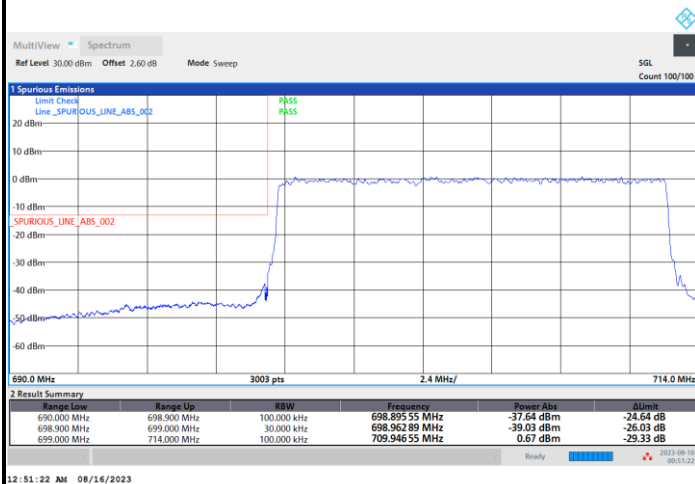


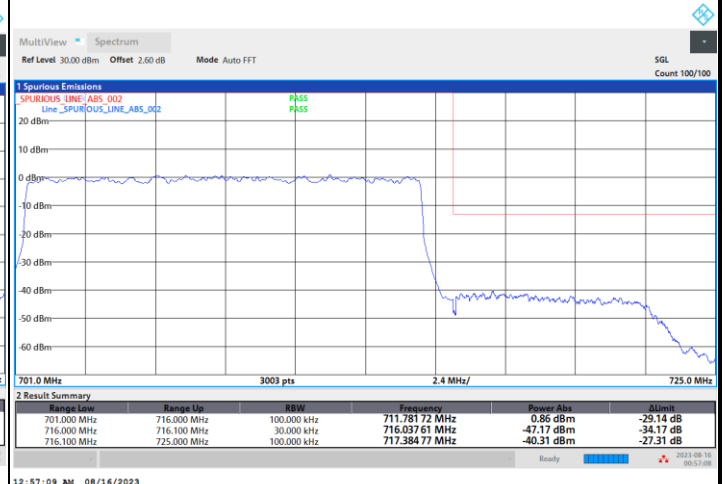


5G-FR1 SA n12 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

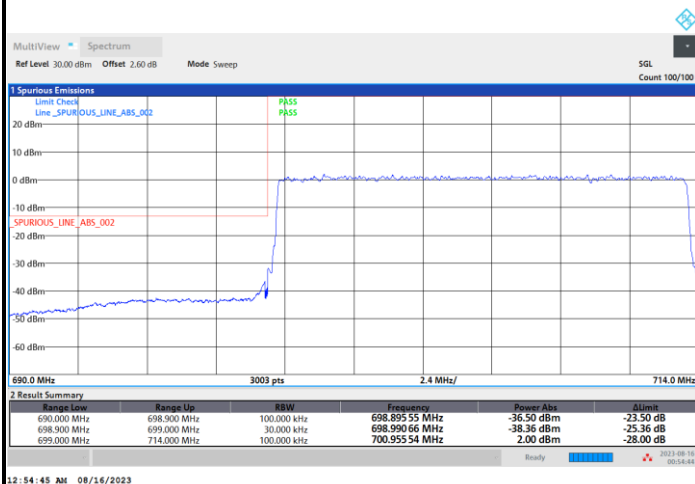


Highest Band Edge

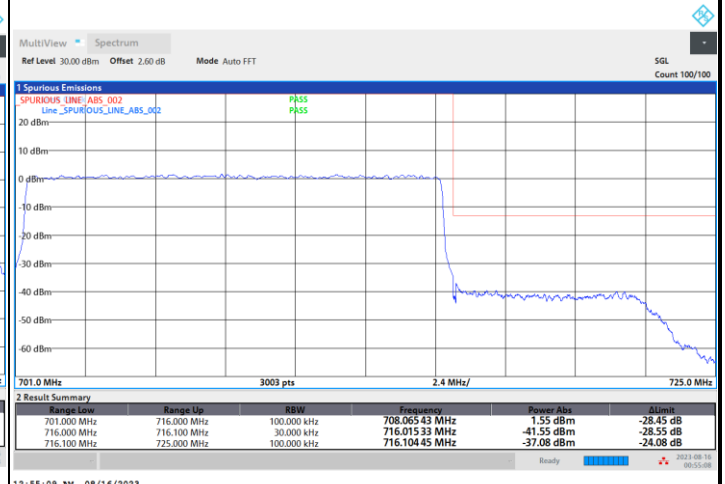


5G-FR1 SA n12 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

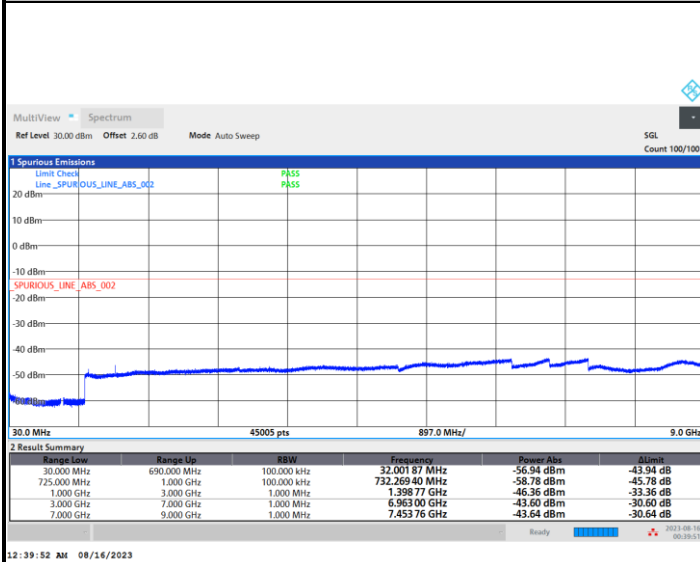




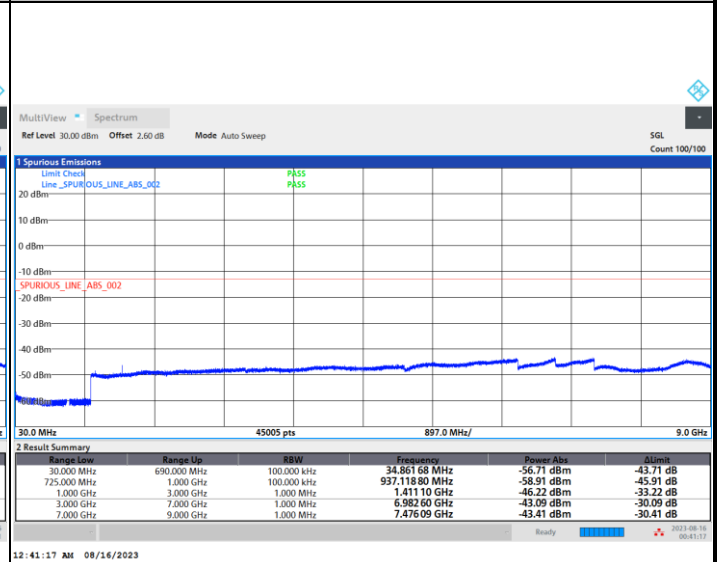
Conducted Spurious Emission

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

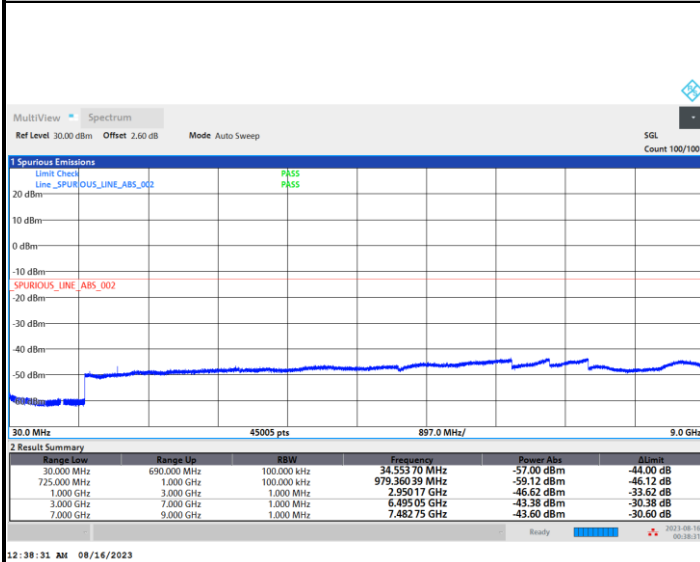
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		5G-FR1 SA n12 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0112	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0196	
0	Normal Voltage	0.0171	
-10	Normal Voltage	0.0045	
-20	Normal Voltage	0.0054	
-30	Normal Voltage	0.0107	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0188	

Note:

1. Normal Voltage = 48 V. ; Minimum Voltage = 42.5 V. ; Maximum Voltage = 57 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

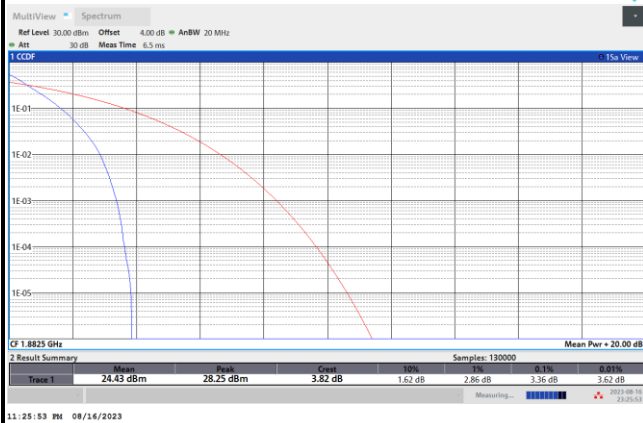
**5G-FR1 SA n25****Peak-to-Average Ratio**

Mode	5G-FR1 SA n25 / 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	3.36	4.18	5.12	5.30	PASS
Mode	5G-FR1 SA n25 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.14				PASS

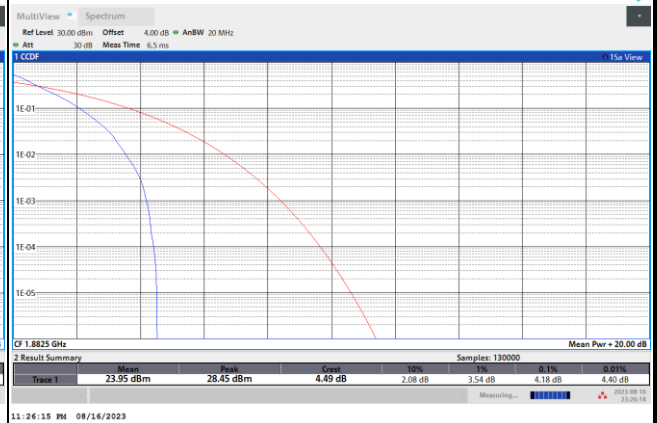


5G-FR1 SA n25 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

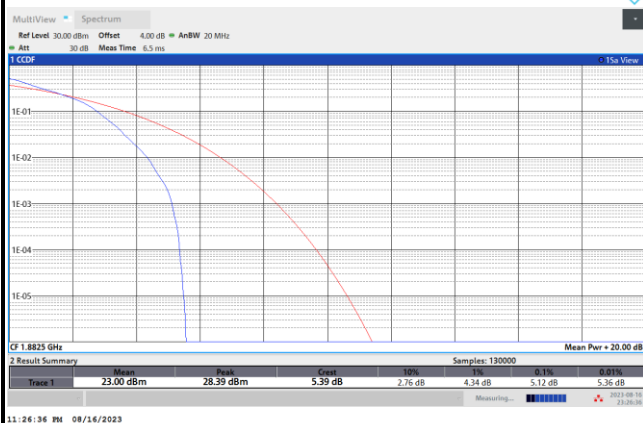
PI/2 BPSK



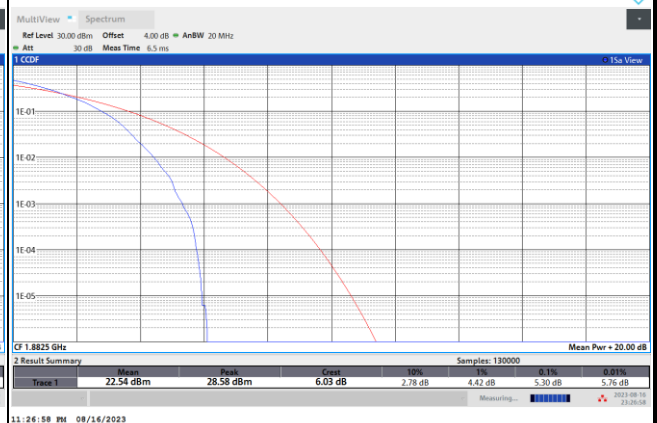
QPSK



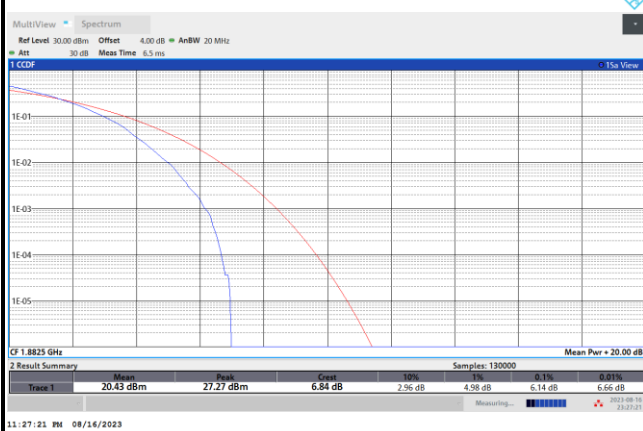
16QAM



64QAM



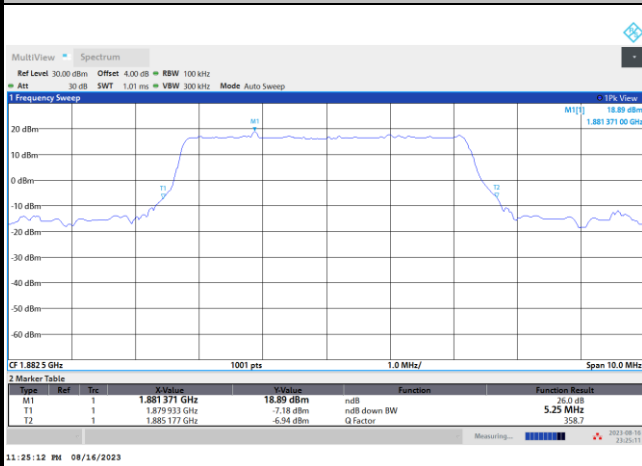
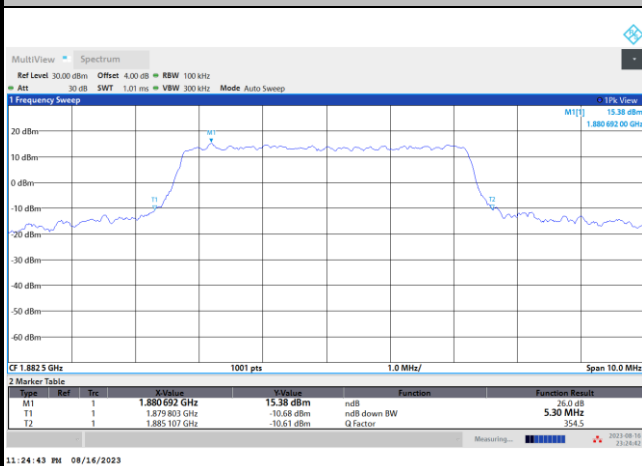
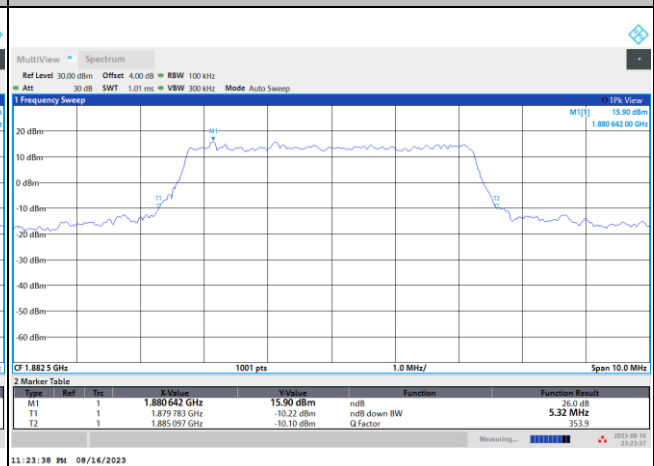
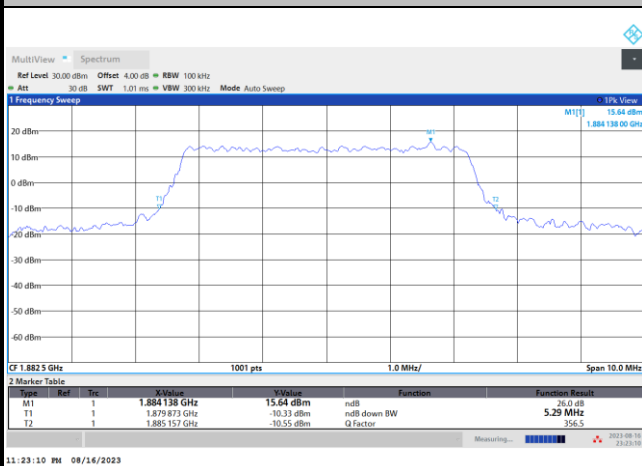
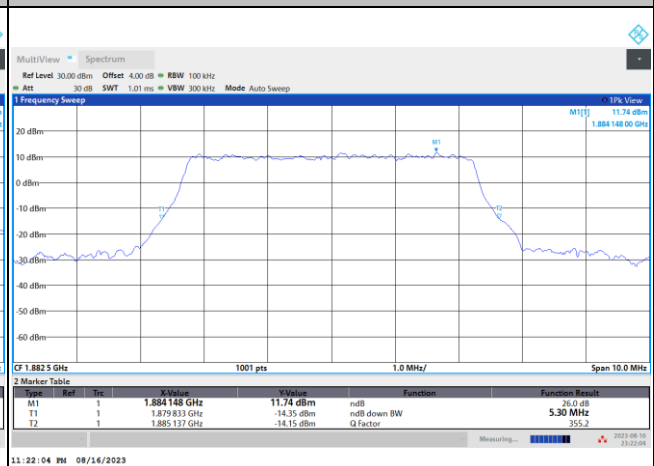
256QAM

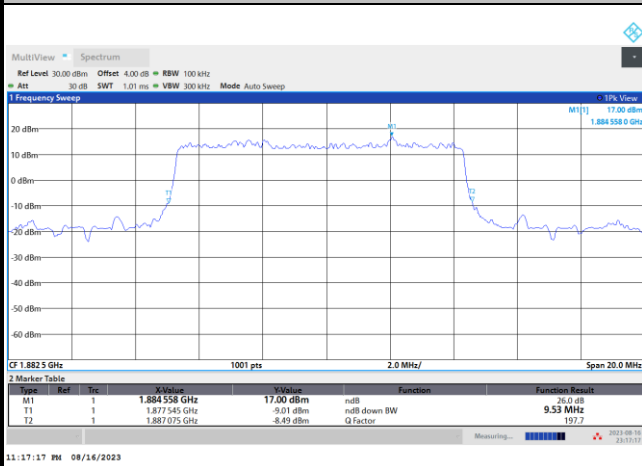
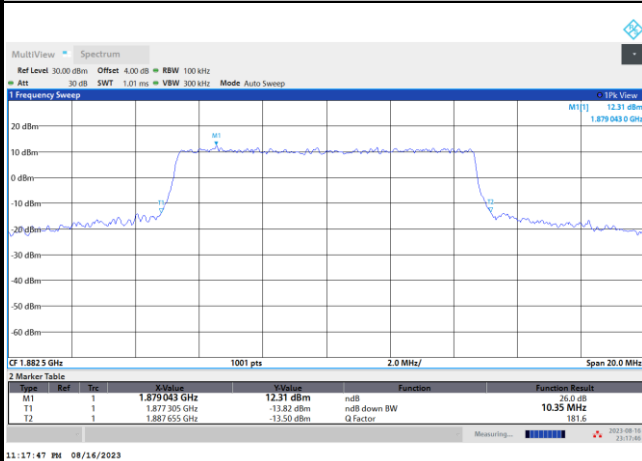
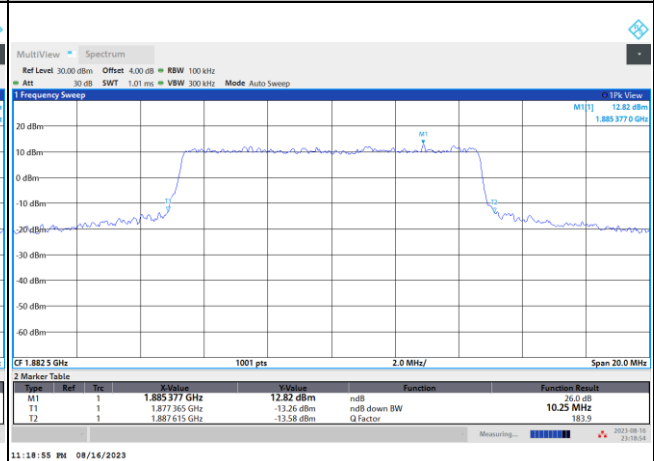
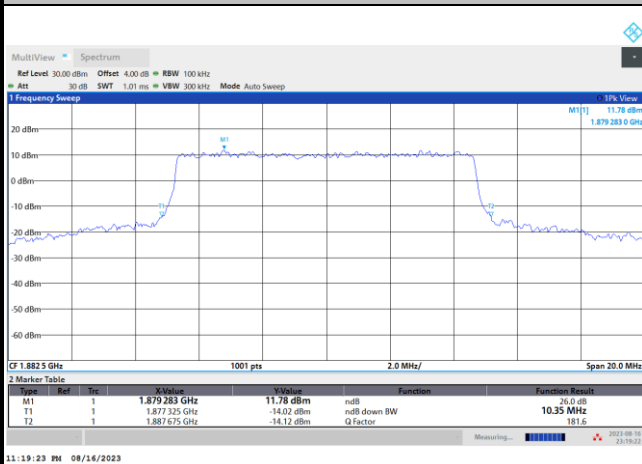
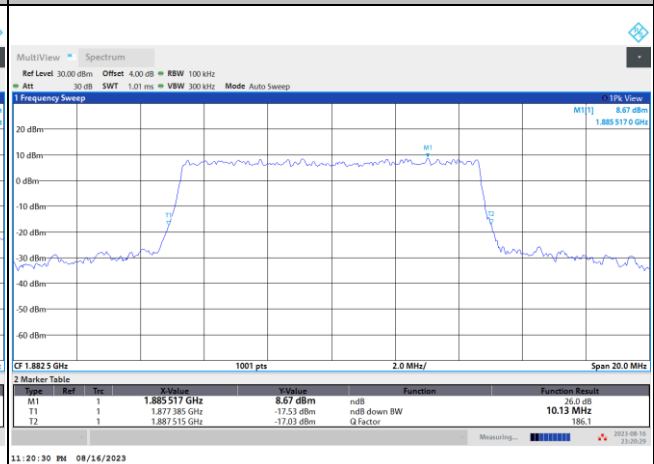


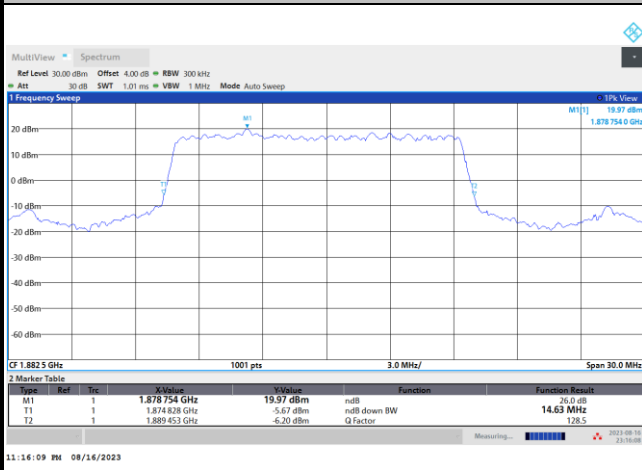
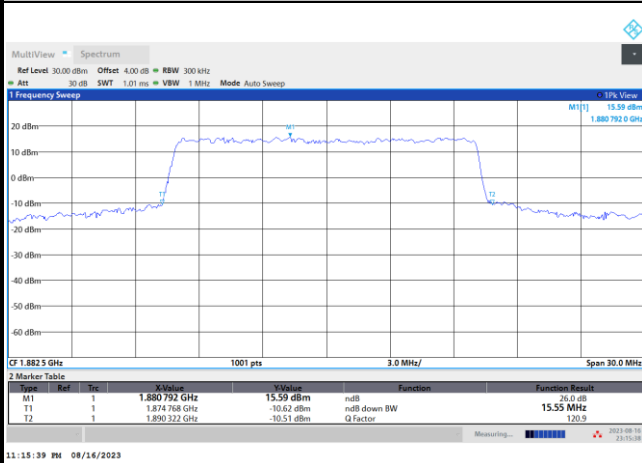
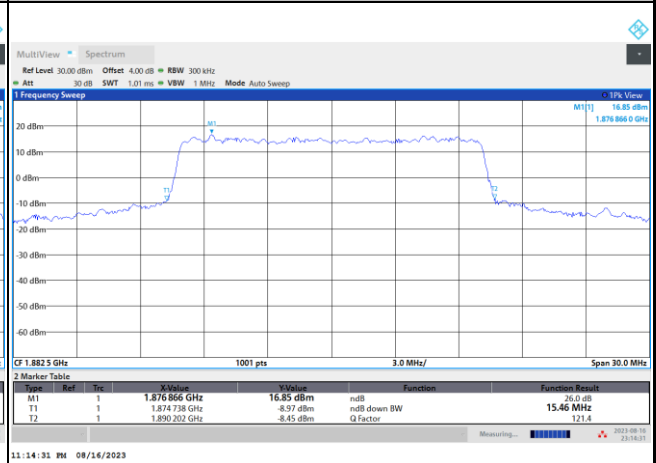
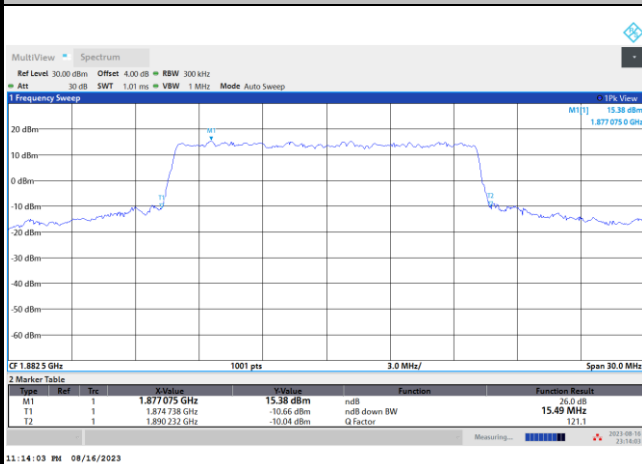
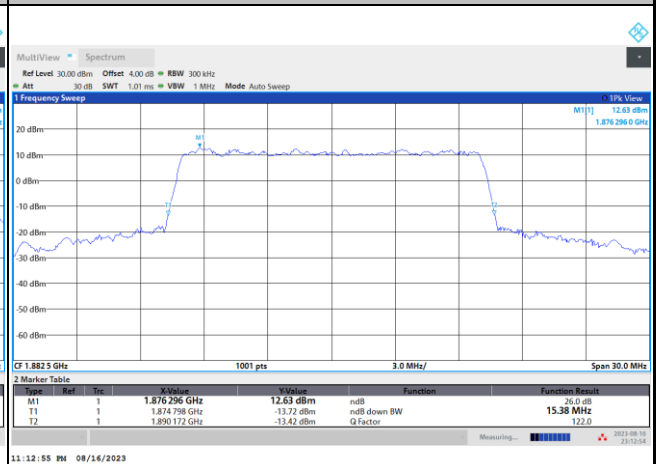
26dB Bandwidth

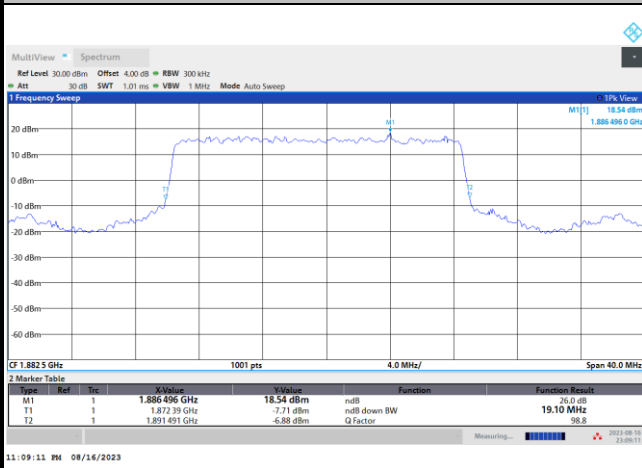
Mode	5G-FR1 SA n25 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	5.25		9.53		14.63		19.10	
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	24.13		33.36		33.36		41.32	

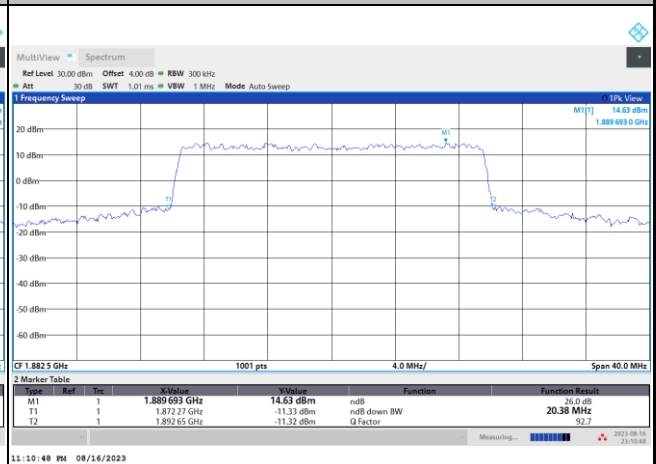
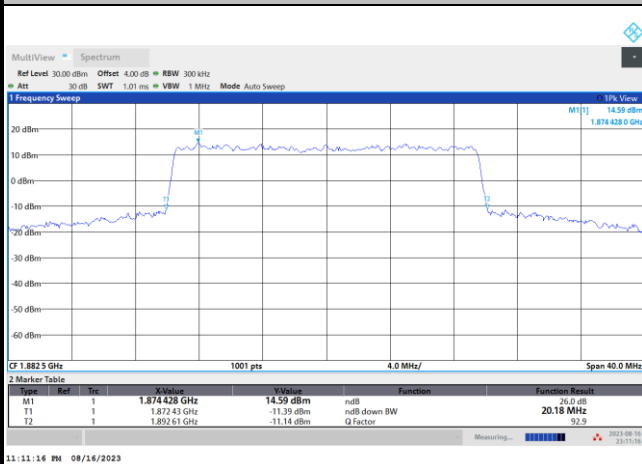
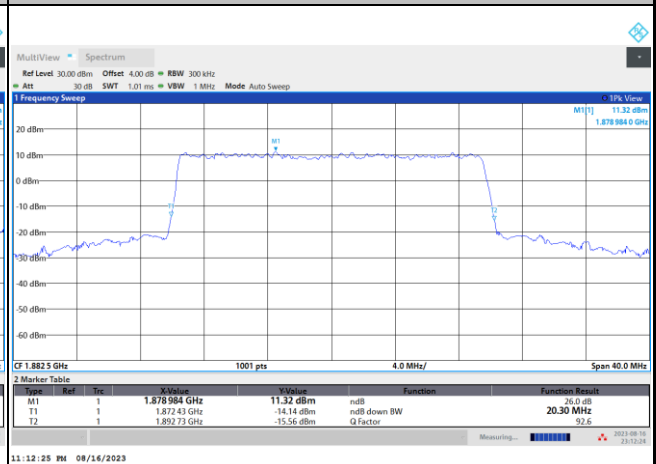
Mode	5G-FR1 SA n25 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.31	5.32	10.35	10.25	15.55	15.47	20.62	20.38
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	5.29	5.31	10.35	10.13	15.50	15.38	20.18	20.30
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	25.18	25.13	35.17	35.24	35.17	35.24	41.96	43.32
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	25.23	24.93	35.10	34.76	35.10	34.76	41.96	41.16

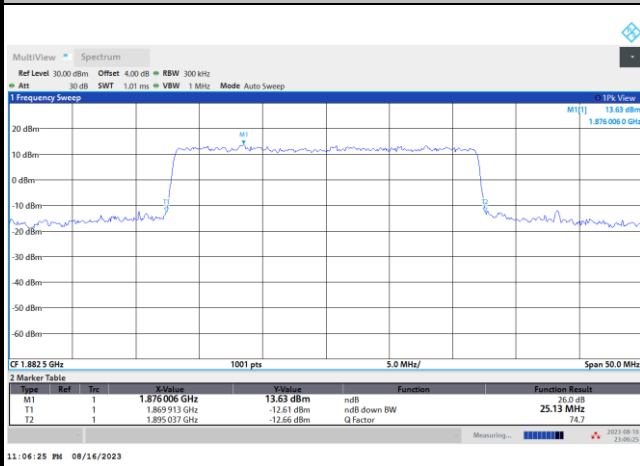
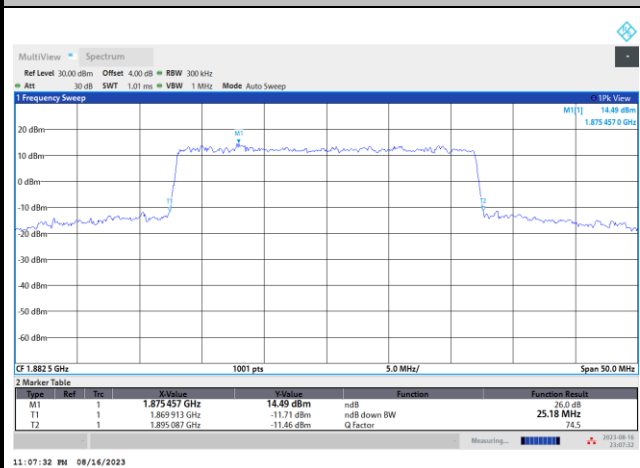
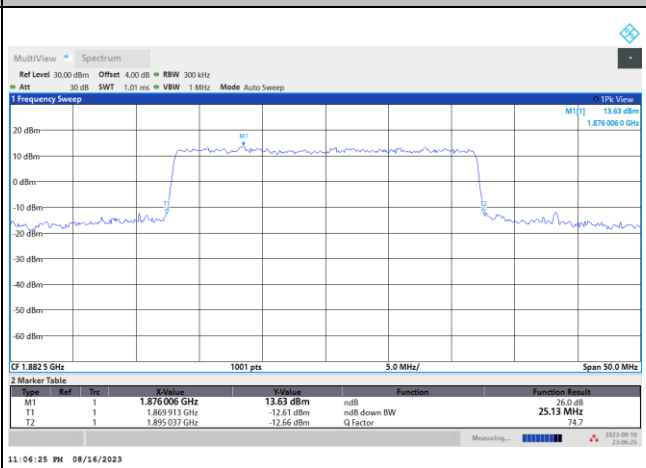
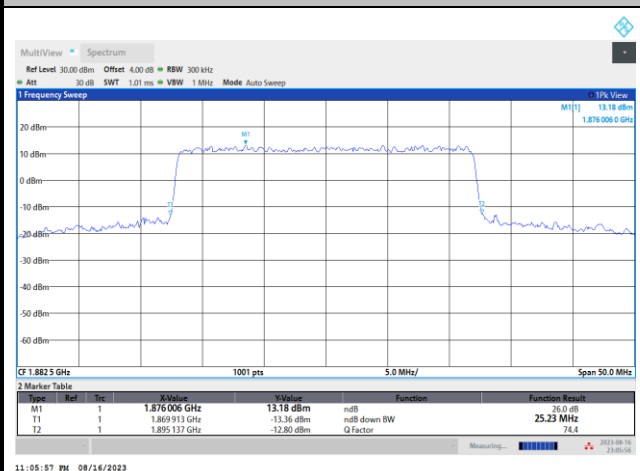
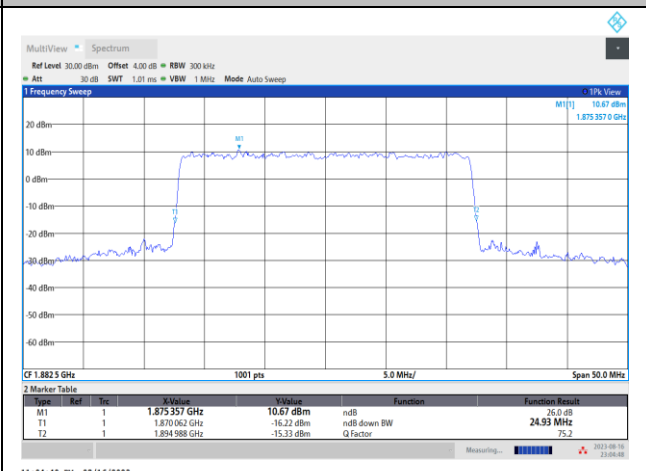
5G-FR1 SA n25 / 5MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

5G-FR1 SA n25 / 5MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


5G-FR1 SA n25 / 10MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

5G-FR1 SA n25 / 10MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


5G-FR1 SA n25 / 15MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

5G-FR1 SA n25 / 15MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


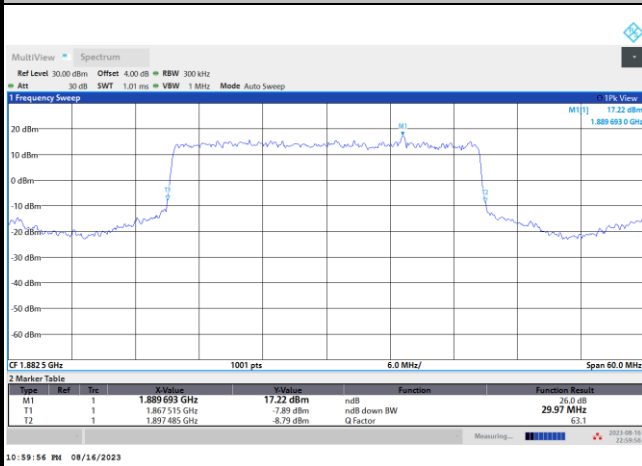
5G-FR1 SA n25 / 20MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

5G-FR1 SA n25 / 20MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


5G-FR1 SA n25 / 25MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

5G-FR1 SA n25 / 25MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


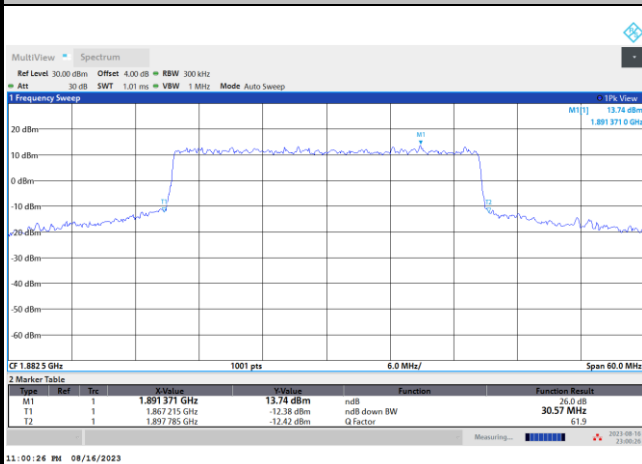
5G-FR1 SA n25 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

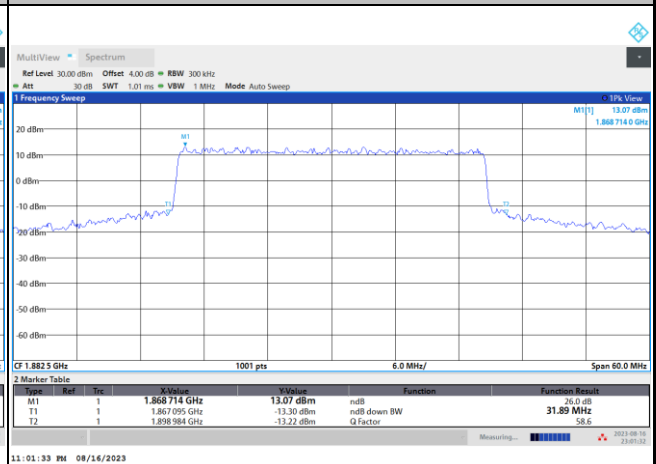


5G-FR1 SA n25 / 30MHz / CP OFDM / Middle Channel / Full RB

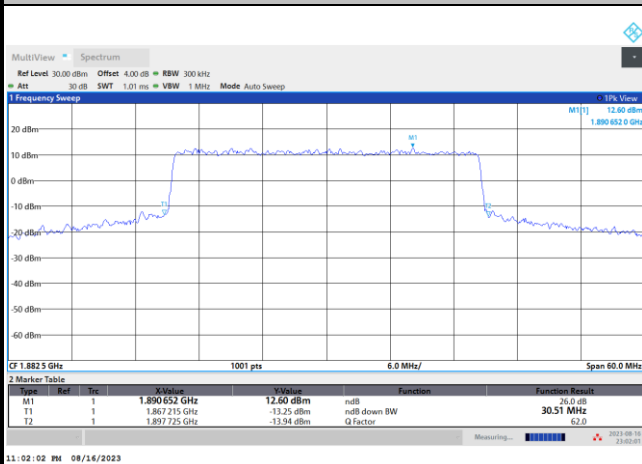
QPSK



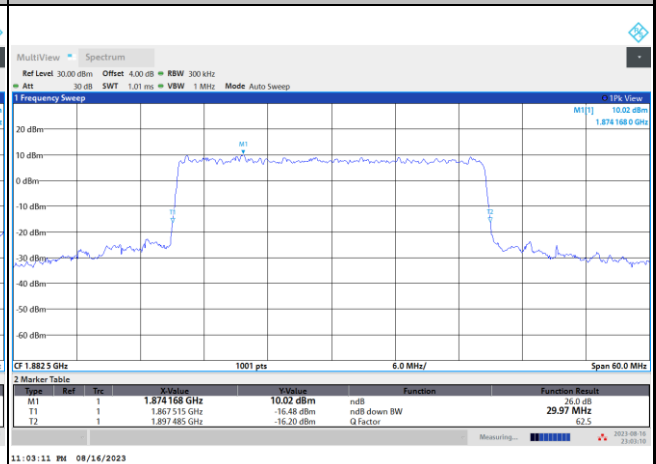
16QAM

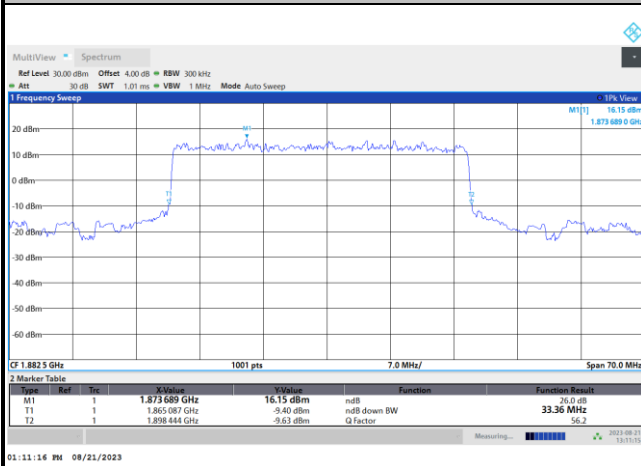
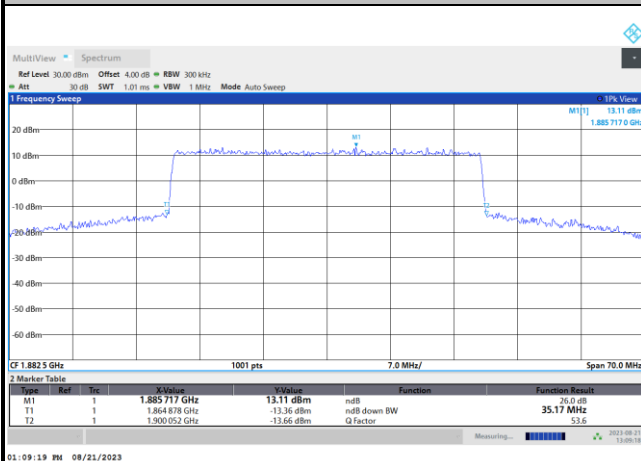
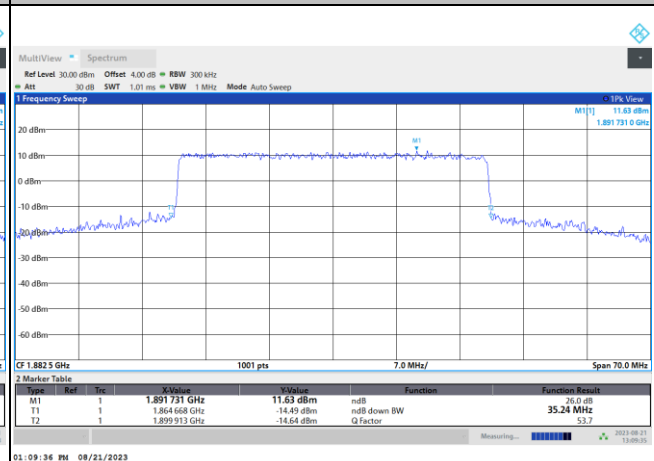
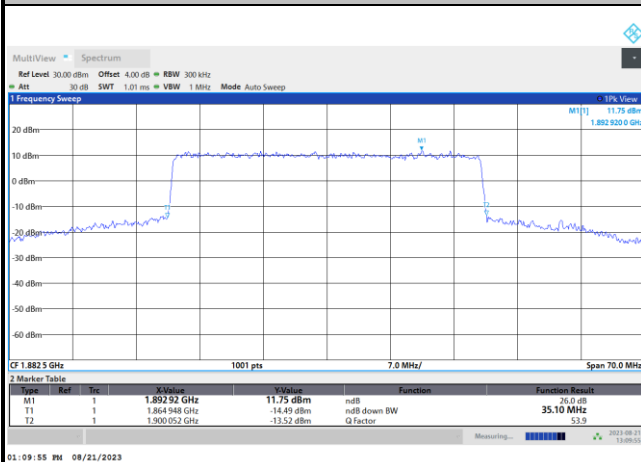
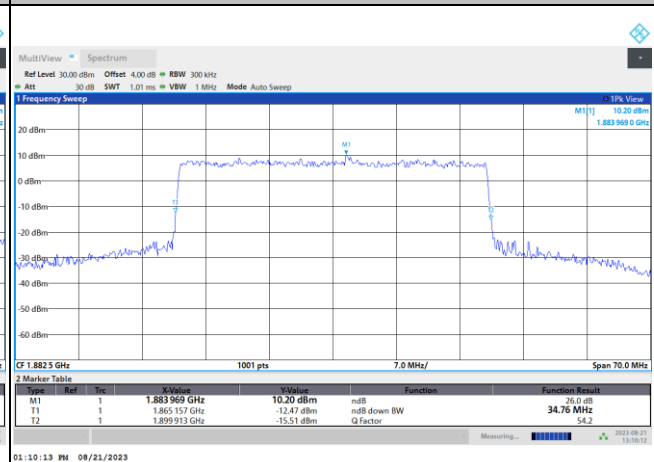


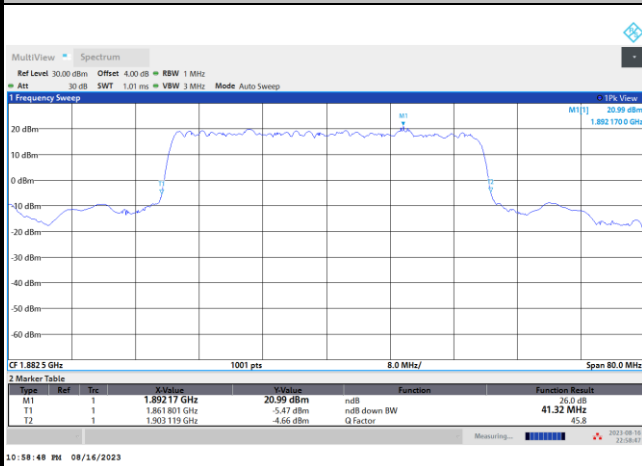
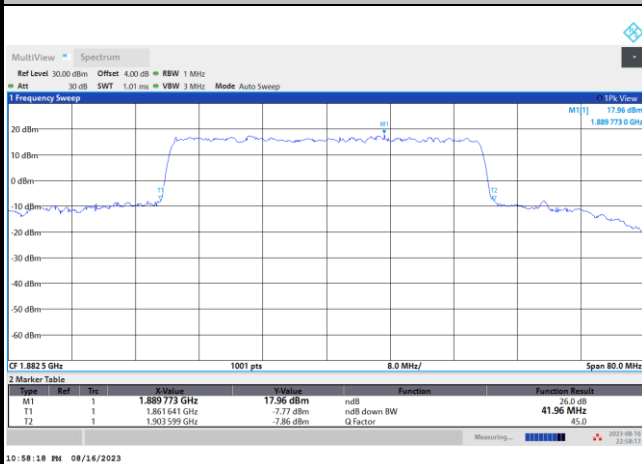
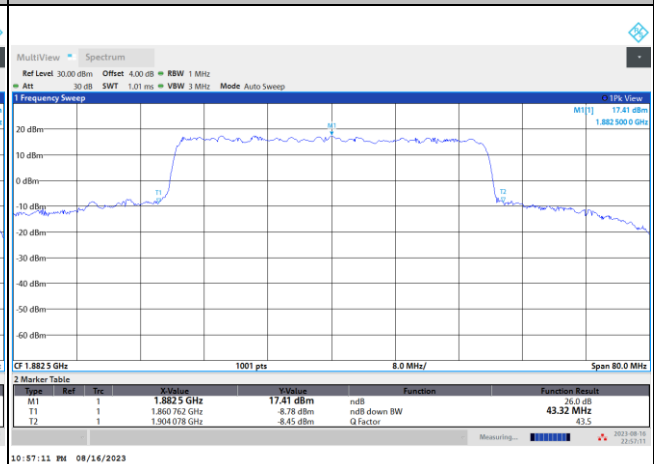
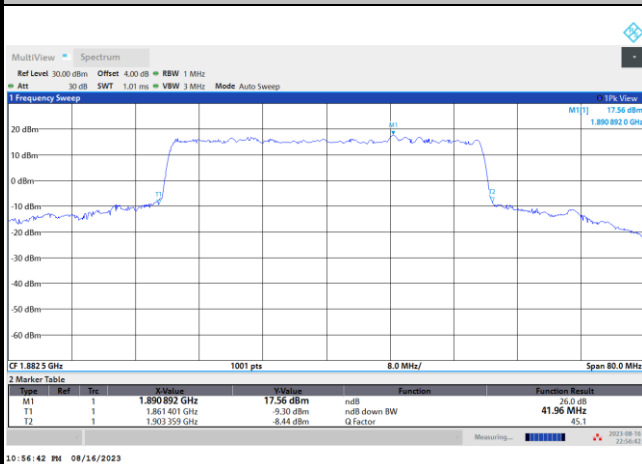
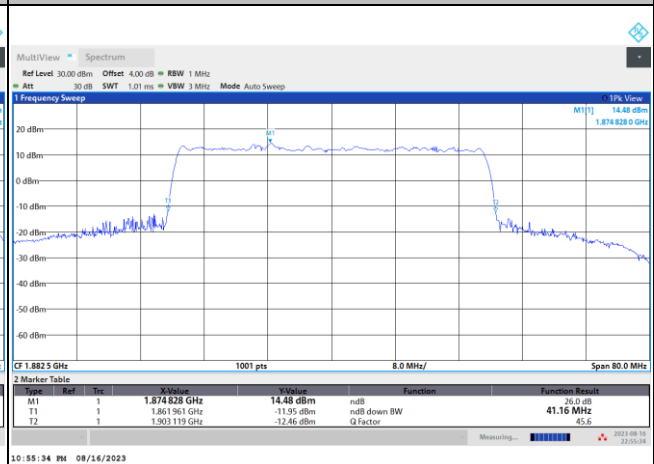
64QAM



256QAM



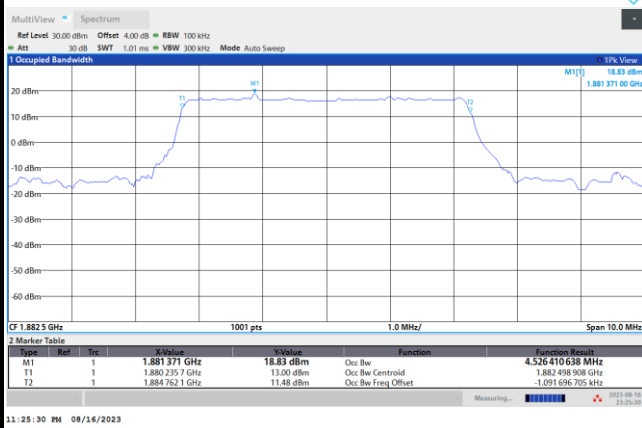
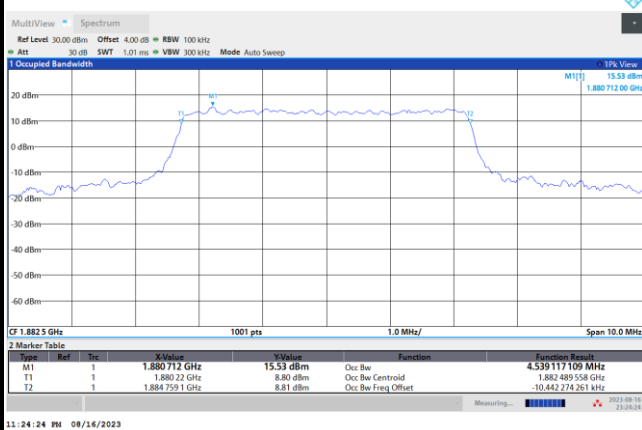
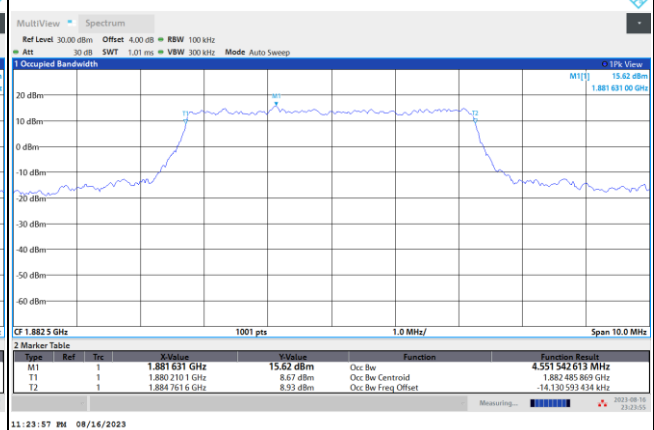
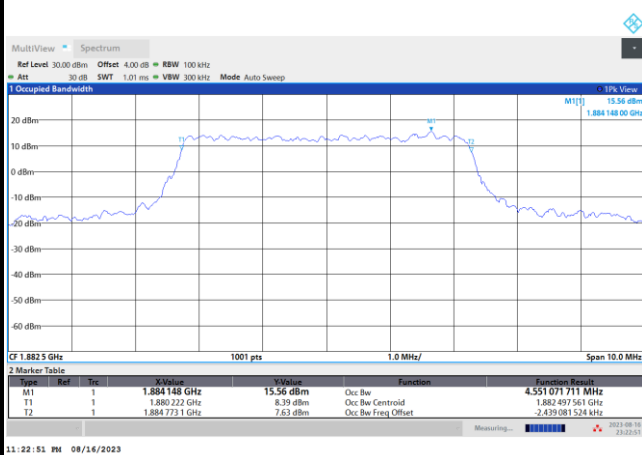
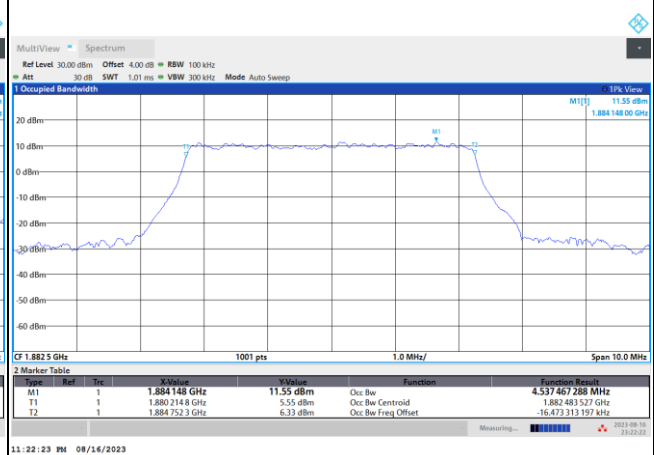
5G-FR1 SA n25 / 35MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

5G-FR1 SA n25 / 35MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


5G-FR1 SA n25 / 40MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

5G-FR1 SA n25 / 40MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


Occupied Bandwidth

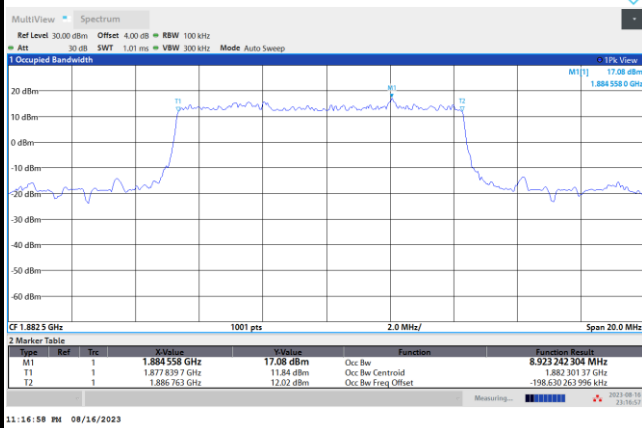
Mode	5G-FR1 SA n25 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.52		8.92		13.47		17.92	
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	22.89		28.57		32.14		38.72	

Mode	5G-FR1 SA n25 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.53	4.55	9.32	9.31	14.19	14.21	19.00	19.03
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.55	4.53	9.30	9.30	14.23	14.20	19.00	19.03
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	23.80	23.80	28.60	28.68	33.62	33.67	38.90	38.84
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	23.77	23.75	28.57	28.57	33.63	33.56	39.04	38.72

5G-FR1 SA n25 / 5MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

5G-FR1 SA n25 / 5MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


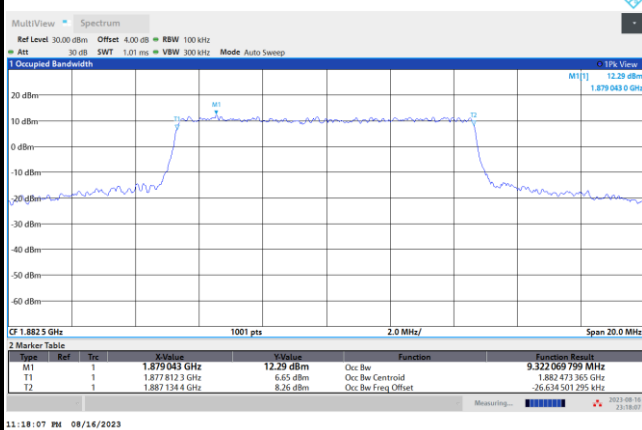
5G-FR1 SA n25 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

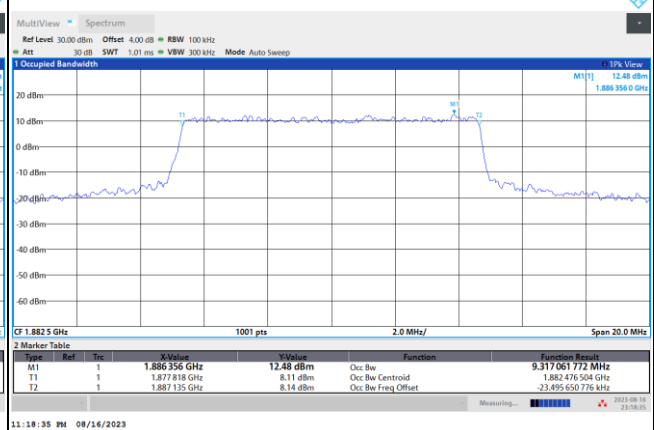


5G-FR1 SA n25 / 10MHz / CP OFDM / Middle Channel / Full RB

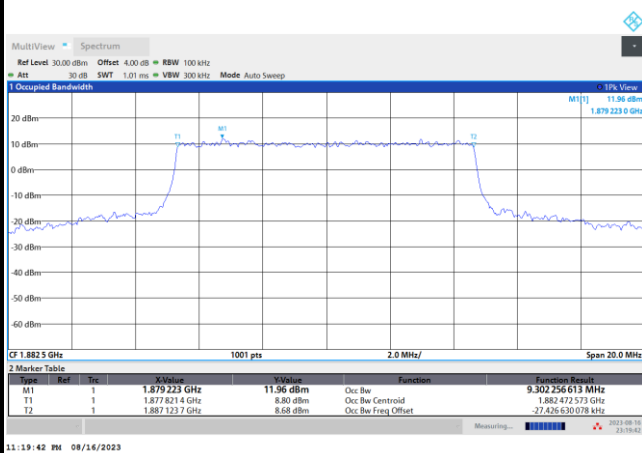
QPSK



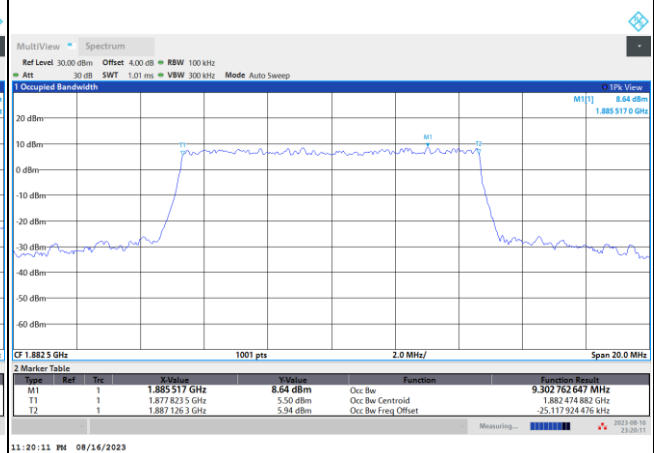
16QAM



64QAM

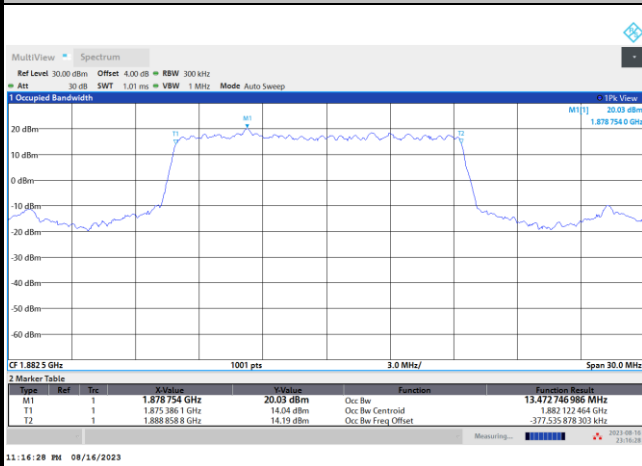


256QAM



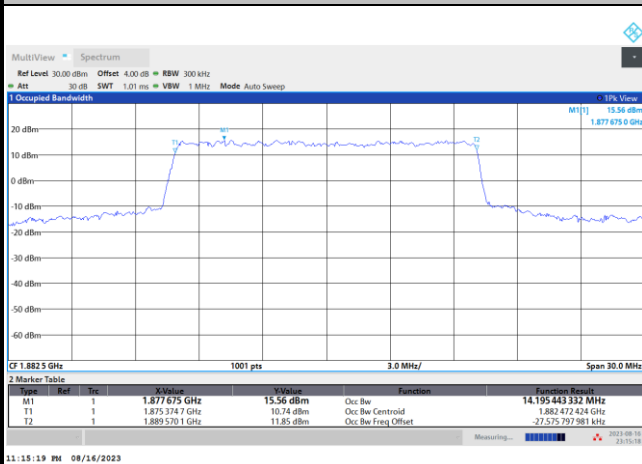
5G-FR1 SA n25 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

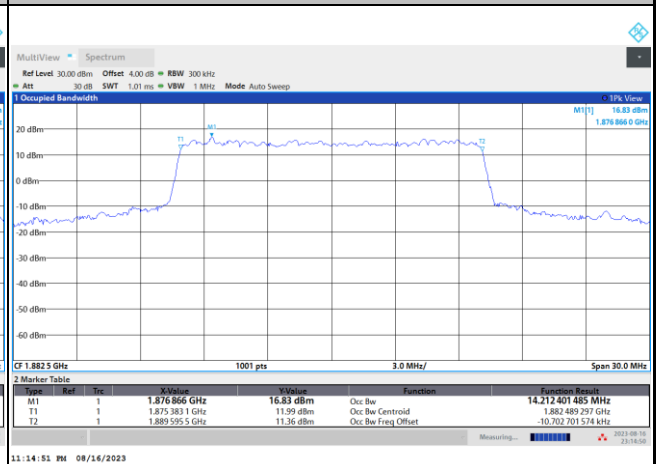


5G-FR1 SA n25 / 15MHz / CP OFDM / Middle Channel / Full RB

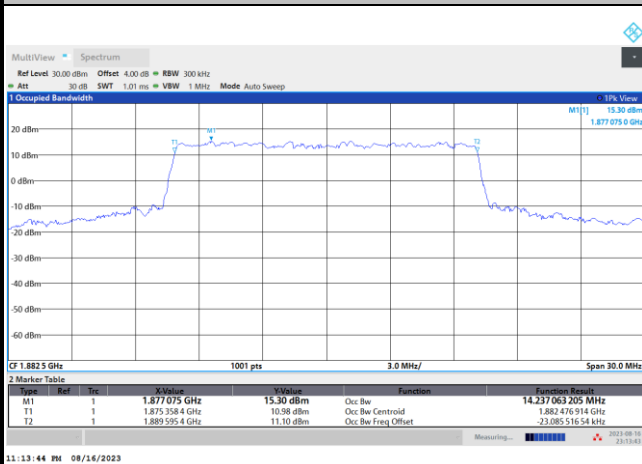
QPSK



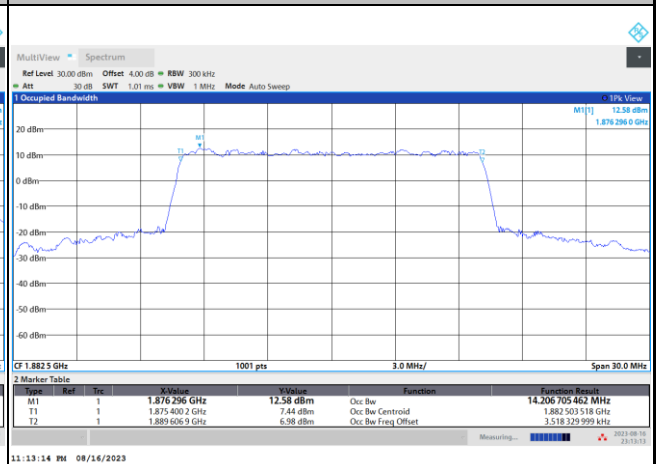
16QAM



64QAM

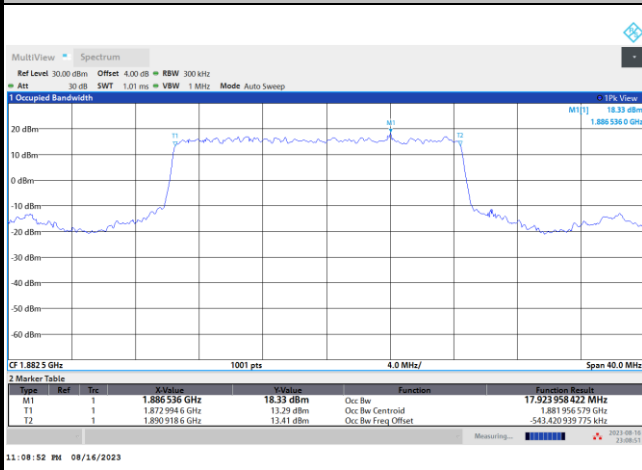


256QAM



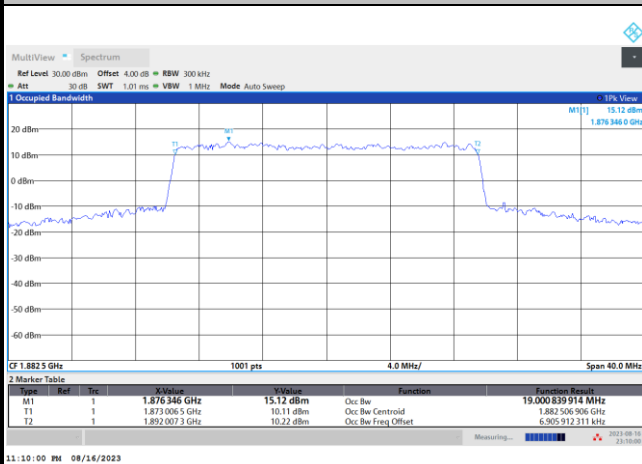
5G-FR1 SA n25 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

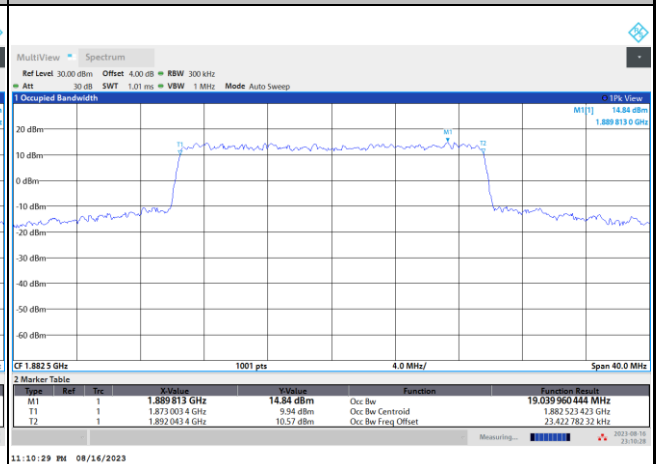


5G-FR1 SA n25 / 20MHz / CP OFDM / Middle Channel / Full RB

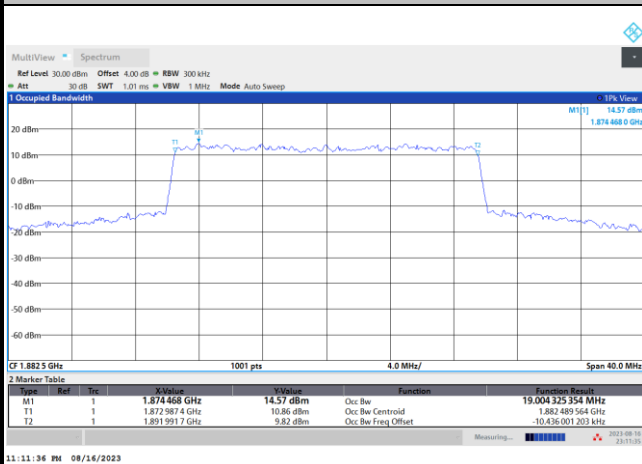
QPSK



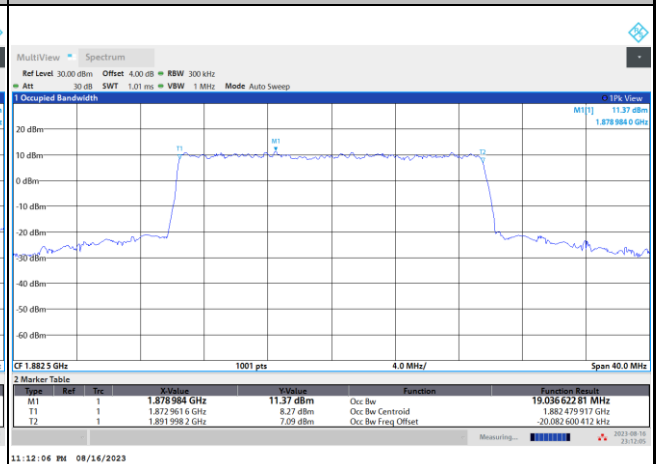
16QAM



64QAM

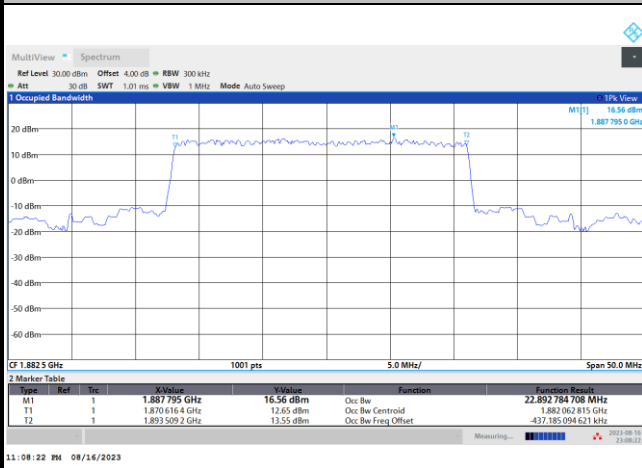


256QAM



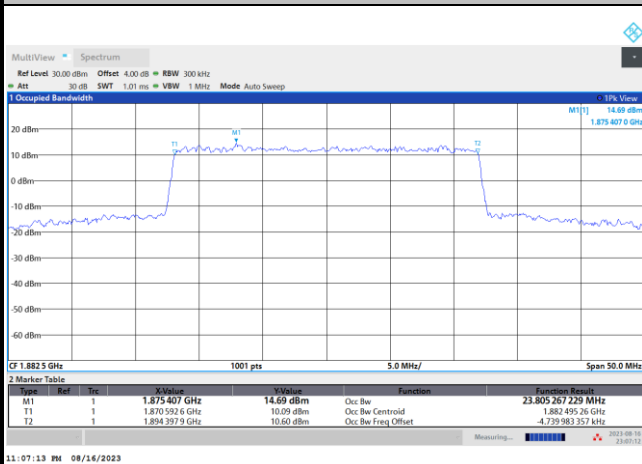
5G-FR1 SA n25 / 25MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

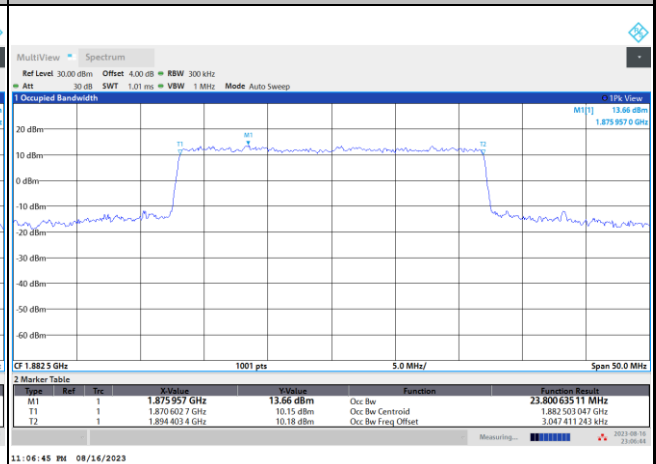


5G-FR1 SA n25 / 25MHz / CP OFDM / Middle Channel / Full RB

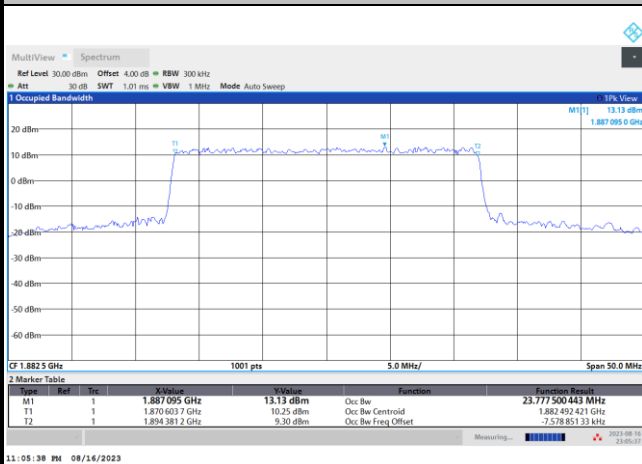
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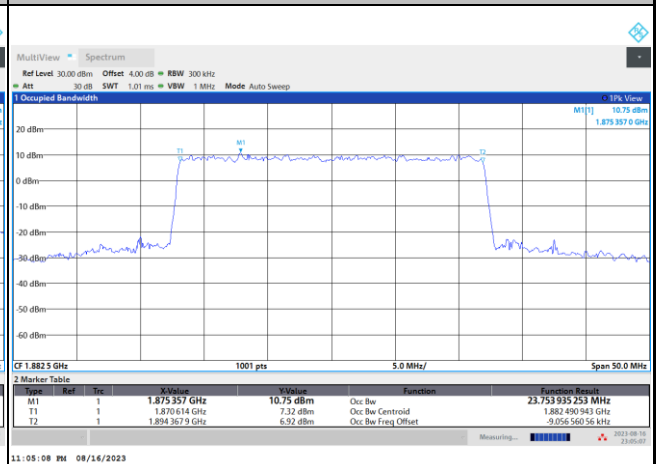
16QAM



64QAM

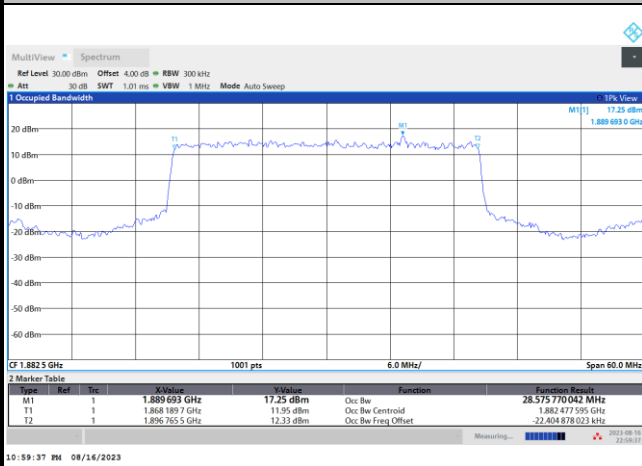


256QAM



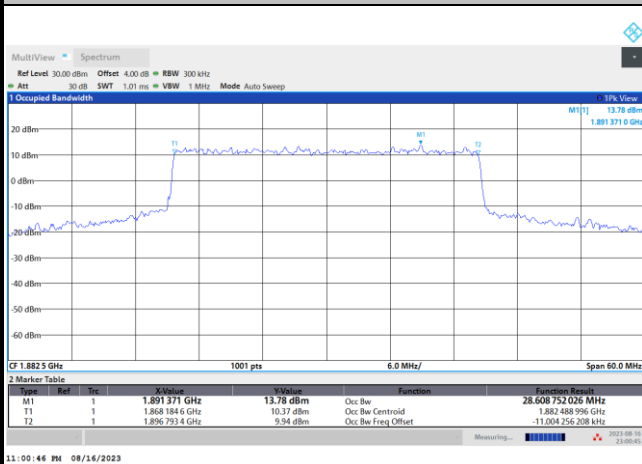
5G-FR1 SA n25 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

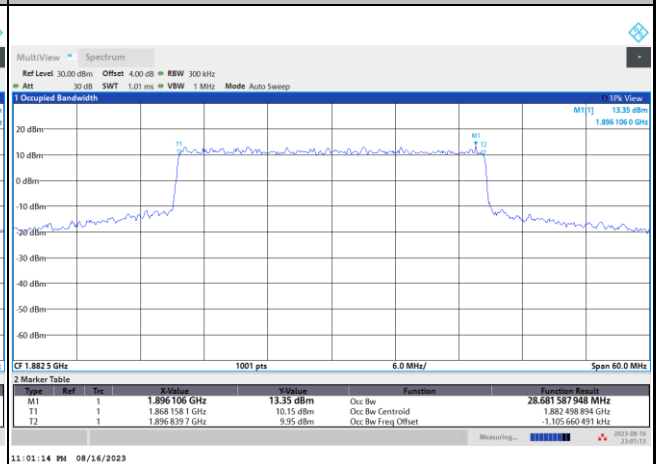


5G-FR1 SA n25 / 30MHz / CP OFDM / Middle Channel / Full RB

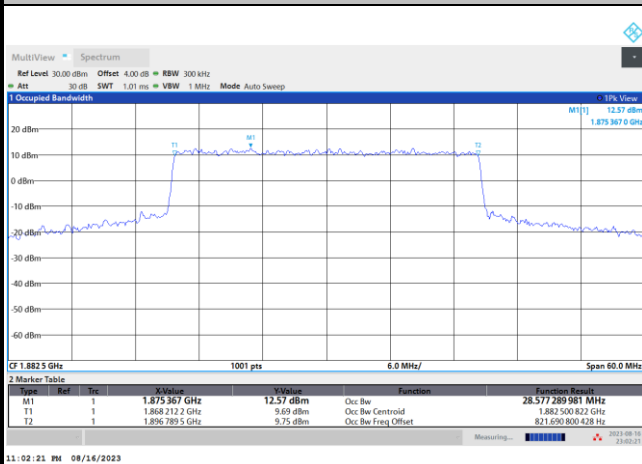
QPSK



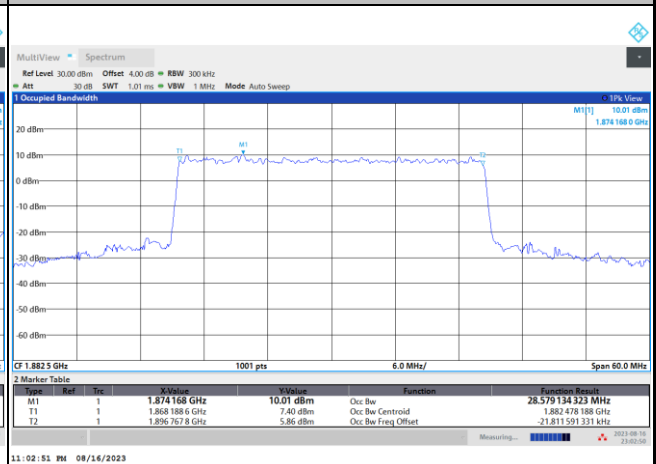
16QAM



64QAM

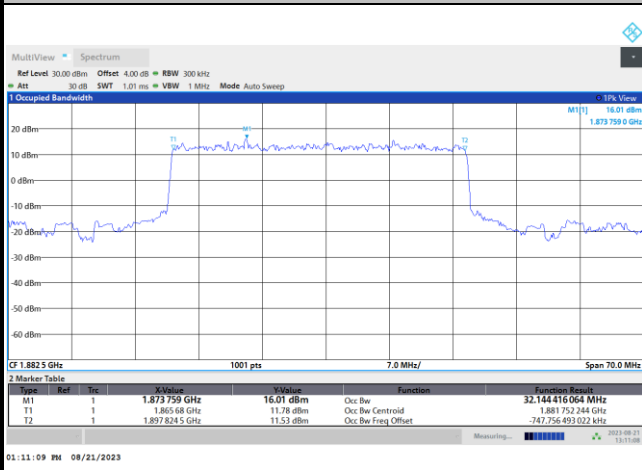


256QAM



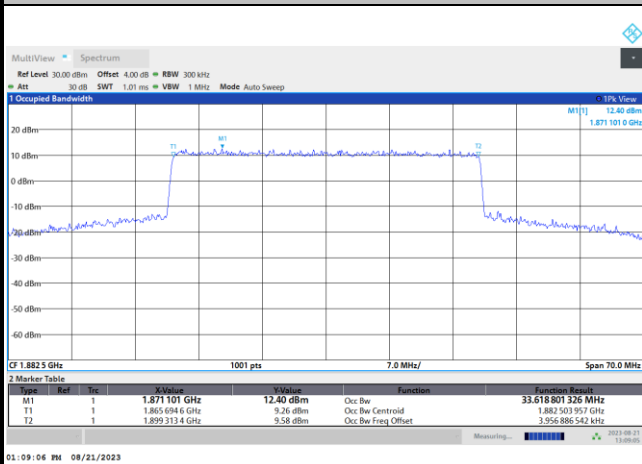
5G-FR1 SA n25 / 35MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

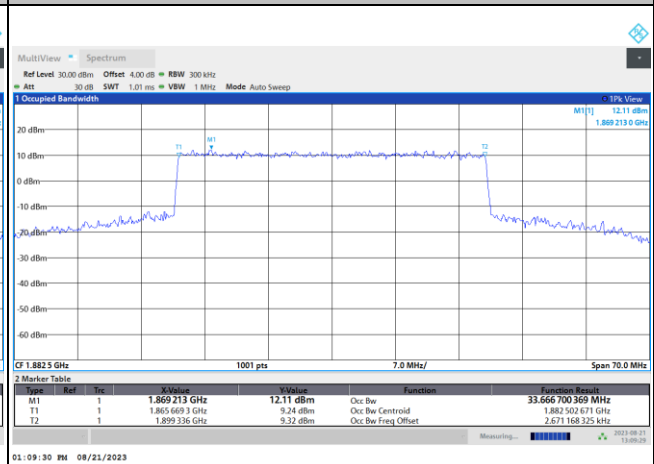


5G-FR1 SA n25 / 35MHz / CP OFDM / Middle Channel / Full RB

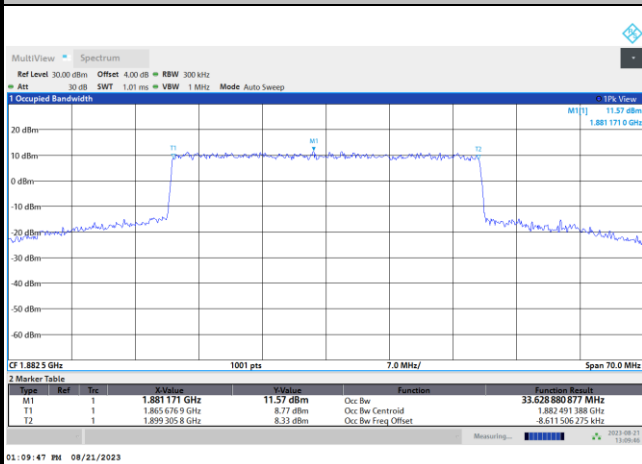
QPSK



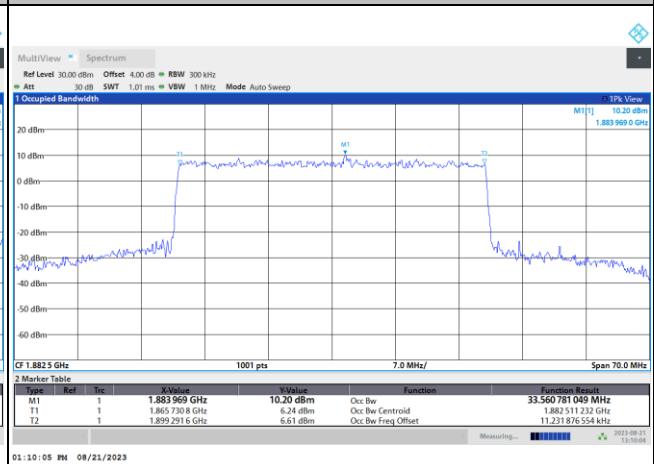
16QAM



64QAM

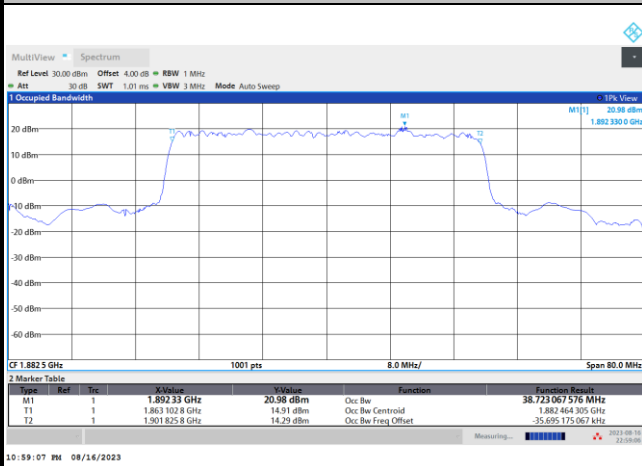


256QAM



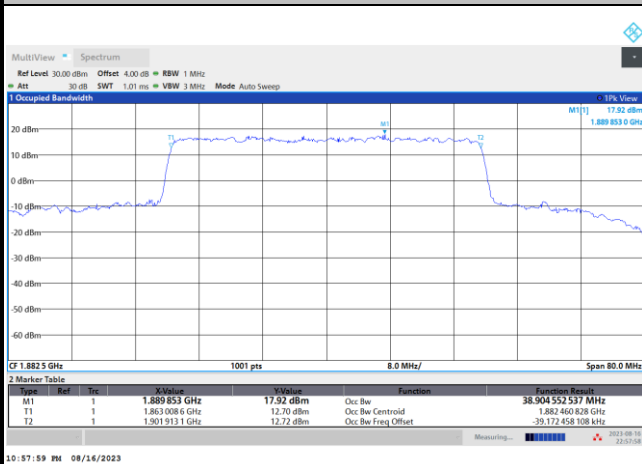
5G-FR1 SA n25 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

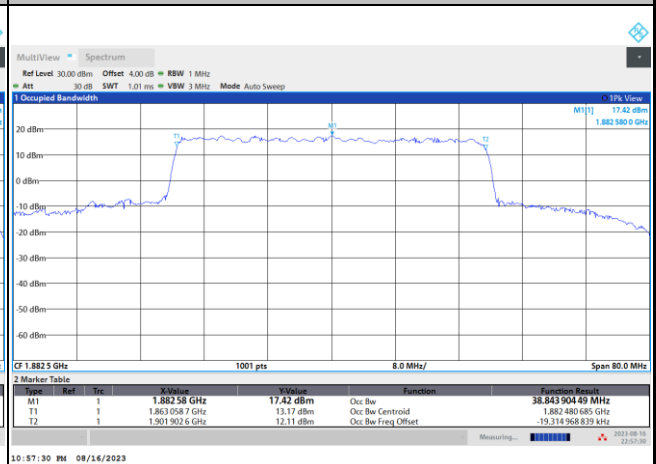


5G-FR1 SA n25 / 40MHz / CP OFDM / Middle Channel / Full RB

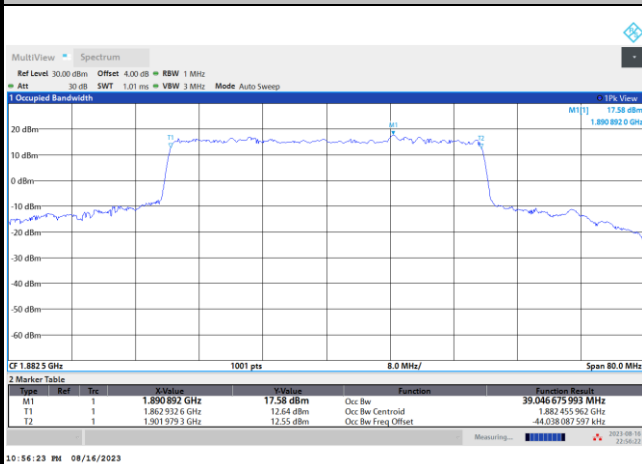
QPSK



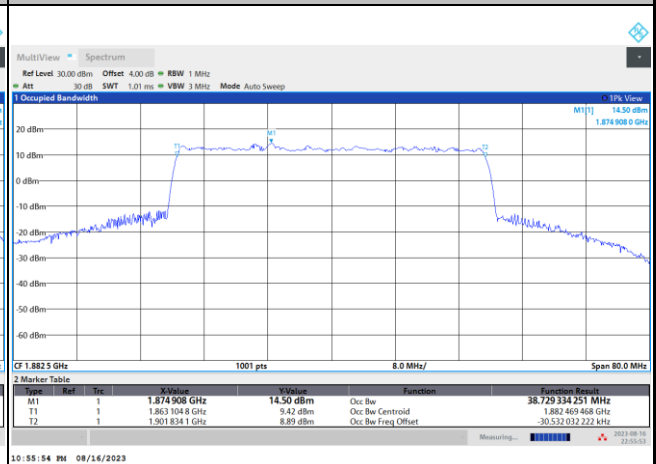
16QAM



64QAM



256QAM



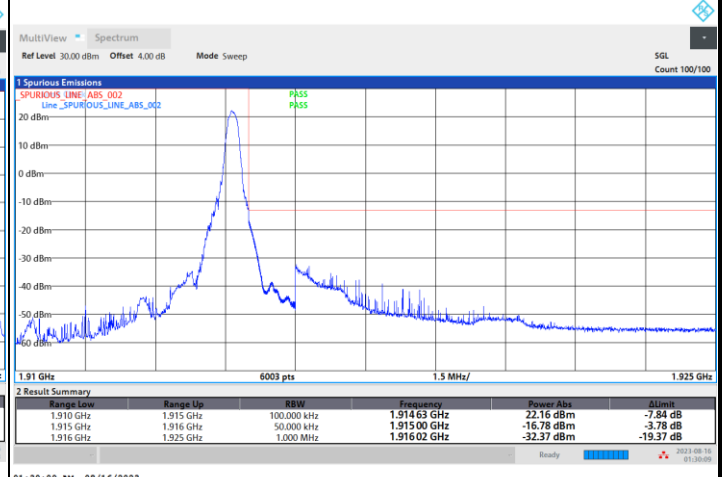
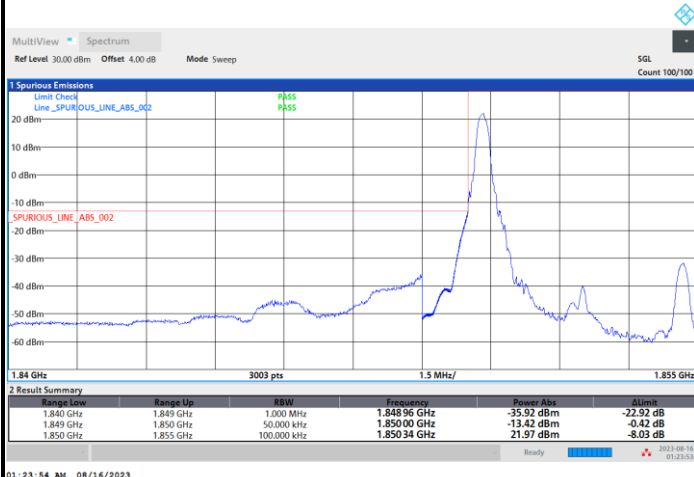


Conducted Band Edge

5G-FR1 SA n25 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

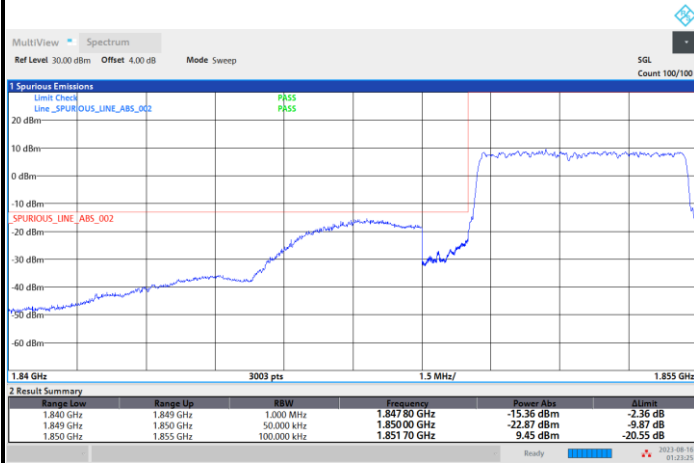
Highest Band Edge / 1RBmax



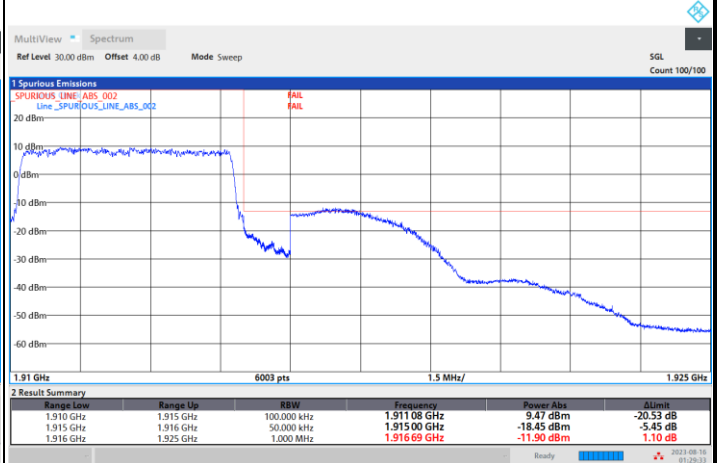


5G-FR1 SA n25 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



Adjacent to the block edge can pass the limit
(shown below is the 1916MHz block edge)

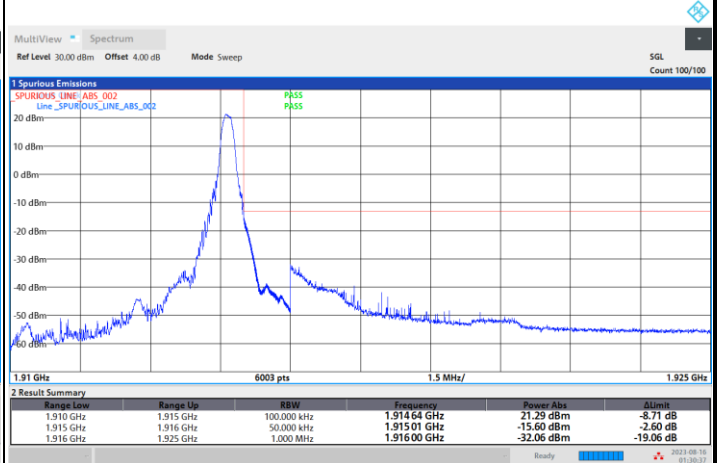
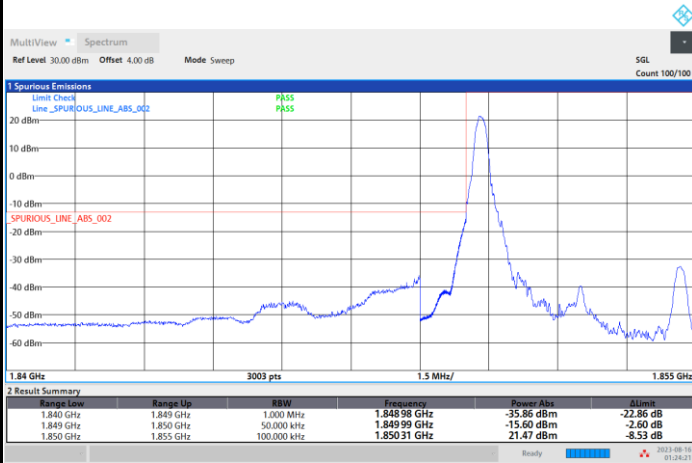




5G-FR1 SA n25 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

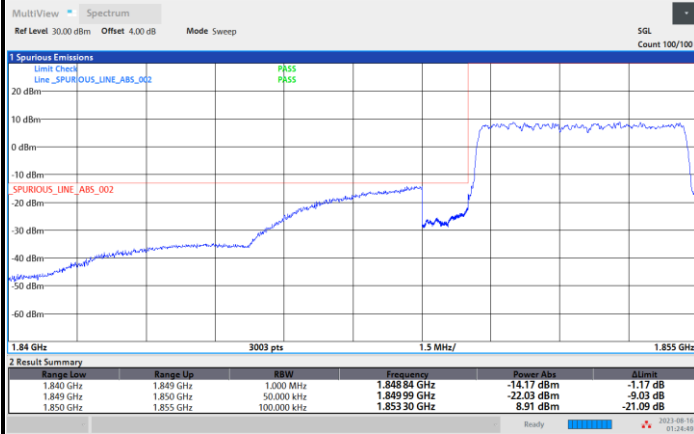
Highest Band Edge / 1RBmax



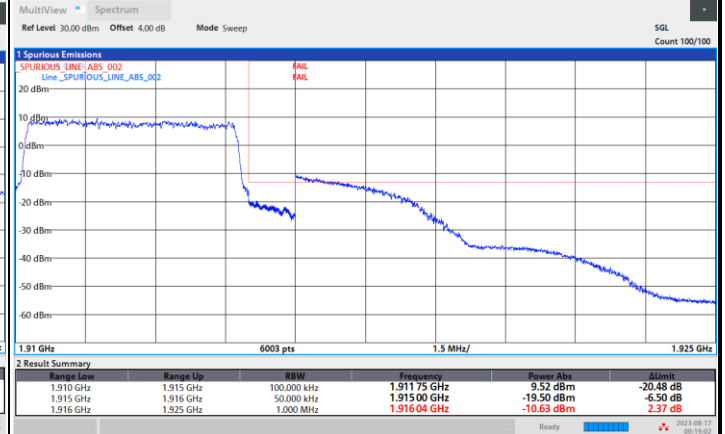


5G-FR1 SA n25 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



Adjacent to the block edge can pass the limit
(shown below is the 1916MHz block edge)

