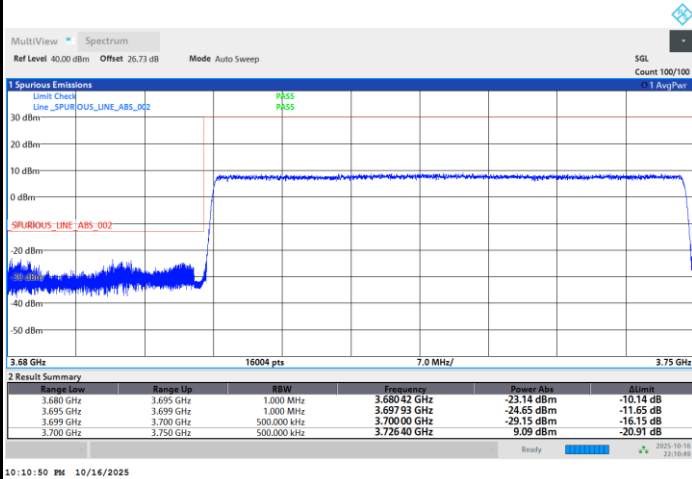




FR1 n77 / 50MHz / QPSK

Lowest Band Edge / Full RB

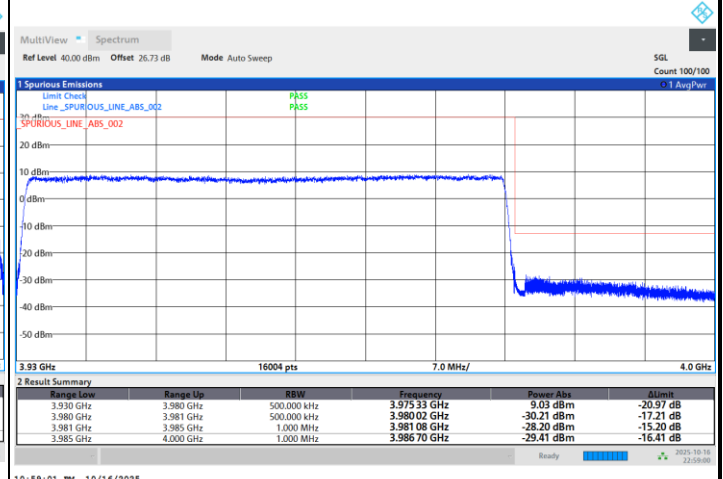
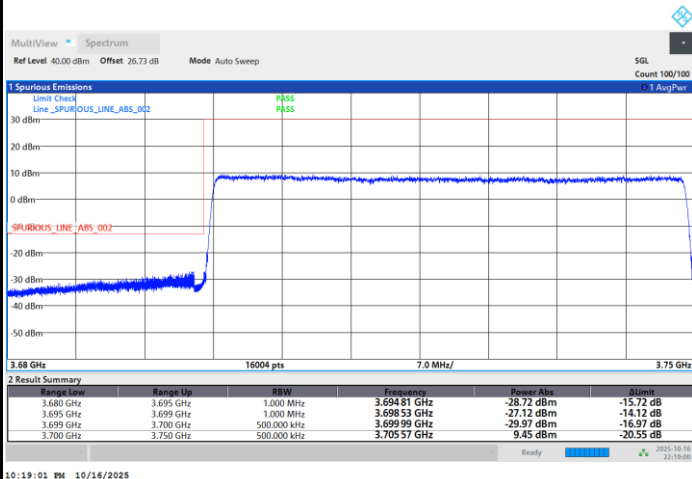
Highest Band Edge / Full RB



FR1 n77 / 50MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

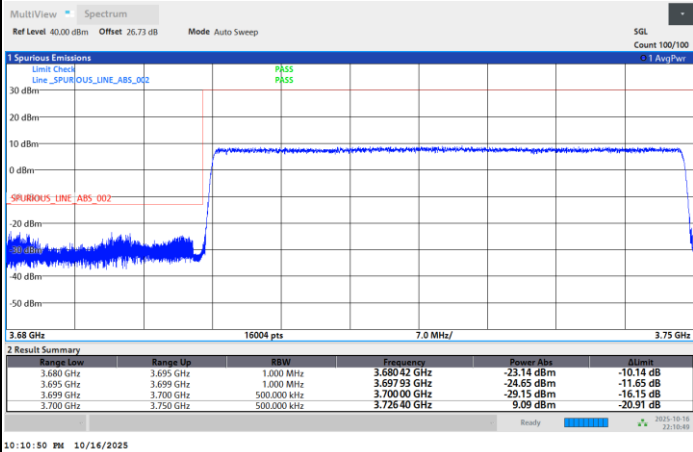




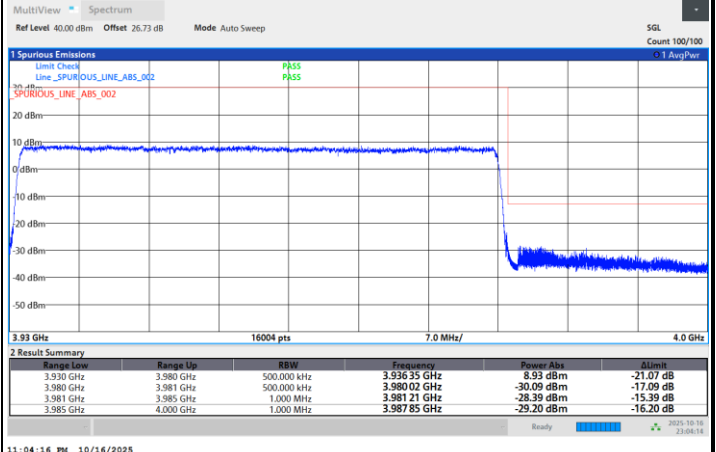
FR1 n77 / 50MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



10:10:50 PM 10/16/2025

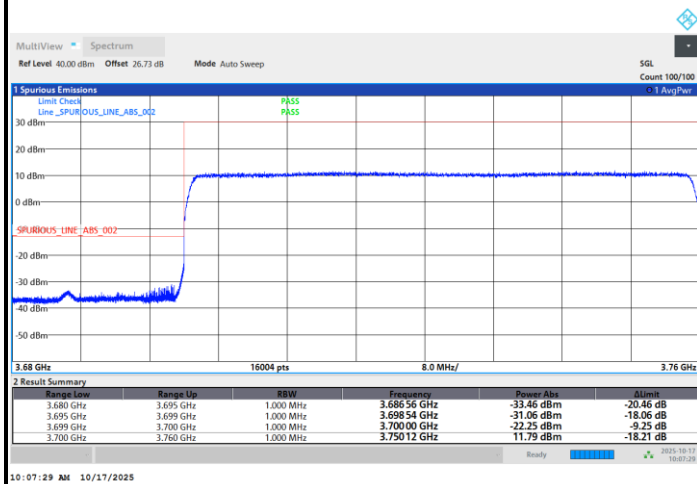


11:04:16 PM 10/16/2025



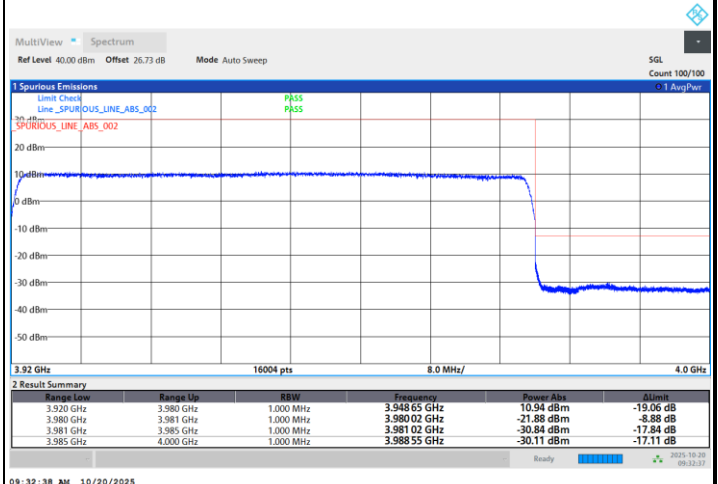
FR1 n77 / 60MHz / QPSK

Lowest Band Edge / Full RB



10:07:29 AM 10/17/2025

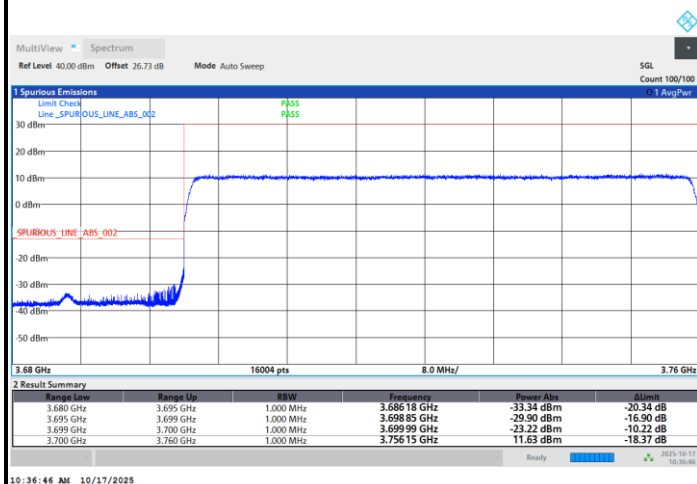
Highest Band Edge / Full RB



09:32:38 AM 10/20/2025

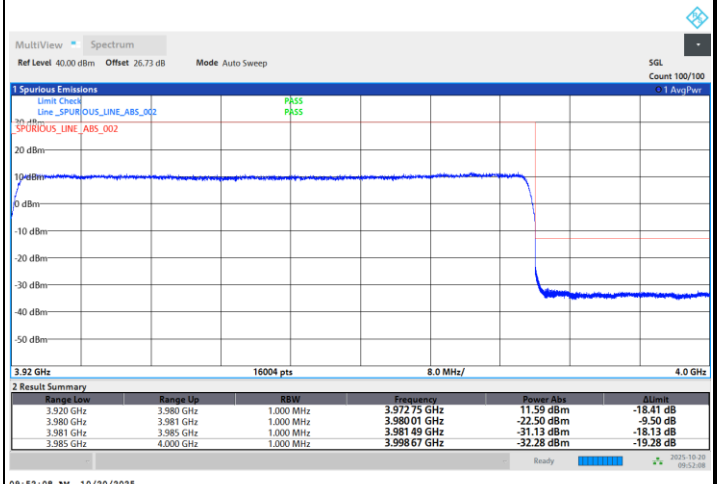
FR1 n77 / 60MHz / 64QAM

Lowest Band Edge / Full RB



10:36:46 AM 10/17/2025

Highest Band Edge / Full RB



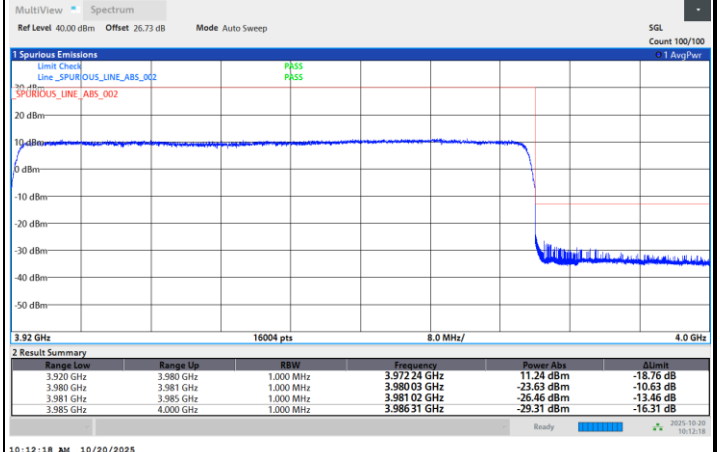
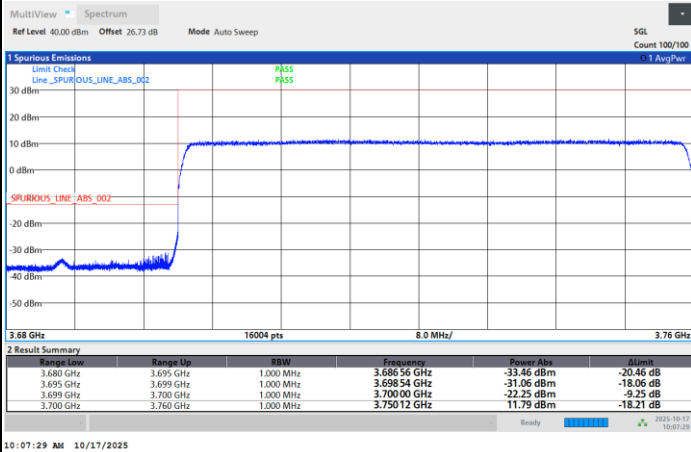
09:52:08 AM 10/20/2025



FR1 n77 / 60MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

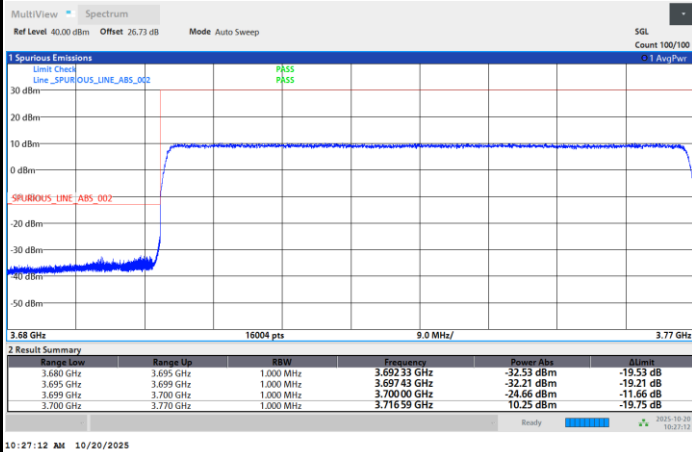




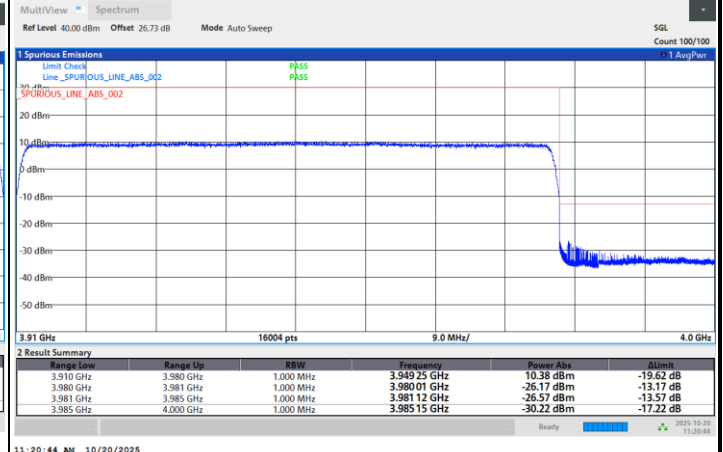
FR1 n77 / 70MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



10:27:12 AM 10/20/2025

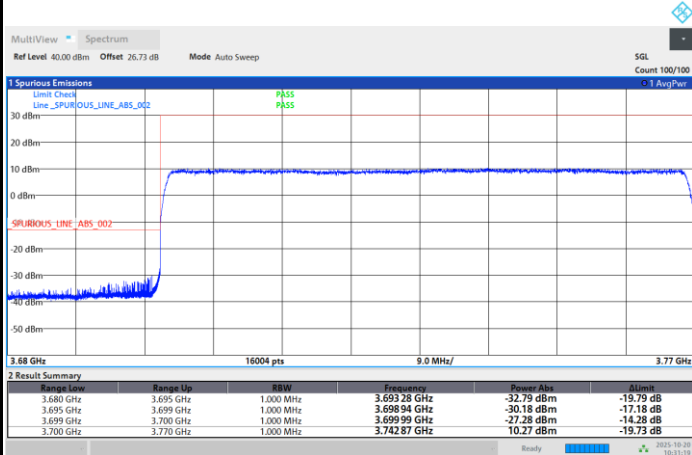


11:20:44 AM 10/20/2025

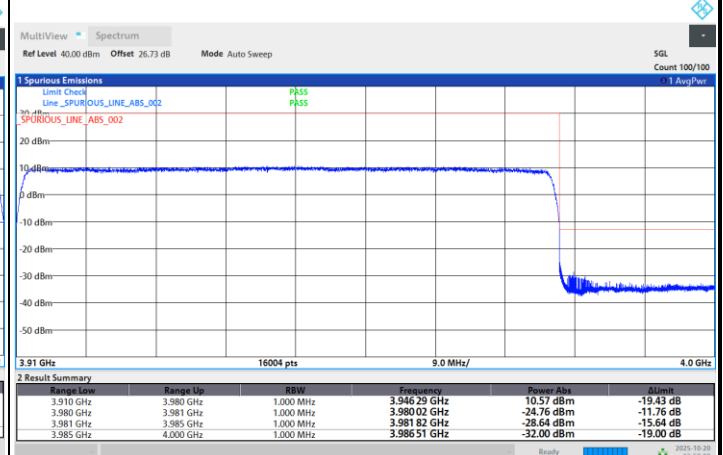
FR1 n77 / 70MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



10:31:19 AM 10/20/2025



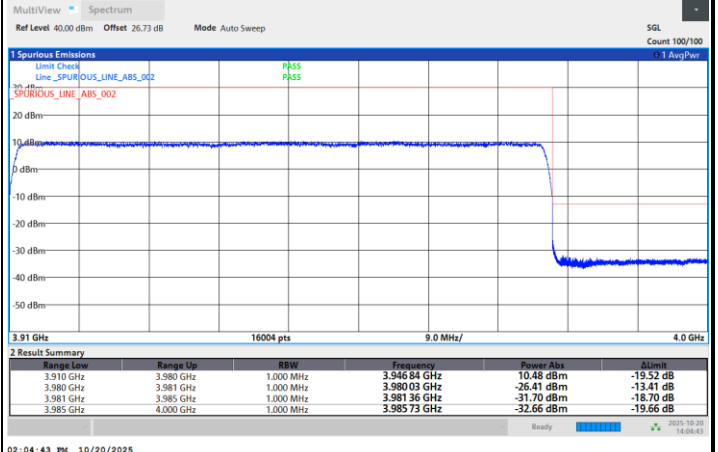
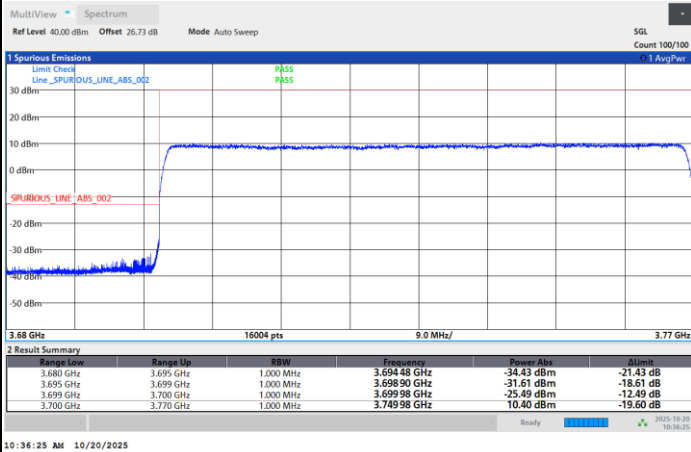
01:59:08 PM 10/20/2025



FR1 n77 / 70MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

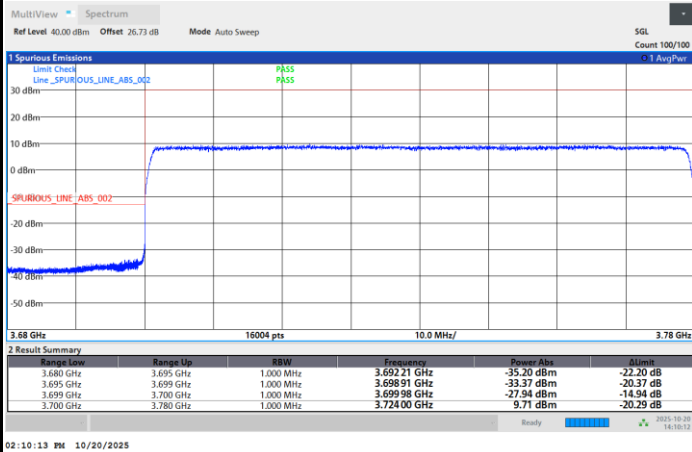




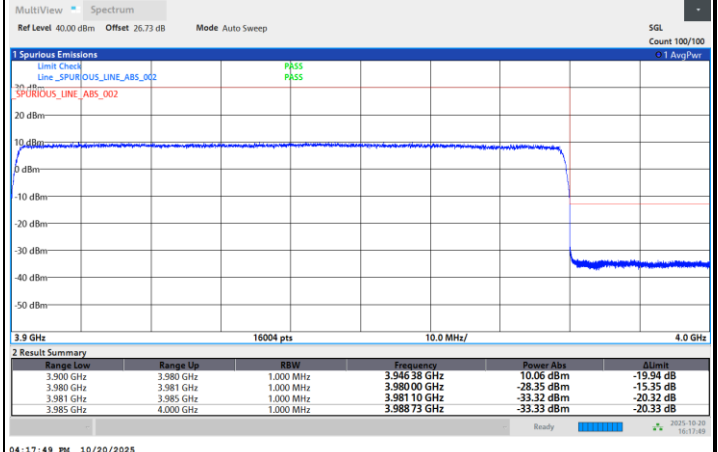
FR1 n77 / 80MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



02:10:13 PM 10/20/2025

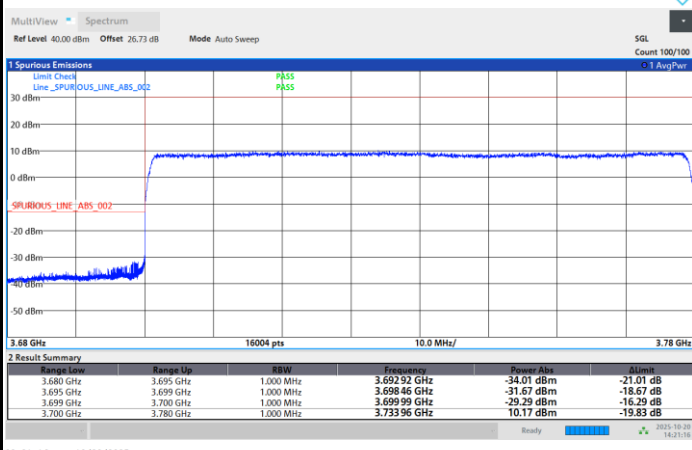


04:17:49 PM 10/20/2025

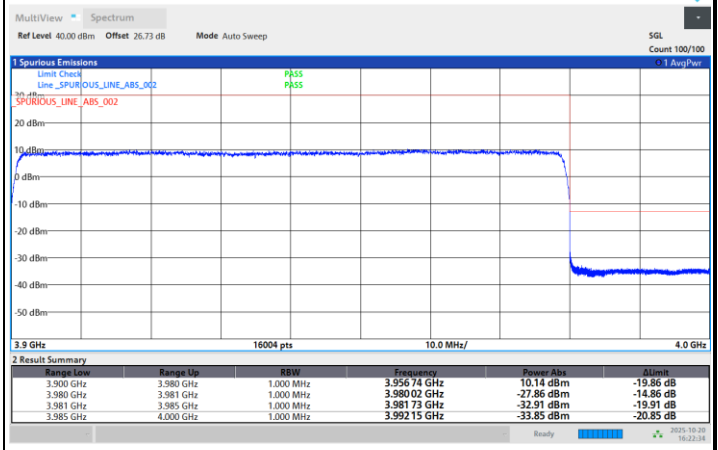
FR1 n77 / 80MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



02:21:16 PM 10/20/2025



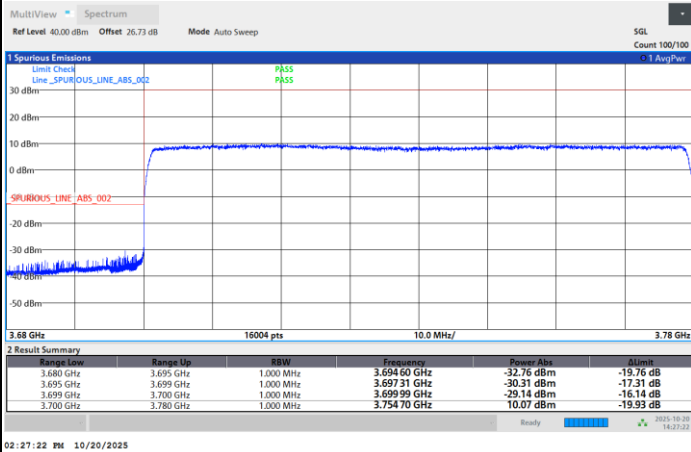
04:22:34 PM 10/20/2025



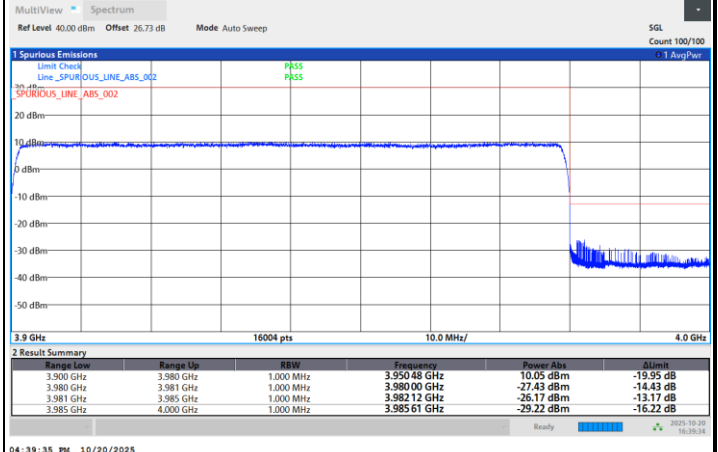
FR1 n77 / 80MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



02:27:22 PM 10/20/2025



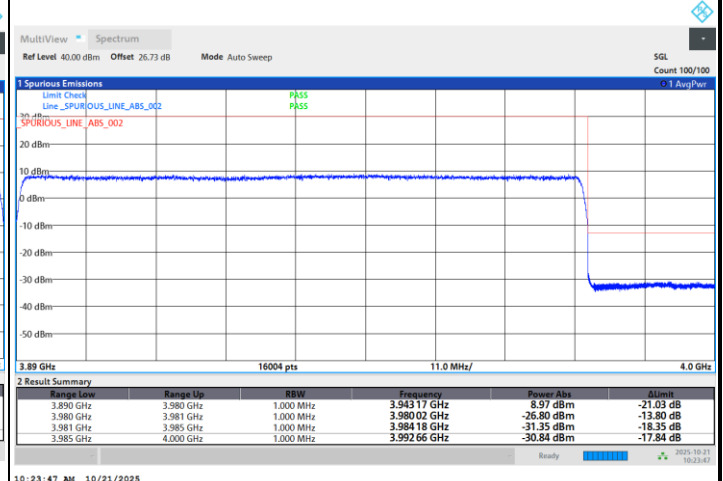
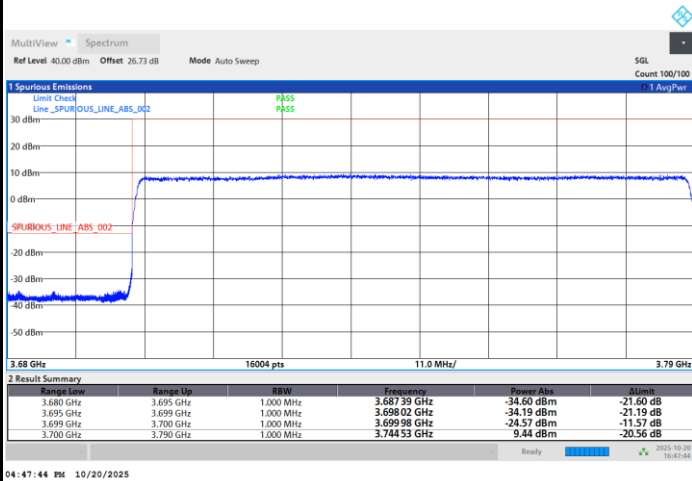
04:39:35 PM 10/20/2025



FR1 n77 / 90MHz / QPSK

Lowest Band Edge / Full RB

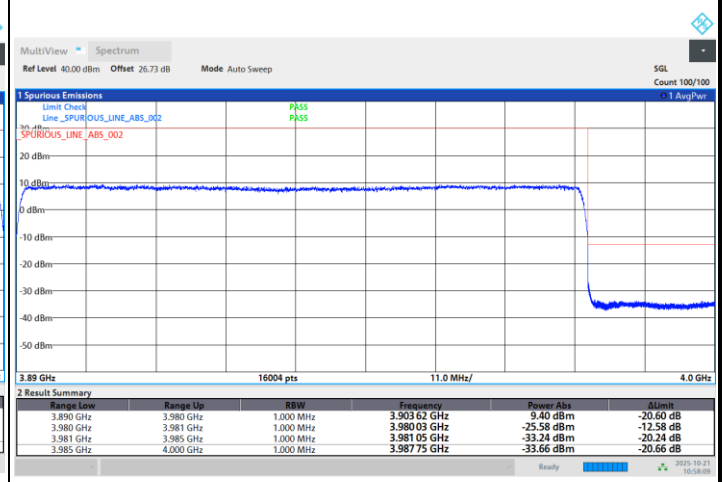
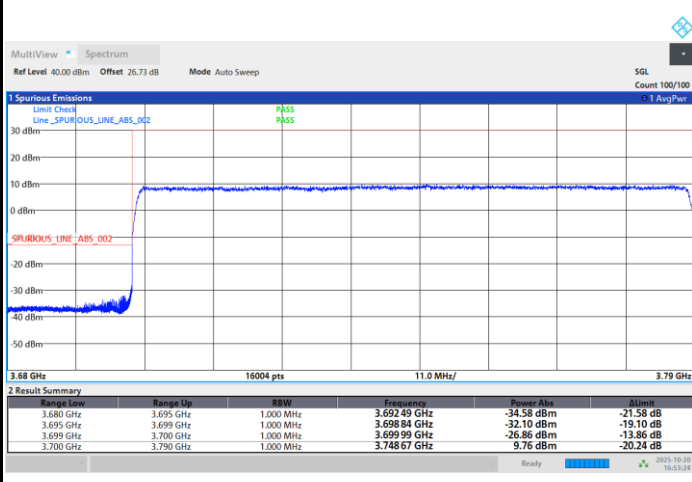
Highest Band Edge / Full RB



FR1 n77 / 90MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

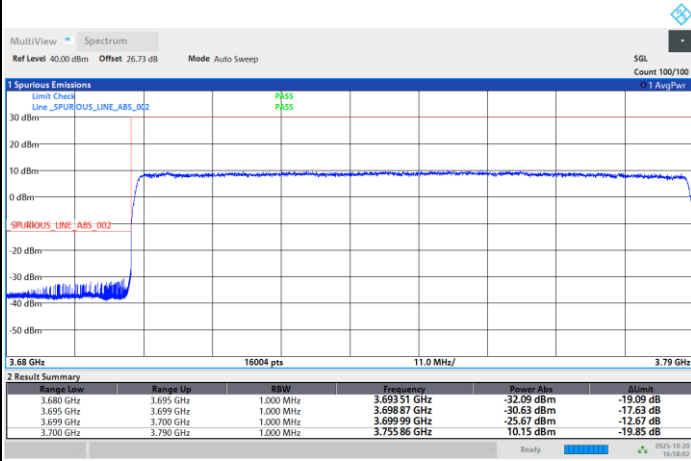




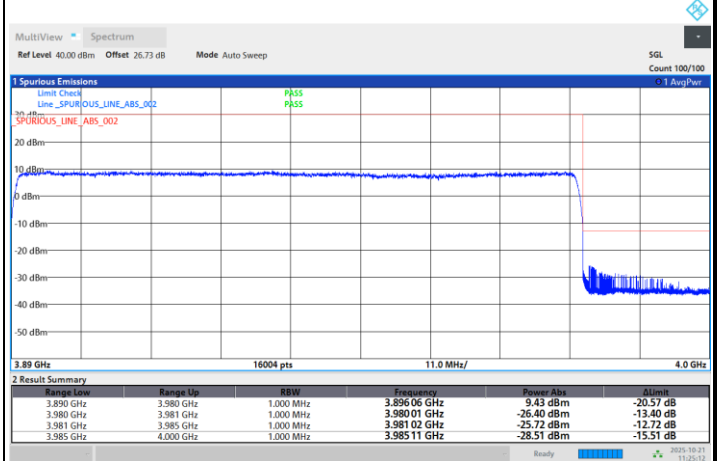
FR1 n77 / 90MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



04:58:02 PM 10/20/2025

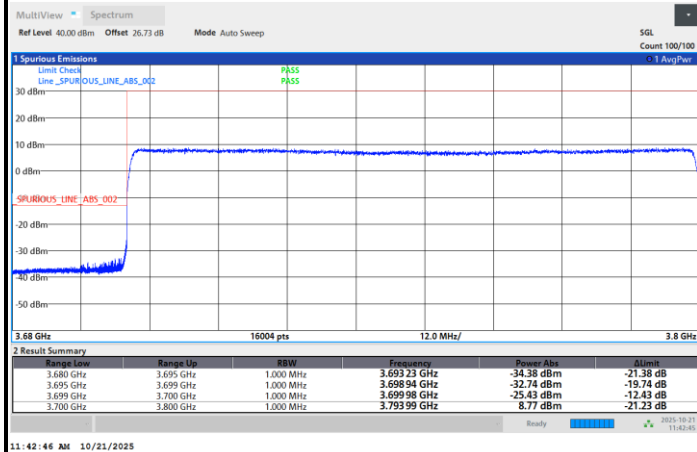


11:25:12 AM 10/21/2025



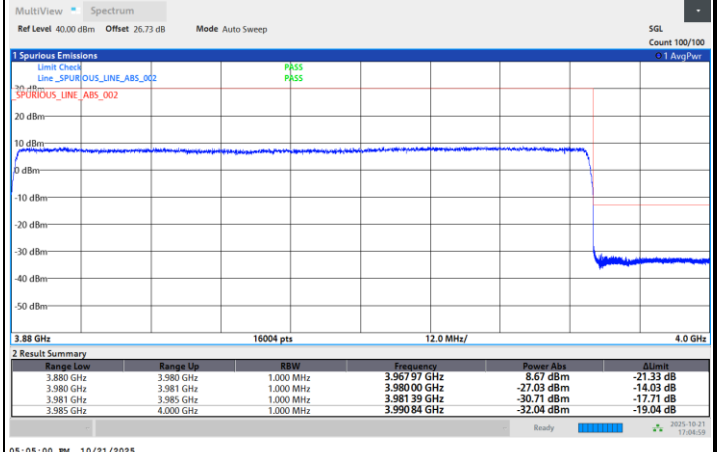
FR1 n77 / 100MHz / QPSK

Lowest Band Edge / Full RB



11:42:46 AM 10/21/2025

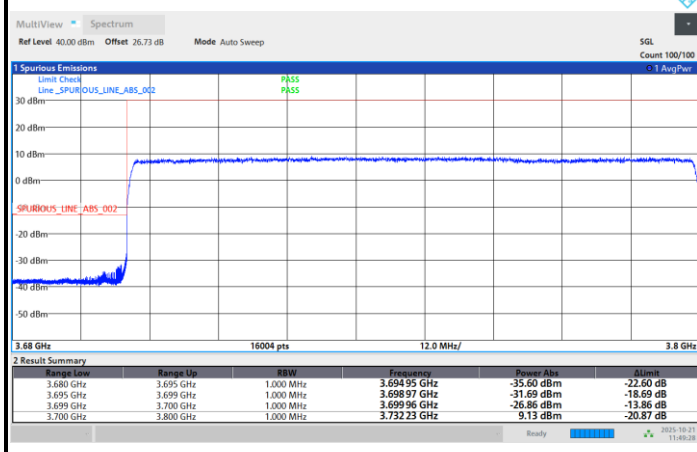
Highest Band Edge / Full RB



05:05:00 PM 10/21/2025

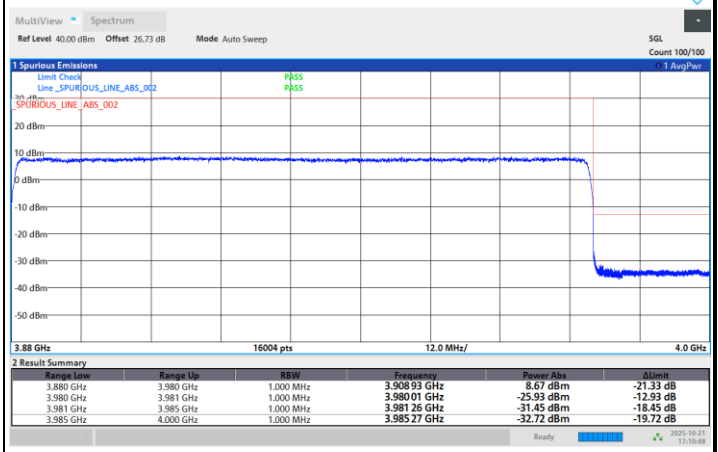
FR1 n77 / 90MHz / 64QAM

Lowest Band Edge / Full RB



11:49:28 AM 10/21/2025

Highest Band Edge / Full RB



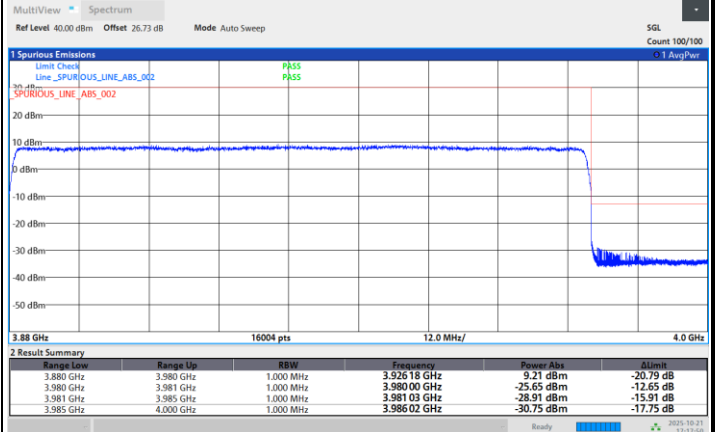
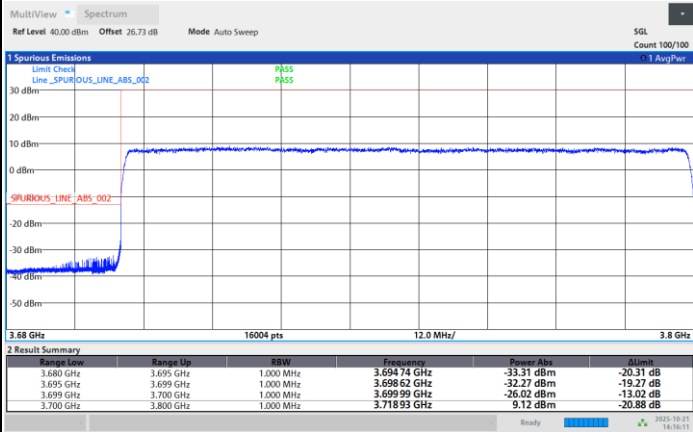
05:10:49 PM 10/21/2025



FR1 n77 / 100MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

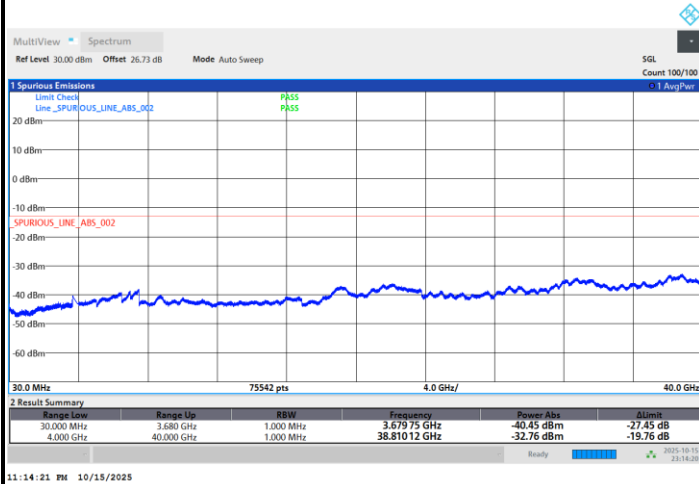




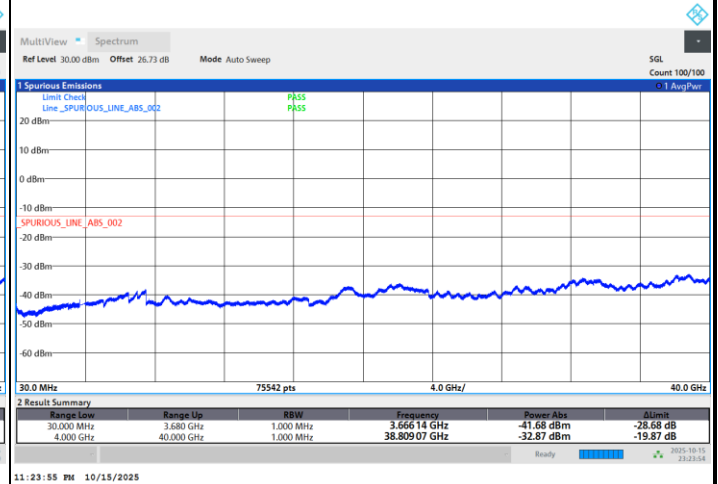
Conducted Spurious Emission

FR1 n77 / 10MHz / QPSK

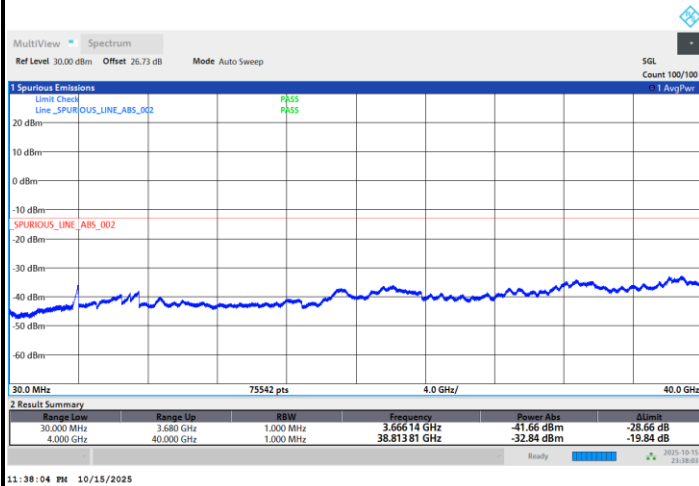
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n77 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.1042	PASS
40	Normal Voltage	0.1563	
30	Normal Voltage	0.1563	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.2604	
0	Normal Voltage	0.7813	
-10	Normal Voltage	0.5208	
-20	Normal Voltage	0.4688	
-30	Normal Voltage	0.3646	
20	Maximum Voltage	0.0521	
20	Normal Voltage	0.8854	
20	Minimum Voltage	1.2500	

Note:

1. Normal Voltage = 115 V. ; Minimum Voltage = 100 V. ; Maximum Voltage = 240 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n77

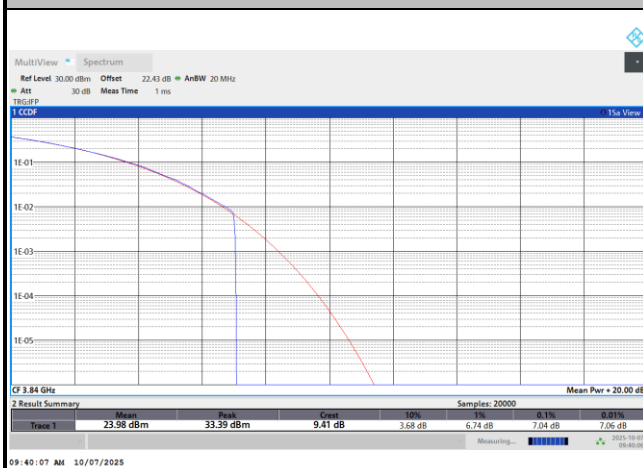
<Ant. 2>

Peak-to-Average Ratio

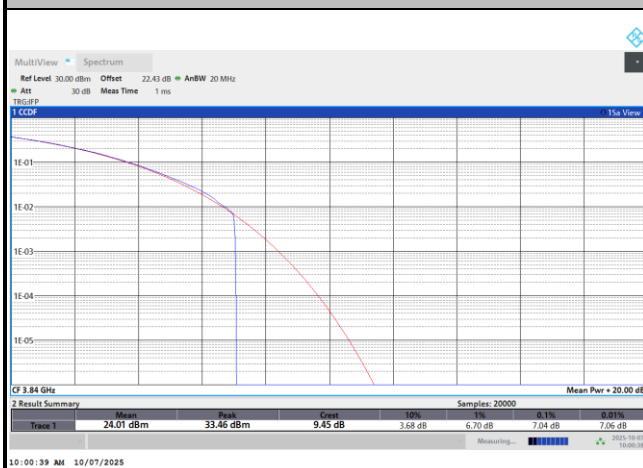
Mode	FR1 n77 / 20MHz dB				
Mod.	QPSK	-	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	-	Full RB	Full RB	Result
Middle CH	7.04	-	7.04	6.96	PASS

FR1 n77 / 20MHz / Middle Channel / Full RB

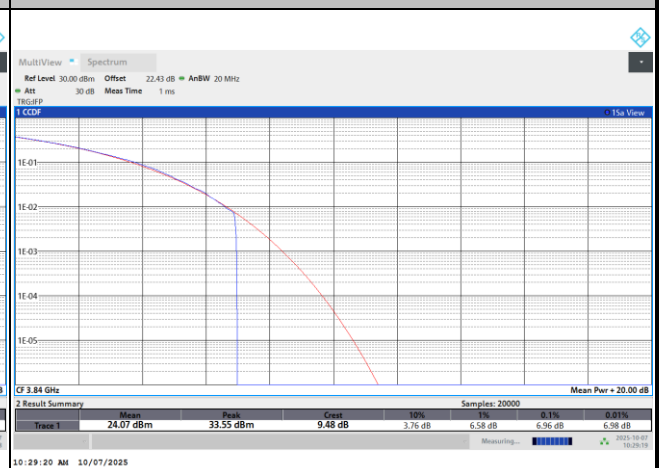
QPSK



64QAM



256QAM



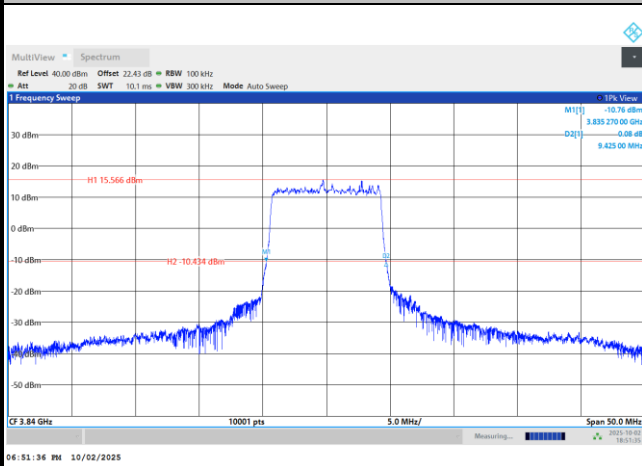
**26dB Bandwidth**

Mode	FR1 n77 : 26dB BW(MHz)							
BW	10MHz		20MHz		30MHz		40MHz	
Mod.	QPSK	-	QPSK	-	QPSK	-	QPSK	-
Middle CH	9.42	-	19.84	-	29.85	-	39.96	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	9.42	9.60	19.61	19.40	29.45	29.52	39.84	40.20
BW	50MHz		60MHz		70MHz		80MHz	
Mod.	QPSK	-	QPSK	-	QPSK	-	QPSK	-
Middle CH	49.71	-	61.08	-	72.65	-	80.63	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	49.80	49.79	61.03	62.23	71.09	70.85	80.56	82.89
BW	90MHz		100MHz					
Mod.	QPSK	-	QPSK	-				
Middle CH	90.61	-	101.06	-				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	90.82	94.77	101.03	101.59				

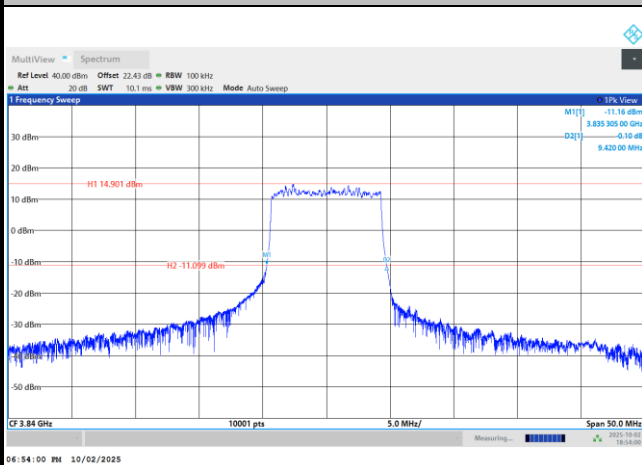


FR1 n77 / 10MHz / Middle Channel / Full RB

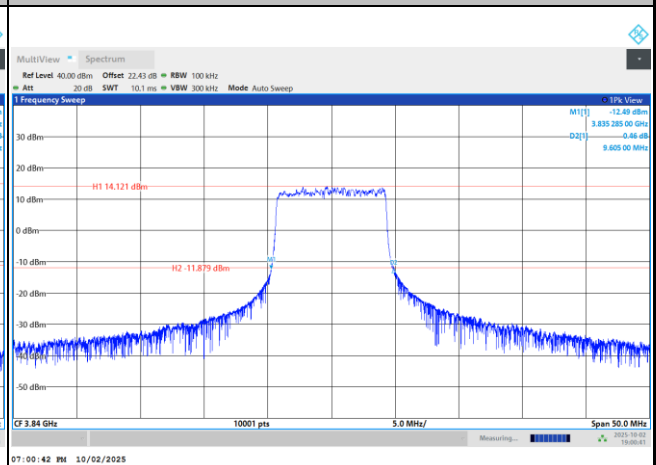
QPSK



64QAM



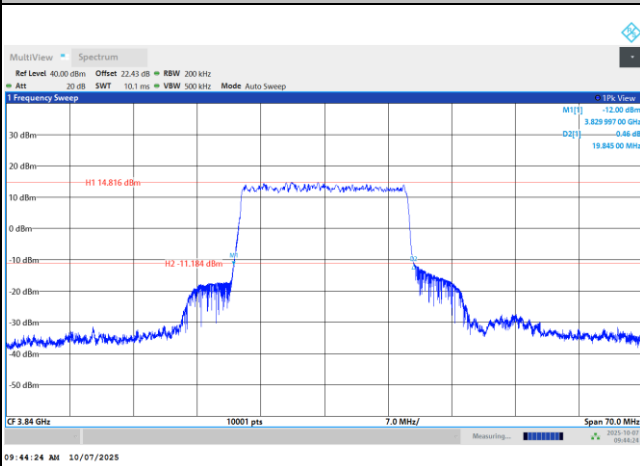
256QAM



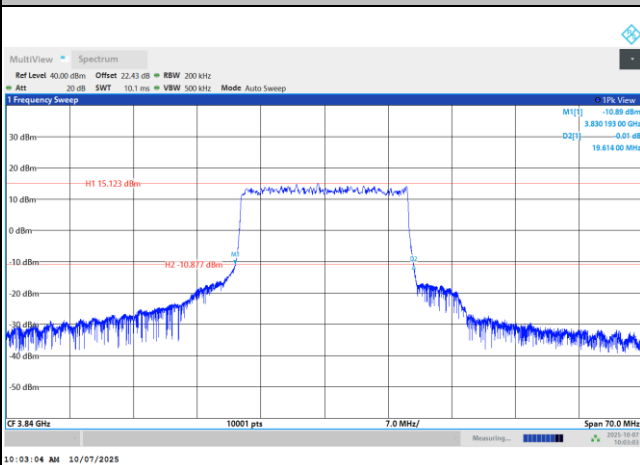


FR1 n77 / 20MHz / Middle Channel / Full RB

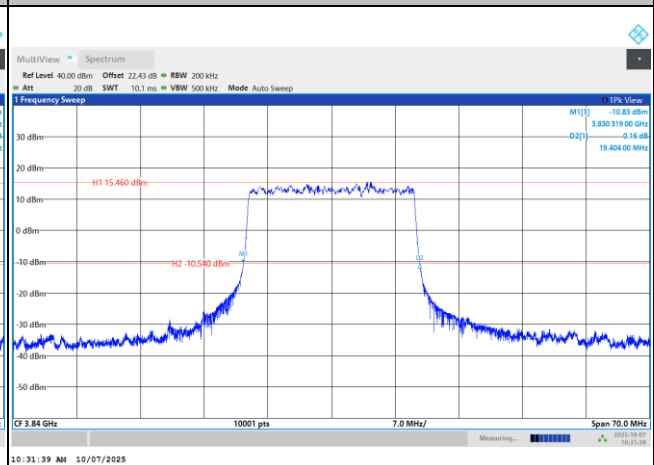
QPSK



64QAM



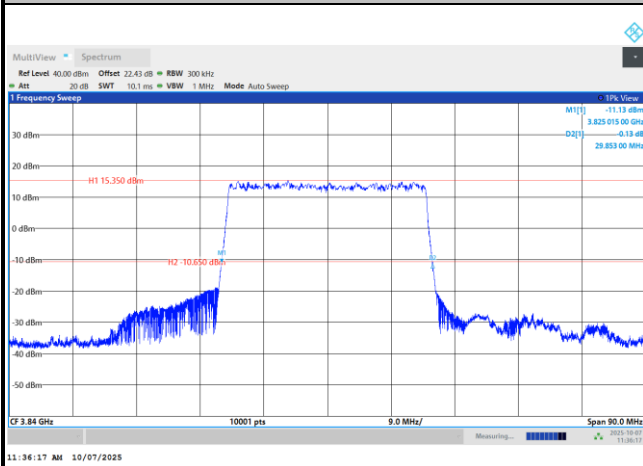
256QAM



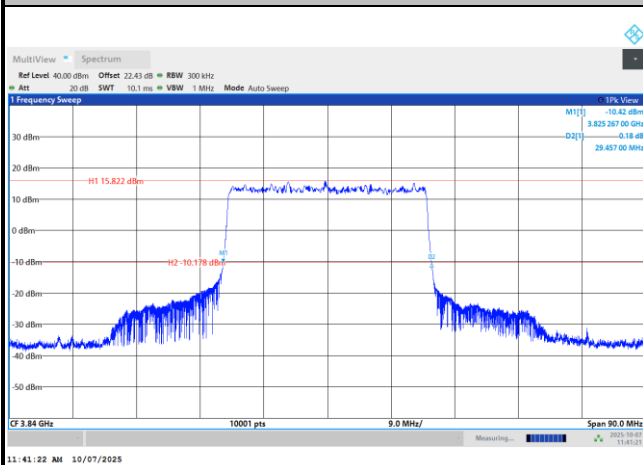


FR1 n77 / 30MHz / Middle Channel / Full RB

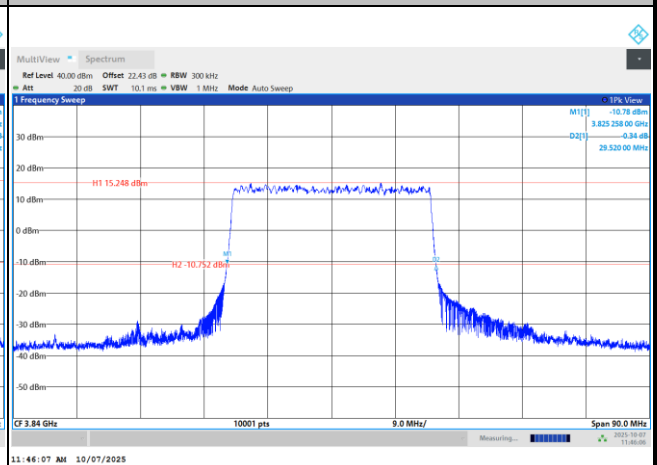
QPSK



64QAM



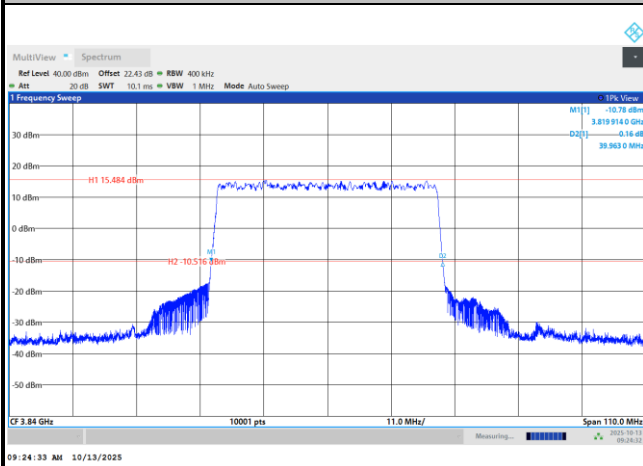
256QAM



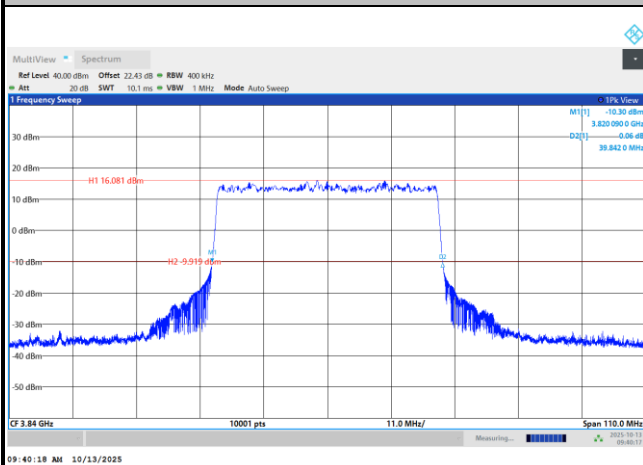


FR1 n77 / 40MHz / Middle Channel / Full RB

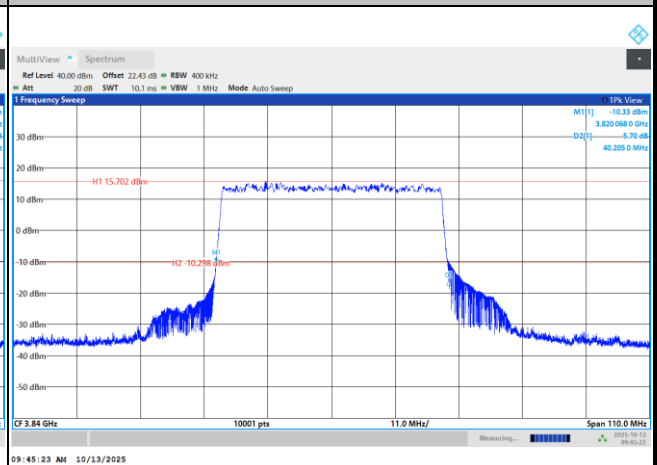
QPSK



64QAM

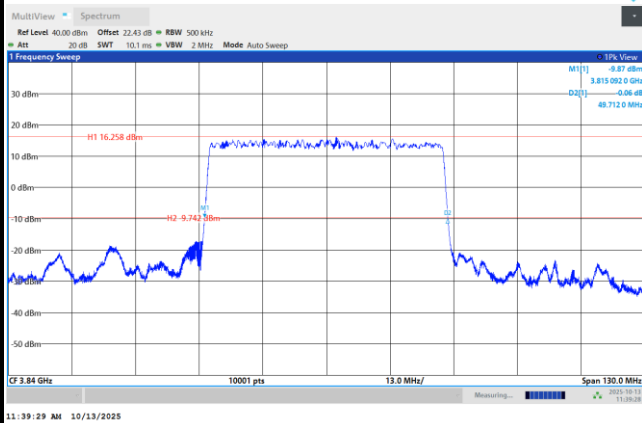


256QAM

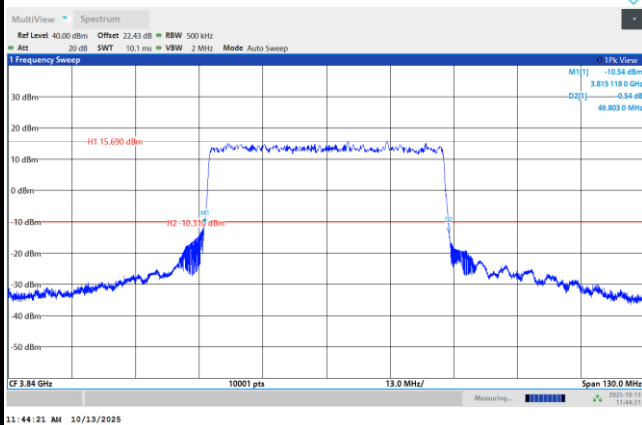


**FR1 n77 / 50MHz / Middle Channel / Full RB**

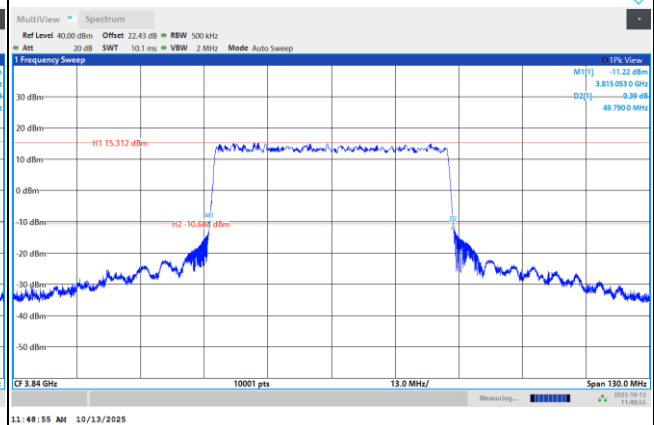
QPSK



64QAM

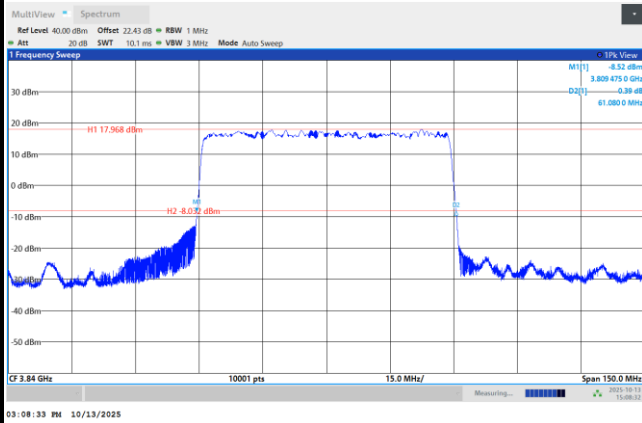


256QAM

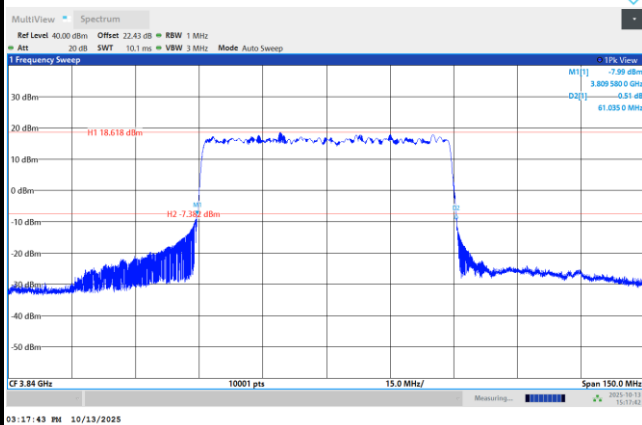


**FR1 n77 / 60MHz / Middle Channel / Full RB**

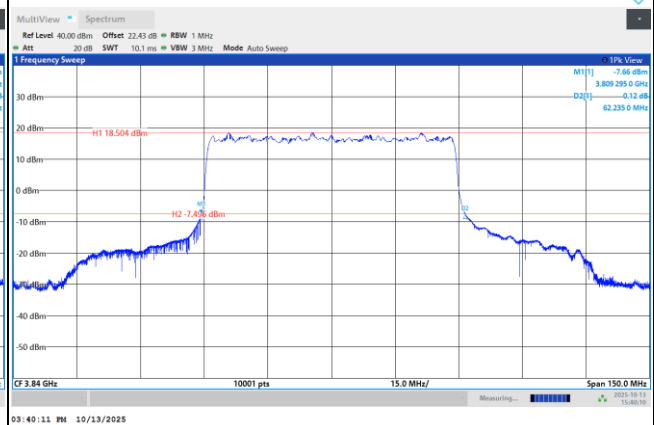
QPSK



64QAM



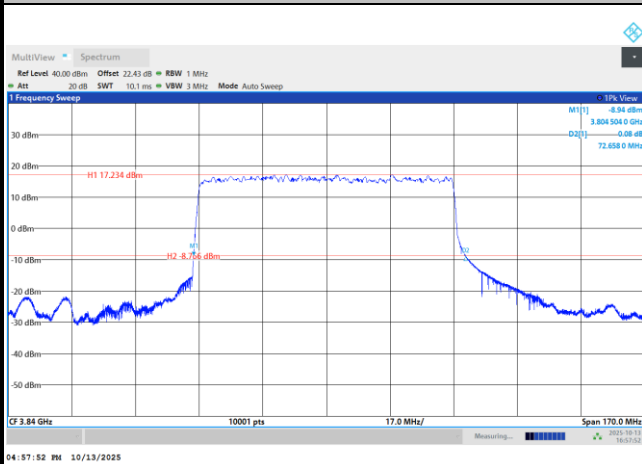
256QAM



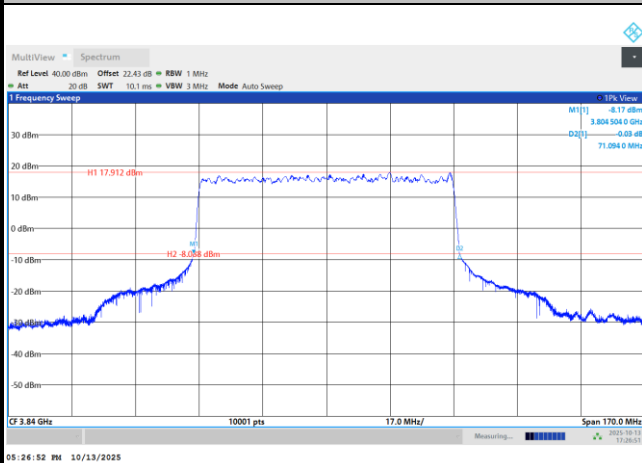


FR1 n77 / 70MHz / Middle Channel / Full RB

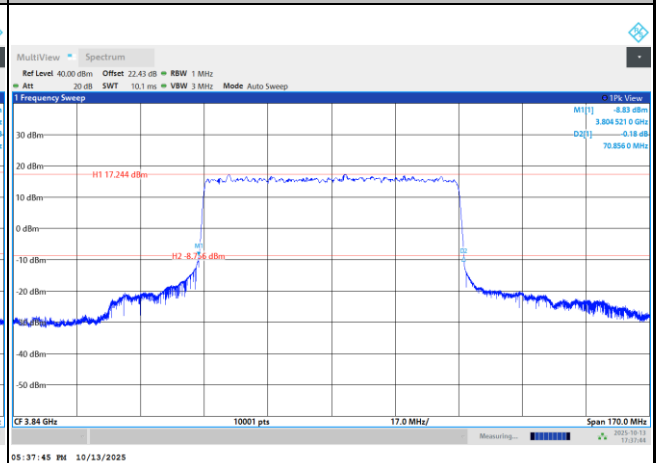
QPSK



64QAM

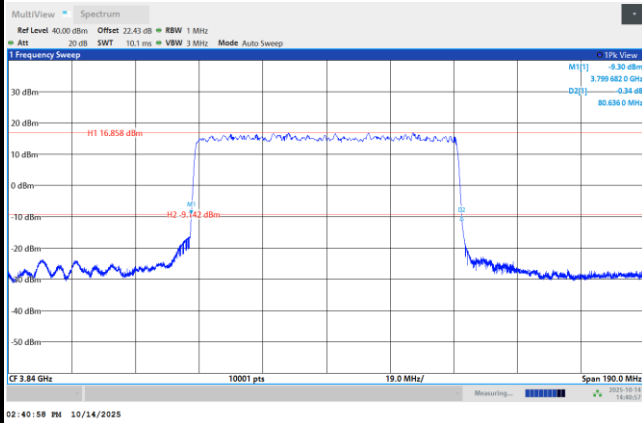


256QAM

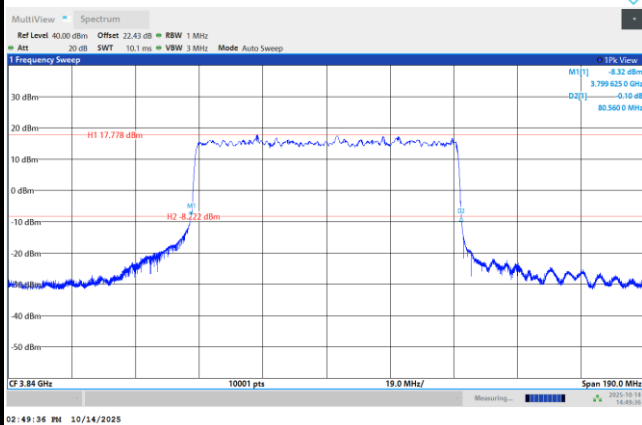


**FR1 n77 / 80MHz / Middle Channel / Full RB**

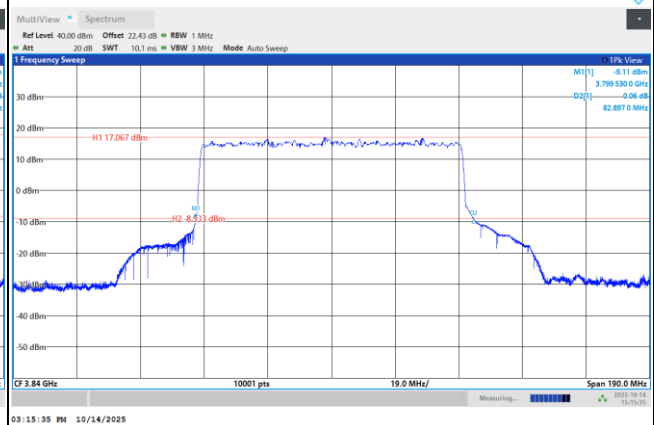
QPSK



64QAM

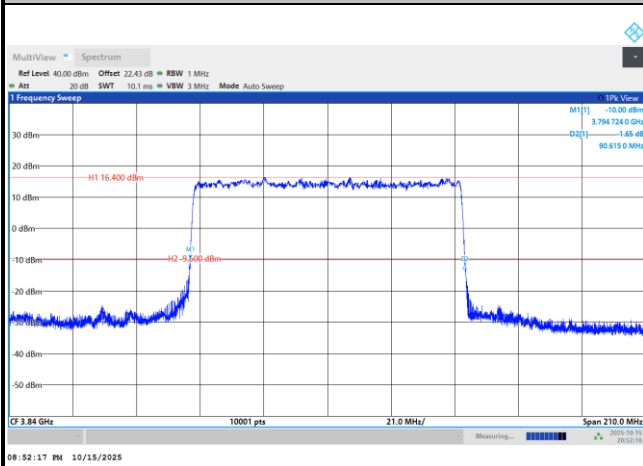


256QAM

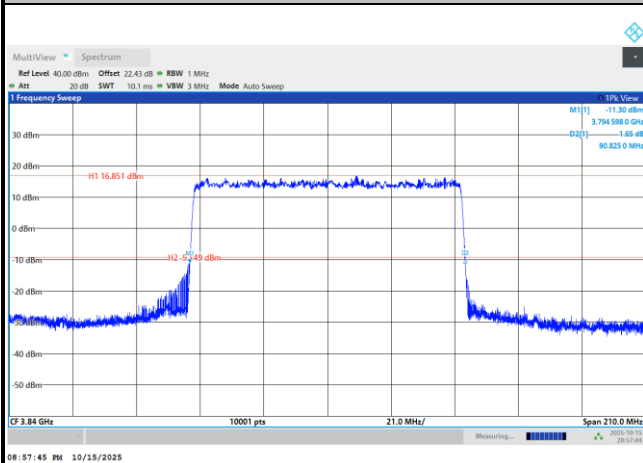


**FR1 n77 / 90MHz / Middle Channel / Full RB**

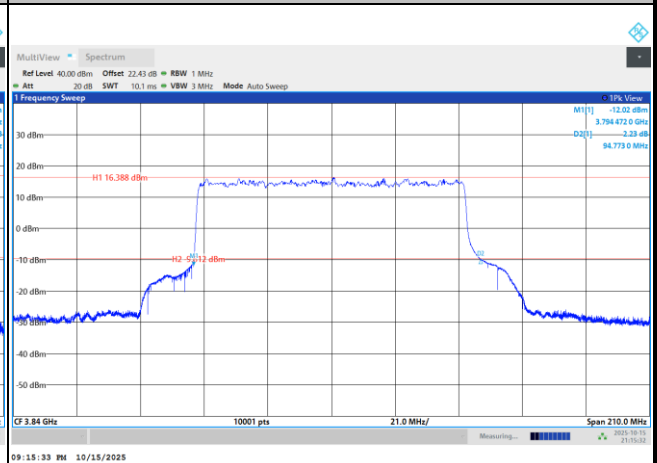
QPSK



64QAM



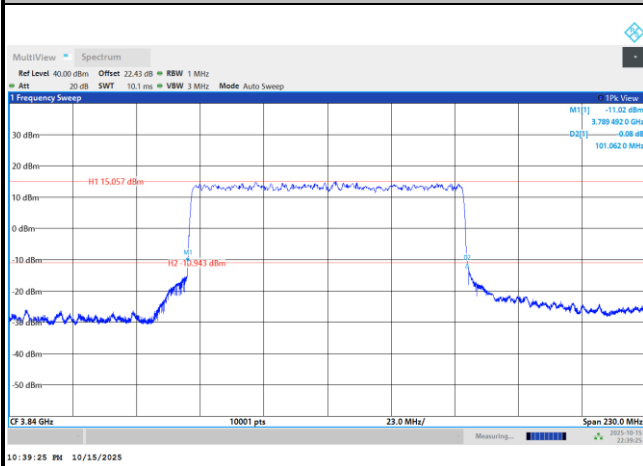
256QAM



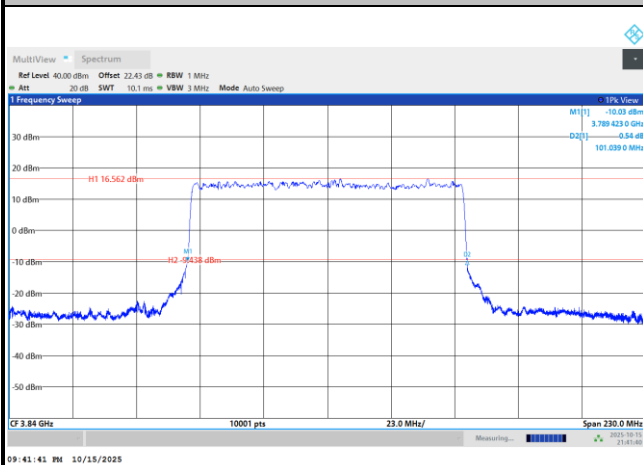


FR1 n77 / 100MHz / Middle Channel / Full RB

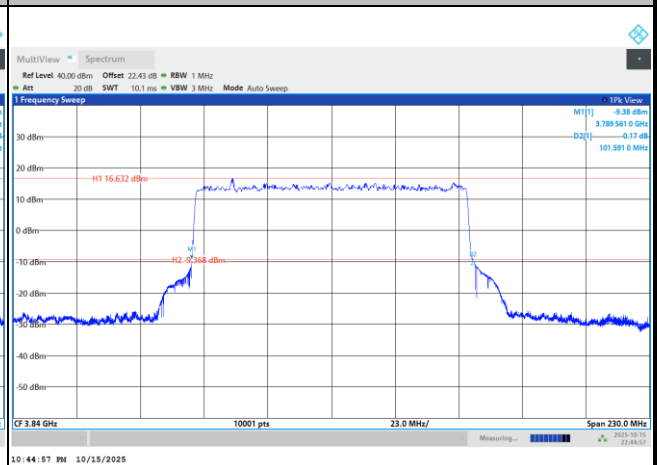
QPSK



64QAM



256QAM



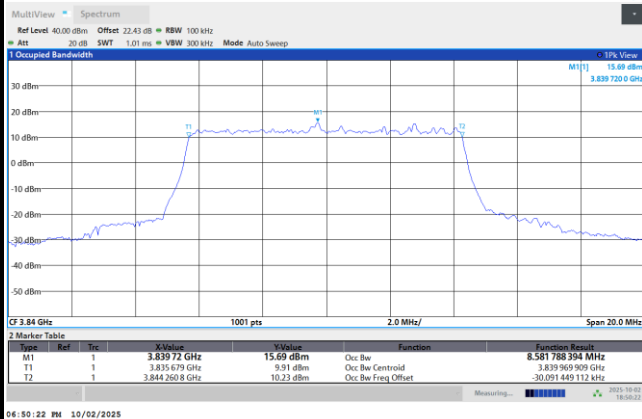
**Occupied Bandwidth**

Mode	FR1 n77 : OB BW(MHz)							
BW	10MHz		20MHz		30MHz		40MHz	
Mod.	QPSK	-	QPSK	-	QPSK	-	QPSK	-
Middle CH	8.58	-	18.20	-	27.85	-	37.84	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	8.58	8.55	18.23	18.15	27.86	27.82	37.84	37.82
BW	50MHz		60MHz		70MHz		80MHz	
Mod.	QPSK	-	QPSK	-	QPSK	-	QPSK	-
Middle CH	47.48	-	57.86	-	67.53	-	77.44	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	47.43	47.40	57.93	57.90	67.49	67.45	77.57	77.47
BW	90MHz		100MHz					
Mod.	QPSK	-	QPSK	-				
Middle CH	87.51	-	97.39	-				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	87.46	87.42	97.35	97.35				

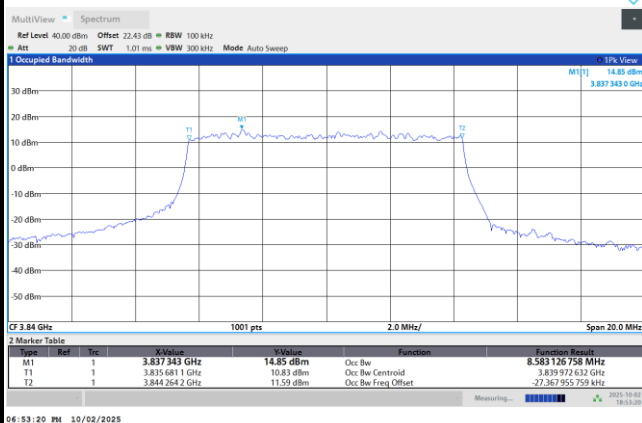


FR1 n77 / 10MHz / Middle Channel / Full RB

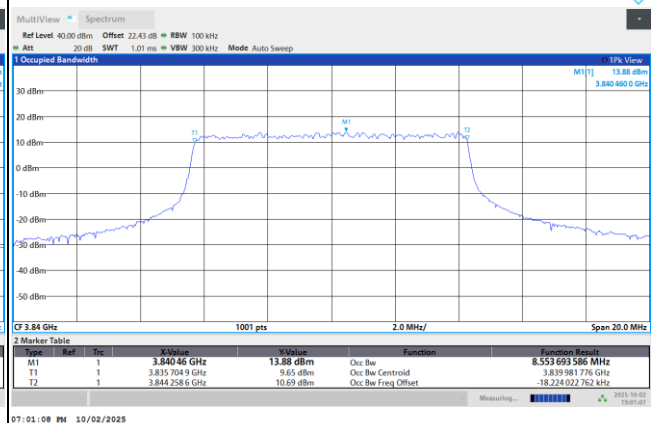
QPSK



64QAM



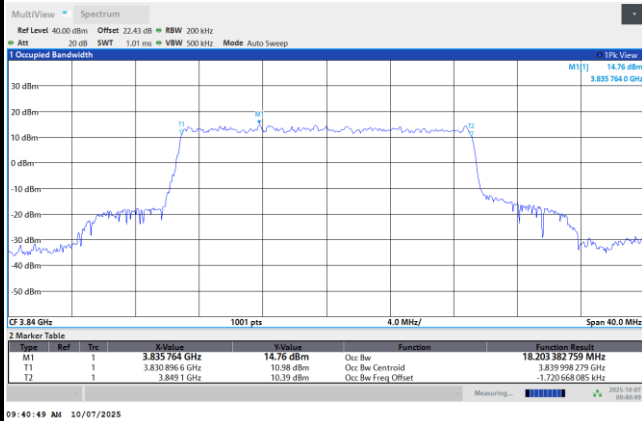
256QAM



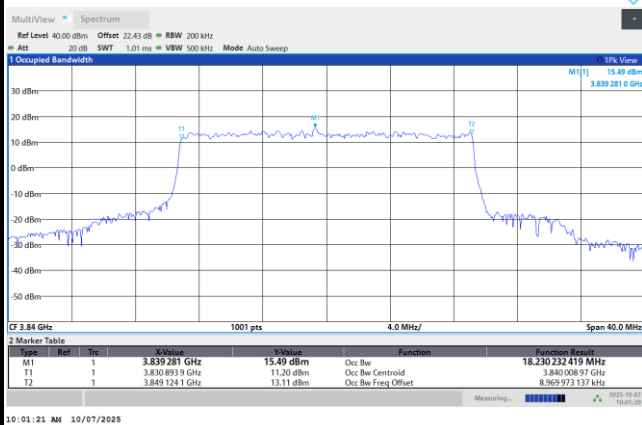


FR1 n77 / 20MHz / Middle Channel / Full RB

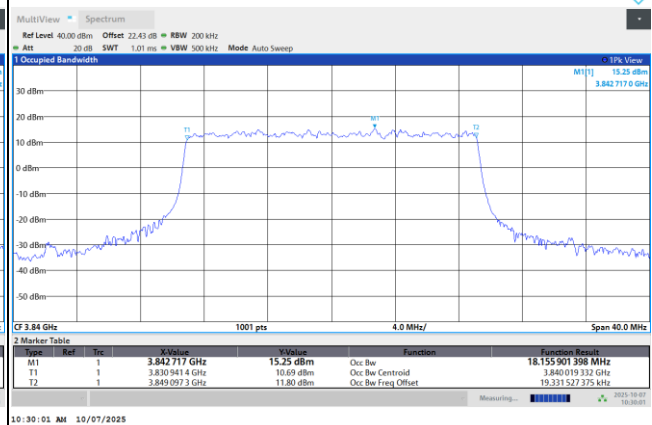
QPSK



64QAM



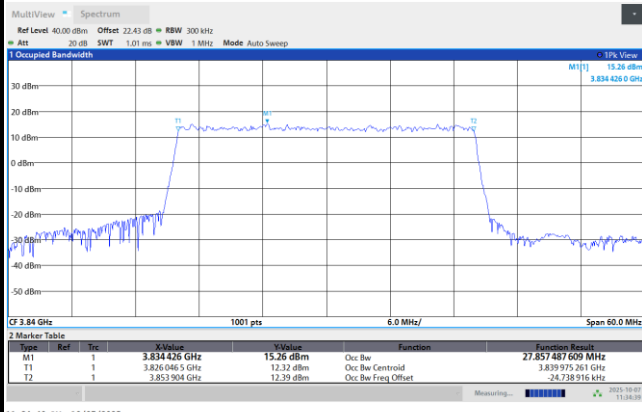
256QAM



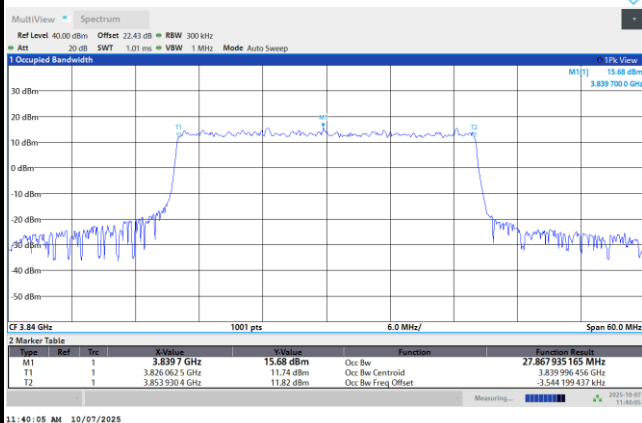


FR1 n77 / 30MHz / Middle Channel / Full RB

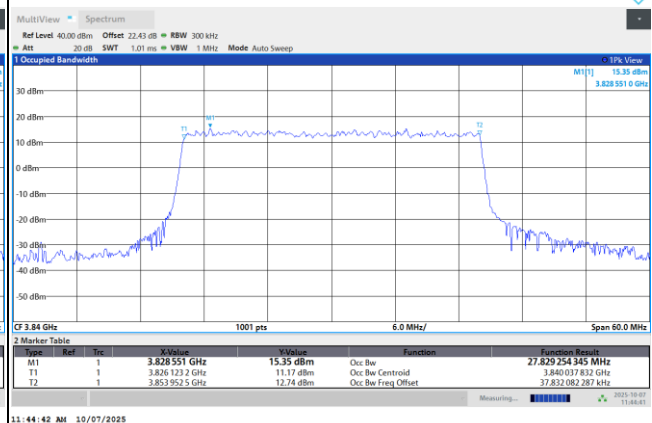
QPSK



64QAM



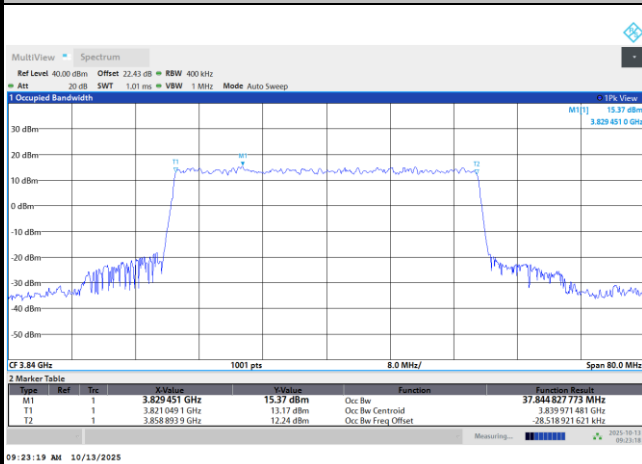
256QAM



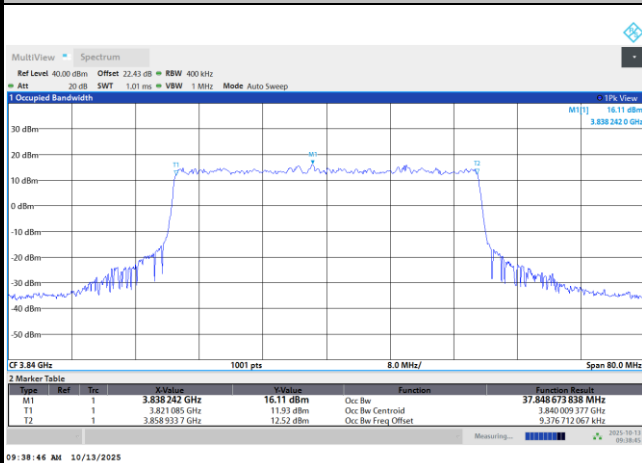


FR1 n77 / 40MHz / Middle Channel / Full RB

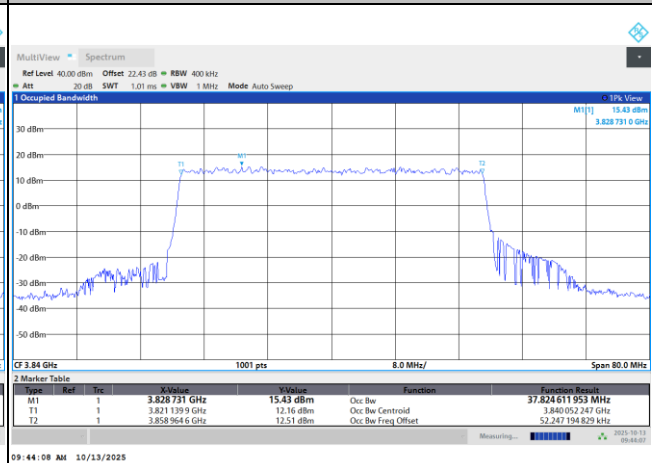
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64QAM



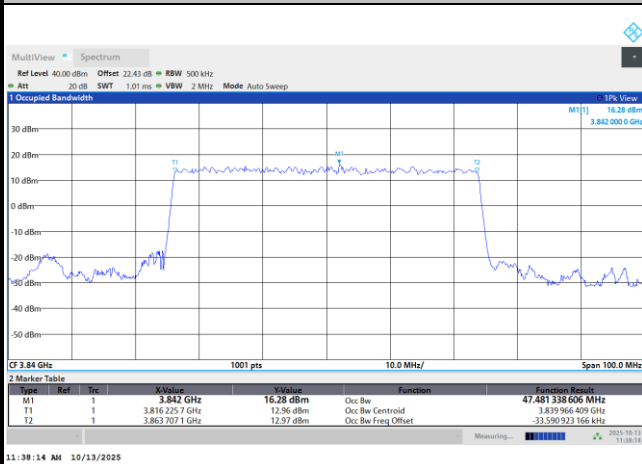
256QAM



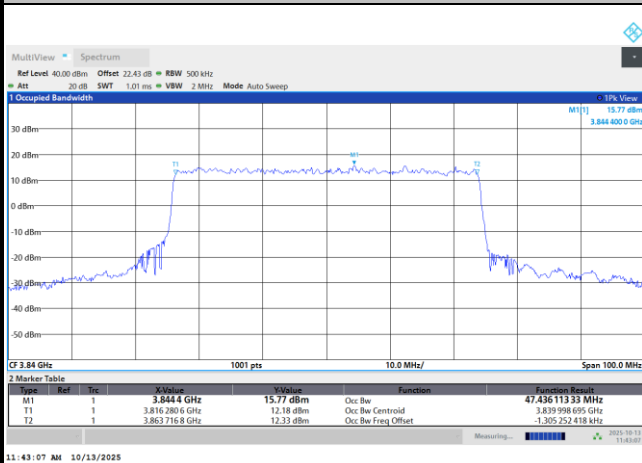


FR1 n77 / 50MHz / Middle Channel / Full RB

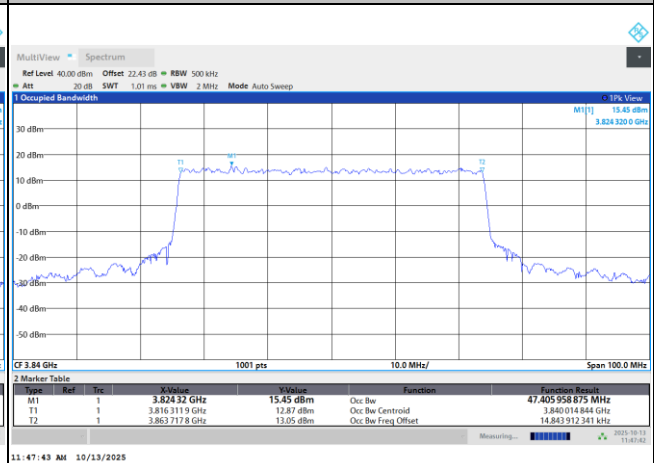
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64QAM



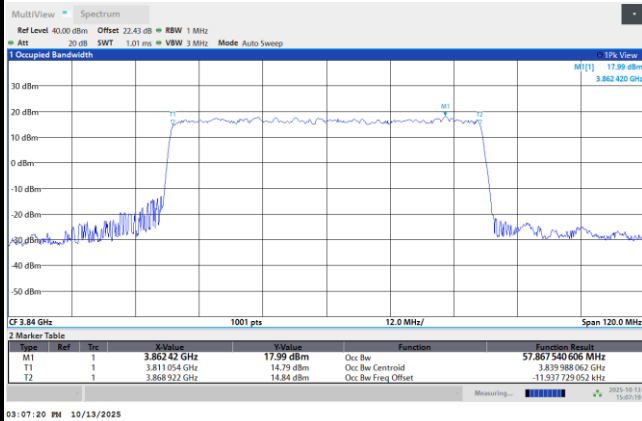
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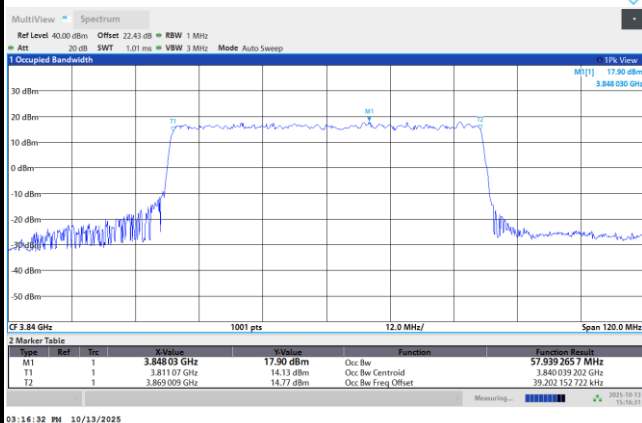


FR1 n77 / 60MHz / Middle Channel / Full RB

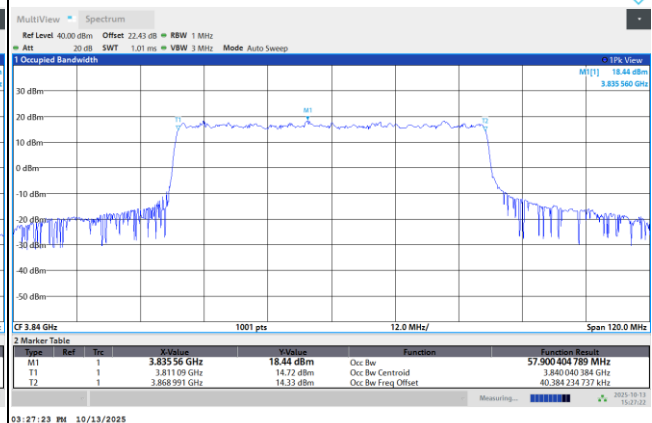
QPSK



64QAM



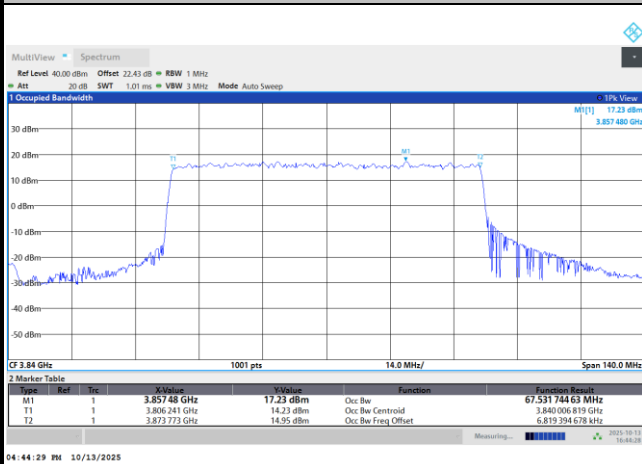
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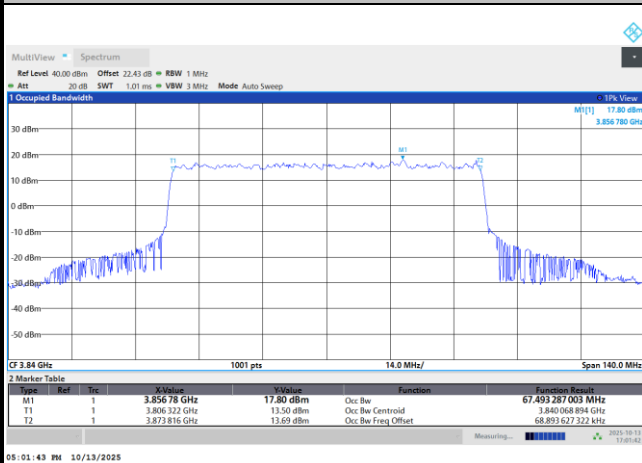


FR1 n77 / 70MHz / Middle Channel / Full RB

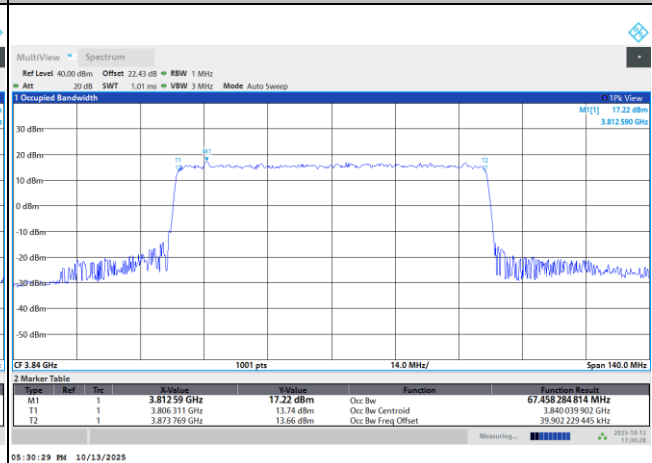
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64QAM



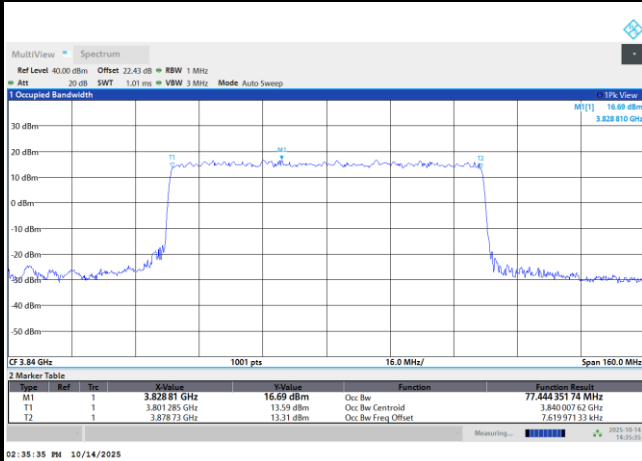
256QAM



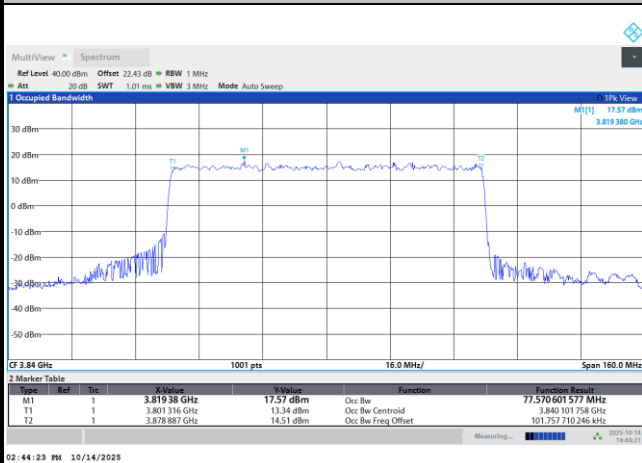


FR1 n77 / 80MHz / Middle Channel / Full RB

QPSK



64QAM



256QAM

