

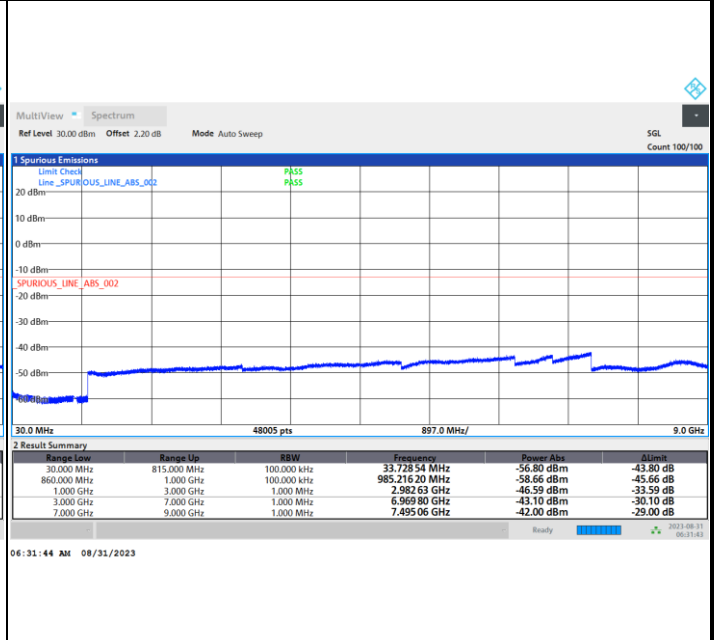
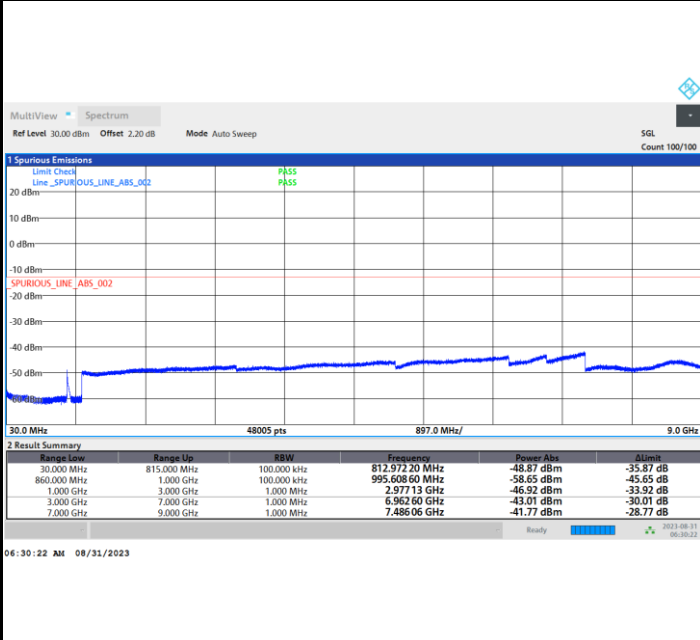


Conducted Spurious Emission

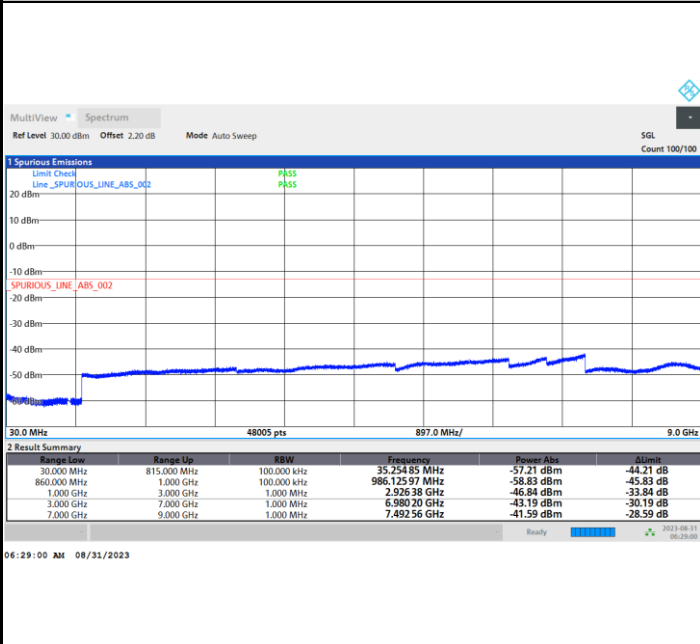
FR1 n26 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel

Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n26 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0128	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0048	
0	Normal Voltage	0.0111	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0111	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0036	

Note: Normal Voltage = 3.87 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.48 V.



FR1 n26_Part90S

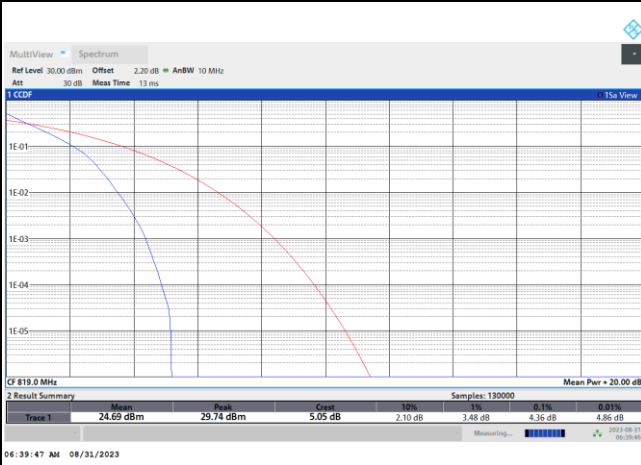
Peak-to-Average Ratio

Mode	FR1 n26 / 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	4.36	5.36	6.18	6.10	PASS
Mode	FR1 n26 / 10MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.76				PASS

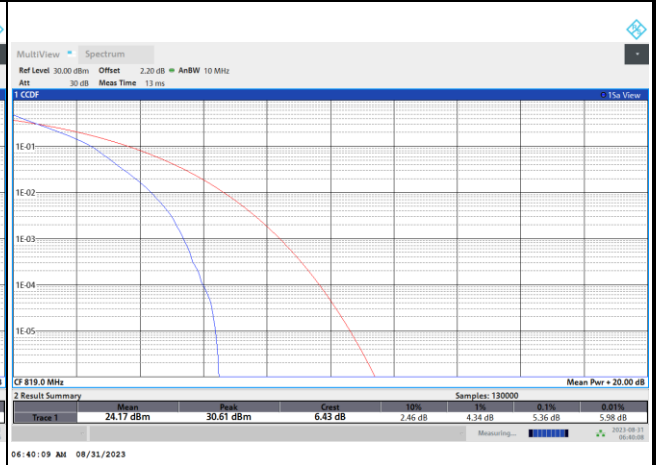


FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

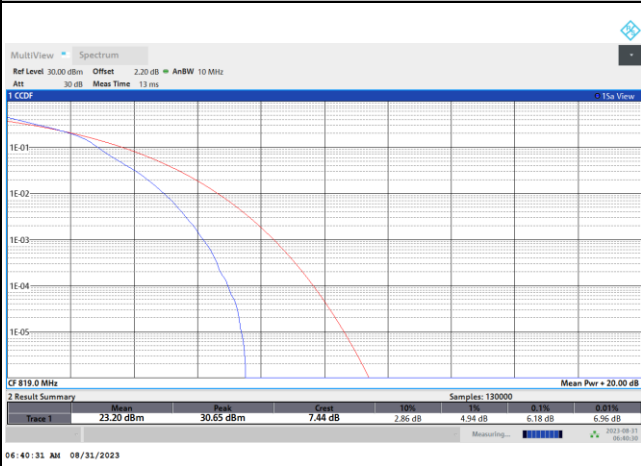
PI/2 BPSK



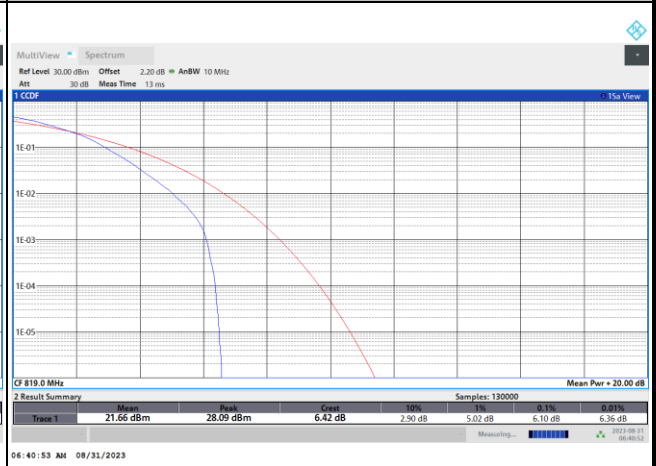
QPSK



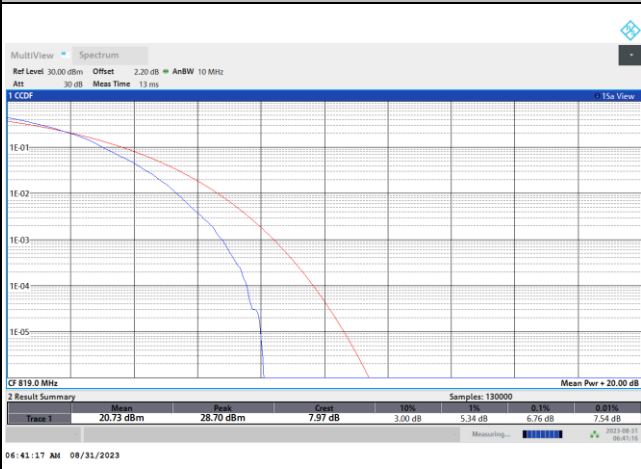
16QAM



64QAM



256QAM





26dB Bandwidth

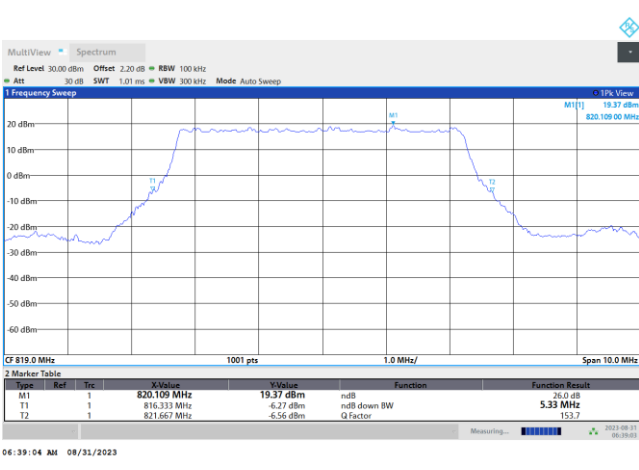
Mode	FR1 n26 : 26dB BW(MHz) / DFT-S OFDM						
BW	5MHz		10MHz				
Mod.	PI/2 BPSK		PI/2 BPSK				
Middle CH	5.33		9.71				

Mode	FR1 n26 : 26dB BW(MHz) / CP OFDM						
BW	5MHz		10MHz				
Mod.	QPSK	16QAM	QPSK	16QAM			
Middle CH	5.34	5.32	10.17	10.43			
Mod.	64QAM	256QAM	64QAM	256QAM			
Middle CH	5.41	5.39	10.21	10.19			



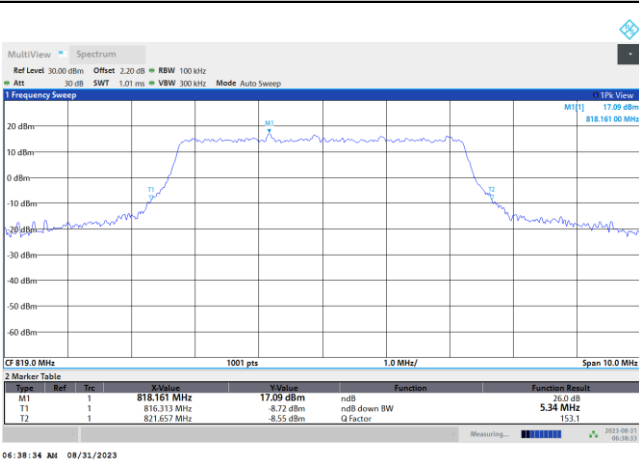
FR1 n26 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

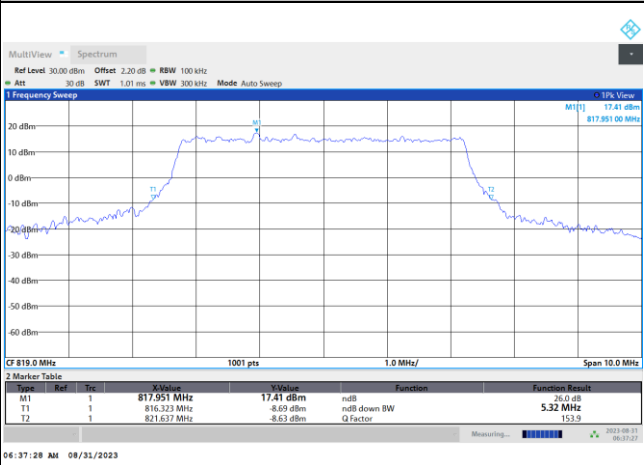


FR1 n26 / 5MHz / CP OFDM / Middle Channel / Full RB

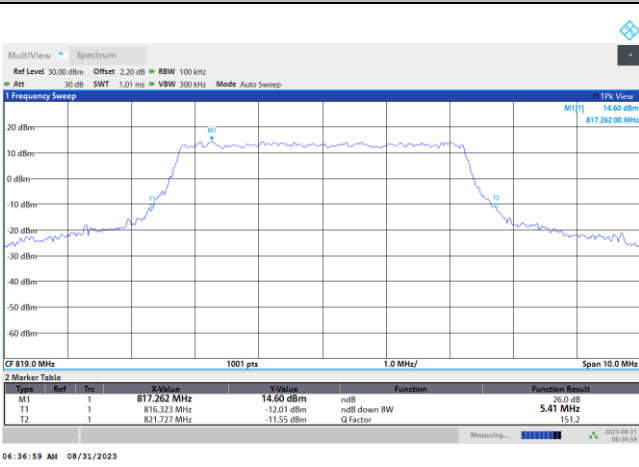
QPSK



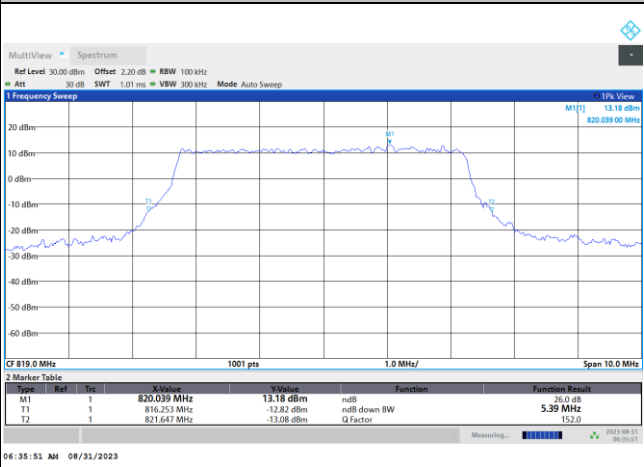
16QAM



64QAM



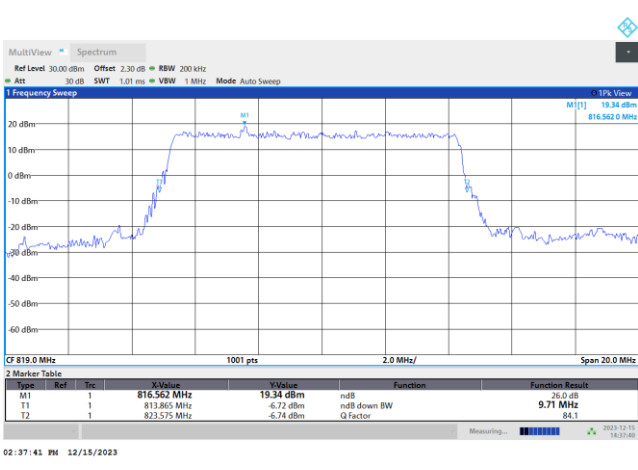
256QAM





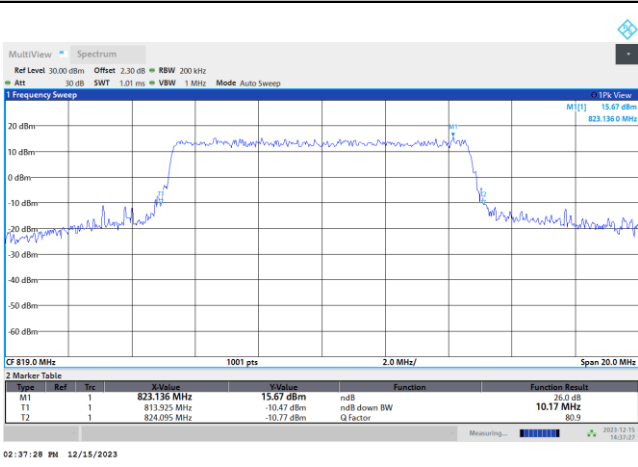
FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

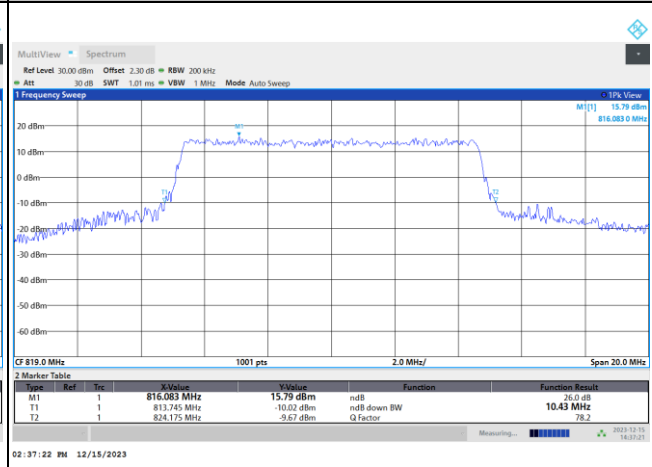


FR1 n26 / 10MHz / CP OFDM / Middle Channel / Full RB

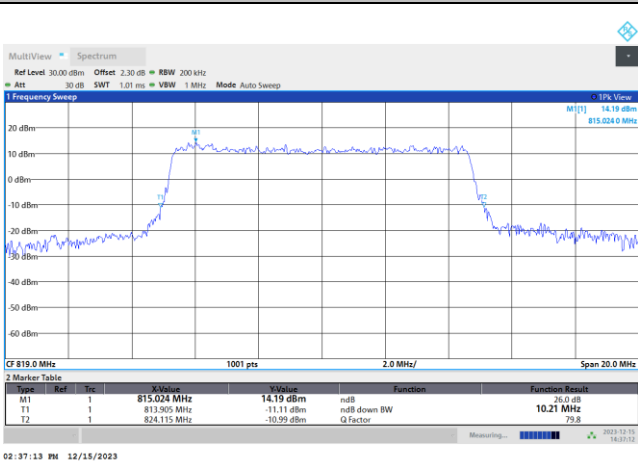
QPSK



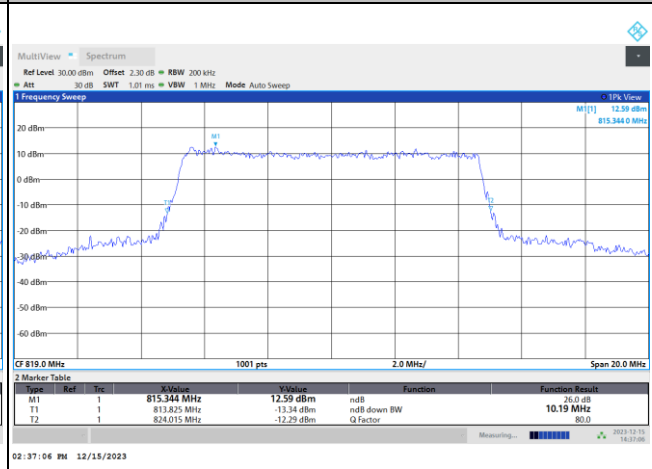
16QAM



64QAM



256QAM





Occupied Bandwidth

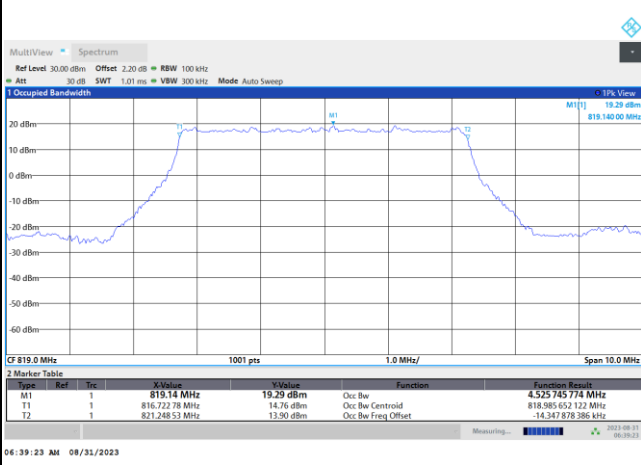
Mode	FR1 n26 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.52		8.94					

Mode	FR1 n26 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.52	4.52	9.32	9.32				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.53	4.53	9.32	9.33				



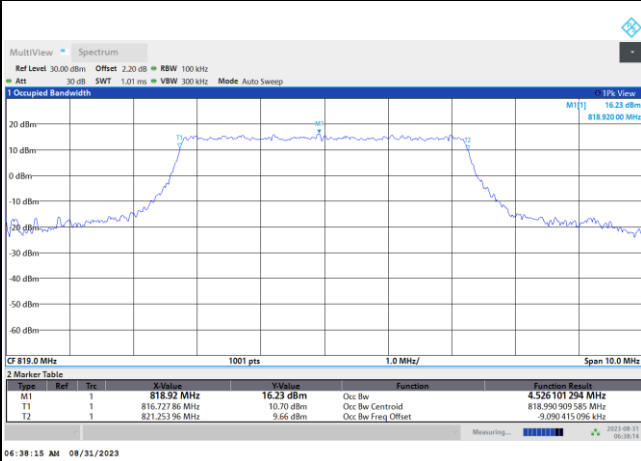
FR1 n26 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

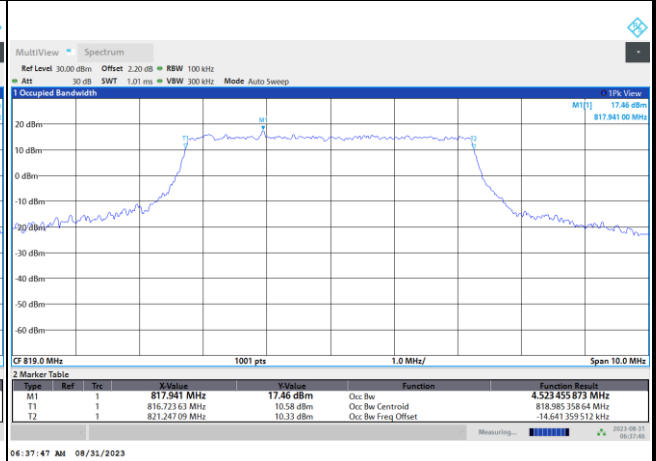


FR1 n26 / 5MHz / CP OFDM / Middle Channel / Full RB

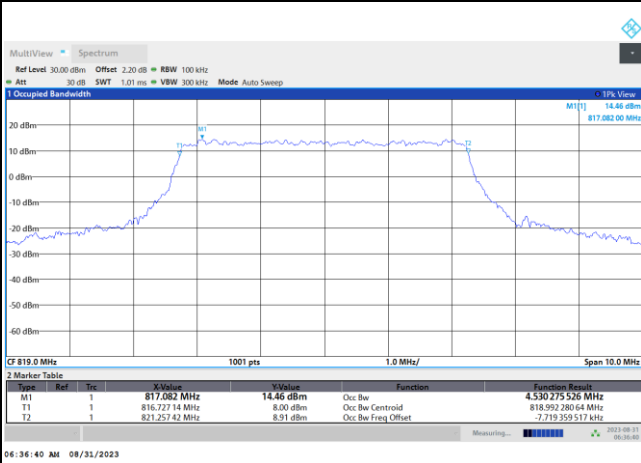
QPSK



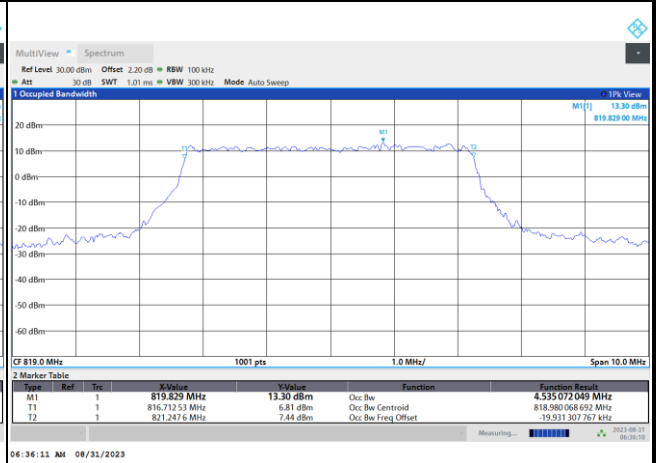
16QAM



64QAM



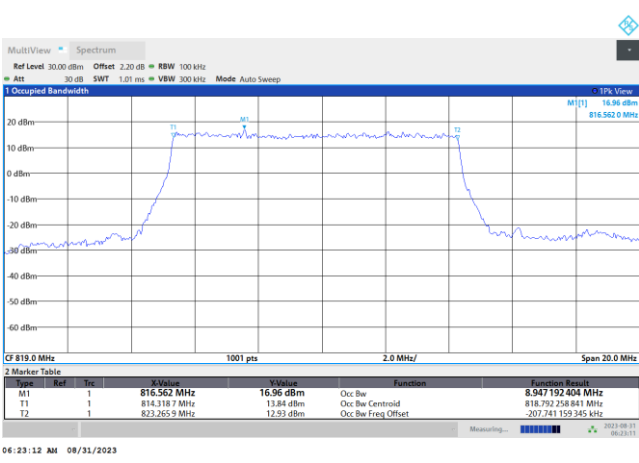
256QAM





FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

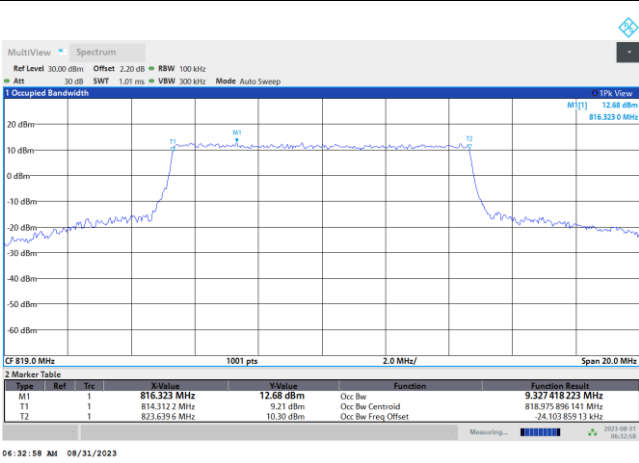
PI/2 BPSK



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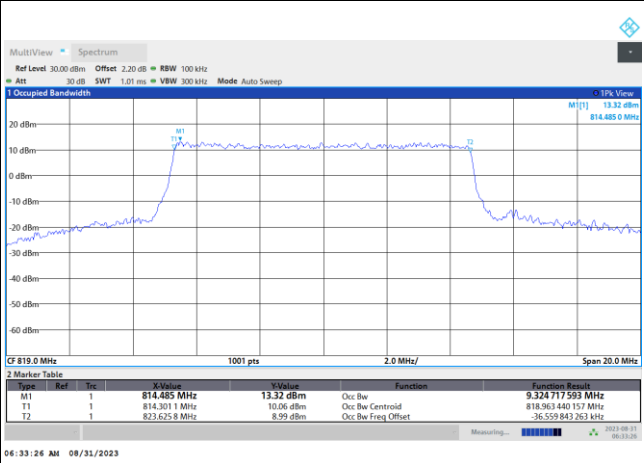
FR1 n26 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



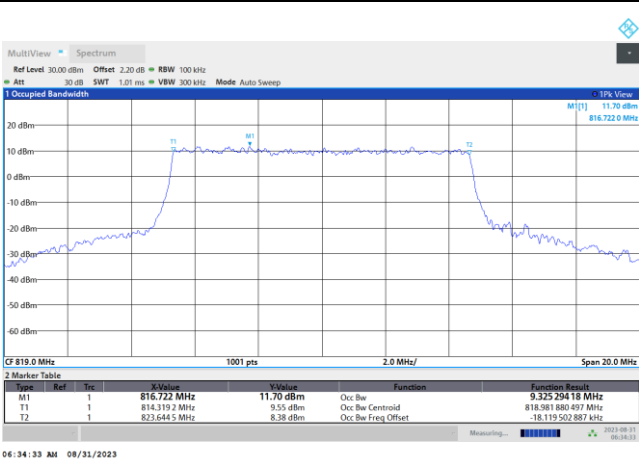
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16QAM



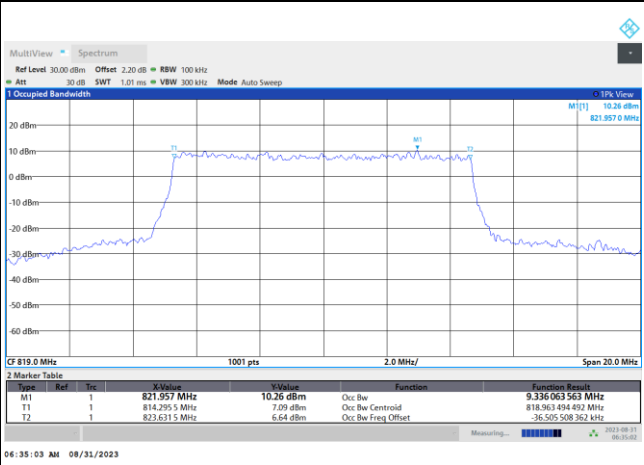
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64QAM



06:34:33 AM 08/31/2023

256QAM



06:35:03 AM 08/31/2023

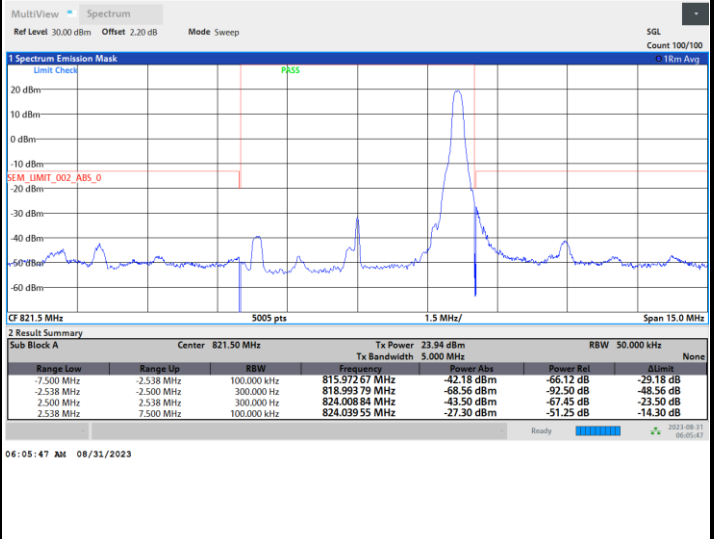
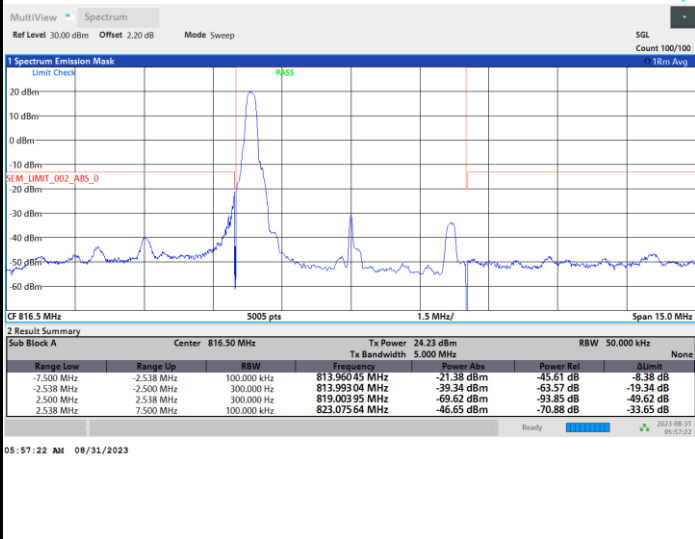


Emission masks – In-band emissions

FR1 n26 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest MASK / 1RB0

Highest MASK / 1RBmax



Lowest MASK / Full RB

Highest MASK / Full RB

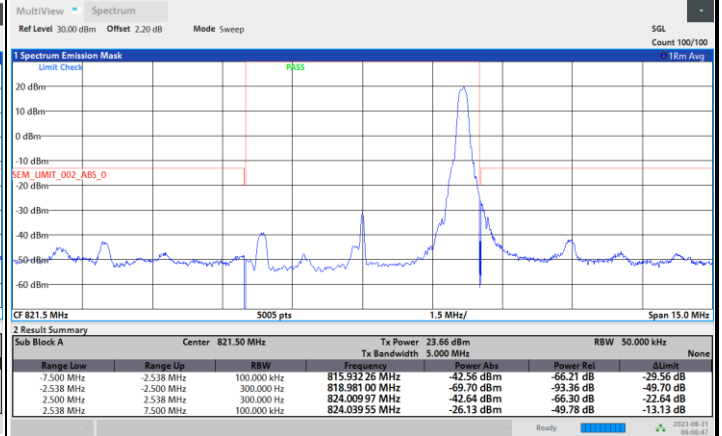
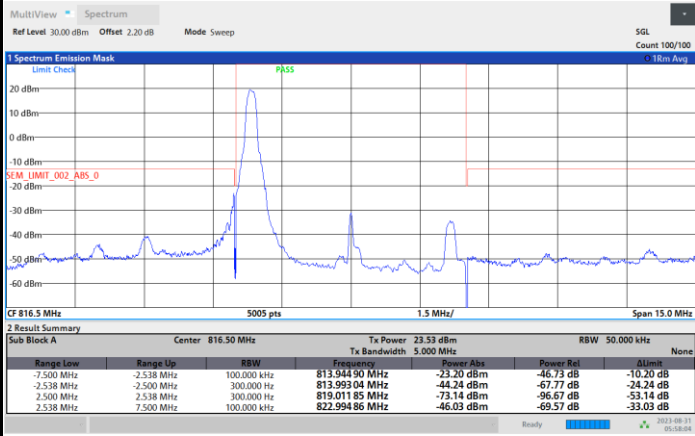




FR1 n26 / 5MHz / DFT-S OFDM / QPSK

Lowest MASK / 1RB0

Highest MASK / 1RBmax

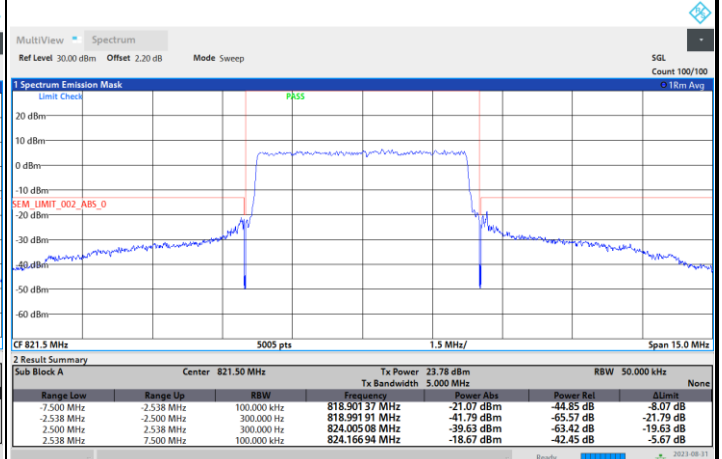
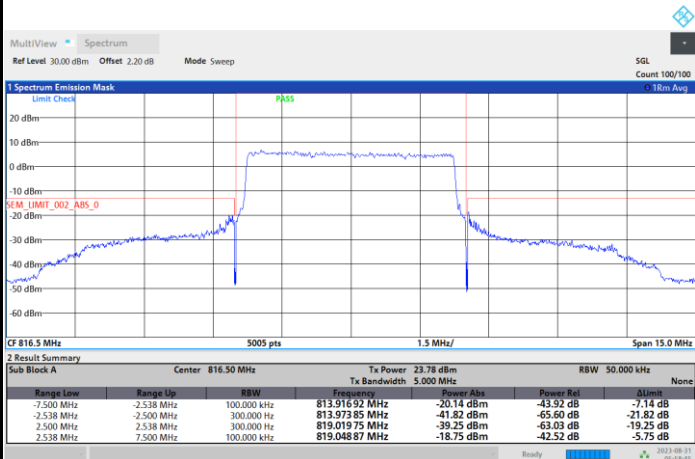


05:58:04 AM 08/31/2023

06:06:48 AM 08/31/2023

Lowest MASK / Full RB

Highest MASK / Full RB



05:58:45 AM 08/31/2023

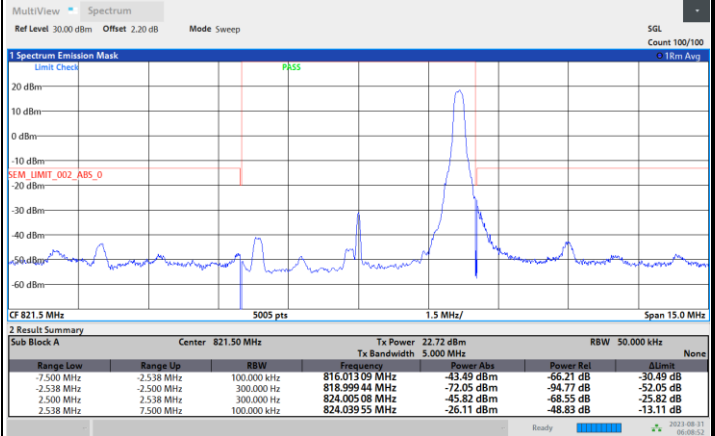
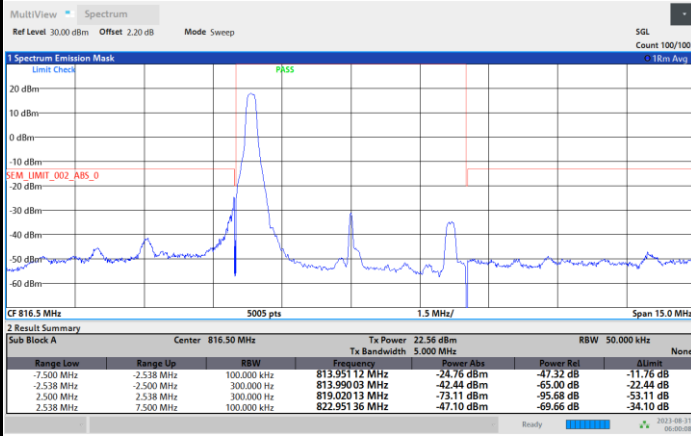
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FR1 n26 / 5MHz / DFT-S OFDM / 16QAM

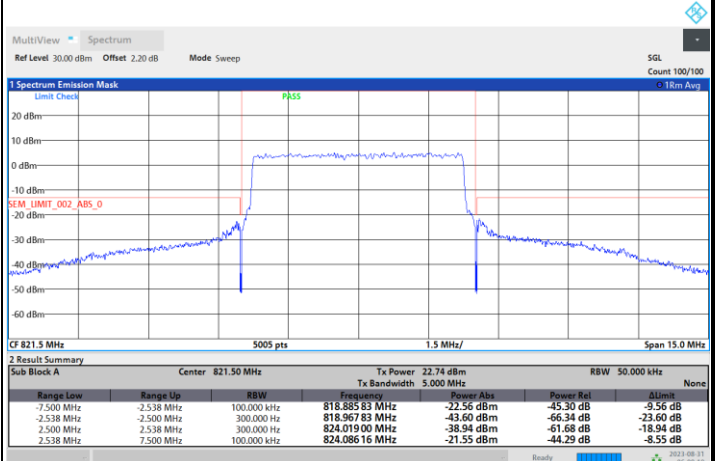
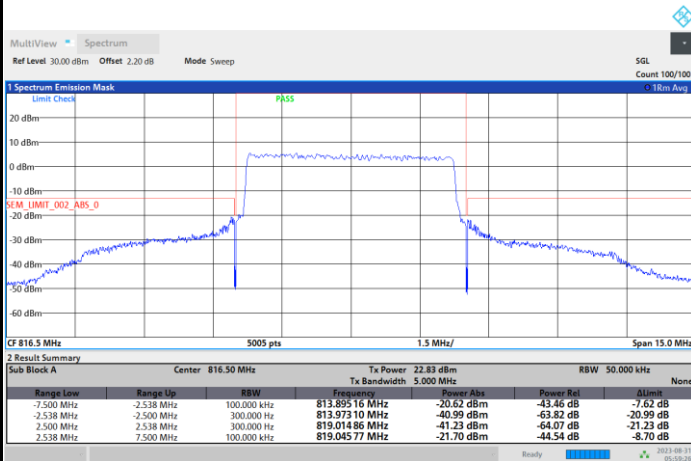
Lowest MASK / 1RB0

Highest MASK / 1RBmax



Lowest MASK / Full RB

Highest MASK / Full RB

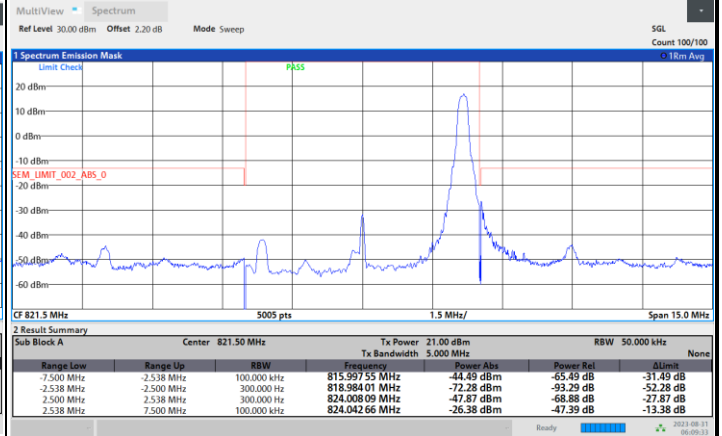
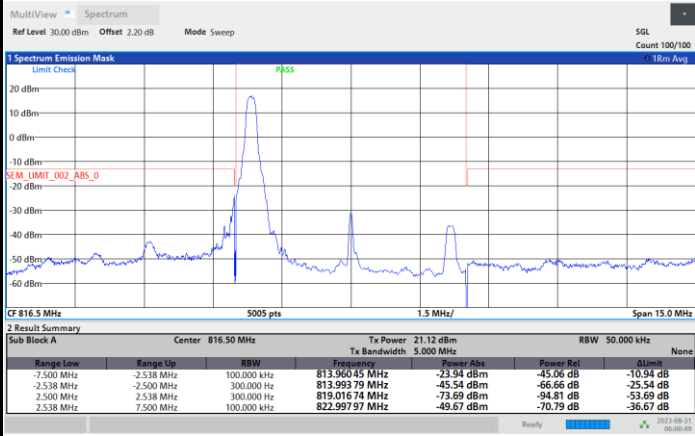




FR1 n26 / 5MHz / DFT-S OFDM / 64QAM

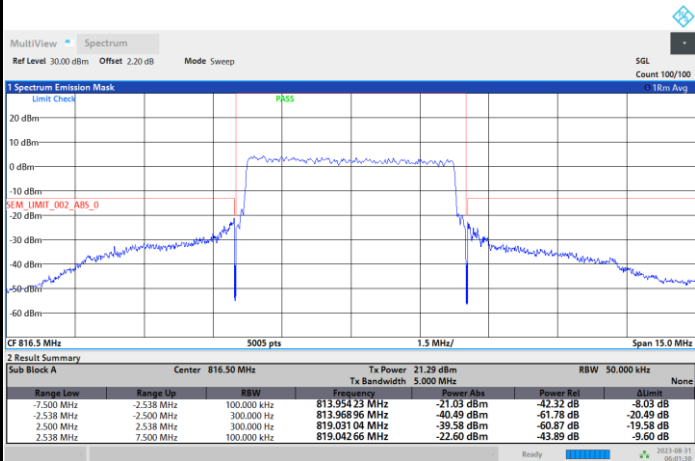
Lowest MASK / 1RB0

Highest MASK / 1RBmax



Lowest MASK / Full RB

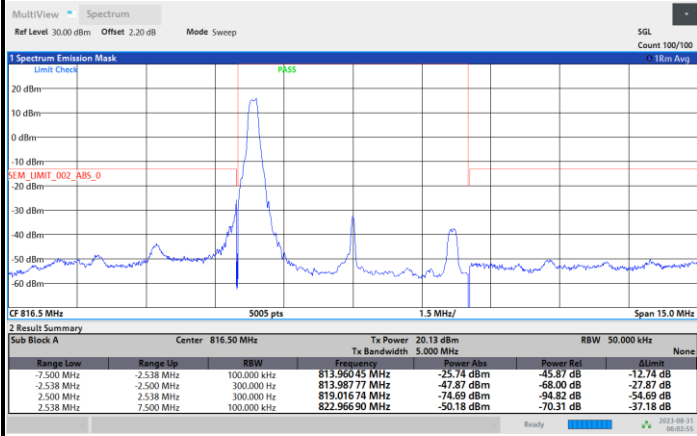
Highest MASK / Full RB





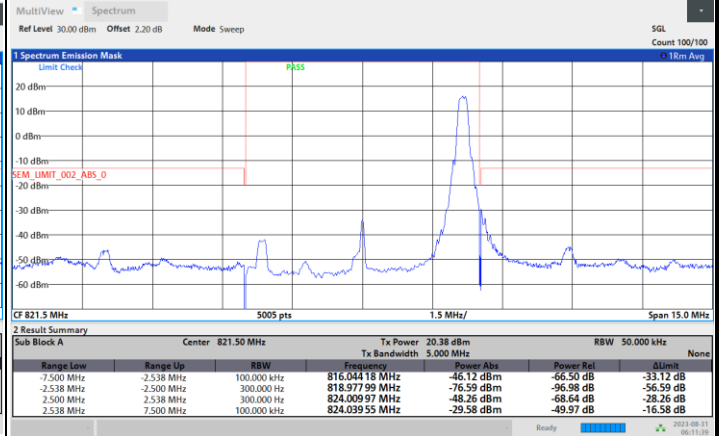
FR1 n26 / 5MHz / DFT-S OFDM / 256QAM

Lowest MASK / 1RB0



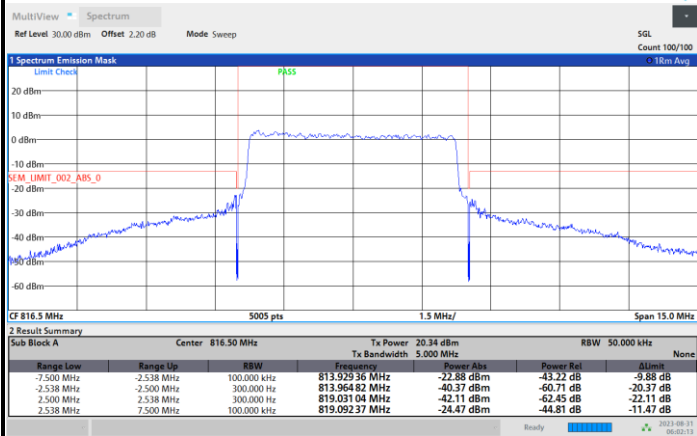
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Highest MASK / 1RBmax



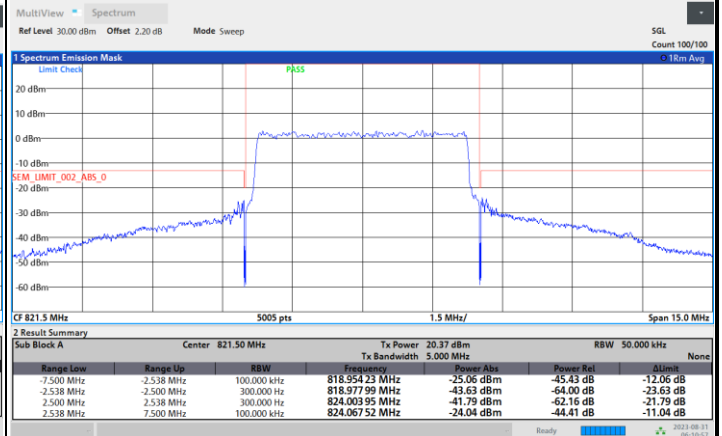
06:11:40 AM 08/31/2023

Lowest MASK / Full RB

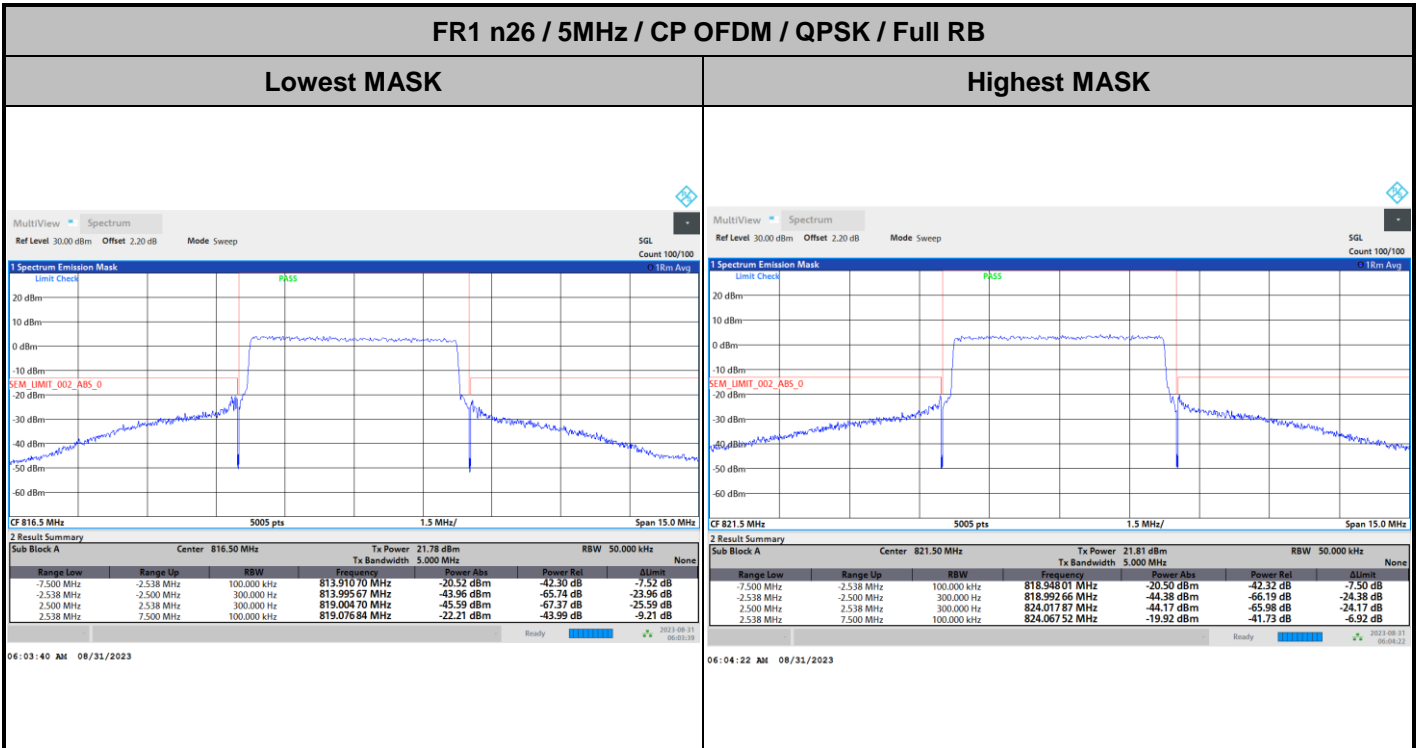


06:02:14 AM 08/31/2023

Highest MASK / Full RB



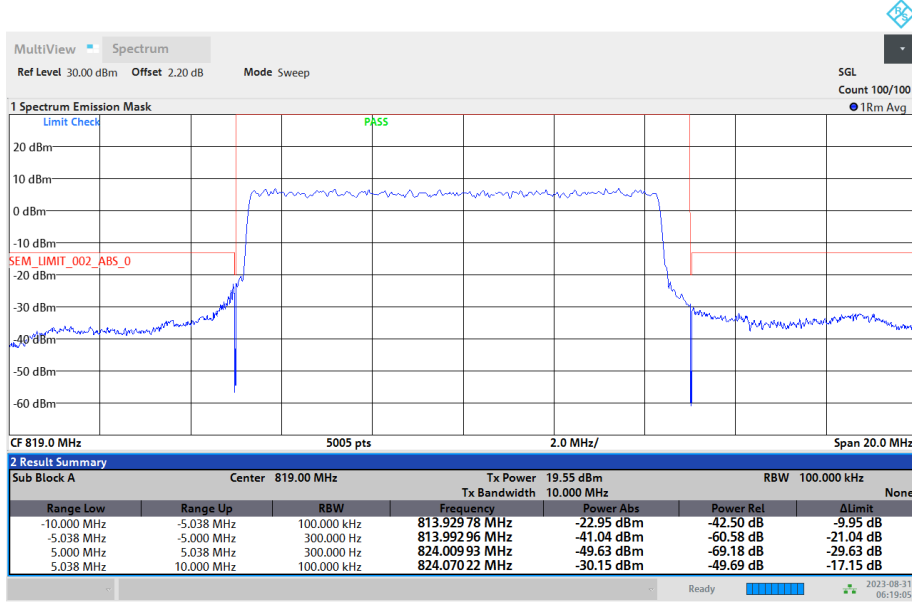
06:10:58 AM 08/31/2023





FR1 n26 / 10MHz / DFT-s-OFDM / PI/2 BPSK

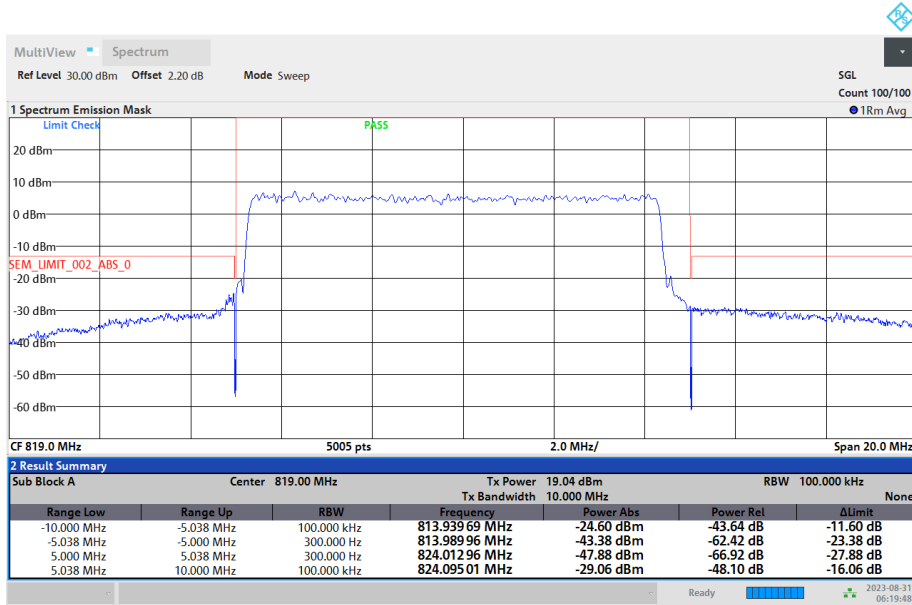
Middle MASK / Full RB



06:19:06 AM 08/31/2023

FR1 n26 / 10MHz / DFT-s-OFDM / QPSK

Lowest MASK / Full RB

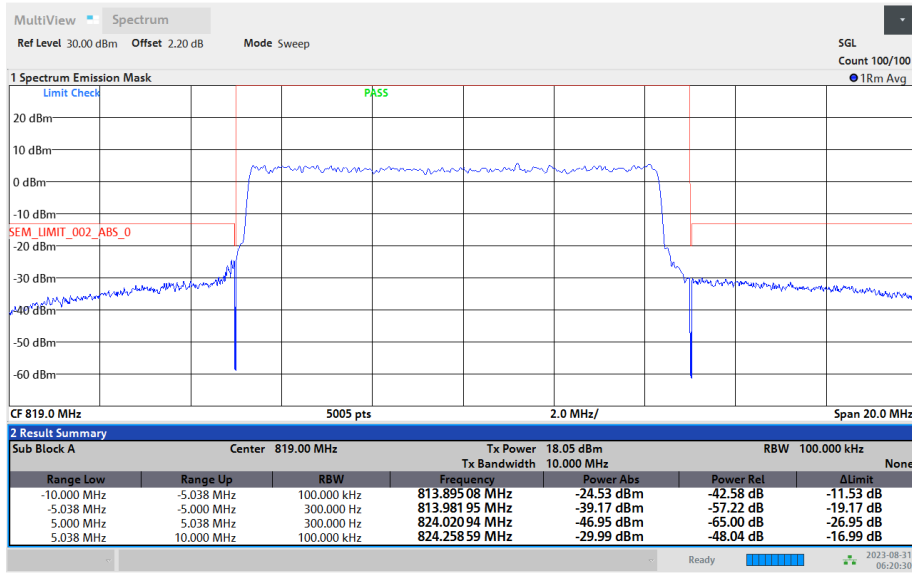


06:19:49 AM 08/31/2023



FR1 n26 / 10MHz / DFT-s-OFDM / 16QAM

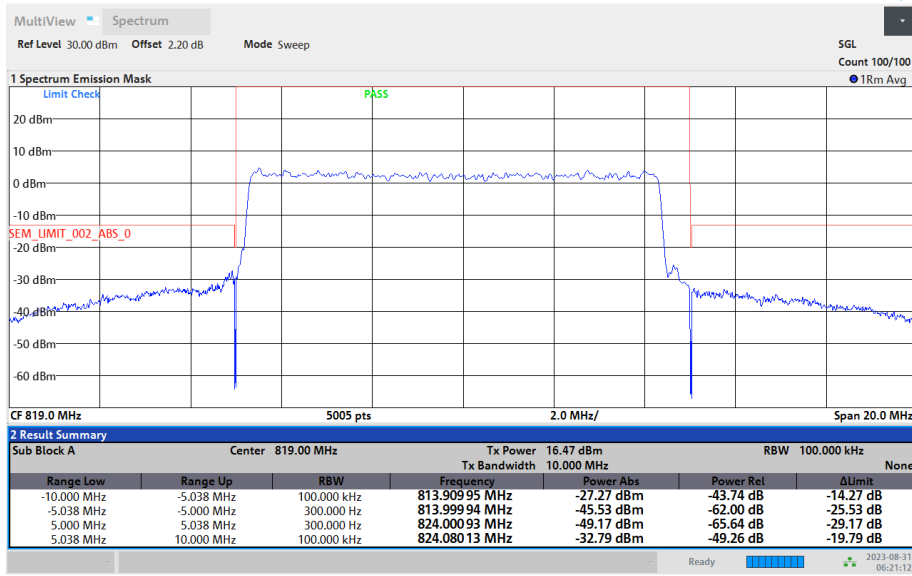
Middle MASK / Full RB



06:20:31 AM 08/31/2023

FR1 n26 / 10MHz / DFT-s-OFDM / 64QAM

Middle MASK / Full RB

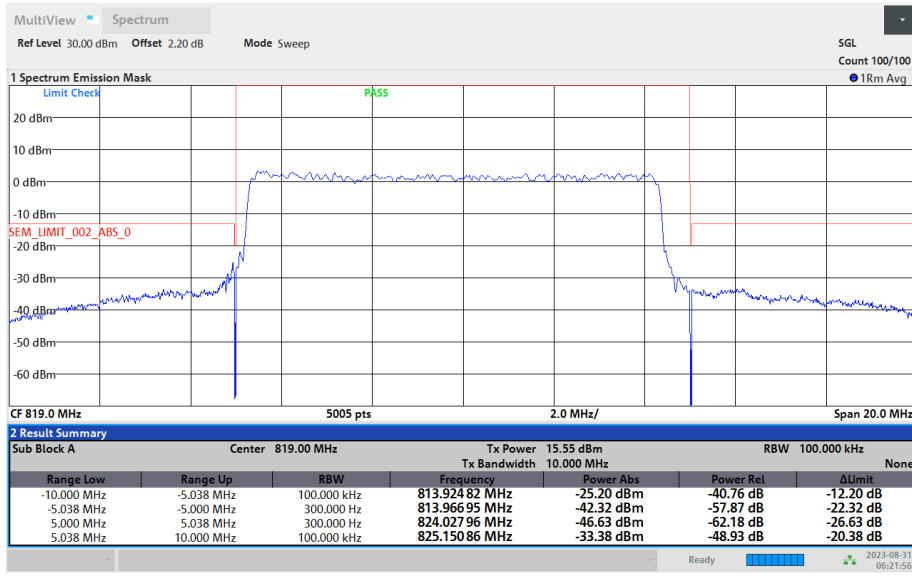


06:21:13 AM 08/31/2023



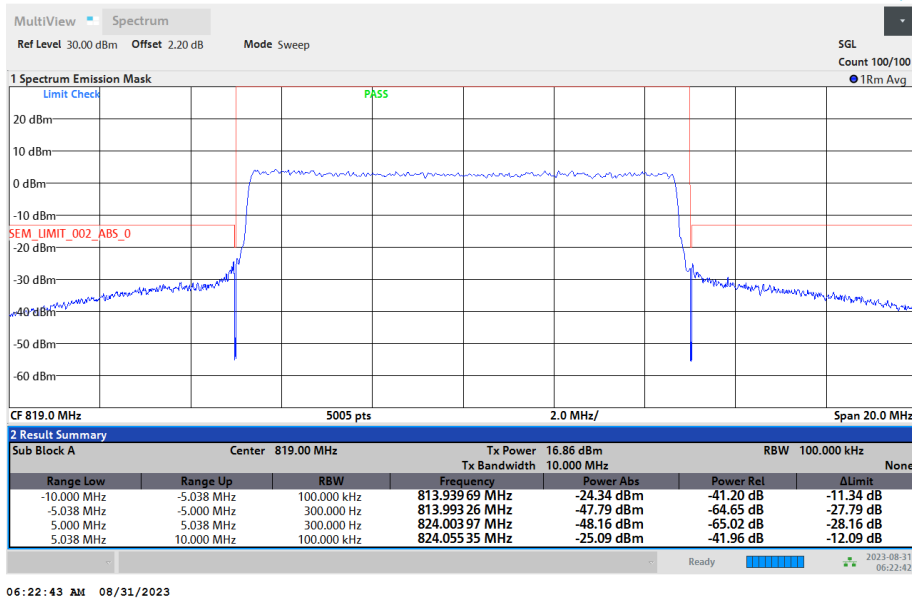
FR1 n26 / 10MHz / DFT-s-OFDM / 256QAM

Middle MASK / Full RB



FR1 n26 / 10MHz / CP OFDM / QPSK / Full RB

Middle MASK

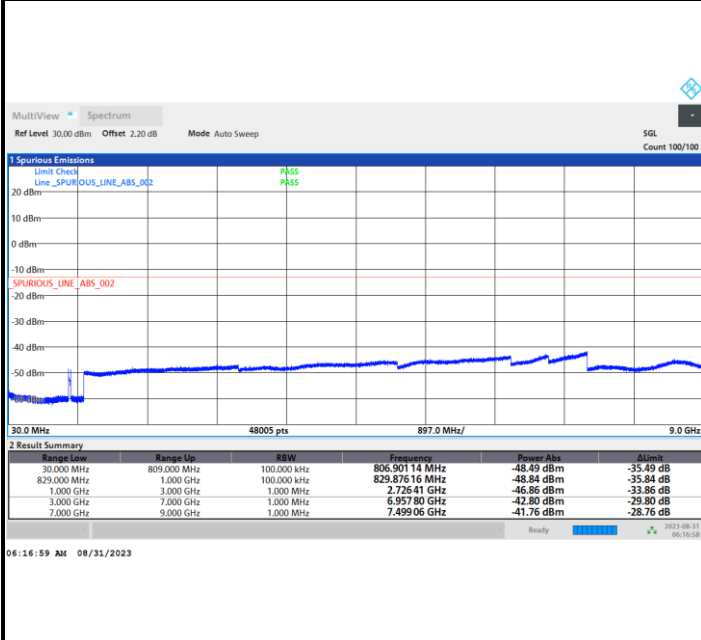




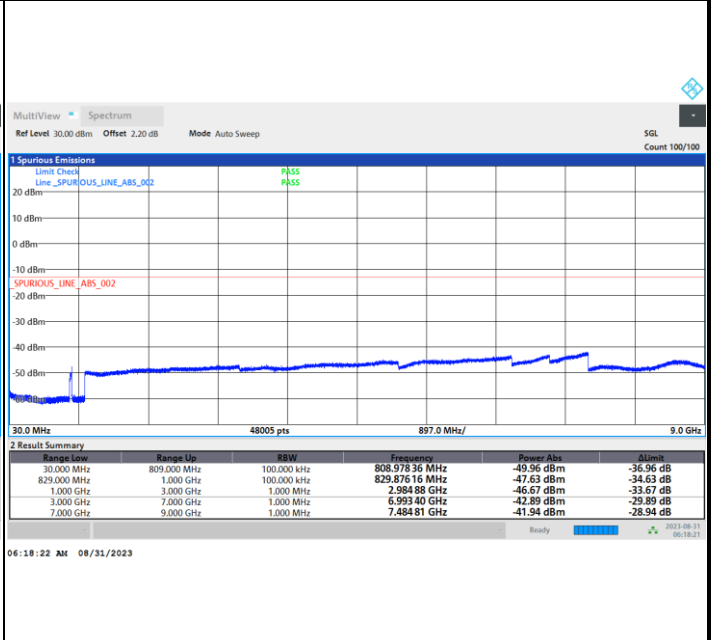
Emission masks – Out of band emissions

FR1 n26 / 5MHz / DFT-S OFDM / QPSK / 1RB1

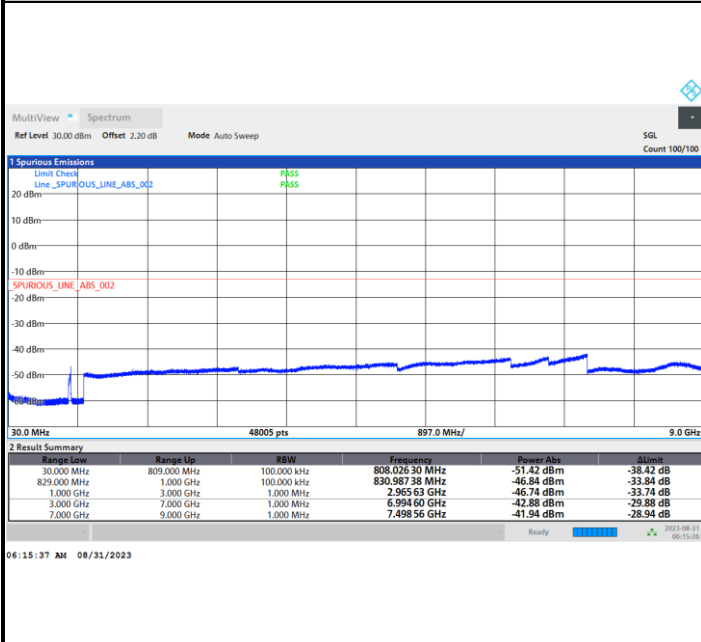
Lowest Channel



Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n26 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0073	PASS
40	Normal Voltage	0.0081	
30	Normal Voltage	0.0043	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0037	
0	Normal Voltage	0.0062	
-10	Normal Voltage	0.0164	
-20	Normal Voltage	0.0085	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0073	

Note: Normal Voltage = 3.87 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.48 V.



FR1 n26_Part90s Straddle Channel

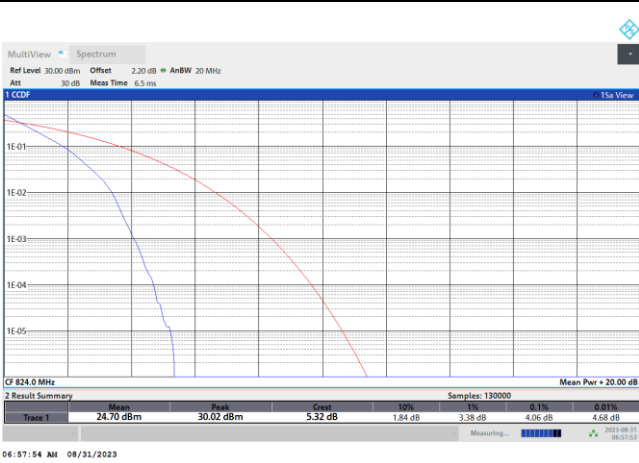
Peak-to-Average Ratio

Mode	FR1 n26 / 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	4.06	5.24	6.02	5.88	PASS
Mode	FR1 n26 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.64				PASS

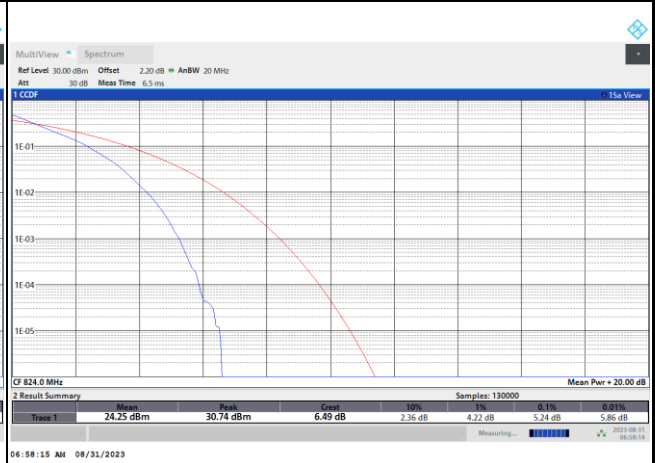


FR1 n26 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

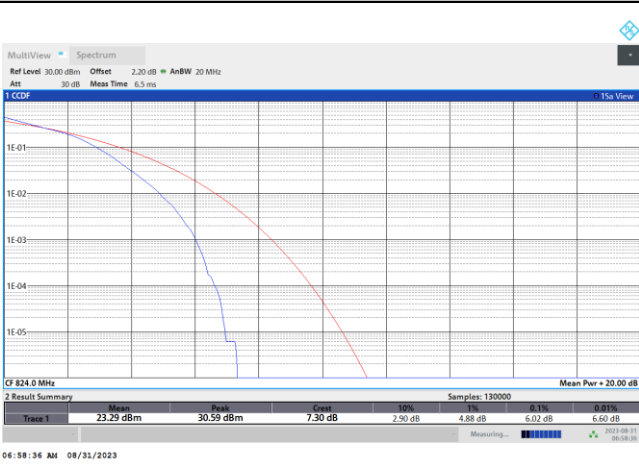
PI/2 BPSK



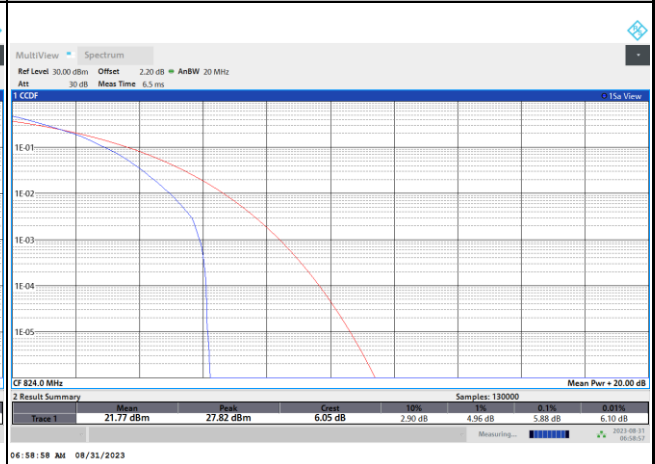
QPSK



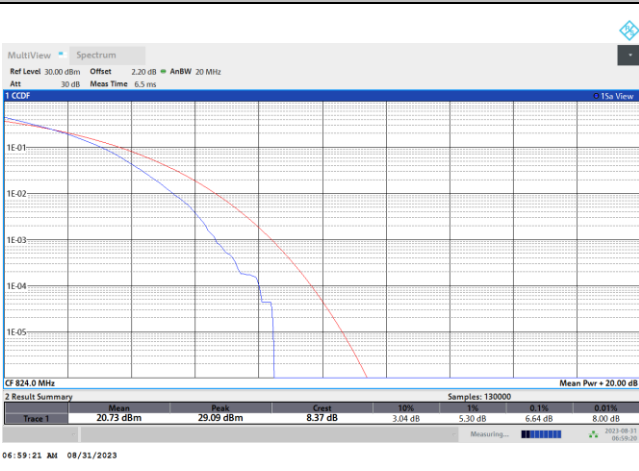
16QAM



64QAM



256QAM





26dB Bandwidth

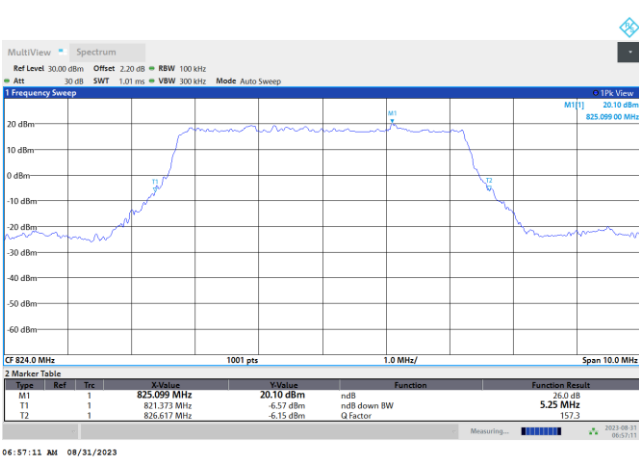
Mode	FR1 n26 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	5.25		9.83		14.56		19.18	

Mode	FR1 n26 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.46	5.43	10.29	10.15	15.40	15.40	20.94	20.90
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	5.34	5.22	10.29	10.11	15.38	15.29	20.74	21.10



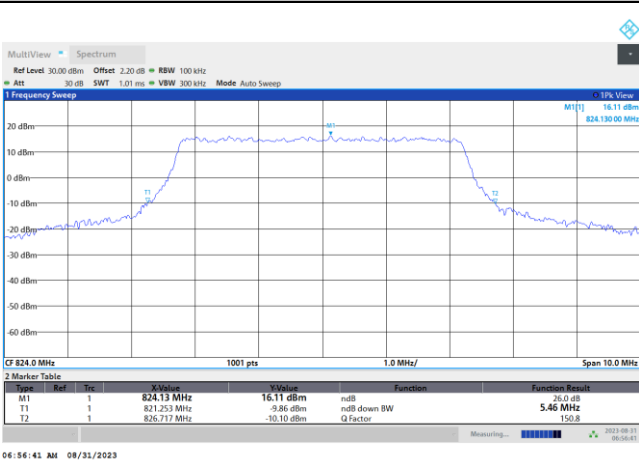
FR1 n26 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

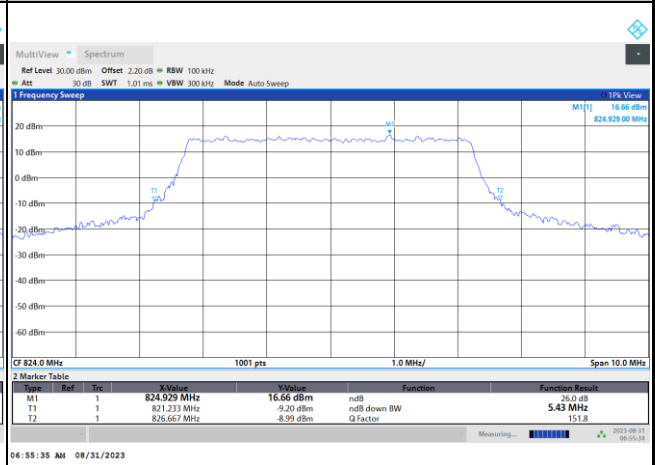


FR1 n26 / 5MHz / CP OFDM / Middle Channel / Full RB

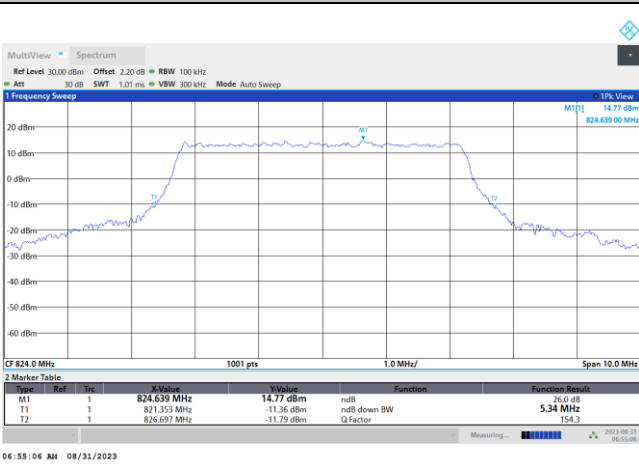
QPSK



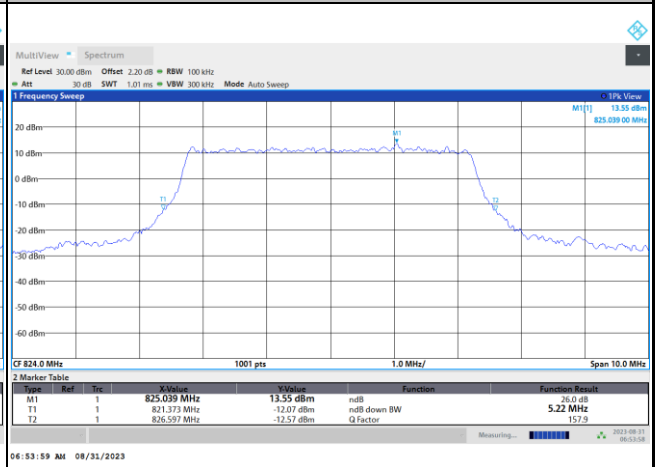
16QAM



64QAM



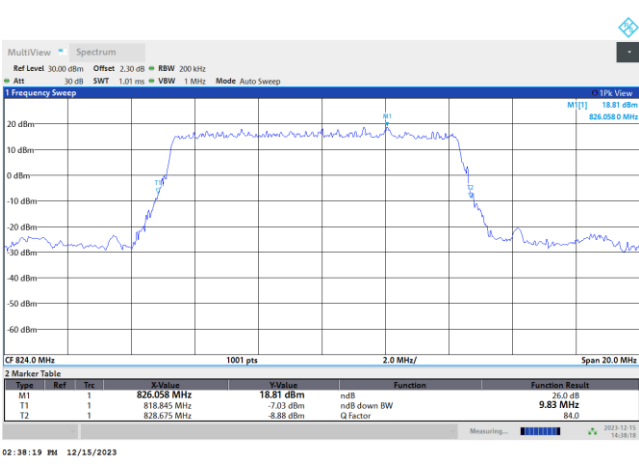
256QAM





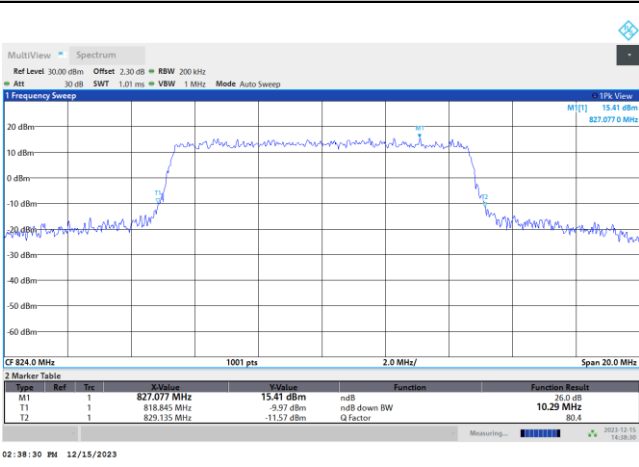
FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

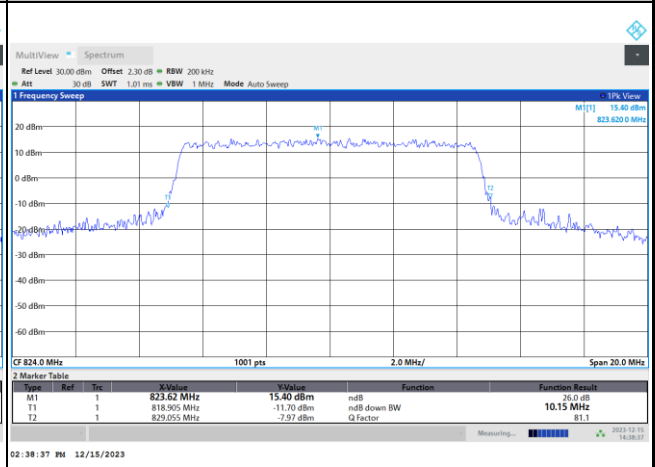


FR1 n26 / 10MHz / CP OFDM / Middle Channel / Full RB

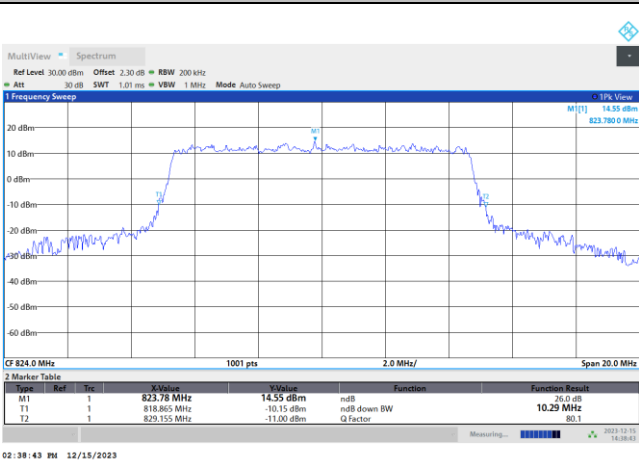
QPSK



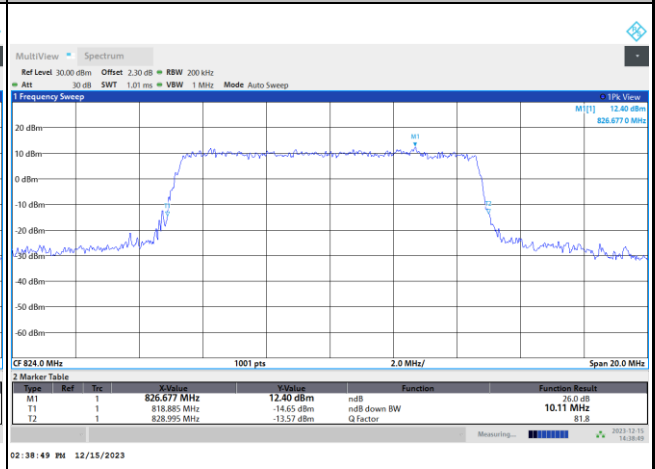
16QAM



64QAM



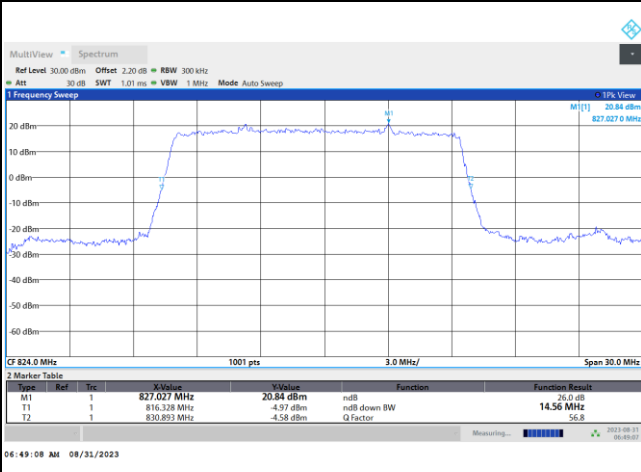
256QAM





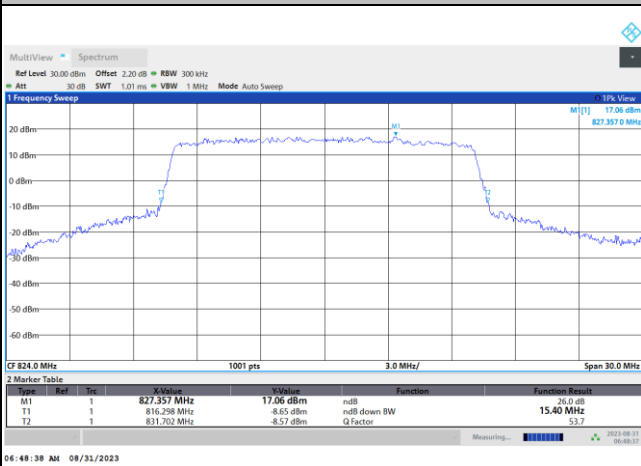
FR1 n26 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

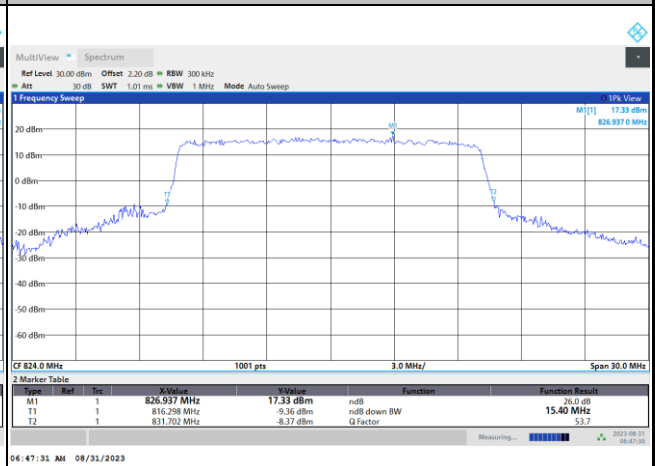


FR1 n26 / 15MHz / CP OFDM / Middle Channel / Full RB

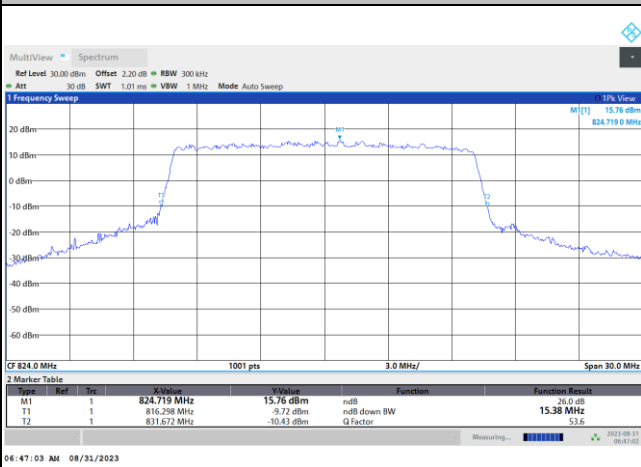
QPSK



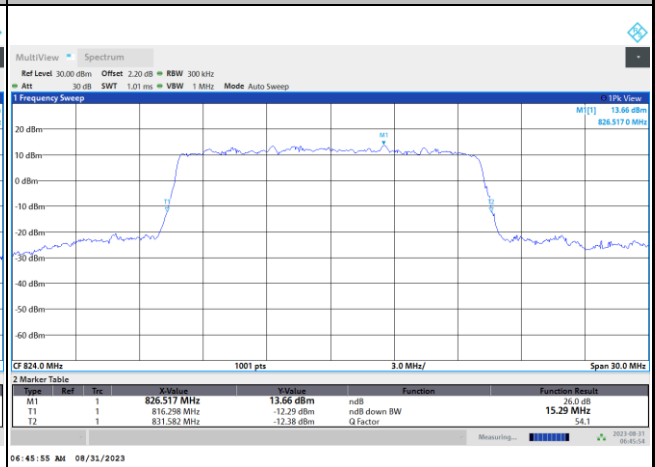
16QAM



64QAM



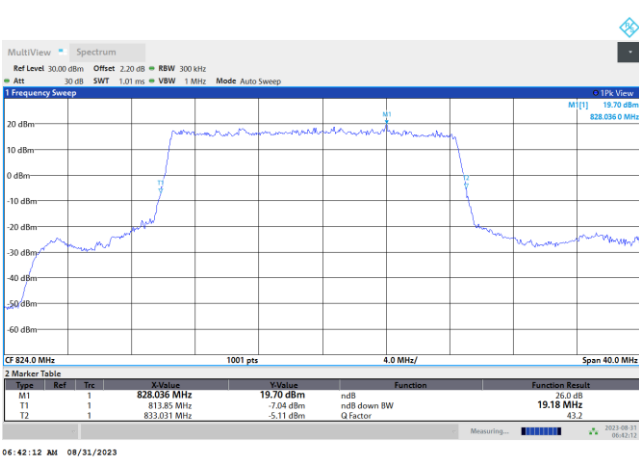
256QAM





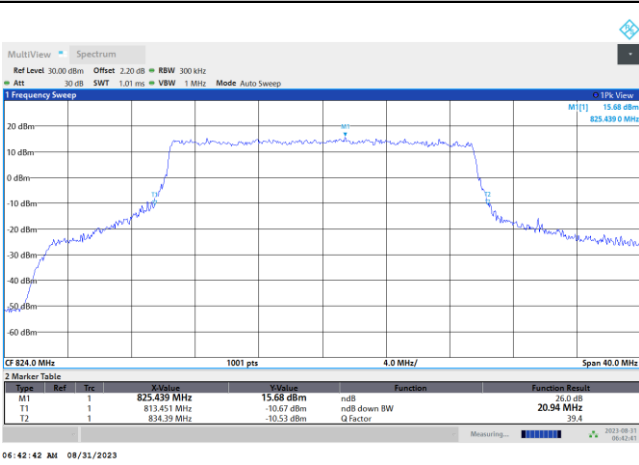
FR1 n26 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

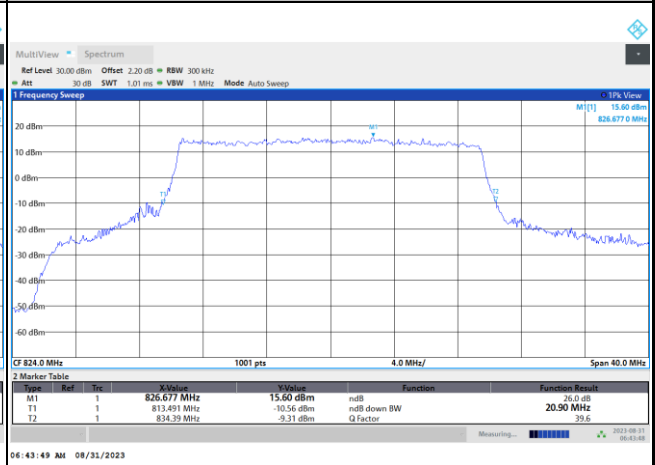


FR1 n26 / 20MHz / CP OFDM / Middle Channel / Full RB

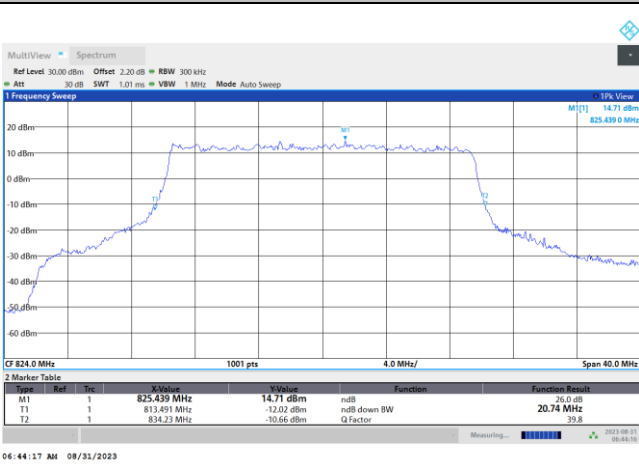
QPSK



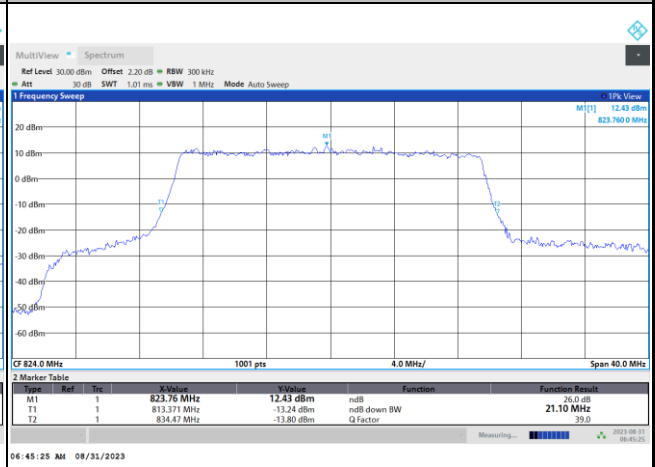
16QAM



64QAM



256QAM





Occupied Bandwidth

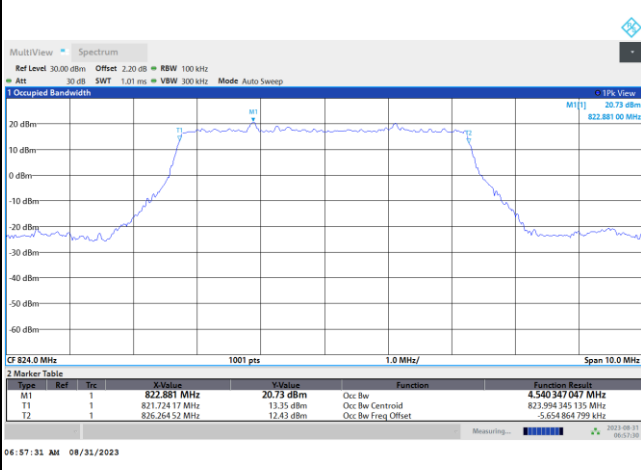
Mode	FR1 n26 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.54		8.93		13.42		17.89	

Mode	FR1 n26 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.52	4.52	9.28	9.28	14.11	14.13	18.98	18.95
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.53	4.49	9.29	9.30	14.12	14.11	18.98	18.98



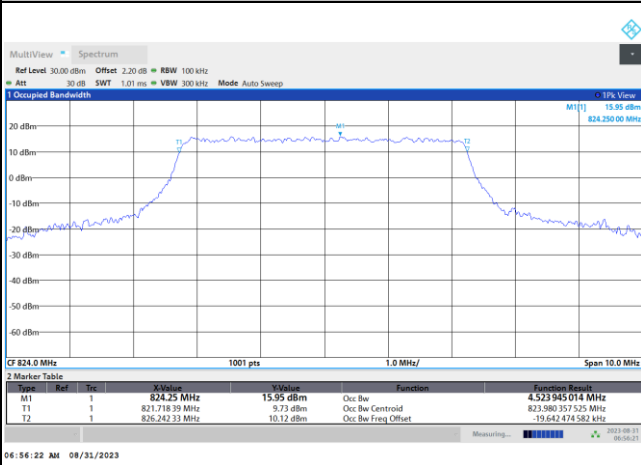
FR1 n26 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

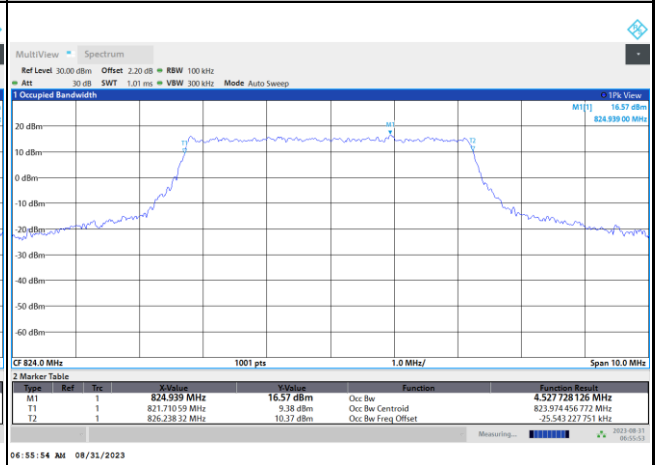


FR1 n26 / 5MHz / CP OFDM / Middle Channel / Full RB

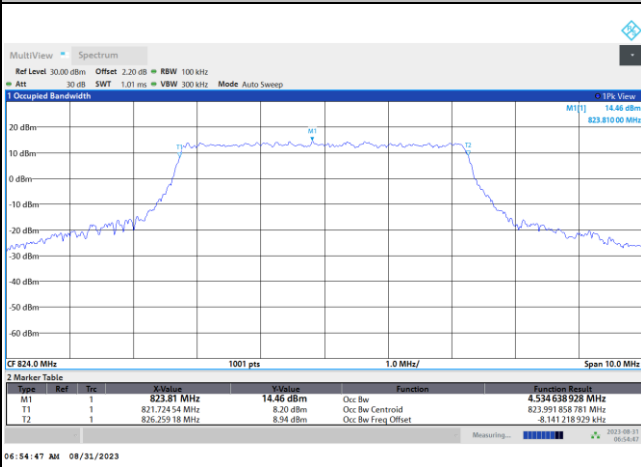
QPSK



16QAM



64QAM



256QAM

