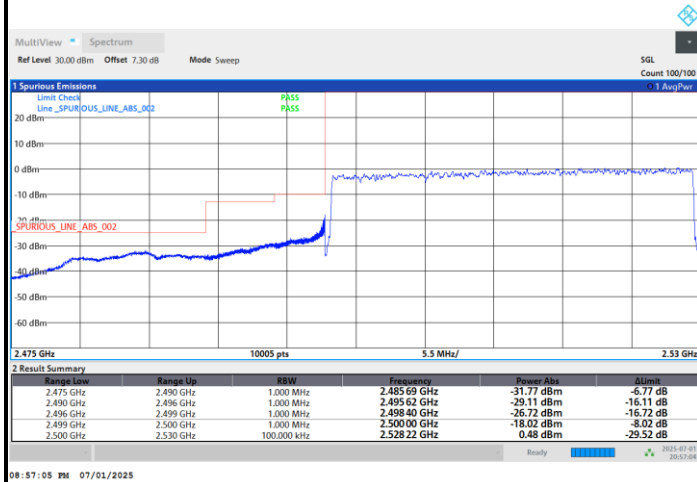




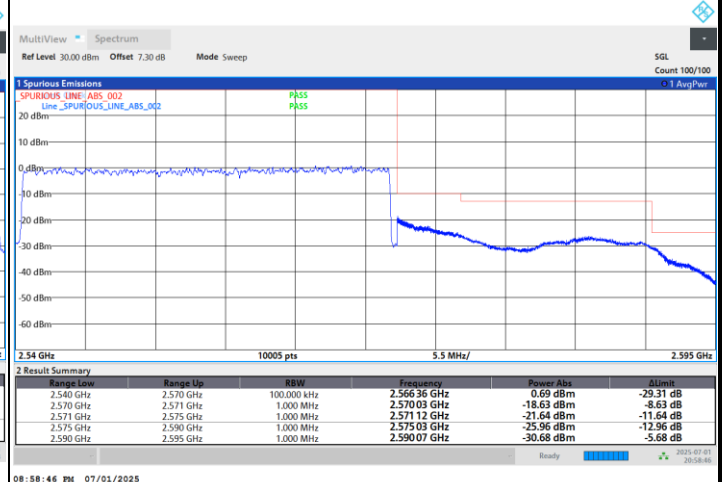
FR1 n7 / 30MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / Full RB



08:57:05 PM 07/01/2025

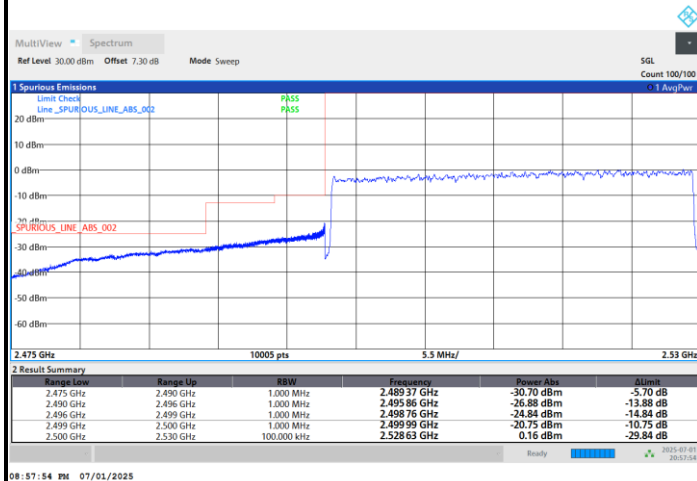
Highest Band Edge / Full RB



08:58:46 PM 07/01/2025

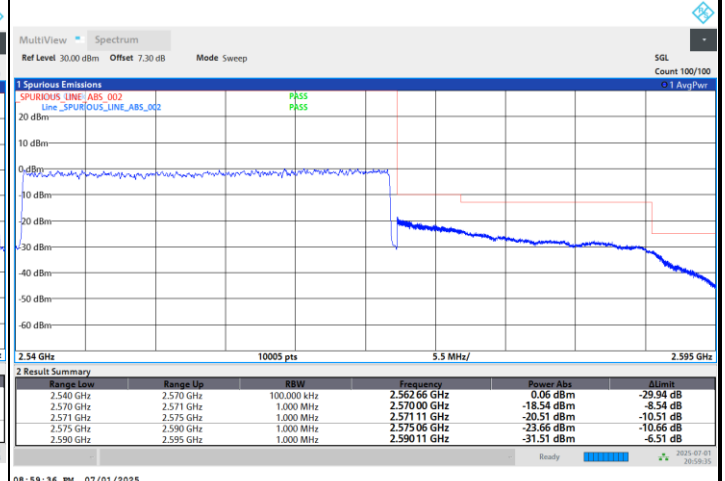
FR1 n7 / 30MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / Full RB



08:57:54 PM 07/01/2025

Highest Band Edge / Full RB

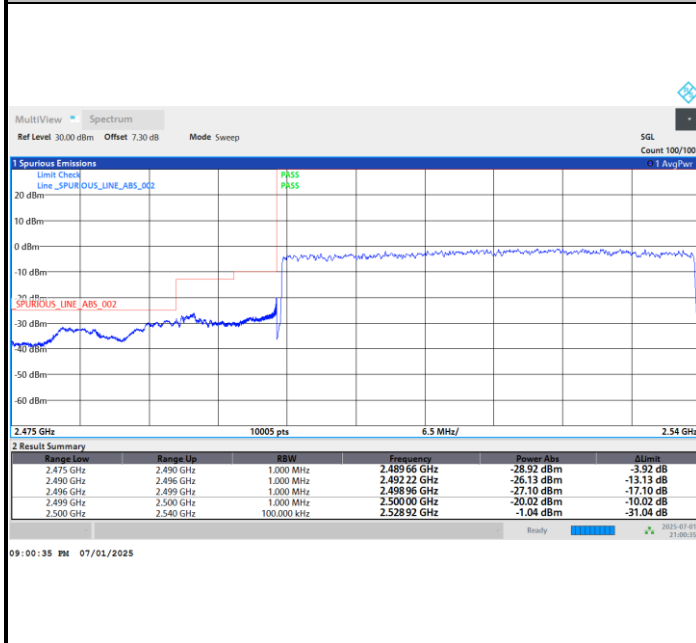


08:59:36 PM 07/01/2025

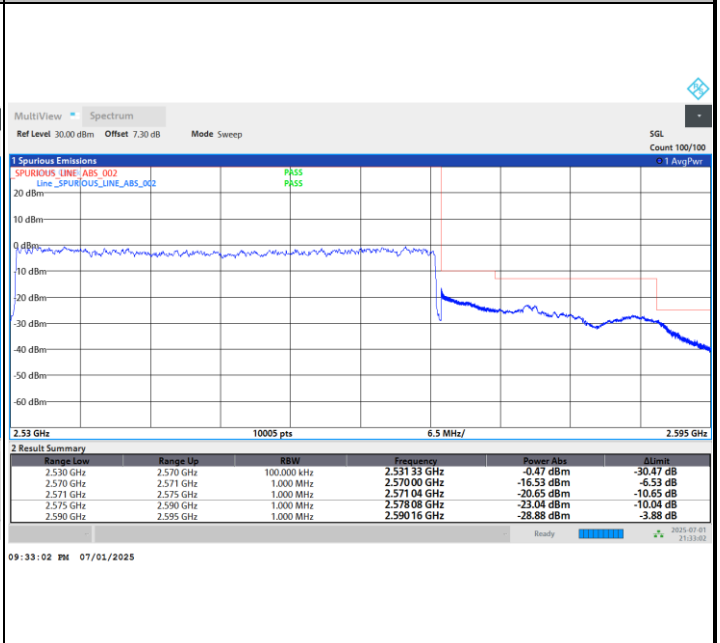


FR1 n7 / 40MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

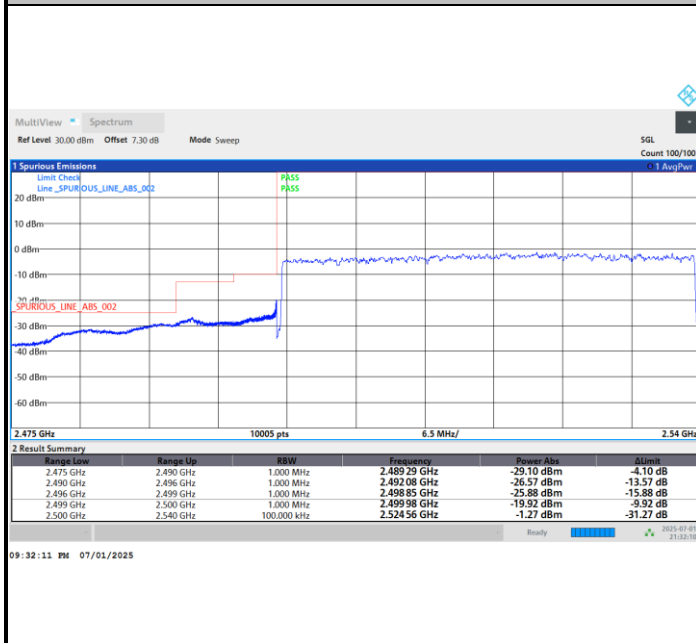


Highest Band Edge / Full RB

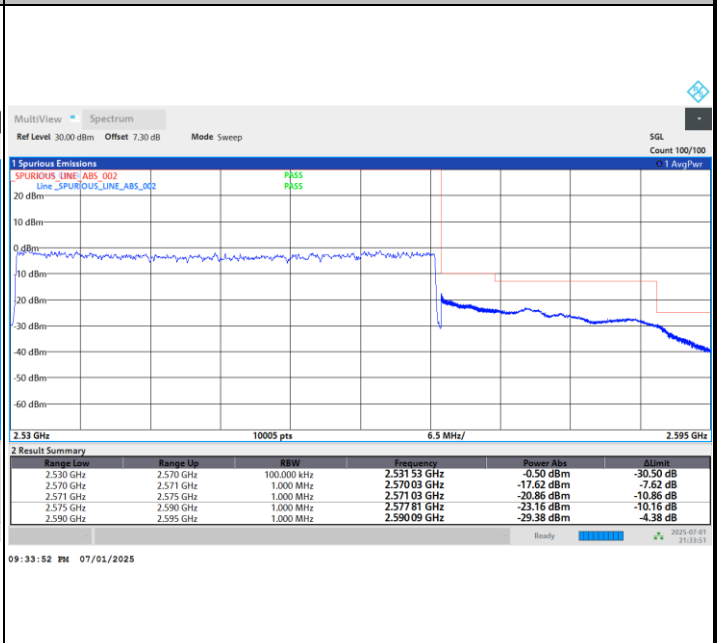


FR1 n7 / 40MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

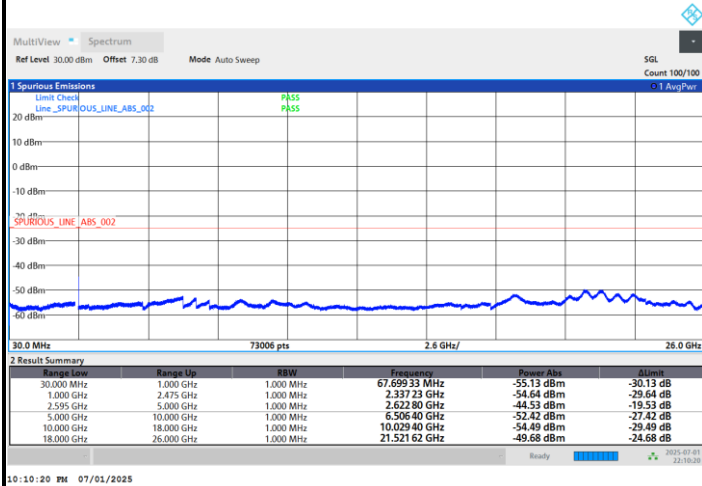




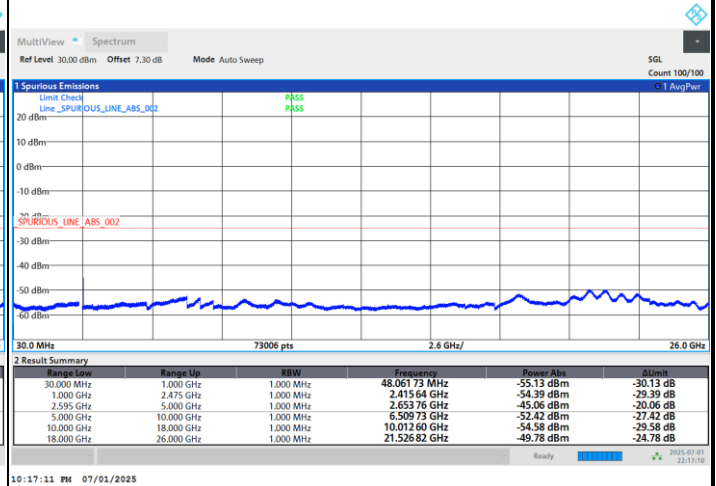
Conducted Spurious Emission

FR1 n7 / 5MHz / DFT-S OFDM / QPSK / 1RB1

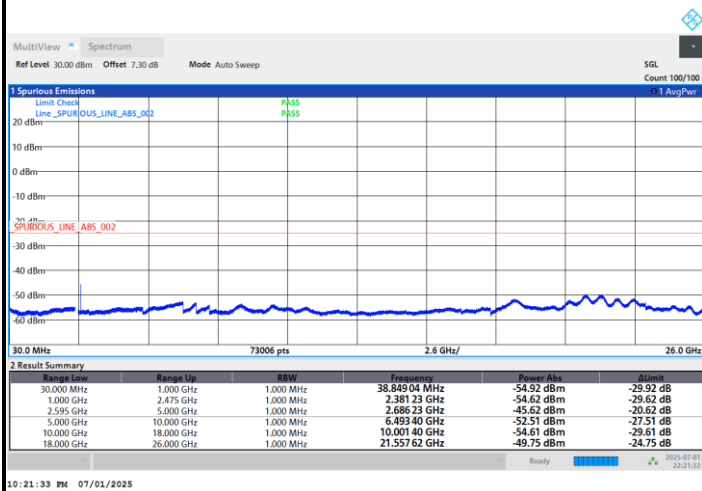
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n7 (BPSK) / Middle Channel 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0031	-7.8	Yes	PASS
40	Normal Voltage	0.0023	-5.9	Yes	
30	Normal Voltage	0.0013	-3.2	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0034	8.6	Yes	
0	Normal Voltage	0.0009	-2.4	Yes	
-10	Normal Voltage	0.0037	-9.4	Yes	
-20	Normal Voltage	0.0022	5.7	Yes	
-30	Normal Voltage	0.0030	-7.5	Yes	
20	Maximum Voltage	0.0006	1.6	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0025	6.3	Yes	

Note:

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 3.63 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.

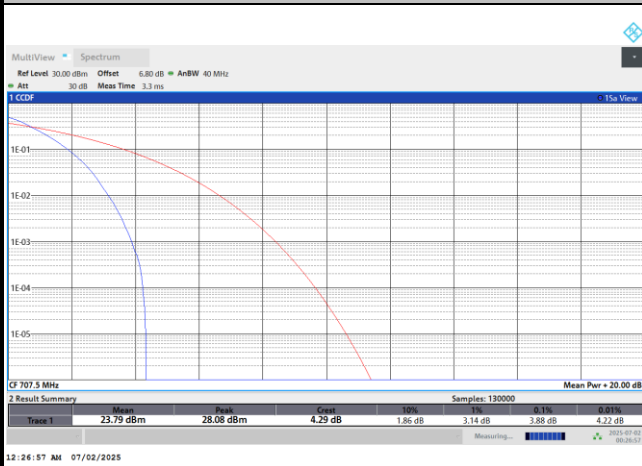
**FR1 n12****<SISO Mode>****Peak-to-Average Ratio**

Mode	FR1 n12 / 15MHz / 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	3.88	4.58	5.28	5.72	PASS
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.58				PASS

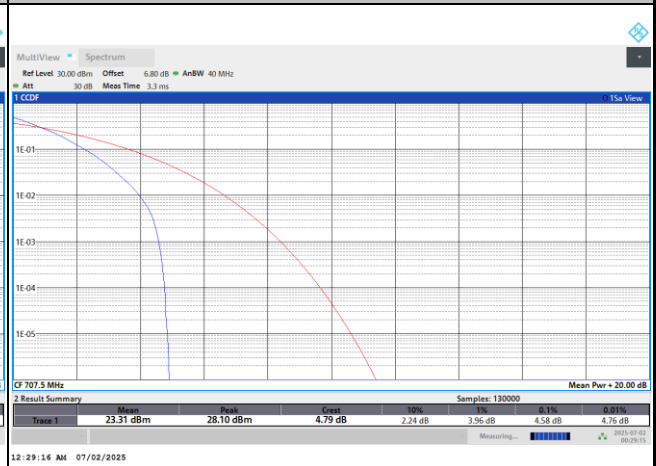


FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

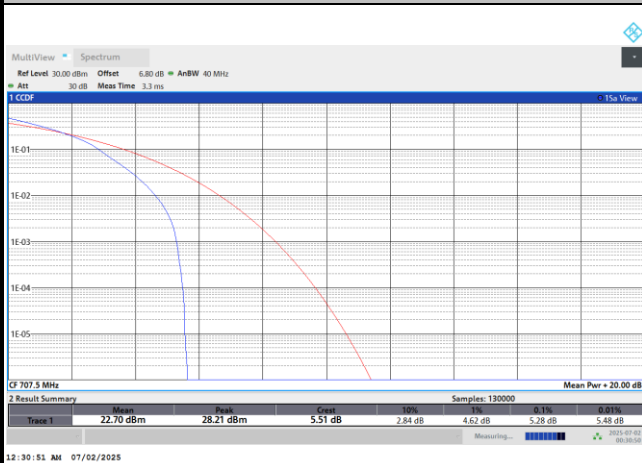
PI/2 BPSK



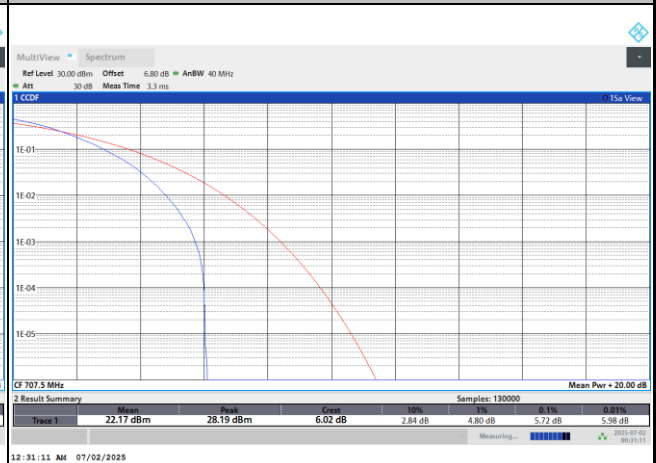
QPSK



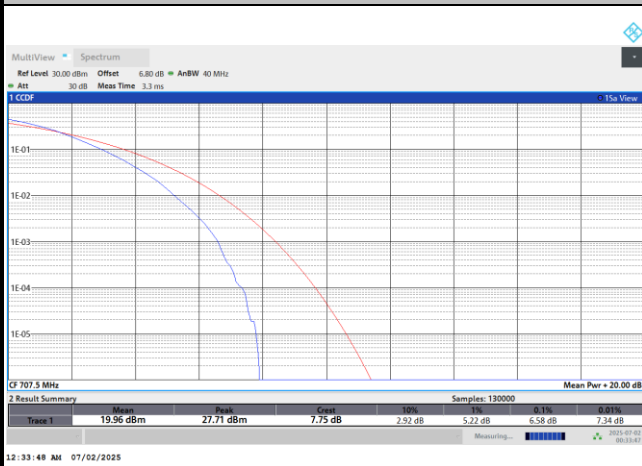
16QAM



64QAM



256QAM



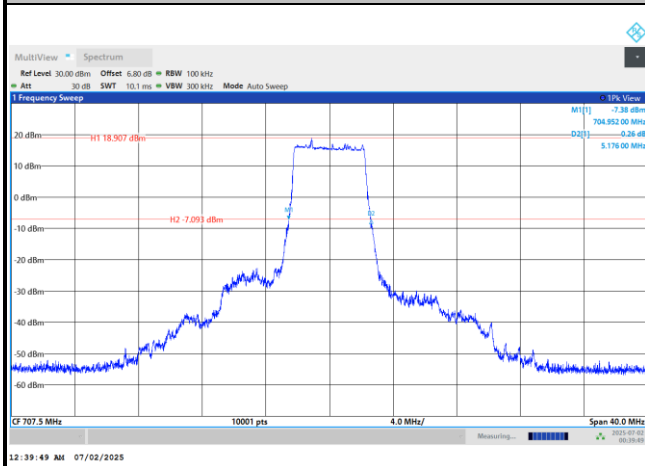
**26dB Bandwidth**

Mode	FR1 n12 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK		
Middle CH	5.17	5.11	9.79	9.85	14.44	14.58		
Mod.	16QAM		16QAM		16QAM			
Middle CH	5.24		9.88		14.61			

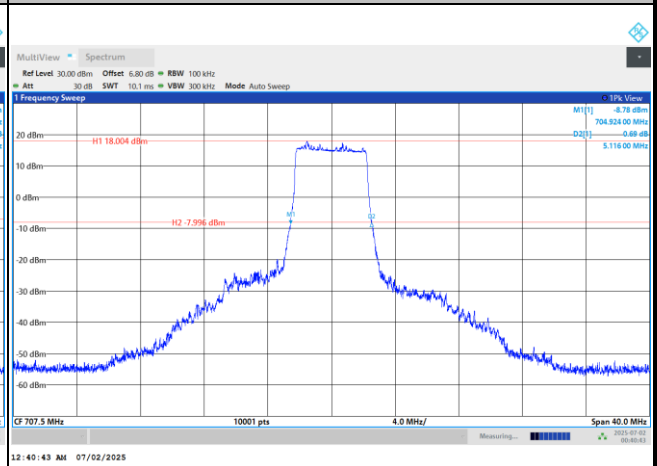


FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

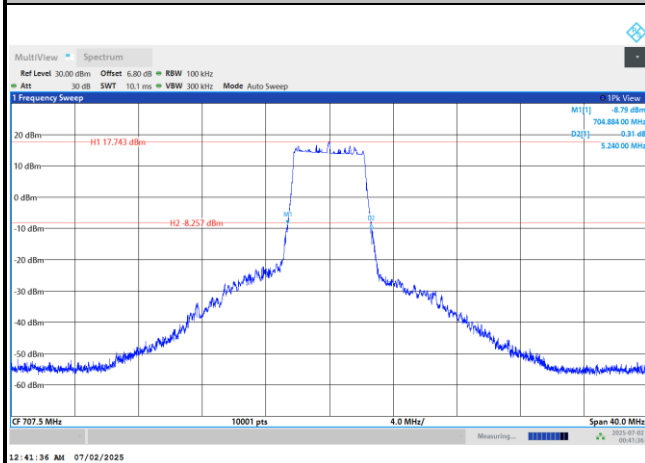
PI/2 BPSK



QPSK



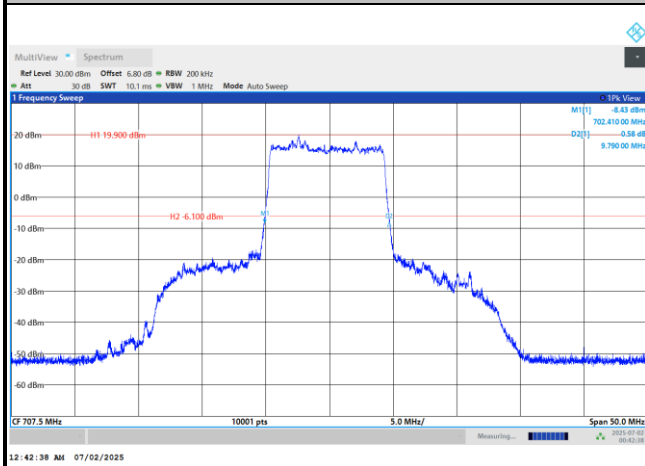
16QAM



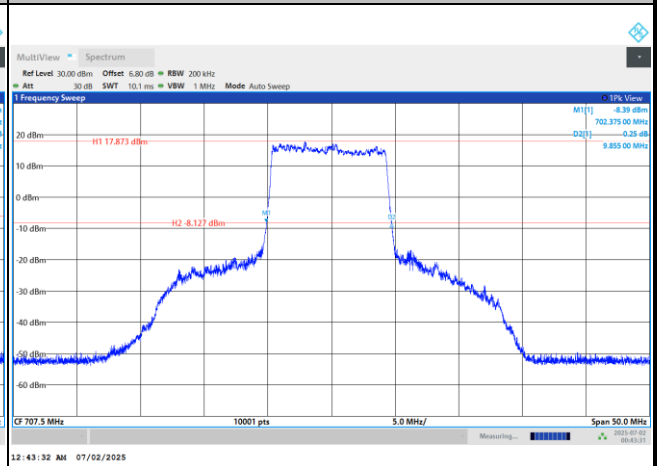


FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

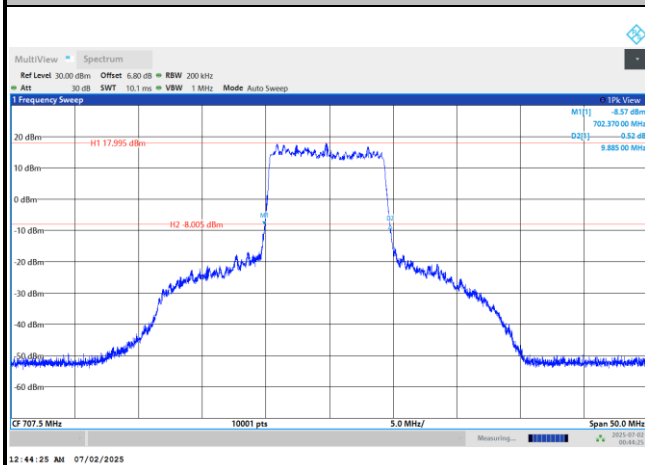
PI/2 BPSK



QPSK



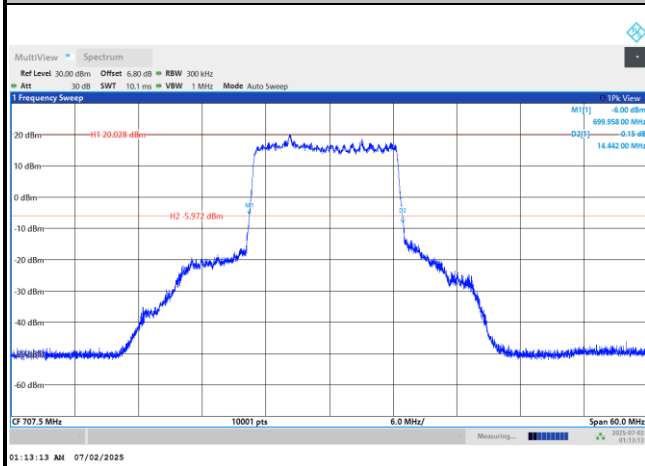
16QAM



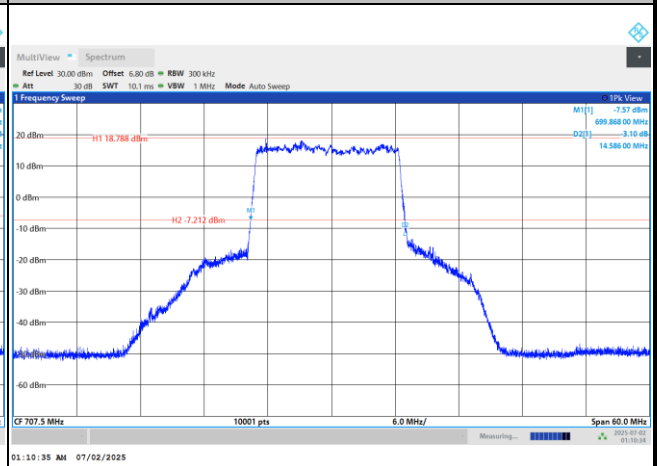


FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

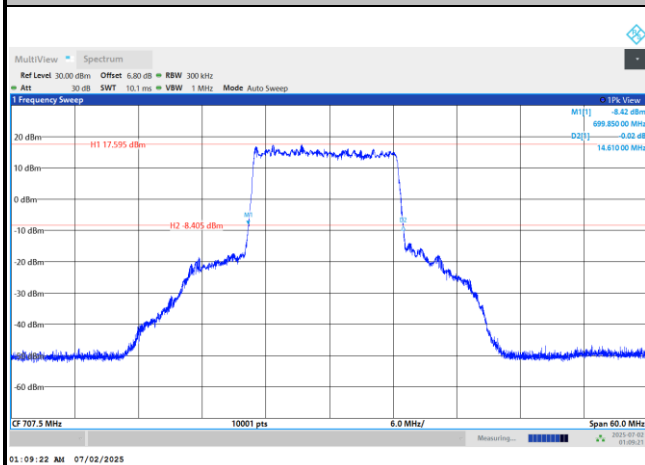
QPSK



QPSK



16QAM



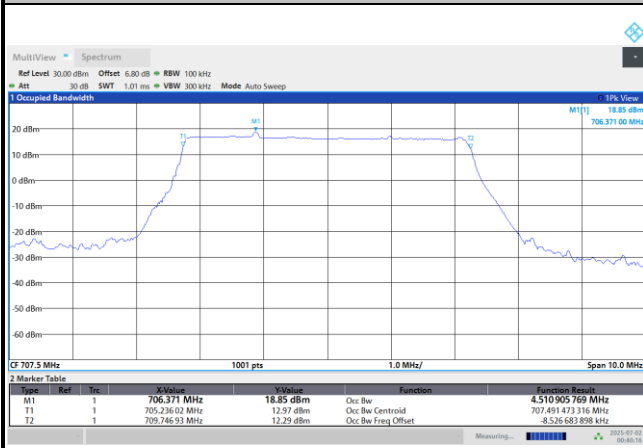
**Occupied Bandwidth**

Mode	FR1 n12 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK		
Middle CH	4.51	4.47	8.97	9.00	13.45	13.48		
Mod.	16QAM		16QAM		16QAM			
Middle CH	4.51		9.00		13.54			



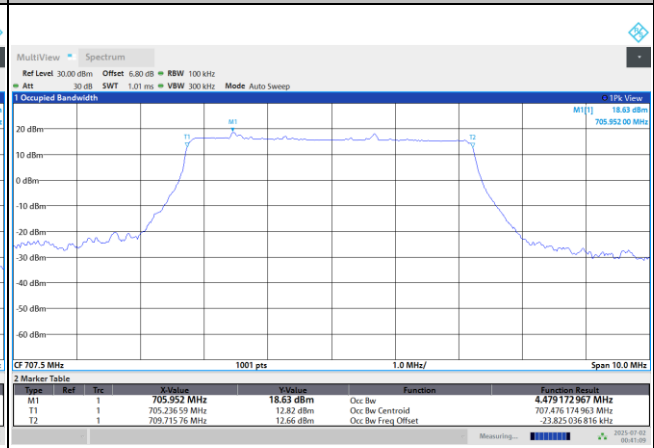
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



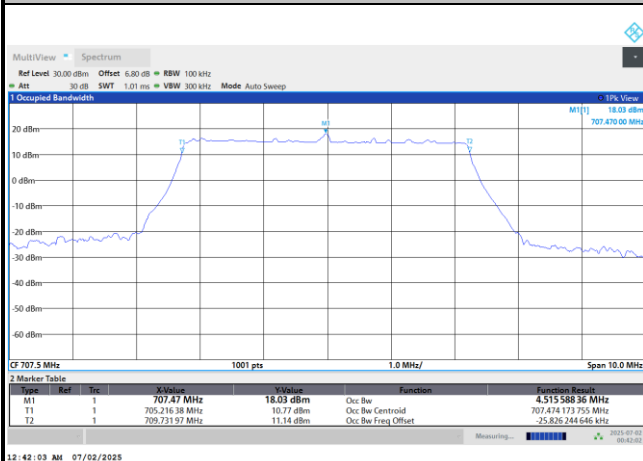
12:40:14 AM 07/02/2025

QPSK



12:41:10 AM 07/02/2025

16QAM

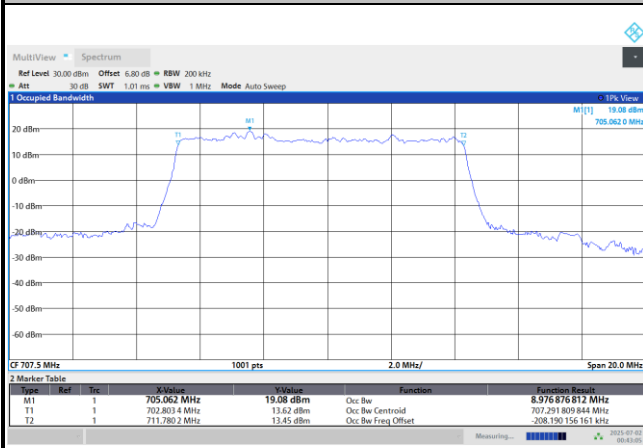


12:42:03 AM 07/02/2025

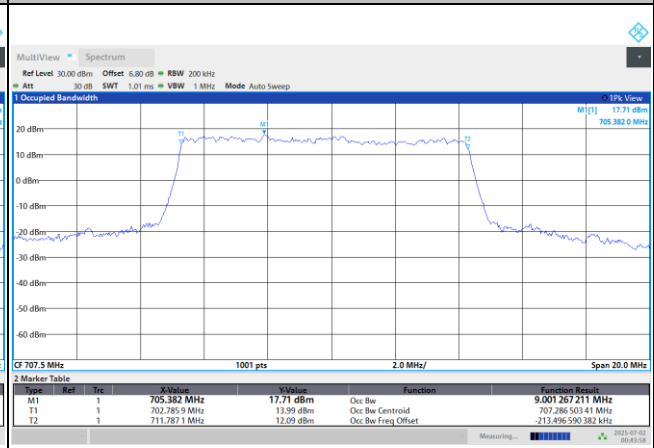


FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

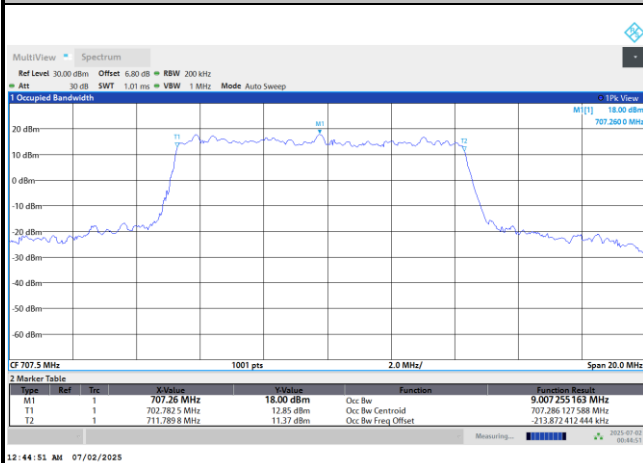
PI/2 BPSK



QPSK



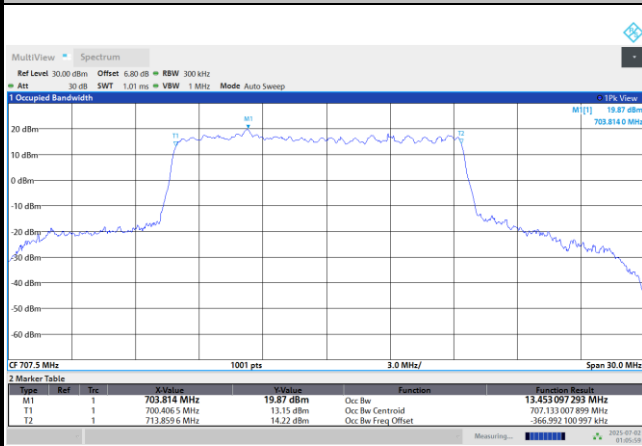
16QAM





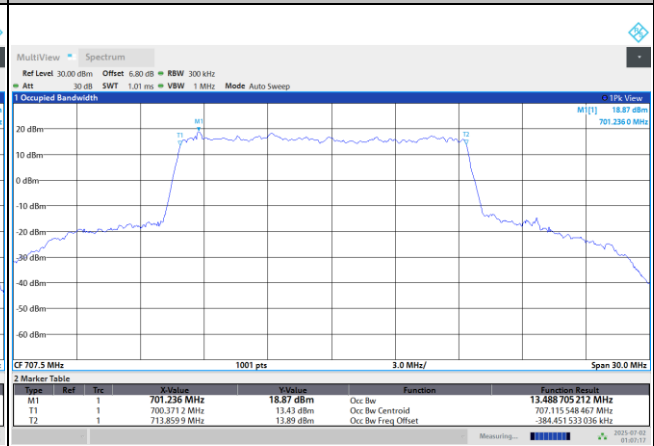
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



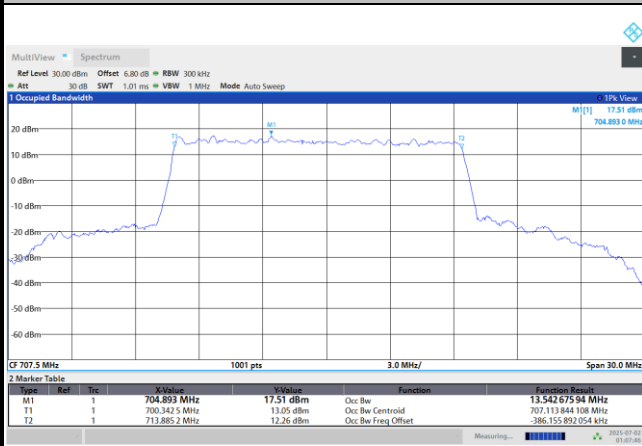
01:06:00 AM 07/02/2025

QPSK



01:07:18 AM 07/02/2025

16QAM



01:07:46 AM 07/02/2025

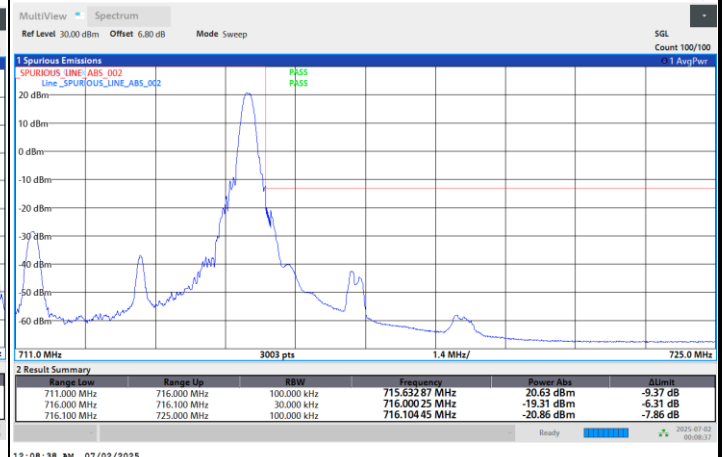
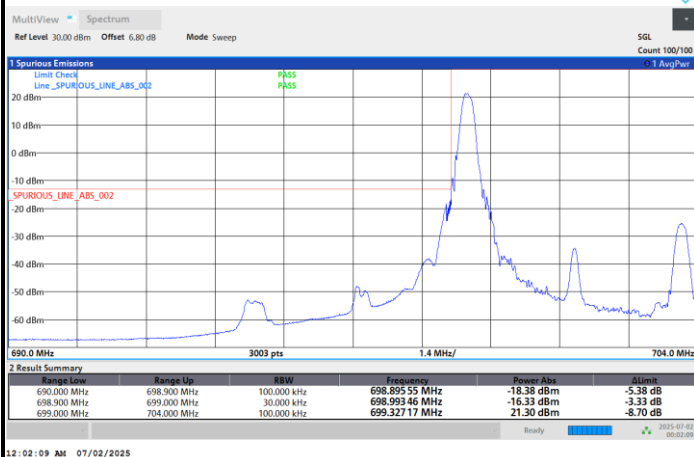


Conducted Band Edge

FR1 n12 / 5MHz / DFT-S OFDM / PI/2 BPSK

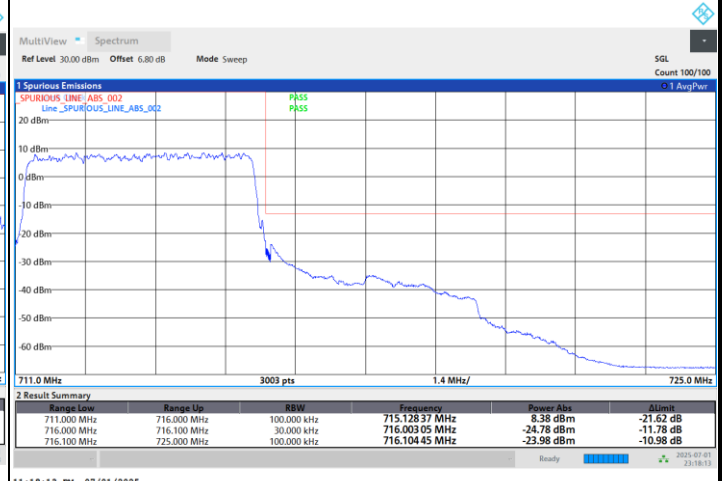
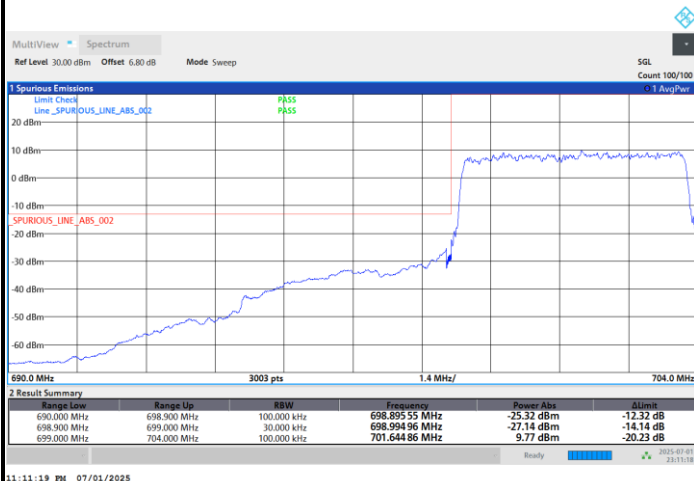
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

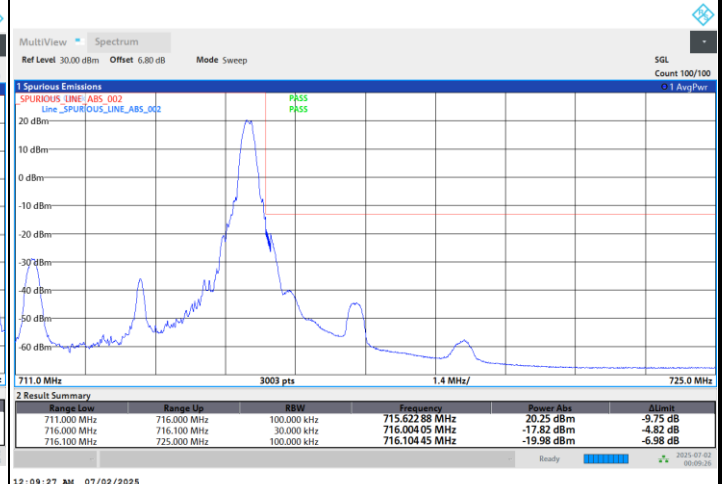
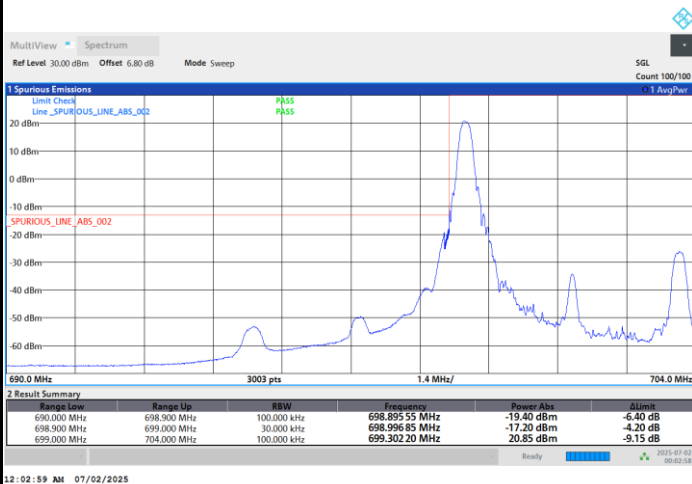




FR1 n12 / 5MHz / DFT-S OFDM / QPSK

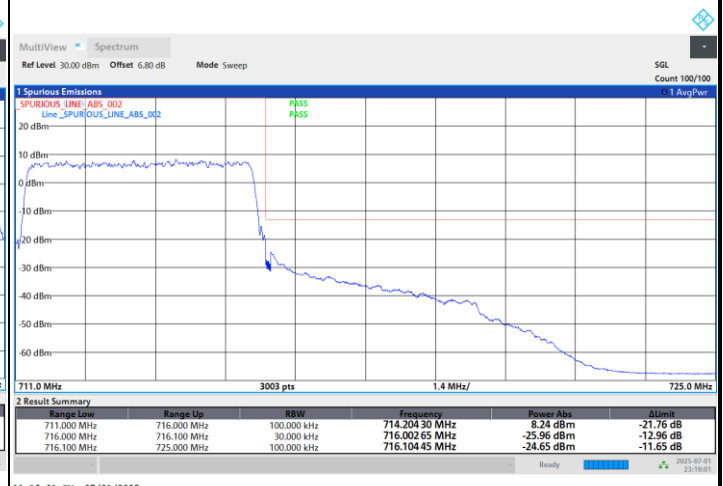
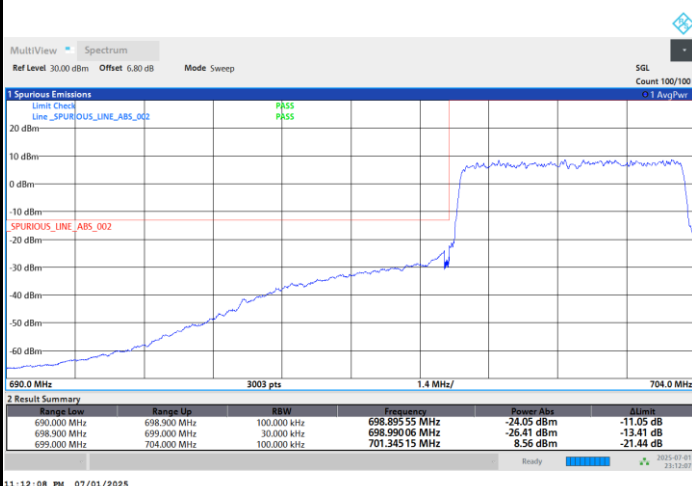
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

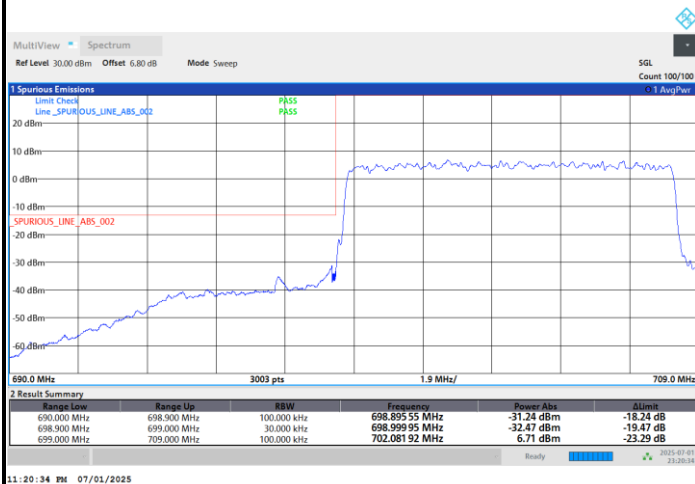
Highest Band Edge / Full RB



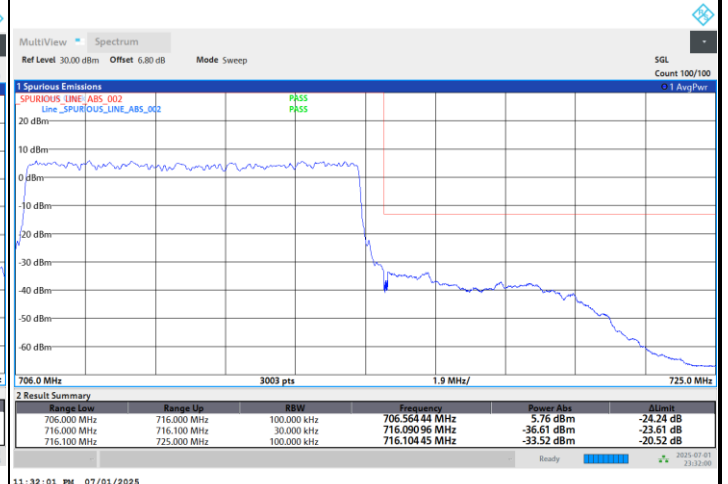


FR1 n12 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

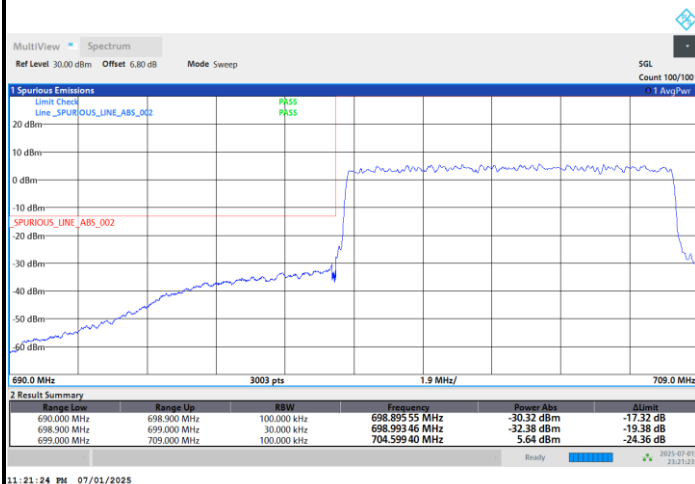


Highest Band Edge

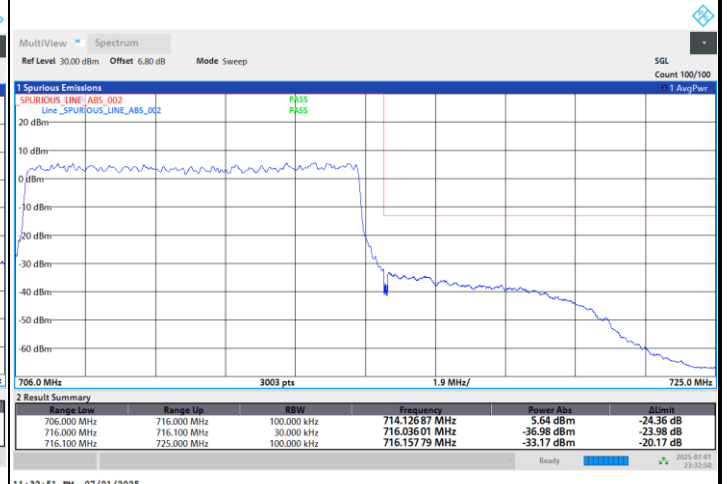


FR1 n12 / 10MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



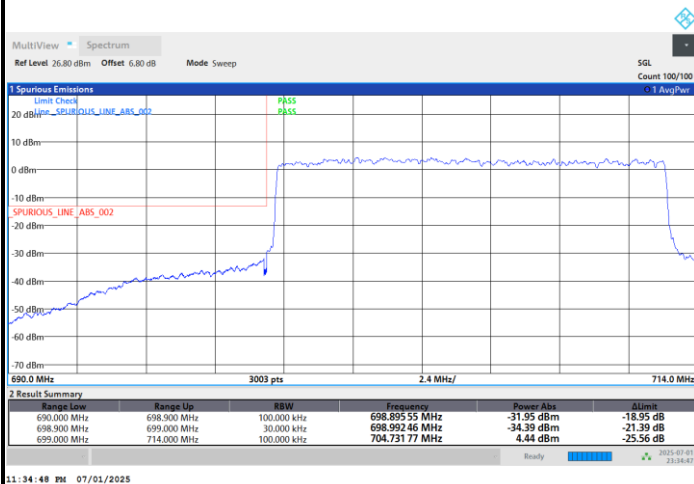
Highest Band Edge





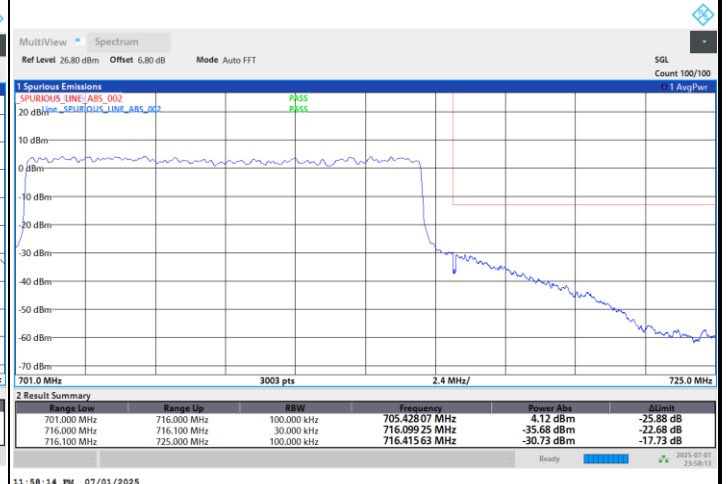
FR1 n12 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge



11:34:48 PM 07/01/2025

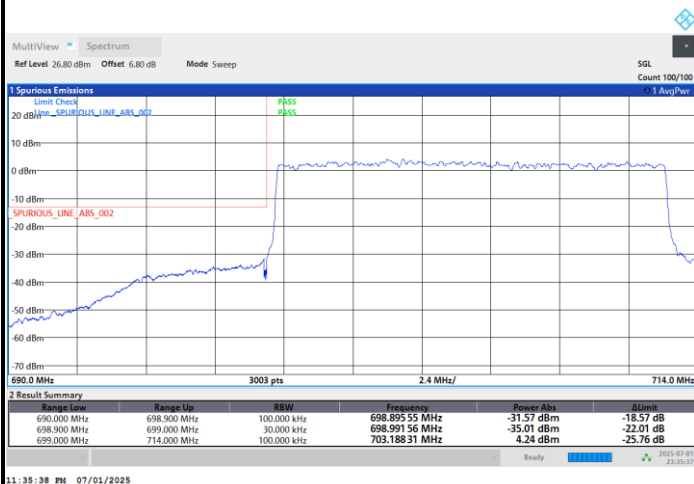
Highest Band Edge



11:58:14 PM 07/01/2025

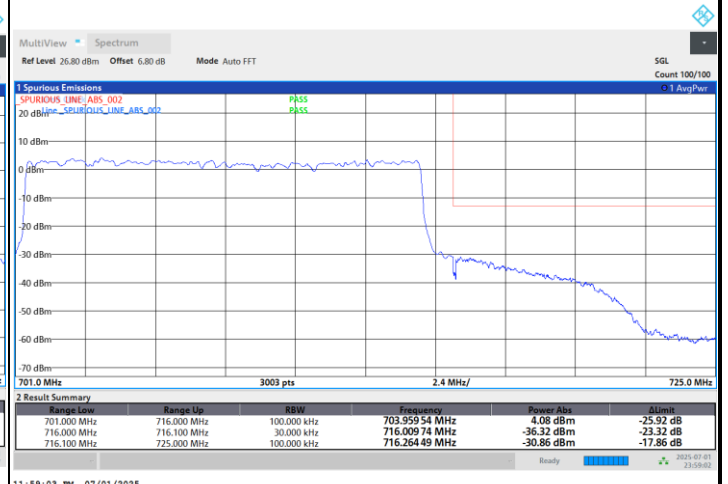
FR1 n12 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



11:35:38 PM 07/01/2025

Highest Band Edge



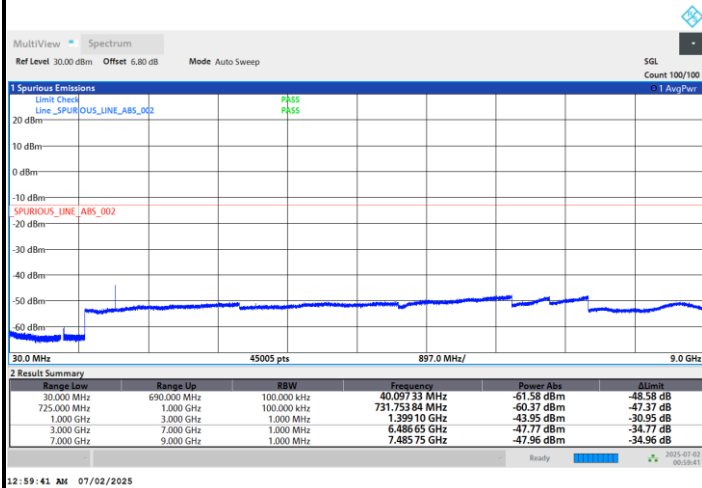
11:59:03 PM 07/01/2025



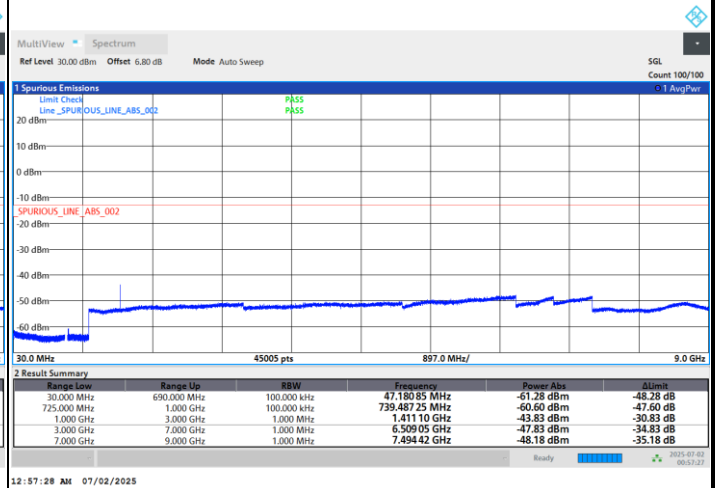
Conducted Spurious Emission

FR1 n12 / 5MHz / DFT-S OFDM / QPSK / 1RB1

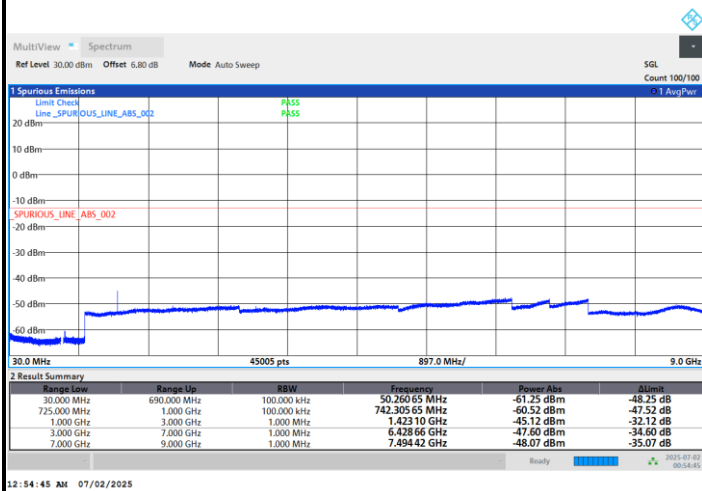
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n12 (BPSK) / Middle Channel 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0001	0.1	Yes	PASS
40	Normal Voltage	0.0057	4	Yes	
30	Normal Voltage	0.0117	8.3	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0110	7.8	Yes	
0	Normal Voltage	0.0020	-1.4	Yes	
-10	Normal Voltage	0.0083	5.9	Yes	
-20	Normal Voltage	0.0088	6.2	Yes	
-30	Normal Voltage	0.0061	4.3	Yes	
20	Maximum Voltage	0.0072	5.1	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0126	8.9	Yes	

Note:

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 3.63 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.

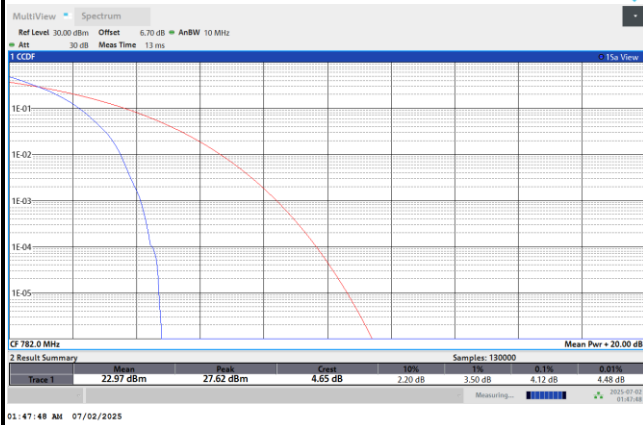
**FR1 n13****<SISO Mode>****Peak-to-Average Ratio**

Mode	FR1 n13 / 10MHz / 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	4.12	5.20	5.98	6.10	PASS
Mode	FR1 n13 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.68				PASS

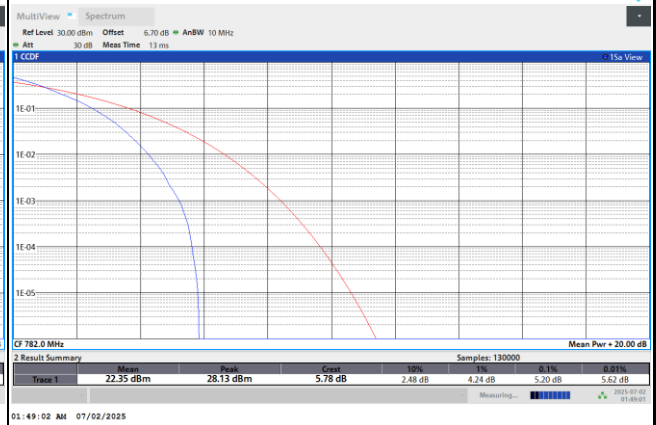


FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

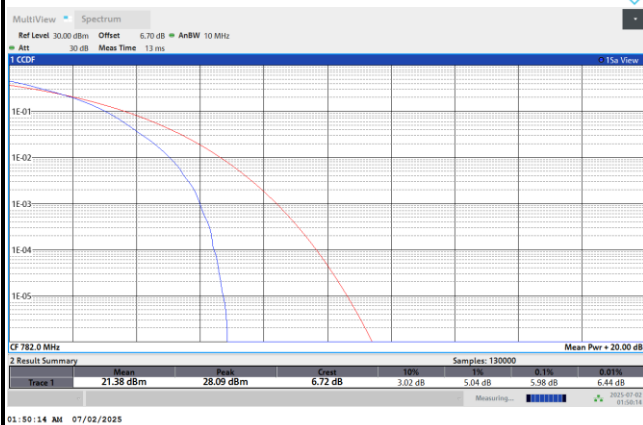
PI/2 BPSK



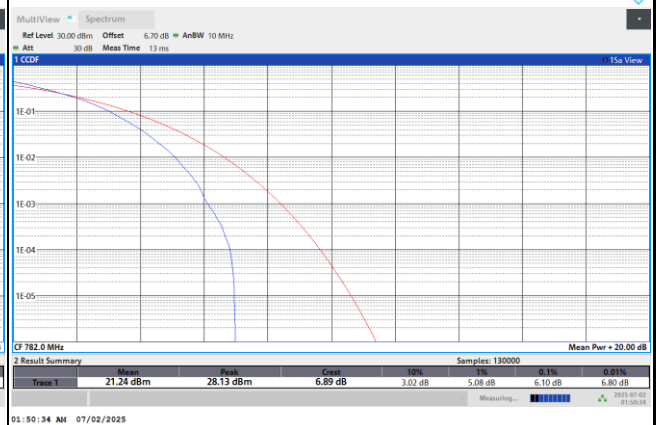
QPSK



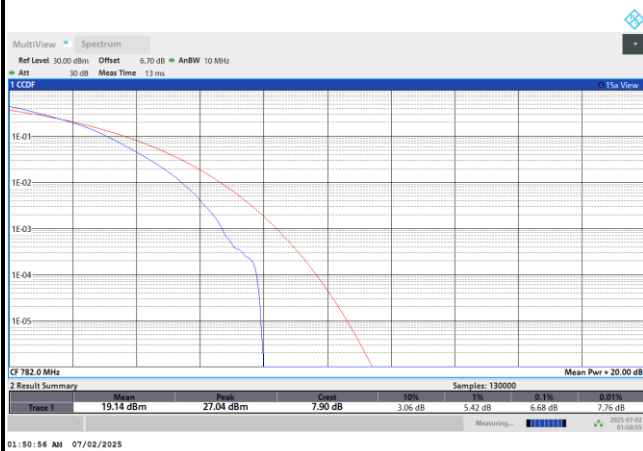
16QAM



64QAM



256QAM



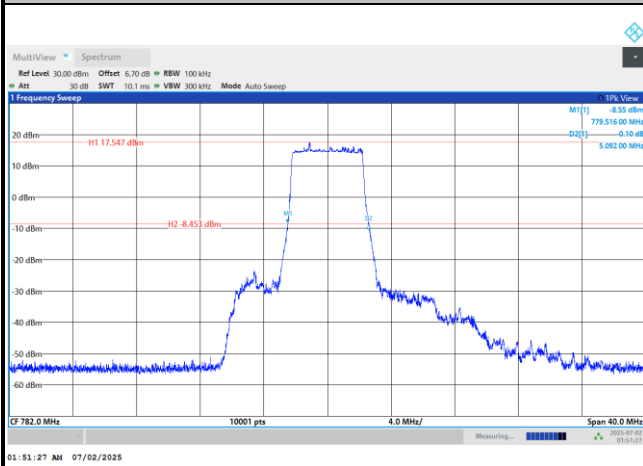
**26dB Bandwidth**

Mode	FR1 n13 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK				
Middle CH	5.09	5.06	9.82	9.82				
Mod.	16QAM		16QAM					
Middle CH	5.14		9.76					



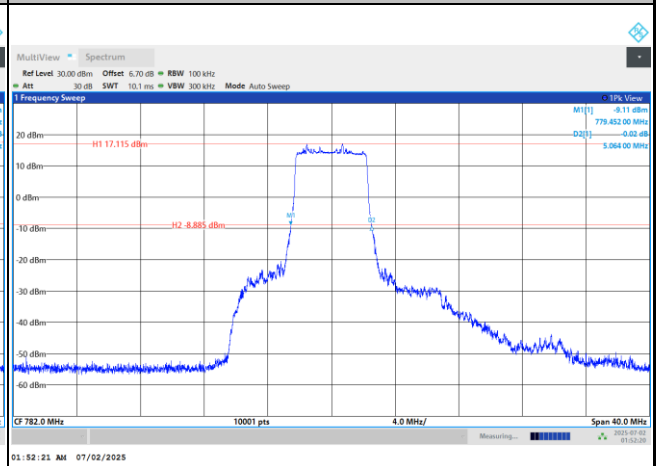
FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



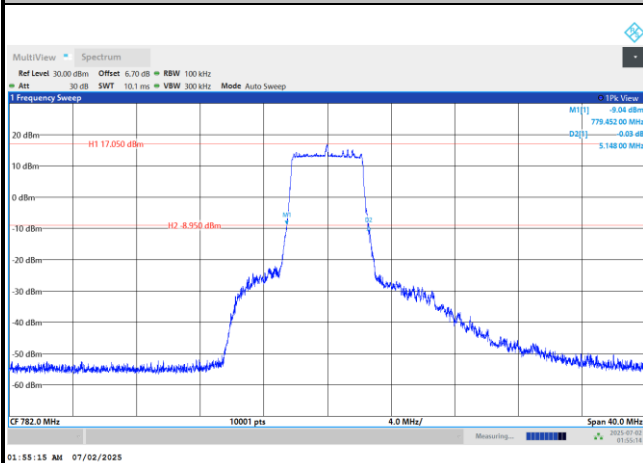
01:51:27 AM 07/02/2025

QPSK



01:52:21 AM 07/02/2025

16QAM

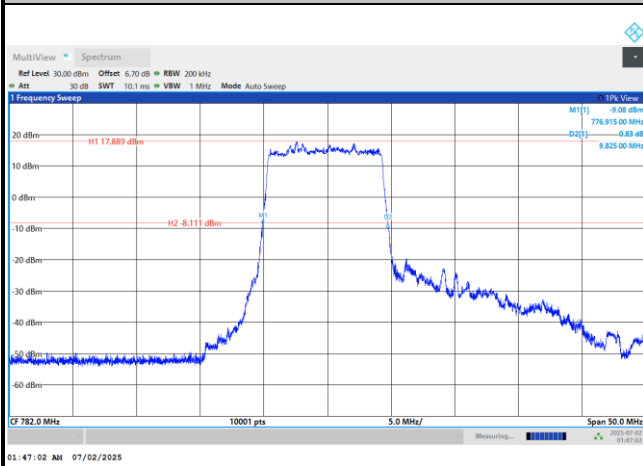


01:55:15 AM 07/02/2025



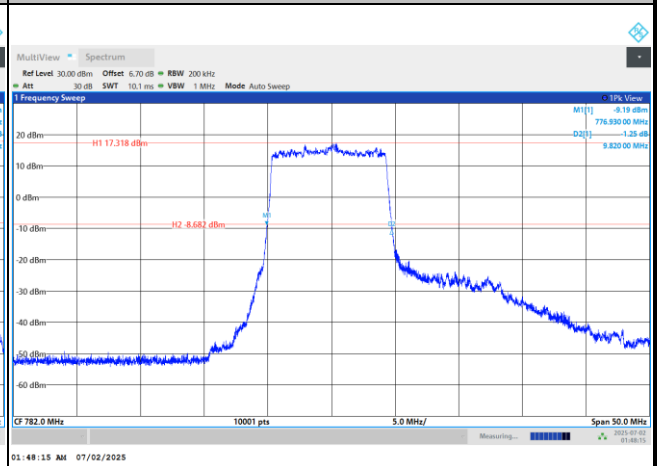
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



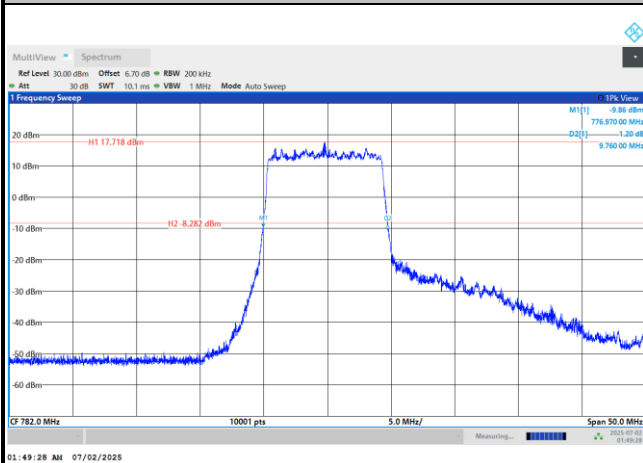
01:47:02 AM 07/02/2025

QPSK



01:48:15 AM 07/02/2025

16QAM



01:49:28 AM 07/02/2025

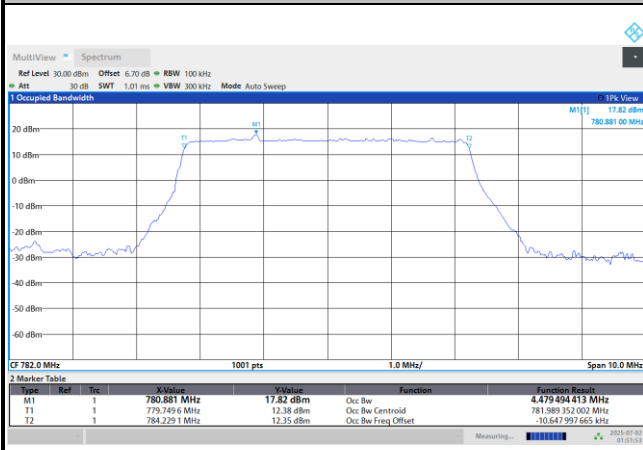
**Occupied Bandwidth**

Mode	FR1 n13 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK				
Middle CH	4.47	4.46	8.95	8.97				
Mod.	16QAM		16QAM					
Middle CH	4.51		8.99					

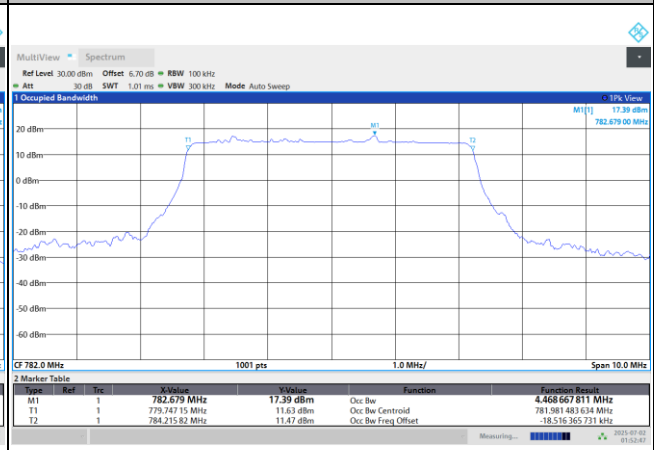


FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

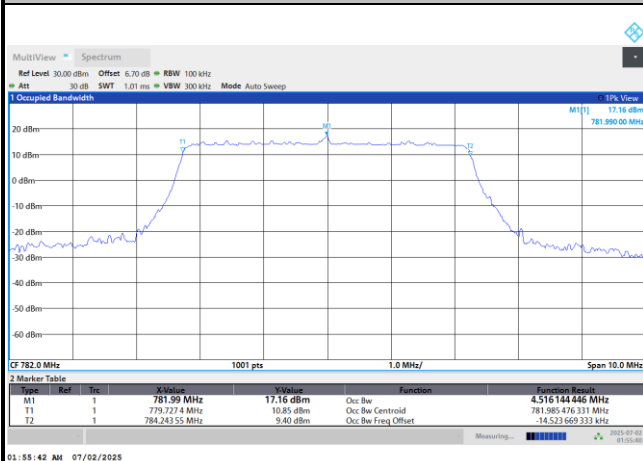
PI/2 BPSK



QPSK



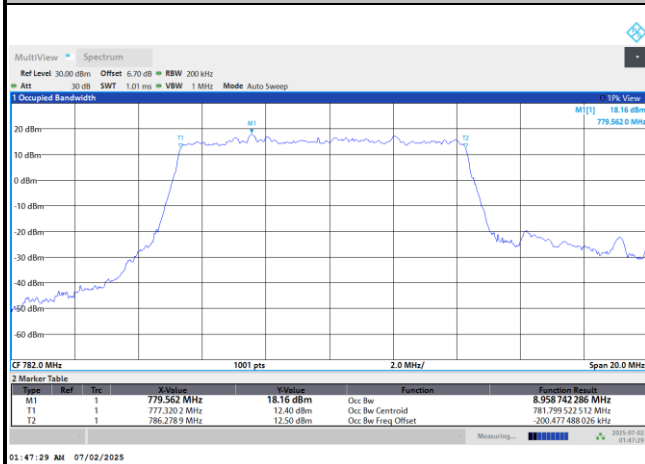
16QAM



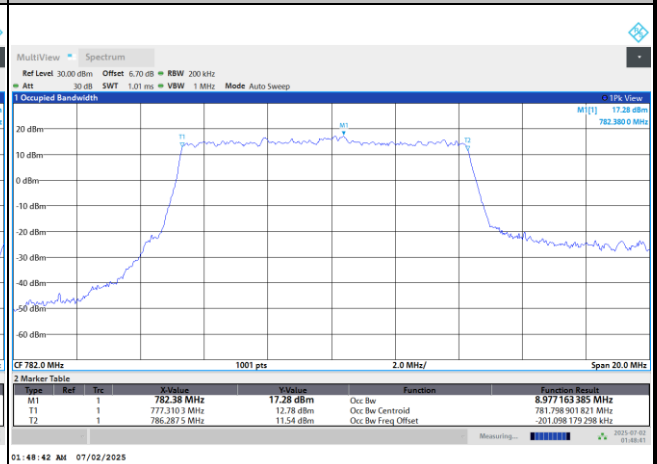


FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

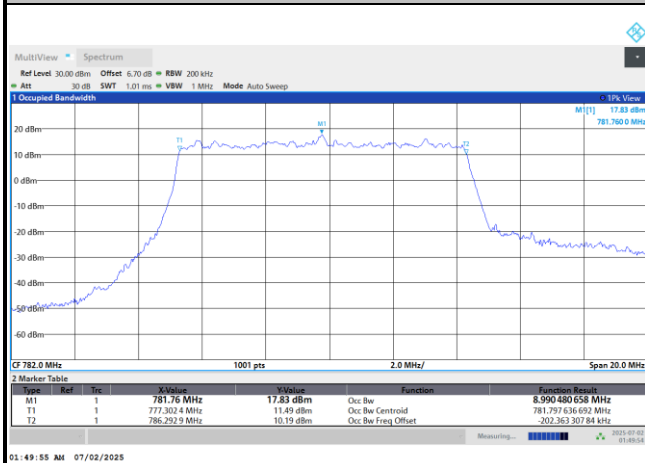
PI/2 BPSK

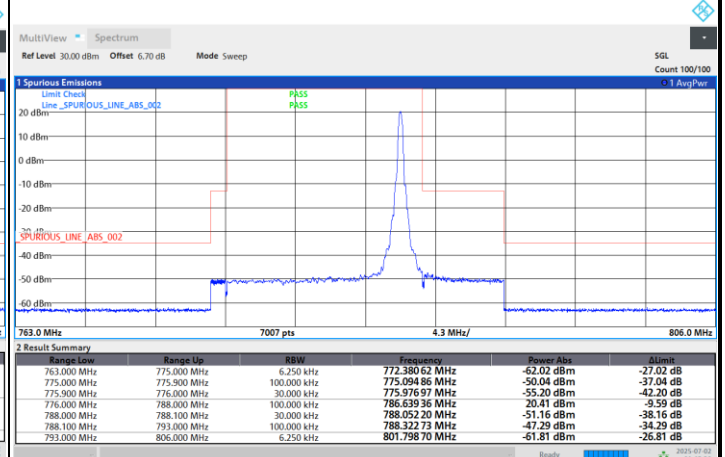
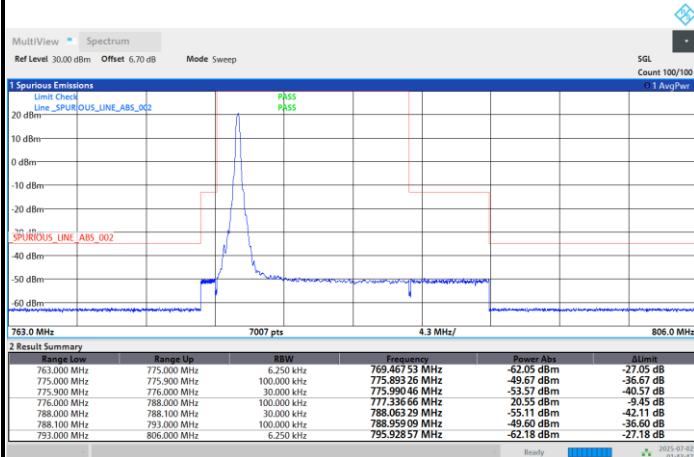
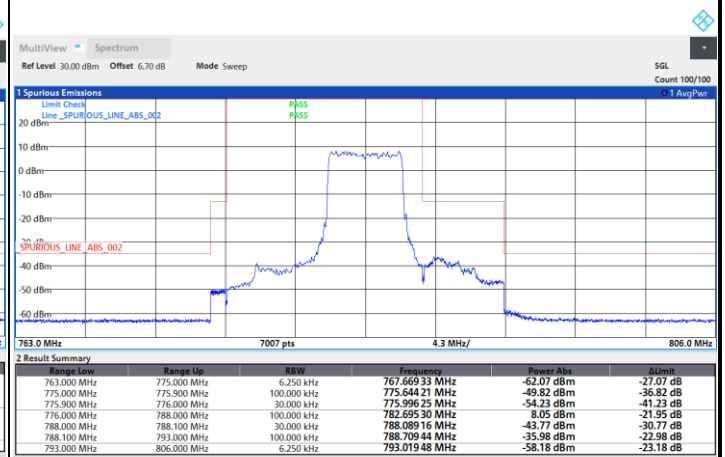
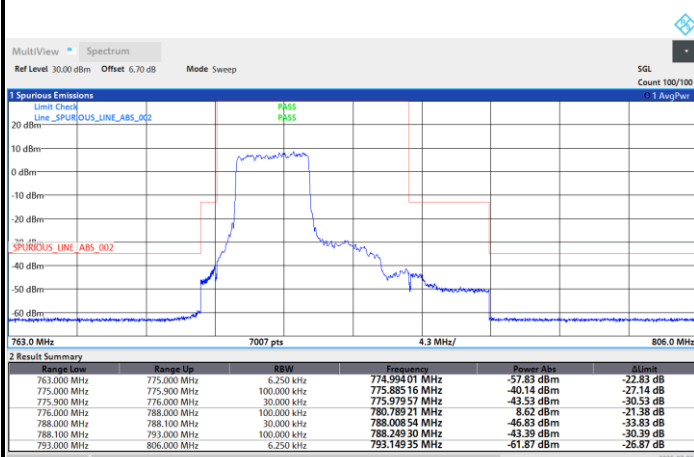


QPSK



16QAM



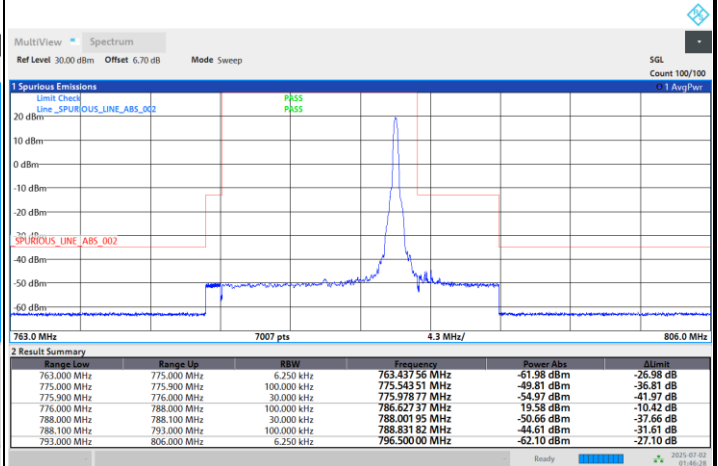
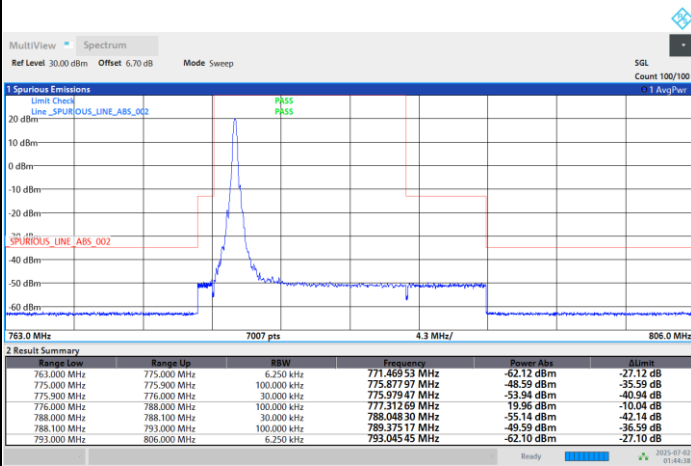
**Conducted Band Edge****FR1 n13 / 5MHz / DFT-S OFDM / PI/2 BPSK****Lowest Band Edge / 1RB0****Highest Band Edge / 1RBmax****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



FR1 n13 / 5MHz / DFT-S OFDM / QPSK

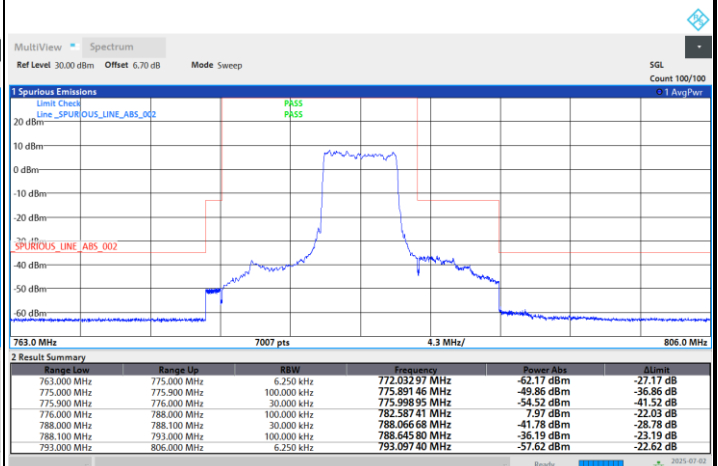
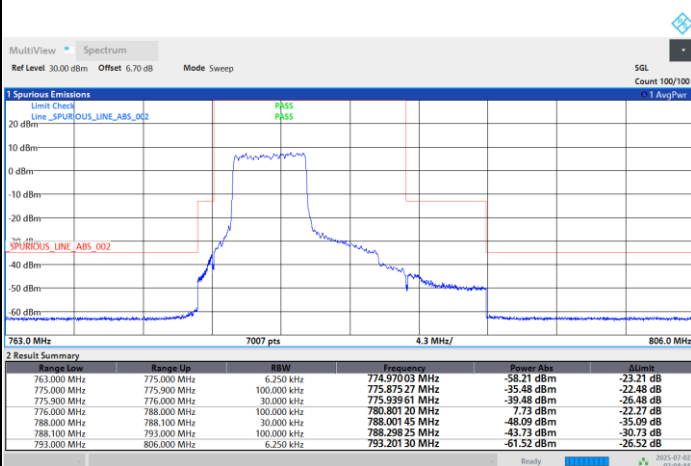
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

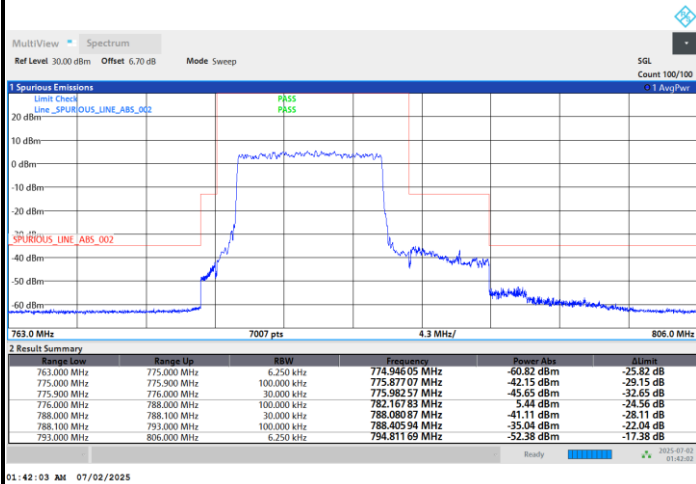
Highest Band Edge / Full RB





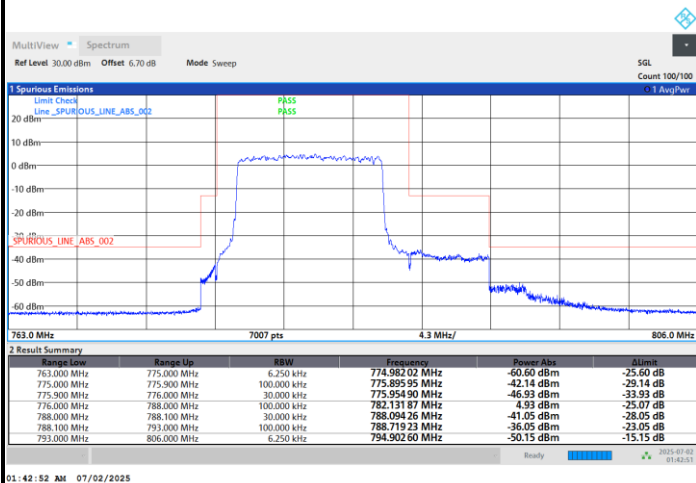
FR1 n13 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Middle Band Edge / Full RB



FR1 n13 / 10MHz / DFT-s-OFDM / QPSK

Middle Band Edge / Full RB

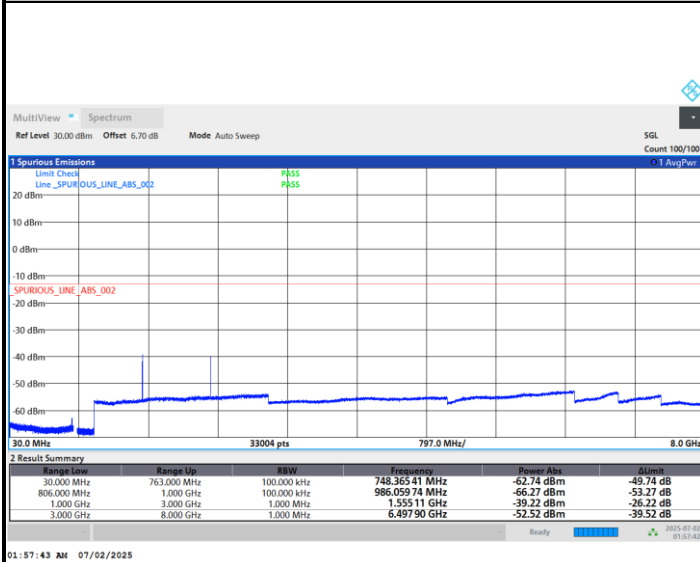




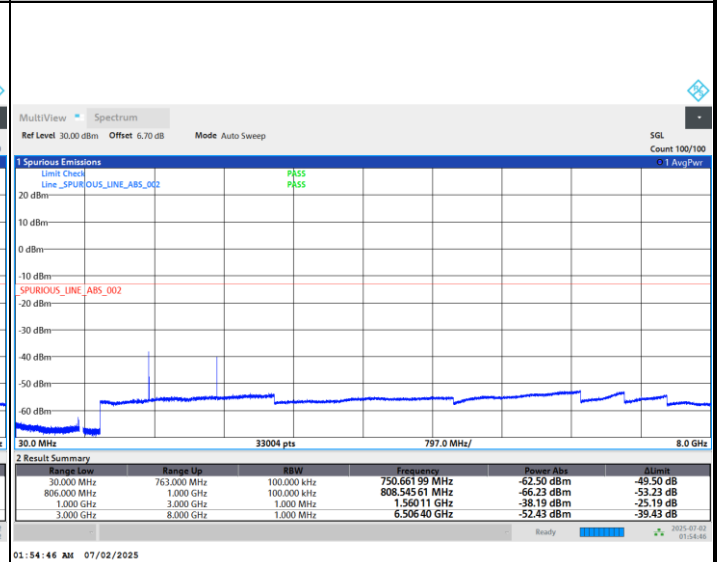
Conducted Spurious Emission

FR1 n13 / 5MHz / DFT-S OFDM / QPSK / 1RB1

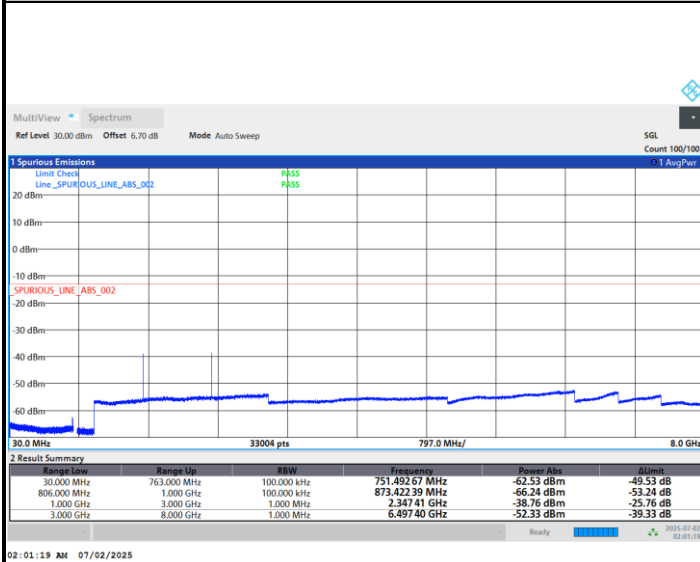
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n13 (BPSK) / Middle Channel 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0059	-4.6	Yes	PASS
40	Normal Voltage	0.0083	-6.5	Yes	
30	Normal Voltage	0.0115	-9	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0029	-2.3	Yes	
0	Normal Voltage	0.0110	-8.6	Yes	
-10	Normal Voltage	0.0014	1.1	Yes	
-20	Normal Voltage	0.0027	2.1	Yes	
-30	Normal Voltage	0.0061	4.8	Yes	
20	Maximum Voltage	0.0022	-1.7	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0041	3.2	Yes	

Note:

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 3.63 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 n14****<SISO Mode>****Peak-to-Average Ratio**

Mode	FR1 n14 / 10MHz / 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	4.02	4.74	5.94	5.96	PASS
Mode	FR1 n14 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.58				PASS