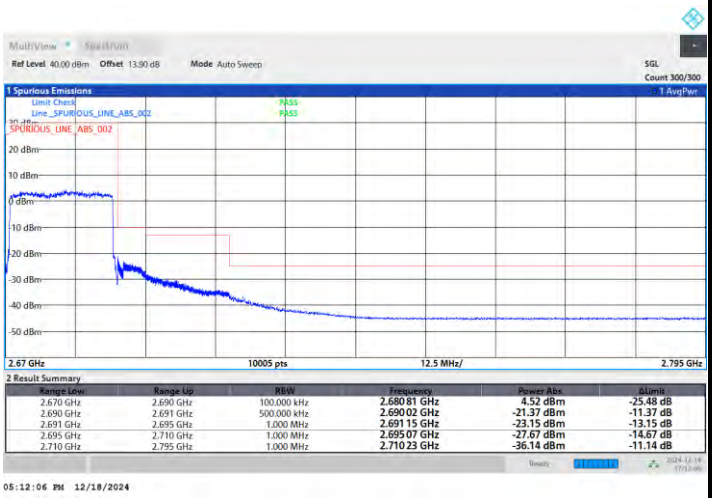
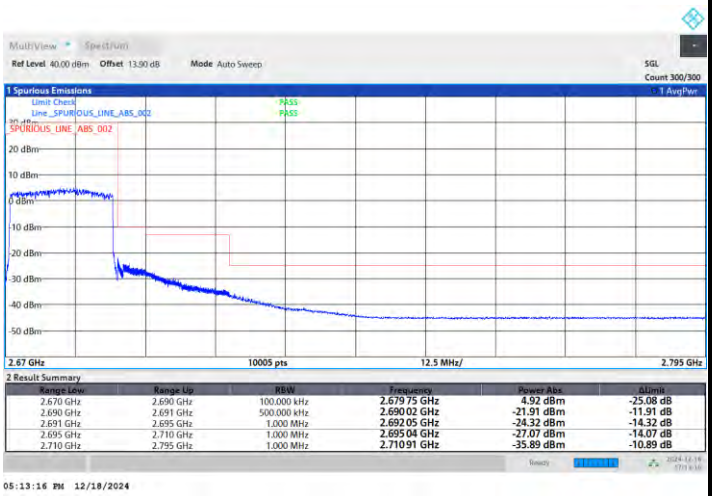
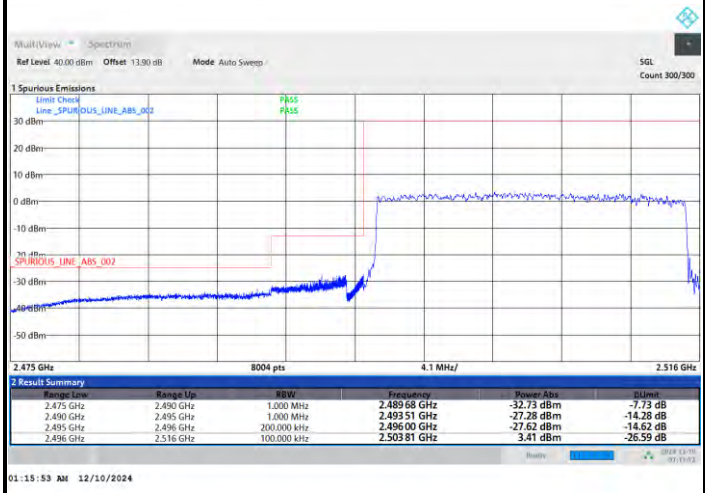
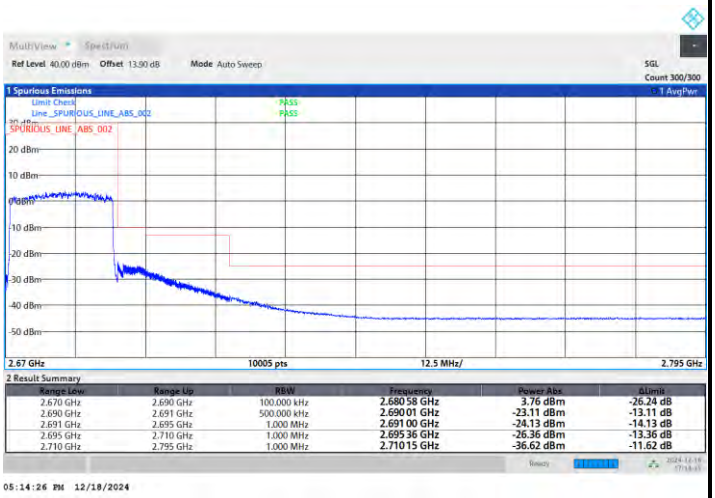
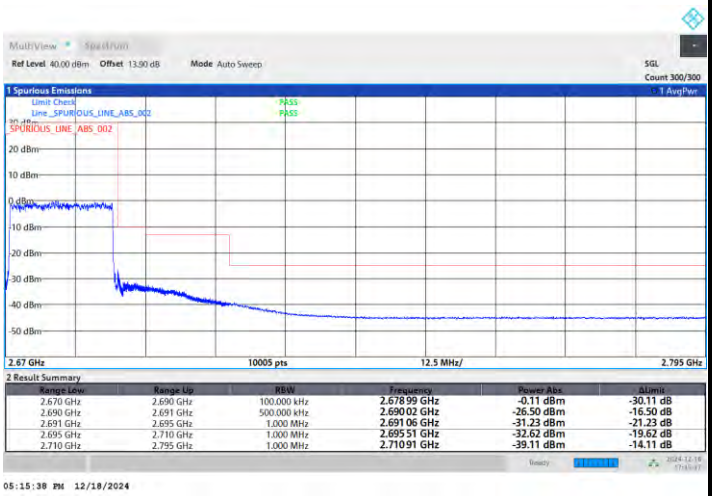
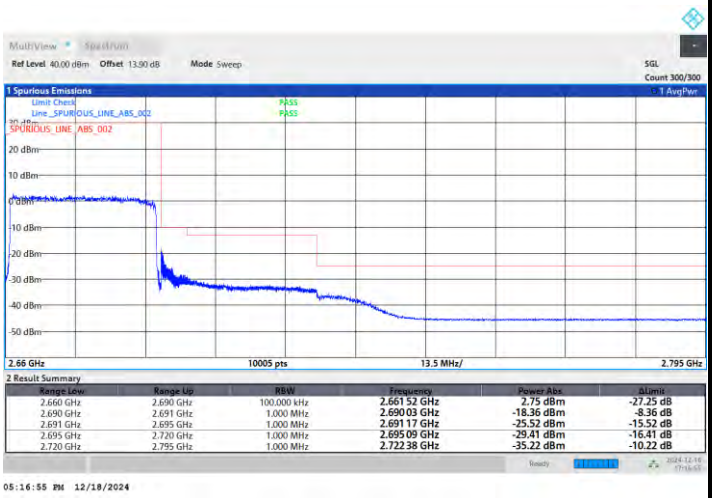
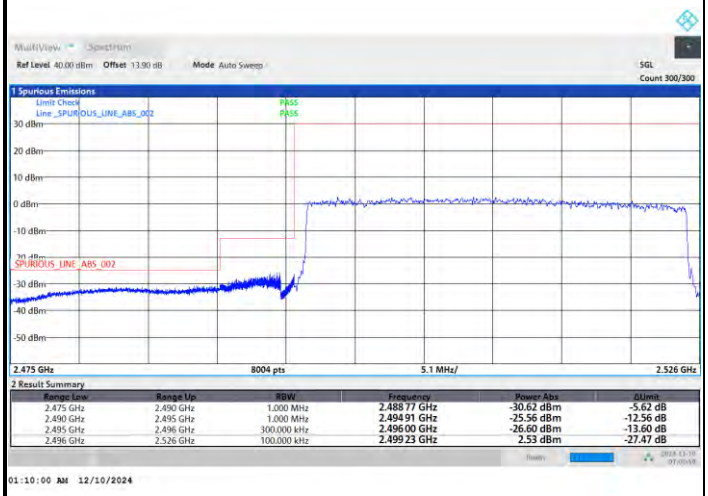
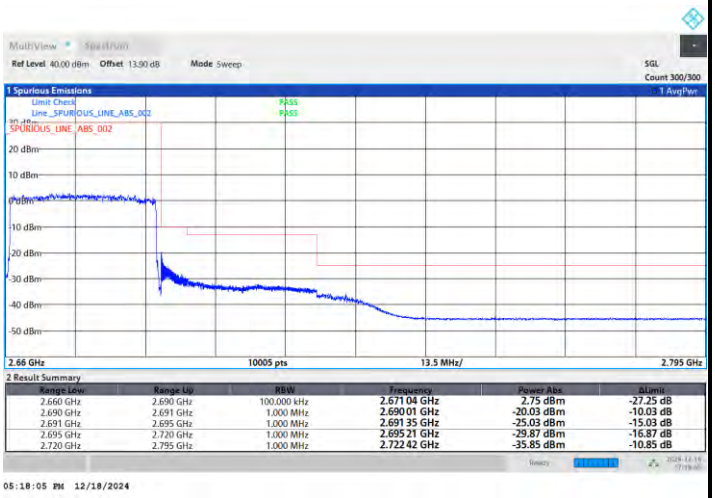
FR1 n41 / 20MHz / CP OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

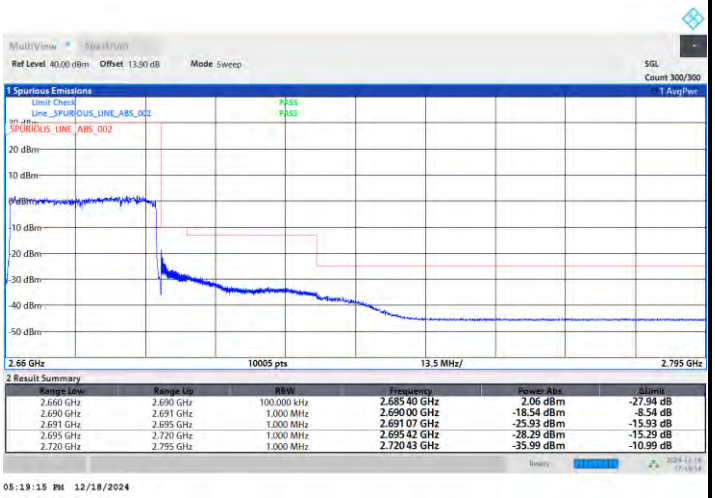
FR1 n41 / 20MHz / CP OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

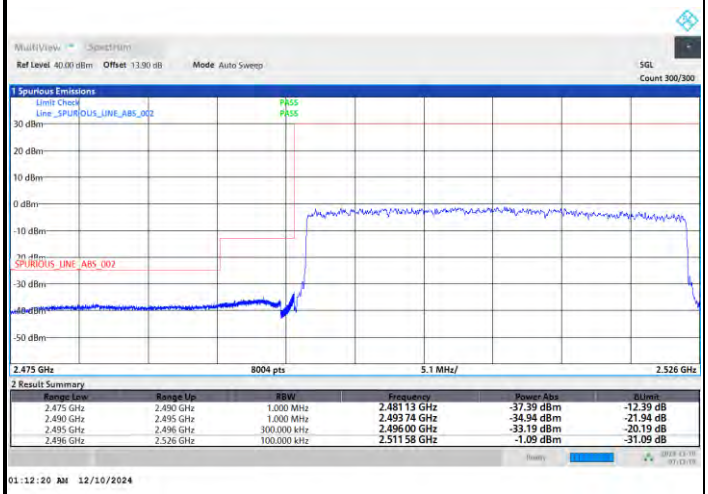
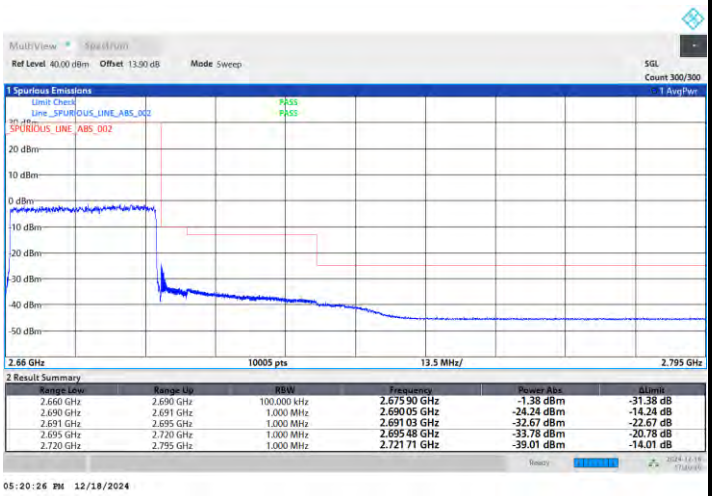
FR1 n41 / 20MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 20MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 30MHz / CP OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

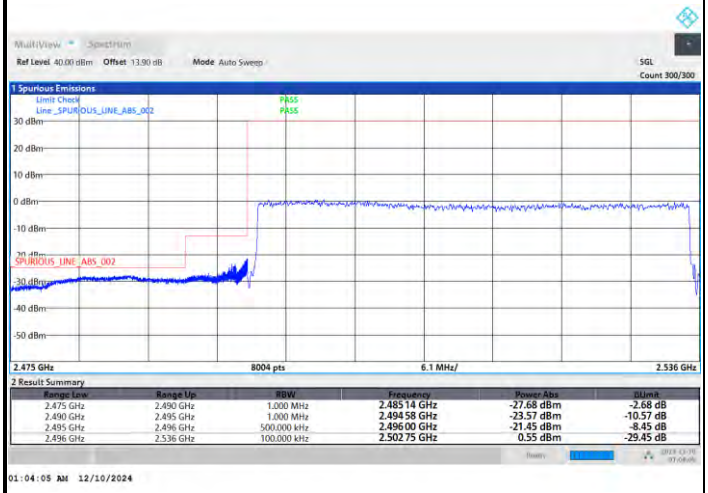
FR1 n41 / 30MHz / CP OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 30MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

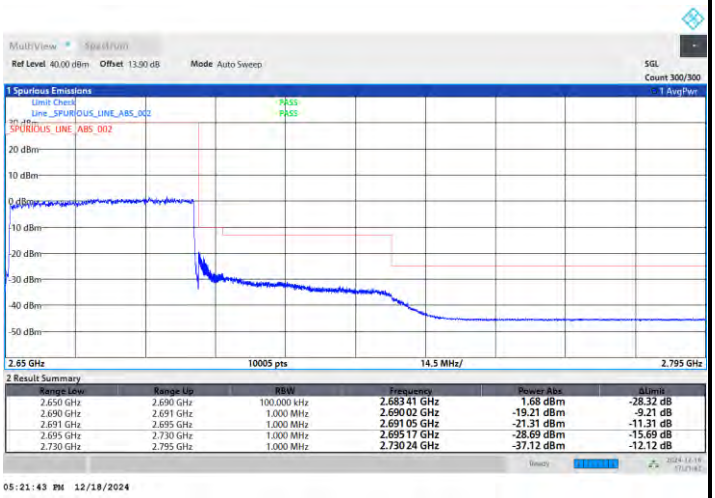
FR1 n41 / 30MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 40MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB



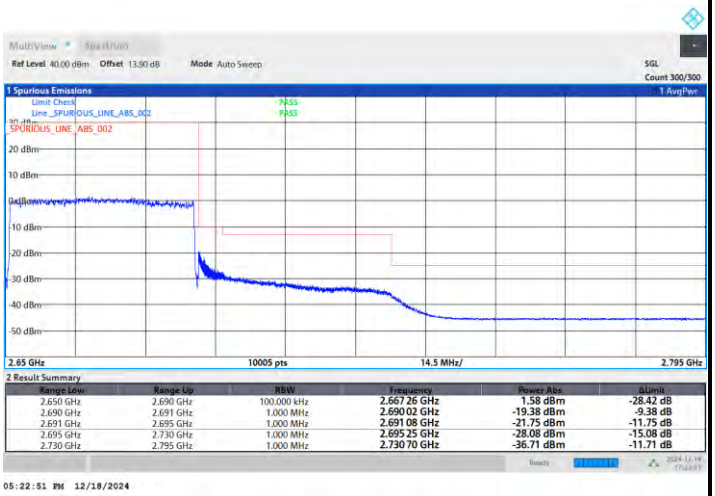
Highest Band Edge / Full RB

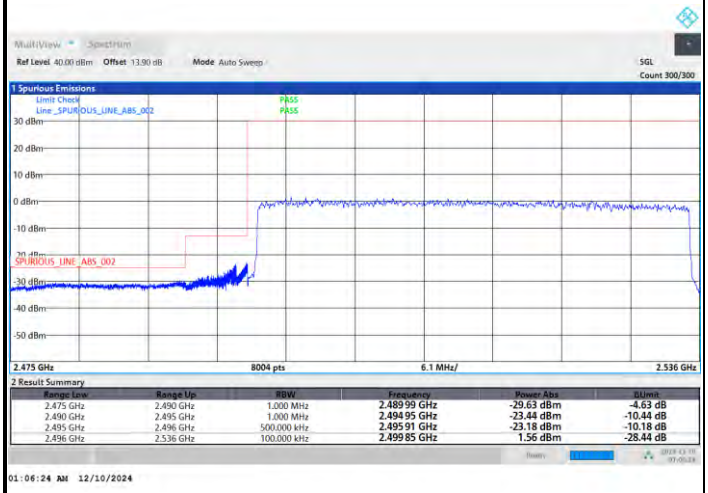
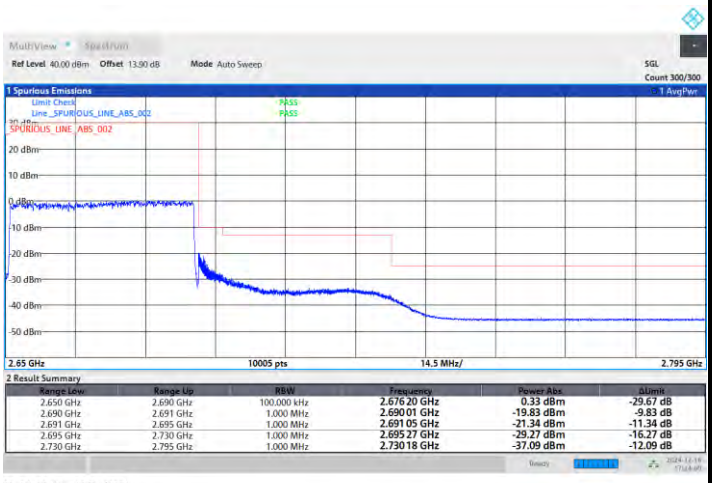


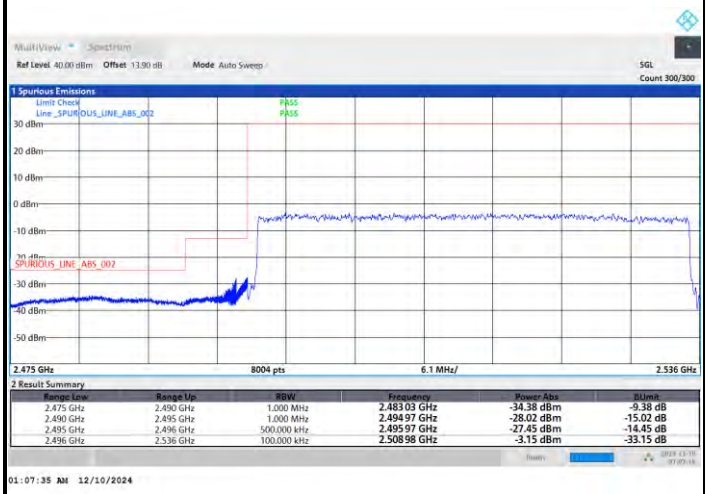
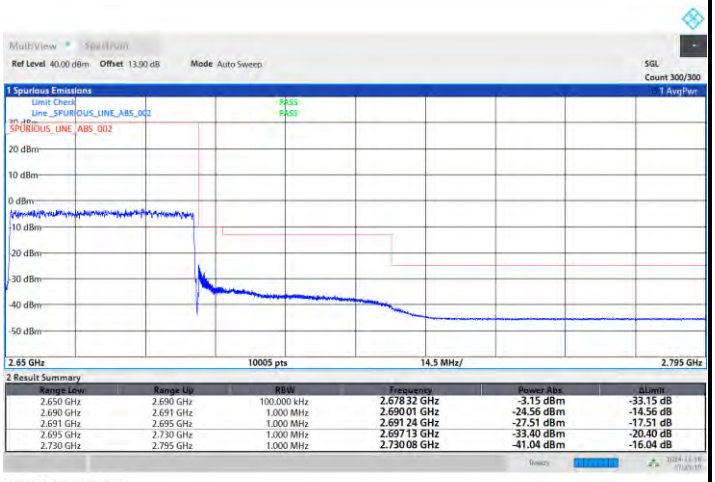
FR1 n41 / 40MHz / CP OFDM / 16QAM

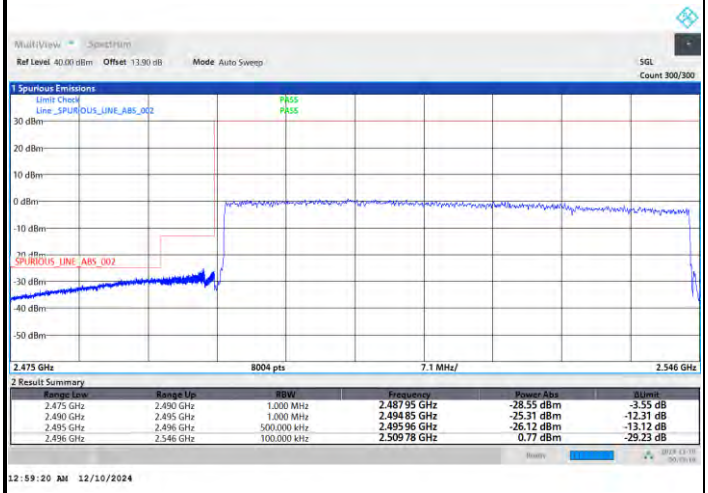
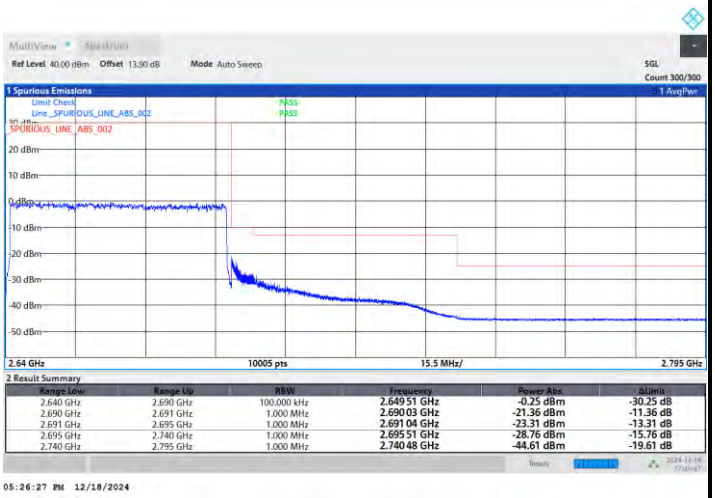
Lowest Band Edge / Full RB

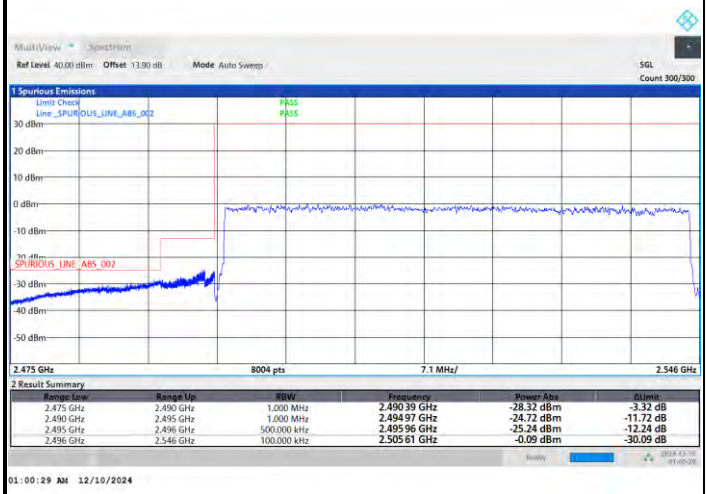
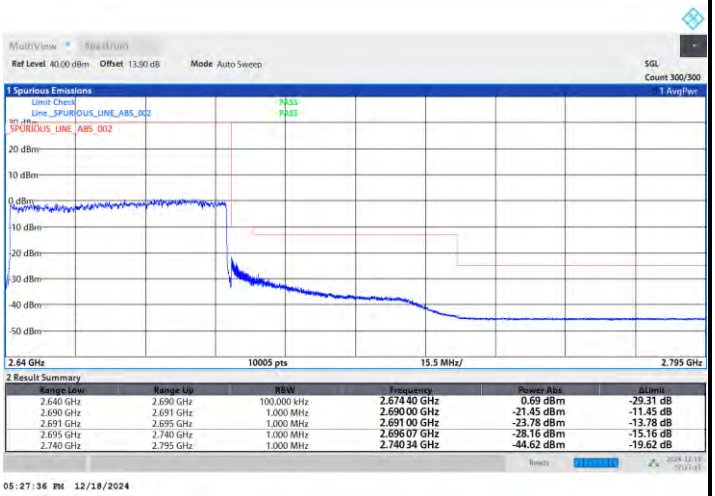
Highest Band Edge / Full RB

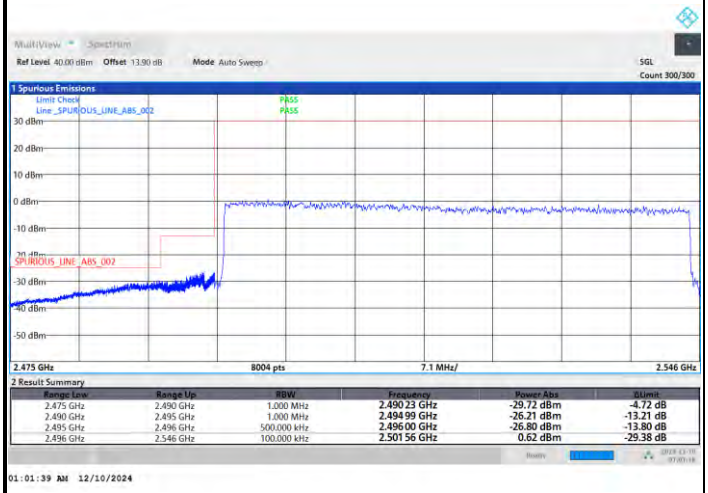
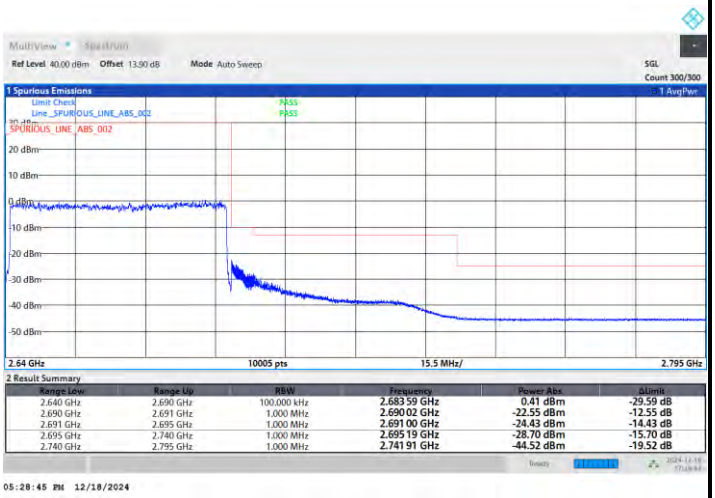


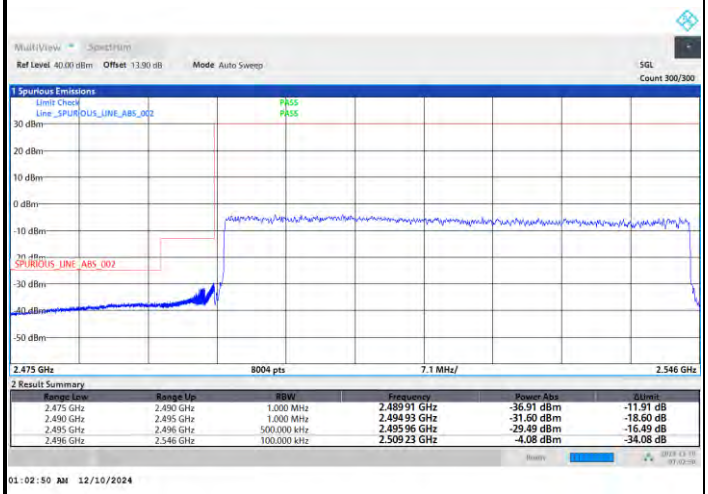
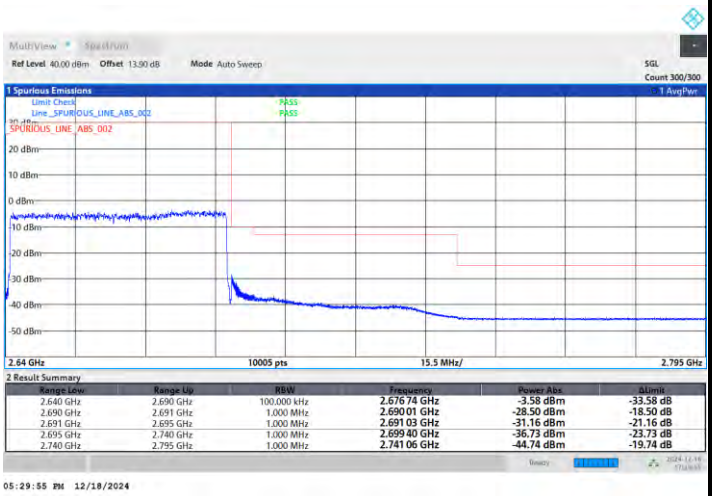
FR1 n41 / 40MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

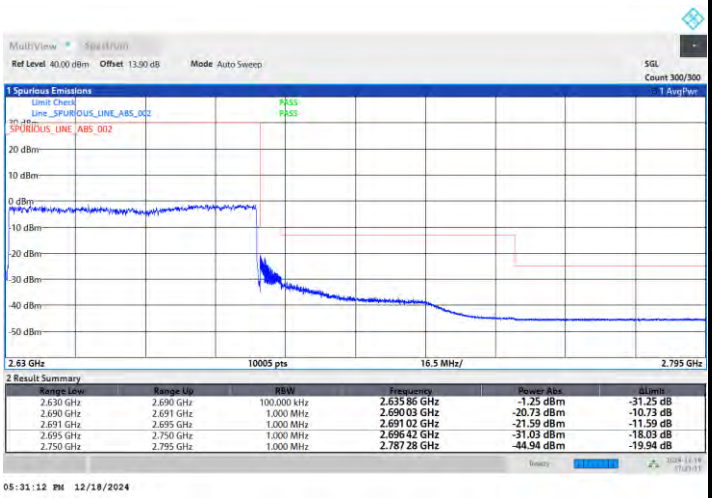
FR1 n41 / 40MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

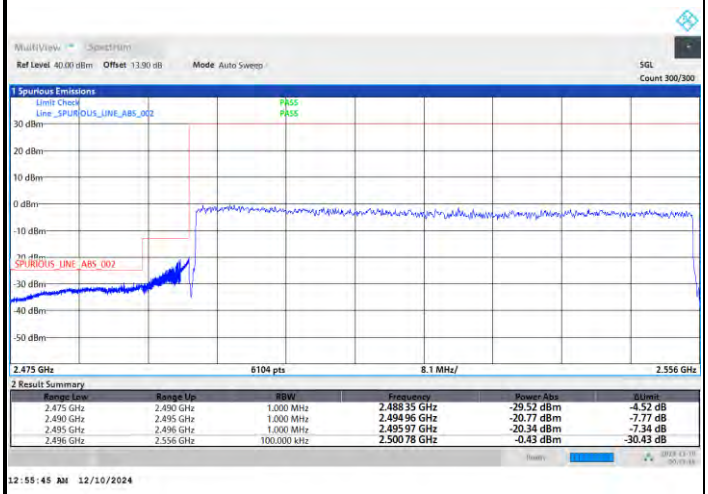
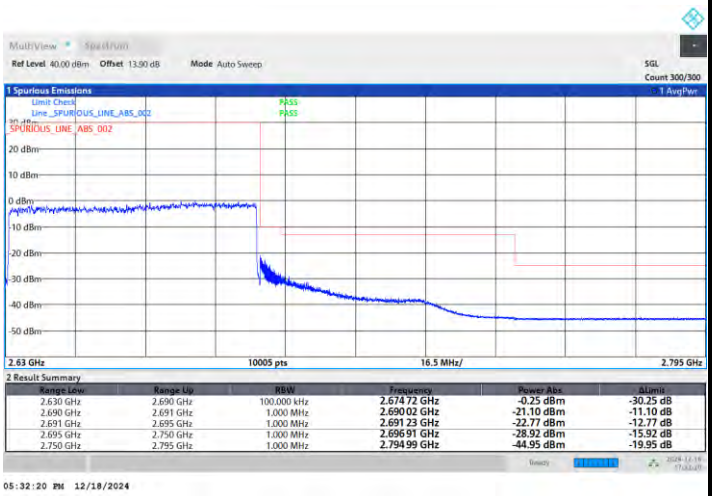
FR1 n41 / 50MHz / CP OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

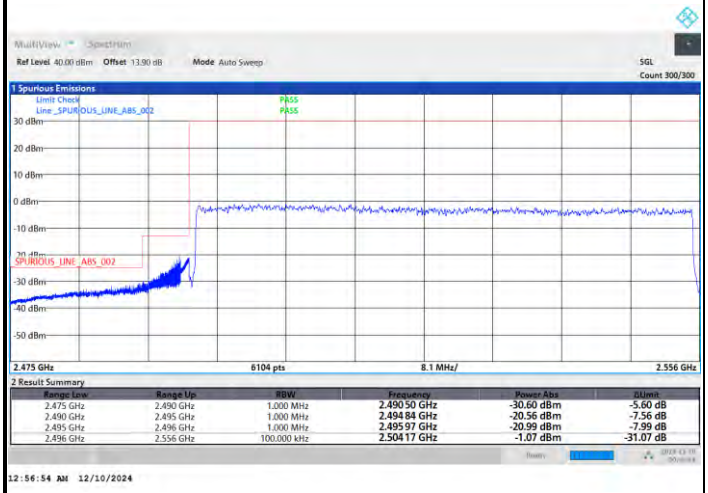
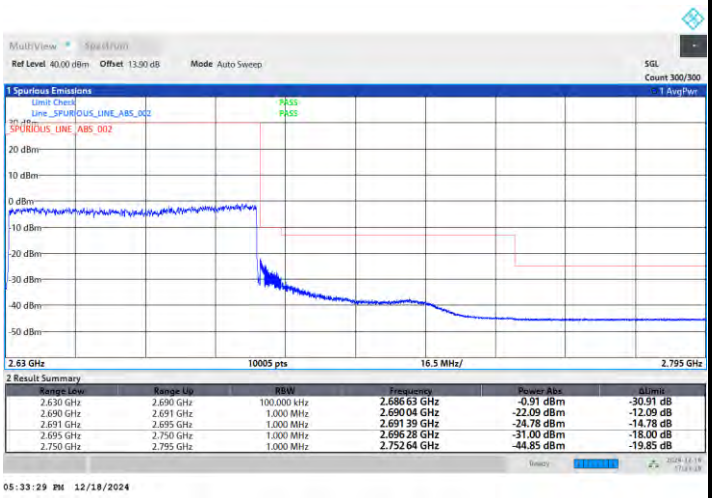
FR1 n41 / 50MHz / CP OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

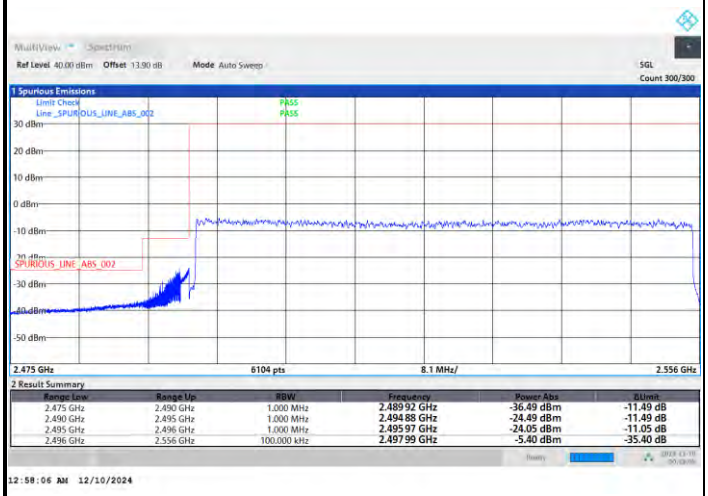
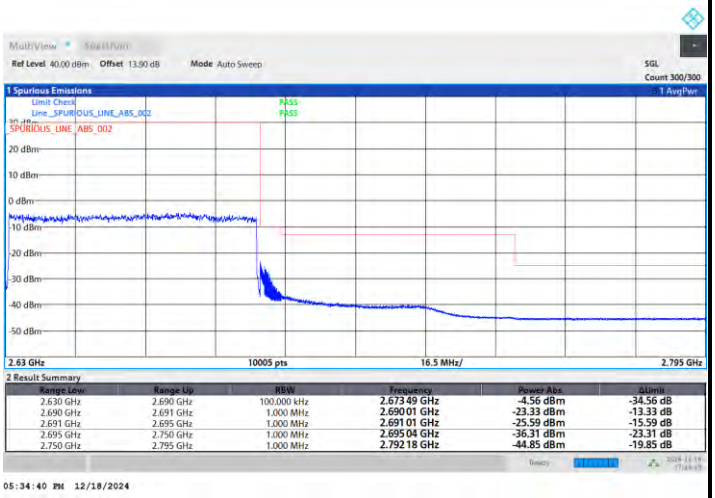
FR1 n41 / 50MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

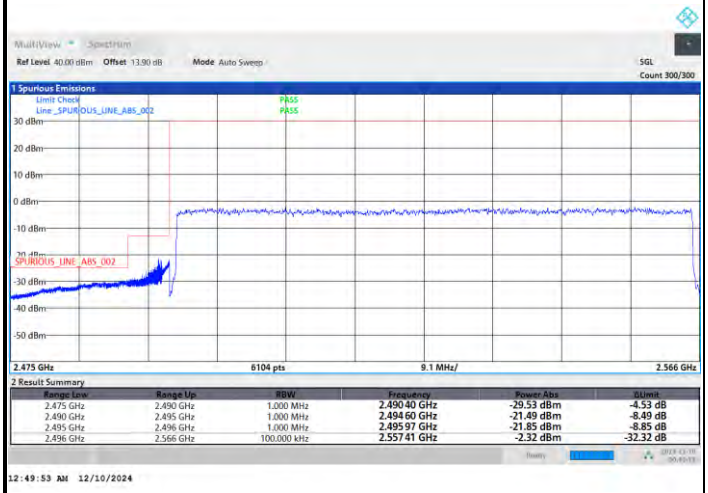
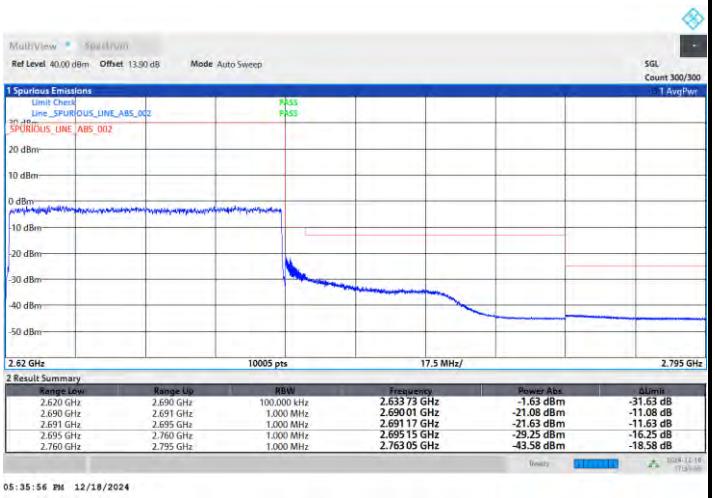
FR1 n41 / 50MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

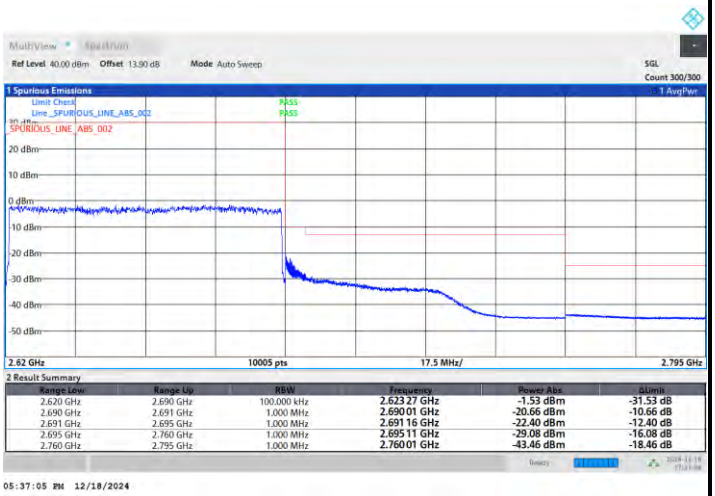
FR1 n41 / 60MHz / CP OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 60MHz / CP OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

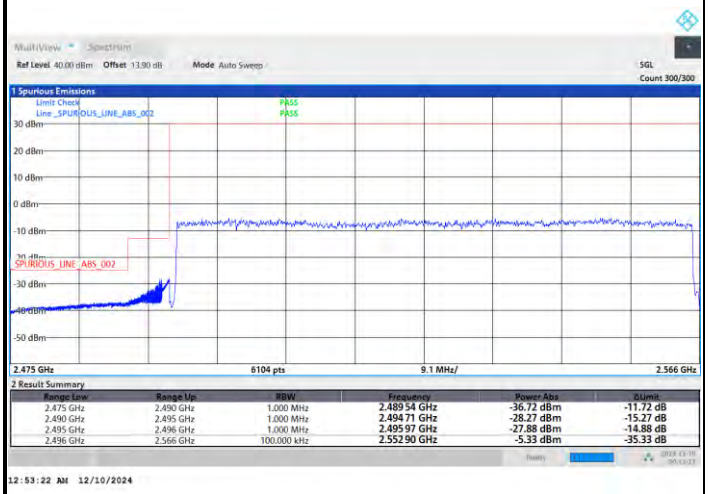
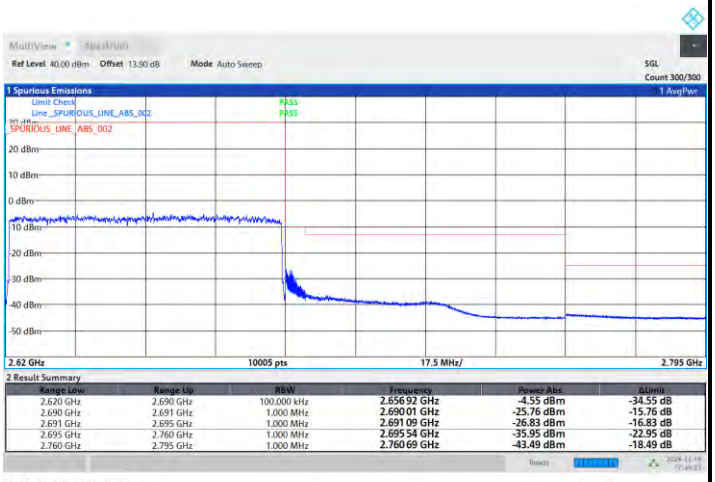
FR1 n41 / 60MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

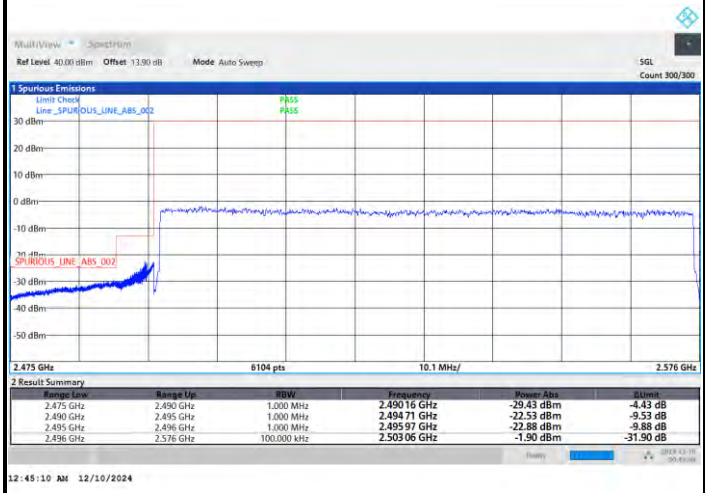
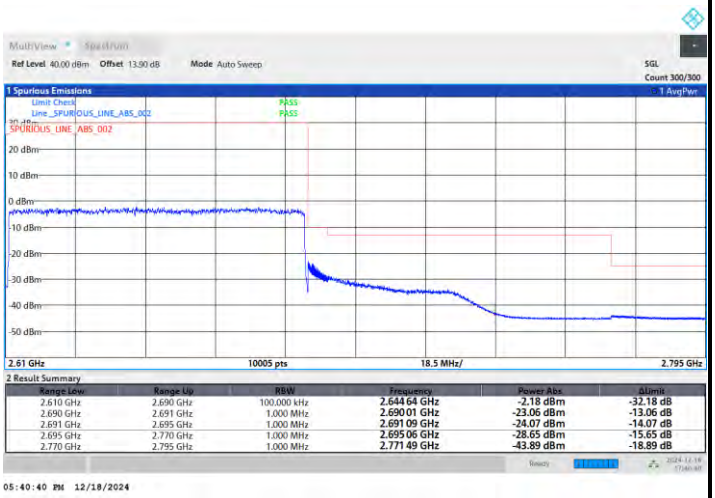
FR1 n41 / 60MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

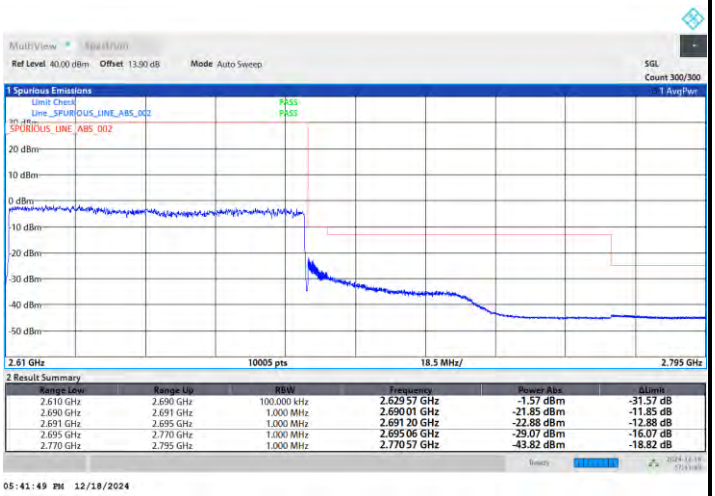
FR1 n41 / 70MHz / CP OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 70MHz / CP OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

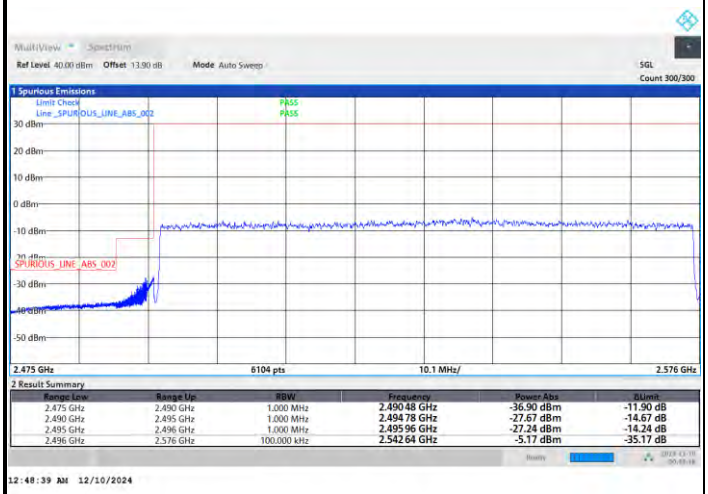
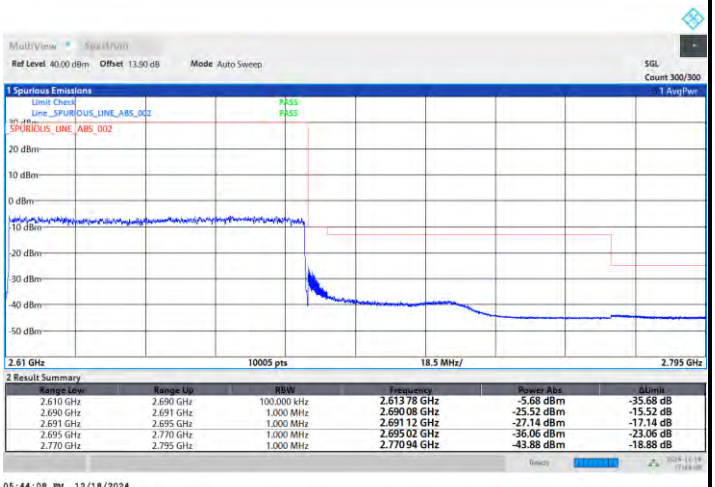
FR1 n41 / 70MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**

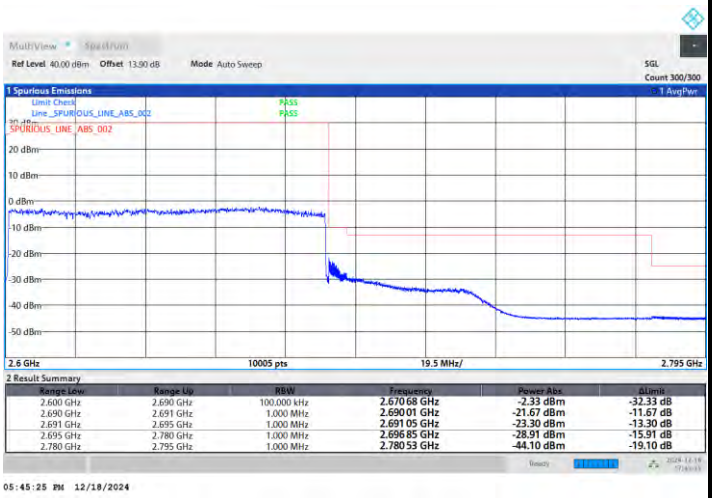
FR1 n41 / 70MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

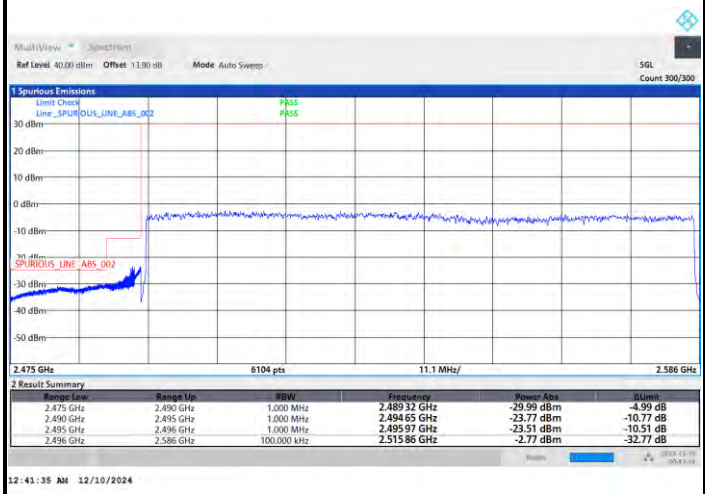
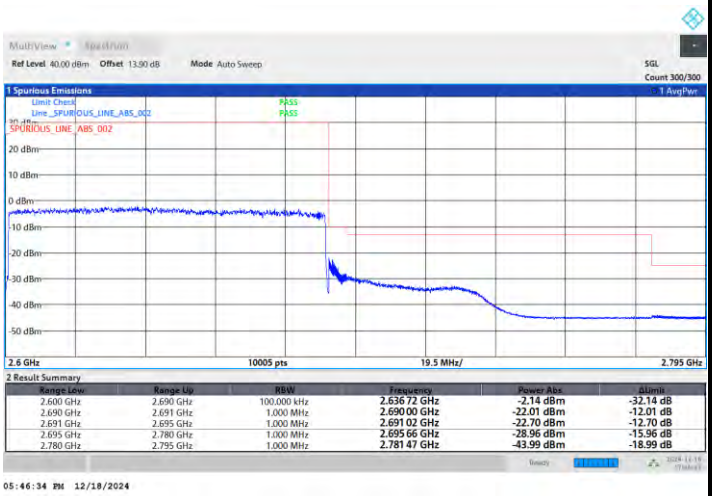
FR1 n41 / 80MHz / CP OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

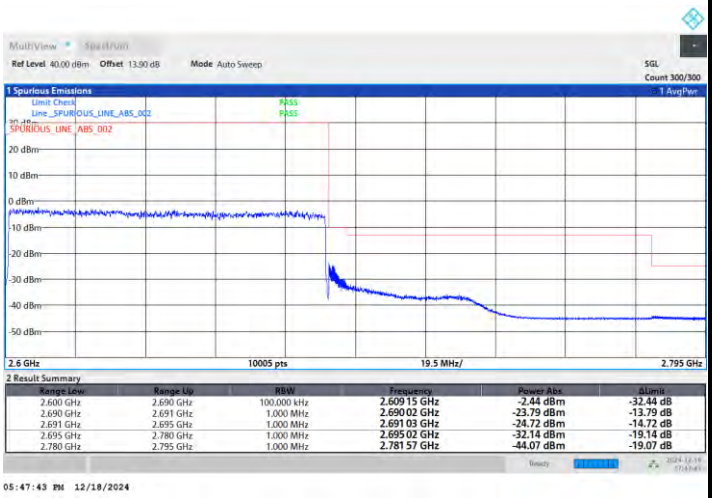
FR1 n41 / 80MHz / CP OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

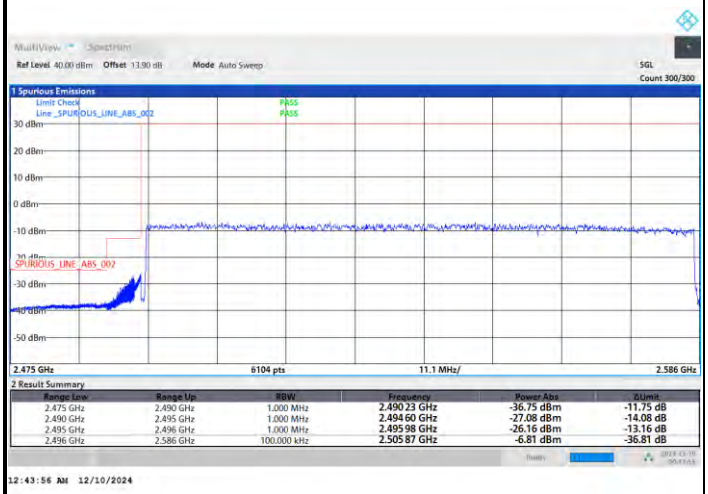
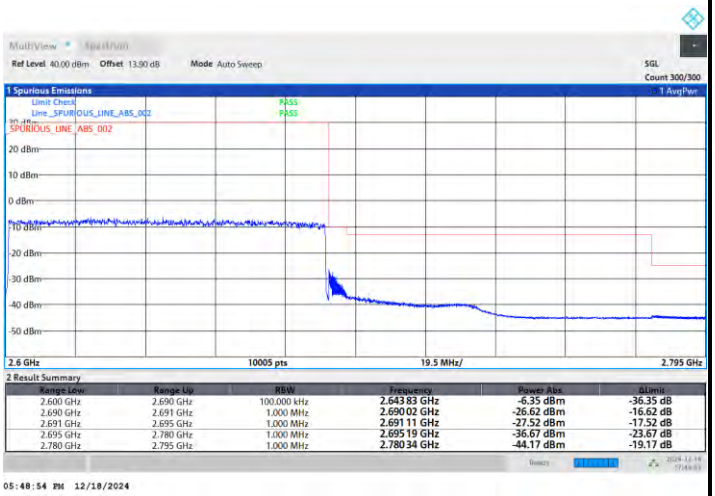
FR1 n41 / 80MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**

FR1 n41 / 80MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 90MHz / CP OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 90MHz / CP OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 90MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

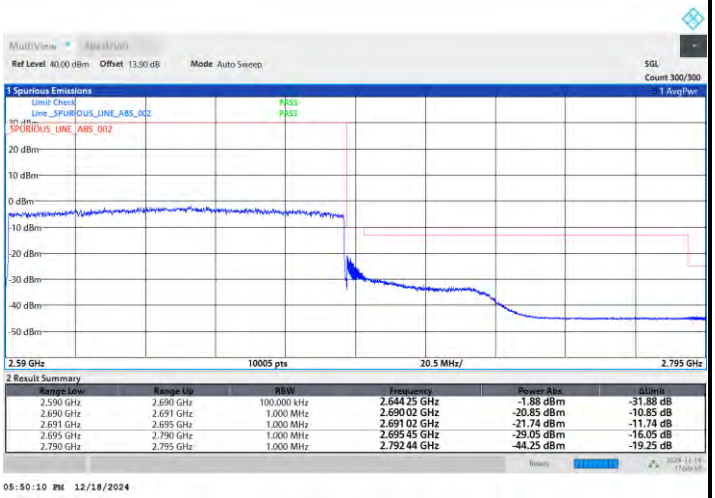
FR1 n41 / 90MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 100MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.485 09 GHz	-29.72 dBm	-4.72 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.494 99 GHz	-23.16 dBm	-10.16 dB
2.495 GHz	2.496 GHz	1.000 MHz	2.495 98 GHz	-22.86 dBm	-9.86 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.538 45 GHz	-2.73 dBm	-32.73 dB

Highest Band Edge / Full RB



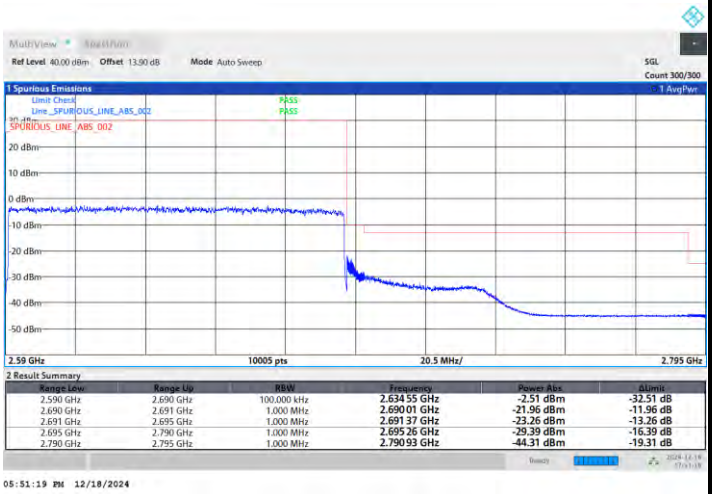
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.644 25 GHz	-1.88 dBm	-31.88 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.690 02 GHz	-20.85 dBm	-10.85 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.691 02 GHz	-21.74 dBm	-11.74 dB
2.695 GHz	2.790 GHz	1.000 MHz	2.695 45 GHz	-29.05 dBm	-16.05 dB
2.790 GHz	2.795 GHz	1.000 MHz	2.792 44 GHz	-44.25 dBm	-19.25 dB

FR1 n41 / 100MHz / CP OFDM / 16QAM

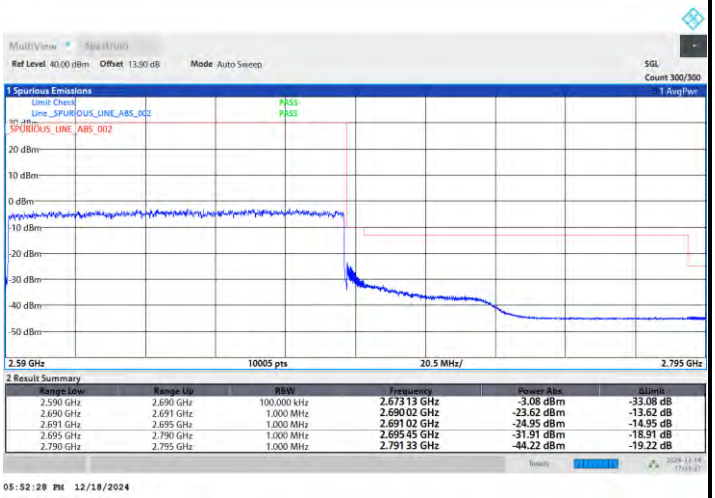
Lowest Band Edge / Full RB

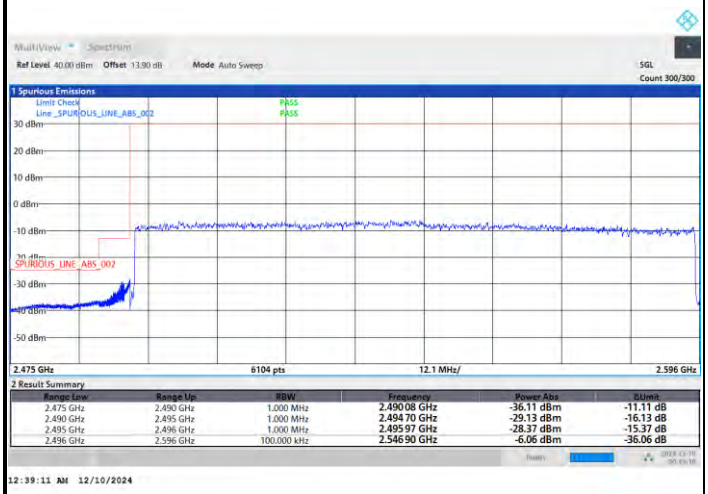
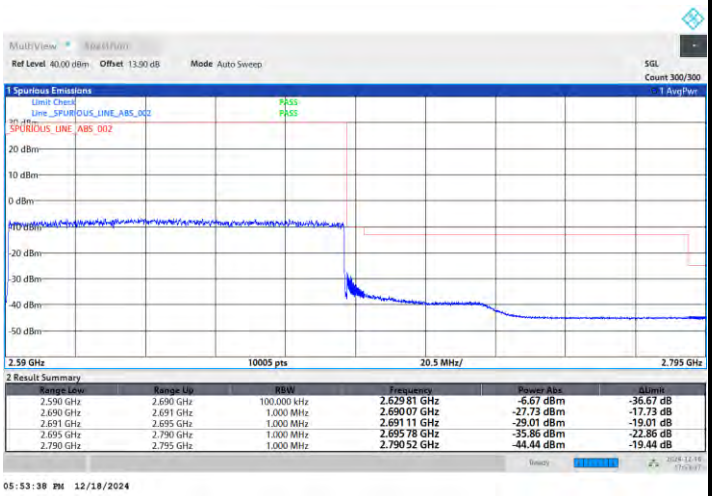
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.486 43 GHz	-29.81 dBm	-4.81 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.494 89 GHz	-23.95 dBm	-10.95 dB
2.495 GHz	2.496 GHz	1.000 MHz	2.495 98 GHz	-23.02 dBm	-10.02 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.517 16 GHz	-2.45 dBm	-32.45 dB

Highest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.634 55 GHz	-2.51 dBm	-32.51 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.690 01 GHz	-21.96 dBm	-11.96 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.691 37 GHz	-23.26 dBm	-13.26 dB
2.695 GHz	2.790 GHz	1.000 MHz	2.695 26 GHz	-29.39 dBm	-16.39 dB
2.790 GHz	2.795 GHz	1.000 MHz	2.790 93 GHz	-44.31 dBm	-19.31 dB

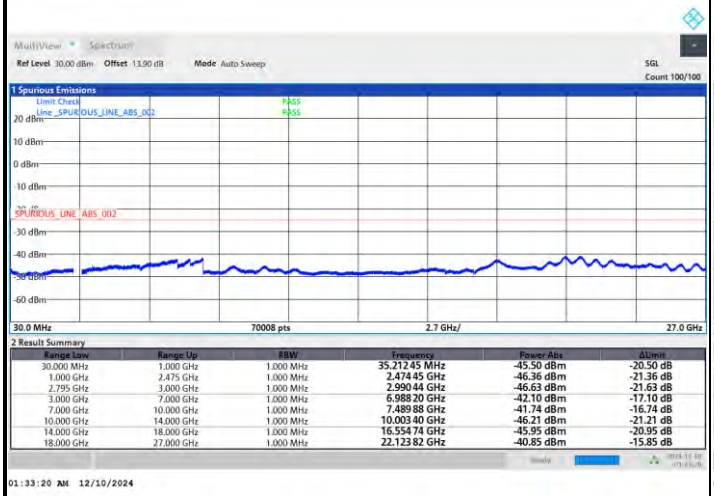
FR1 n41 / 100MHz / CP OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n41 / 100MHz / CP OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

Conducted Spurious Emission

FR1 n41 / 10MHz / CP OFDM / QPSK / 1RB1

Lowest Channel



2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	35.212 45 MHz	-45.50 dBm	-20.50 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.474 45 GHz	-46.36 dBm	-21.36 dB
2.795 GHz	3.000 GHz	1.000 MHz	2.990 44 GHz	-46.63 dBm	-21.63 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.988 20 GHz	-42.10 dBm	-17.10 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.489 88 GHz	-41.74 dBm	-16.74 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.003 40 GHz	-46.21 dBm	-21.21 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.554 74 GHz	-45.95 dBm	-20.95 dB
18.000 GHz	27.000 GHz	1.000 MHz	22.123 82 GHz	-40.85 dBm	-15.85 dB

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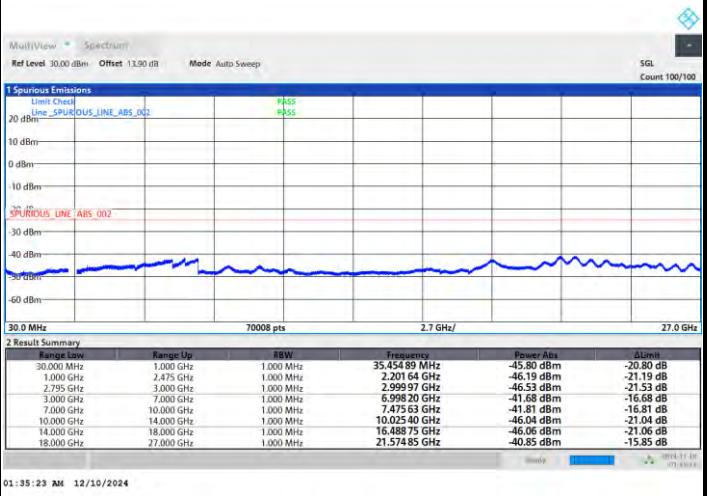
Middle Channel

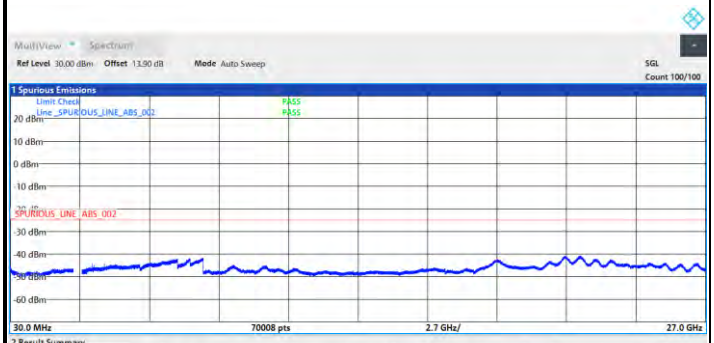


2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	35.454 89 MHz	-45.80 dBm	-20.80 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.201 64 GHz	-46.19 dBm	-21.19 dB
2.795 GHz	3.000 GHz	1.000 MHz	2.999 97 GHz	-46.53 dBm	-21.53 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.998 20 GHz	-41.68 dBm	-16.68 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.475 63 GHz	-41.81 dBm	-16.81 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.025 40 GHz	-46.04 dBm	-21.04 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.488 75 GHz	-46.06 dBm	-21.06 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.574 85 GHz	-40.85 dBm	-15.85 dB

01:35:23 AM 12/10/2024

Highest Channel



2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	35.939 77 MHz	-45.76 dBm	-20.76 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.112 79 GHz	-46.29 dBm	-21.29 dB
2.795 GHz	3.000 GHz	1.000 MHz	2.976 56 GHz	-46.35 dBm	-21.35 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.981 40 GHz	-41.87 dBm	-16.87 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.492 88 GHz	-41.96 dBm	-16.96 dB
10.000 GHz	14.000 GHz	1.000 MHz	11.001 70 GHz	-46.24 dBm	-21.24 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.478 75 GHz	-46.15 dBm	-21.15 dB
18.000 GHz	27.000 GHz	1.000 MHz	22.158 02 GHz	-40.67 dBm	-15.67 dB

01:37:25 AM 12/10/2024

Frequency Stability

Test Conditions		FR1 n41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0008	
20	Minimum Voltage	0.0020	

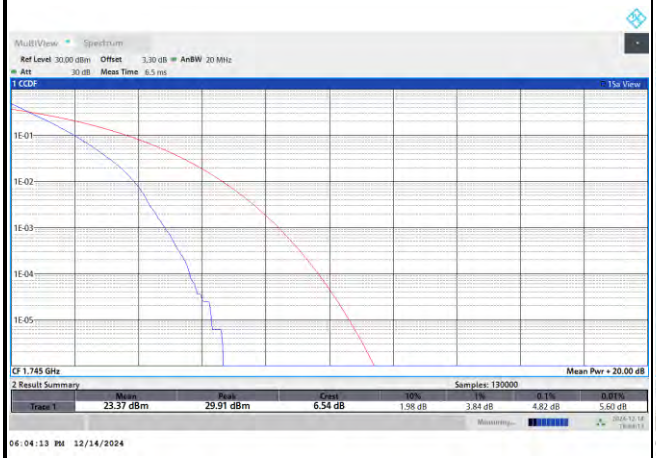
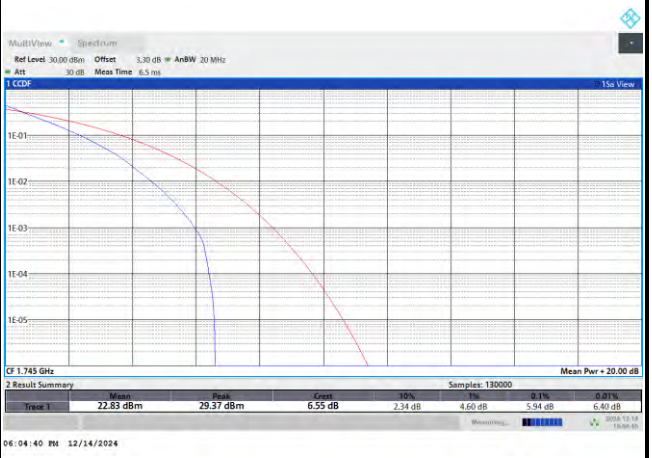
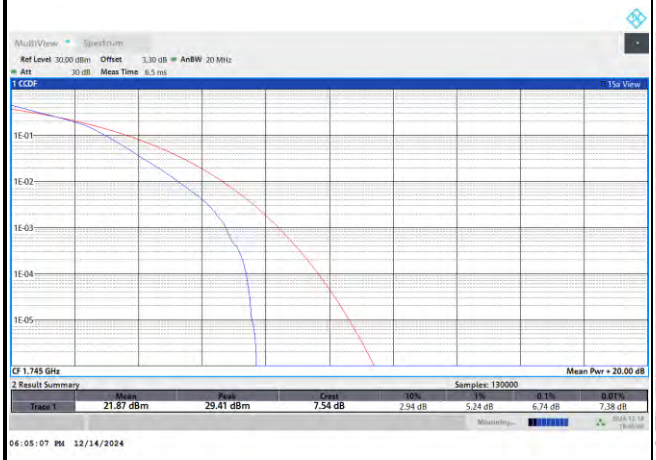
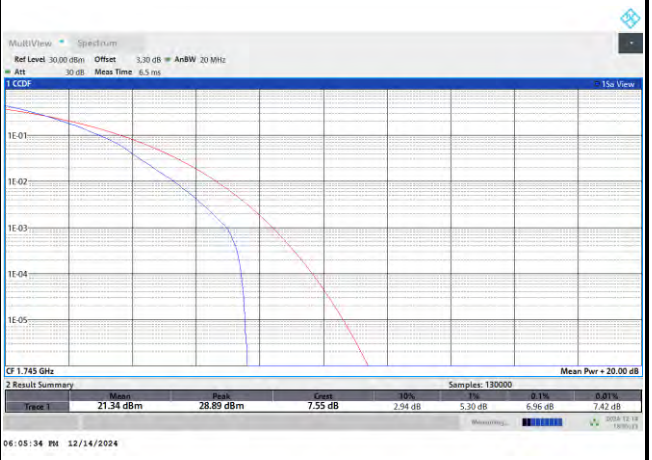
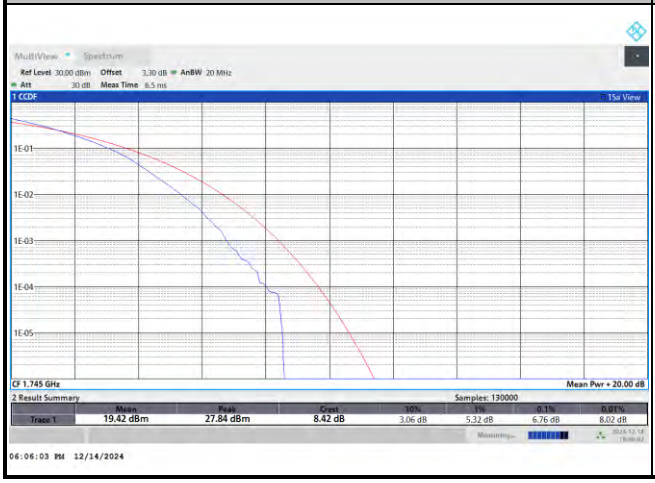
Note:

1. Normal Voltage = 3.9 V.；Minimum Voltage = 3.6 V.；Maximum Voltage = 4.5 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

FR1 n66

Peak-to-Average Ratio

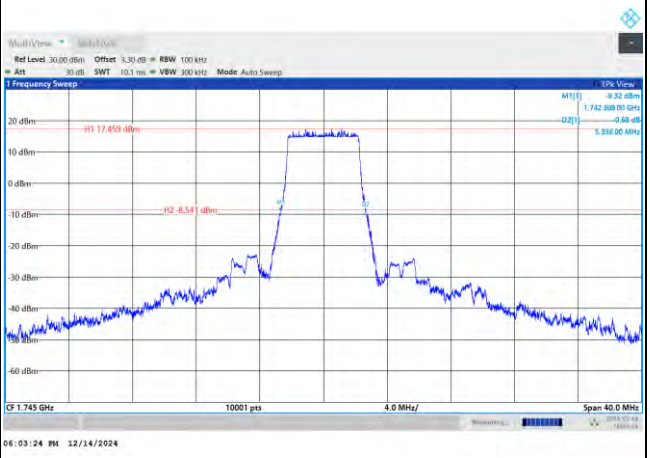
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.82	5.94	6.74	6.96	PASS
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.76				PASS

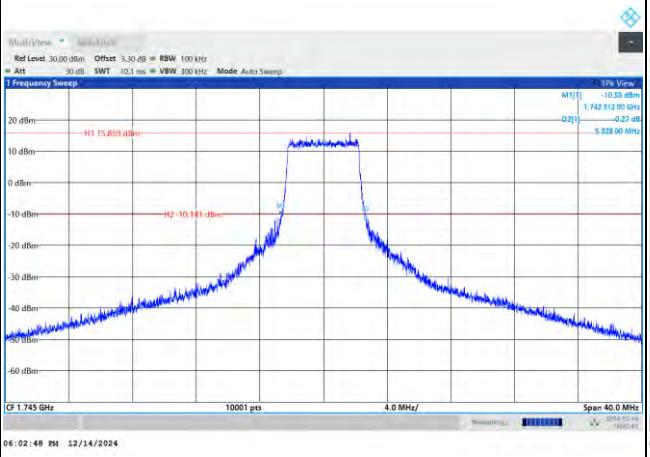
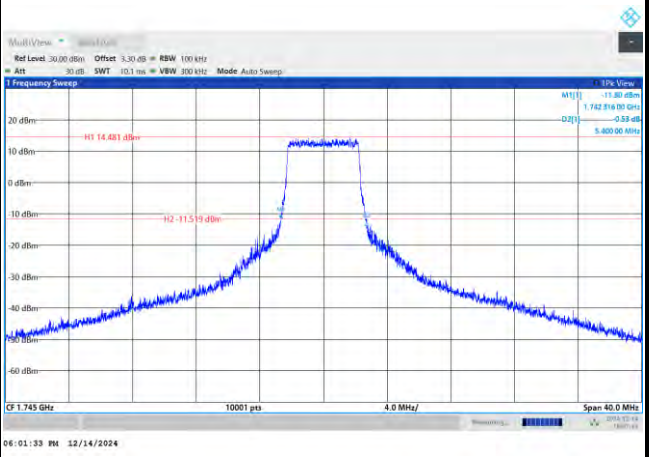
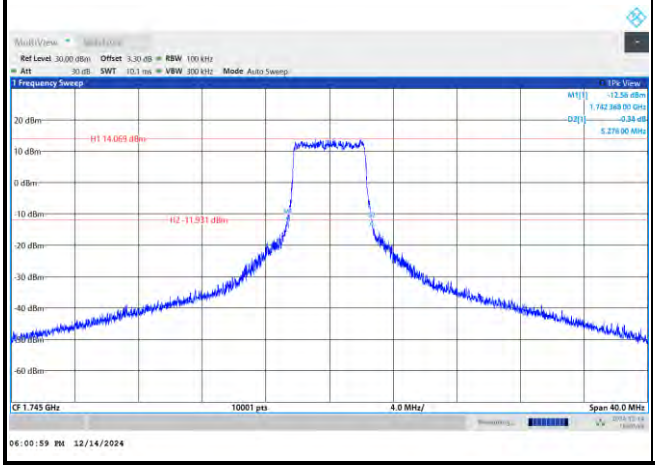
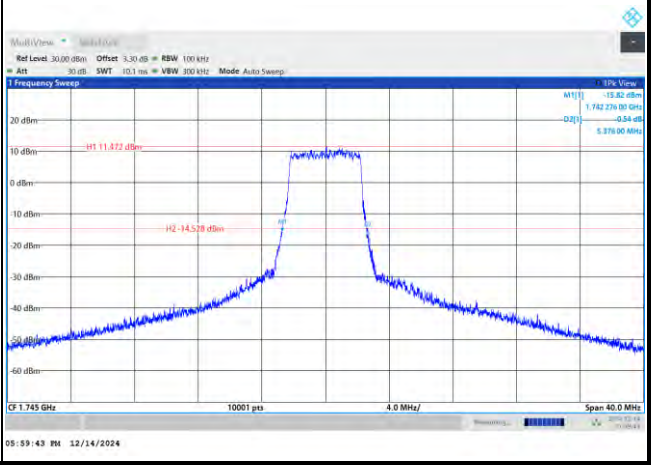
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	QPSK
	
16QAM	64QAM
	
256QAM	
	

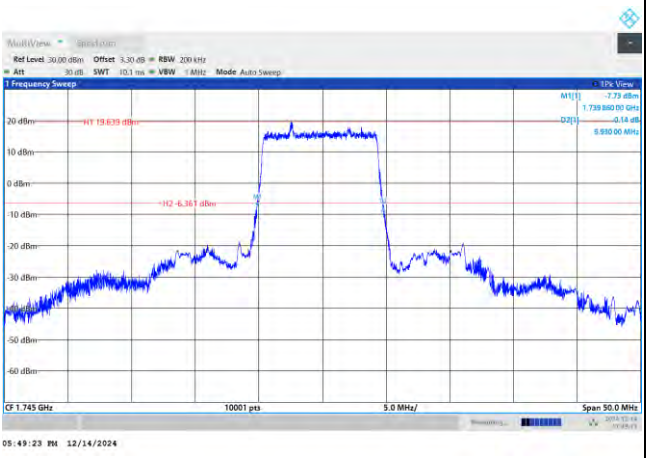
26dB Bandwidth

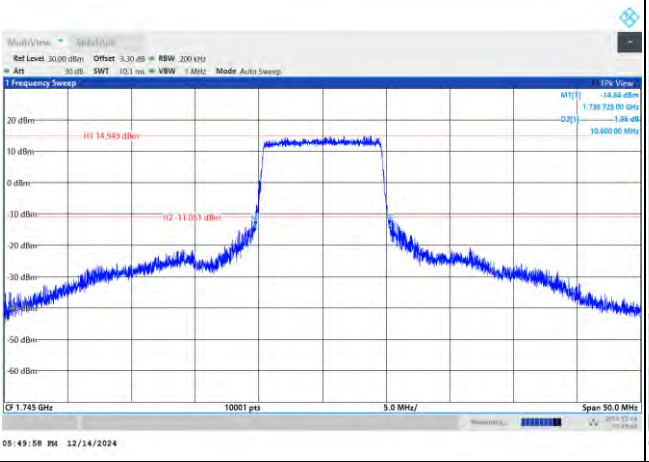
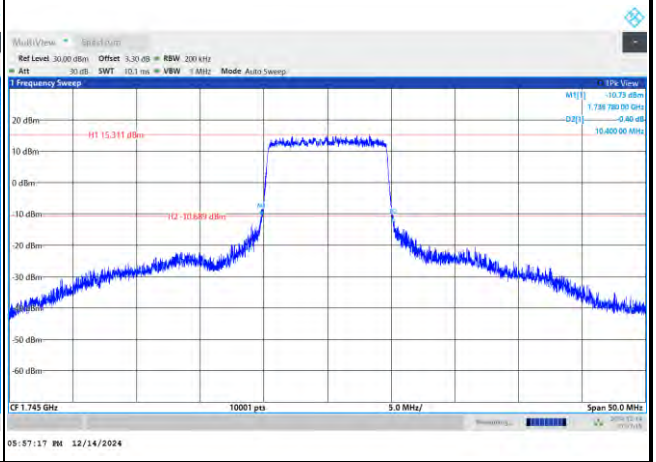
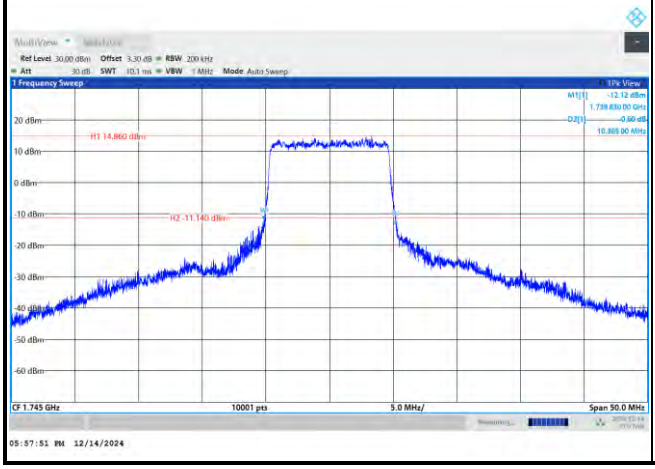
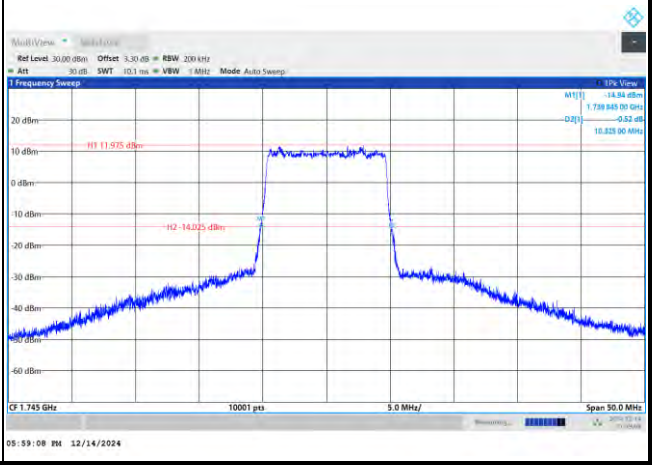
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	5.33		9.93		14.74		19.48	
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	25.22		33.56		37.06		43.34	

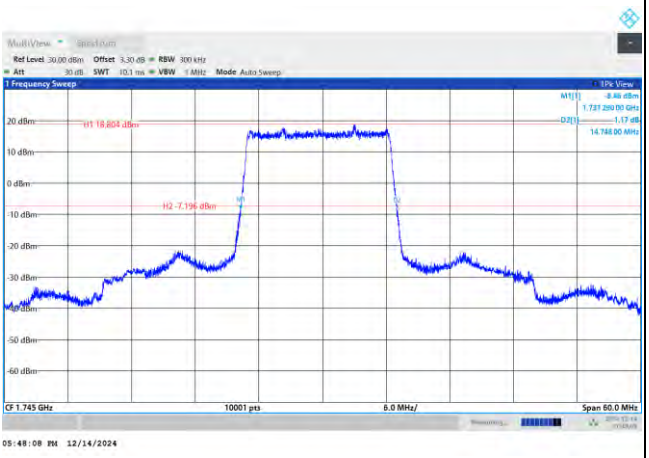
Mode	FR1 n66 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.32	5.40	10.60	10.40	15.52	15.70	21.54	21.53
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	5.27	5.37	10.36	10.32	15.43	15.31	21.40	21.60
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	26.30	26.17	33.45	33.55	38.24	38.27	43.65	43.23
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	26.50	26.11	34.50	33.52	38.69	38.67	43.49	43.17

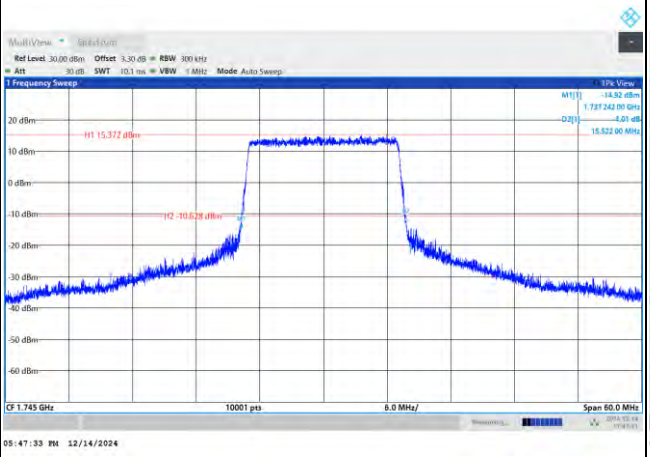
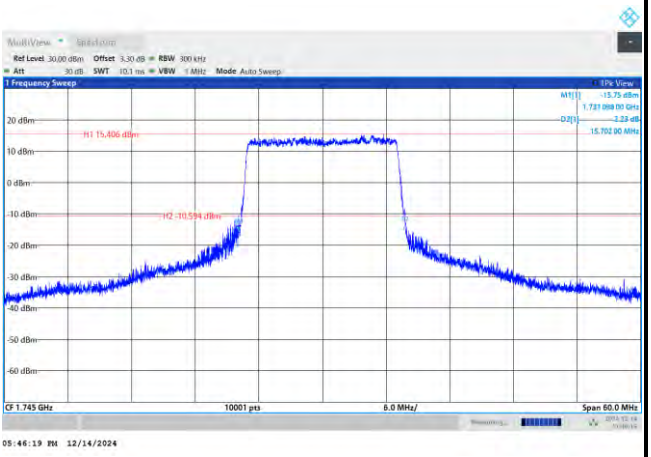
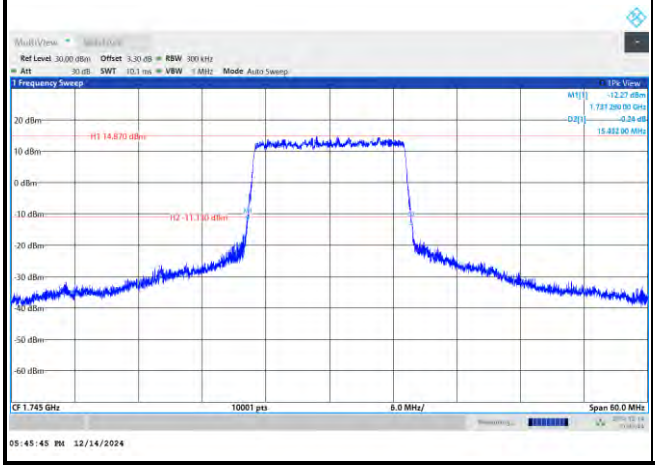
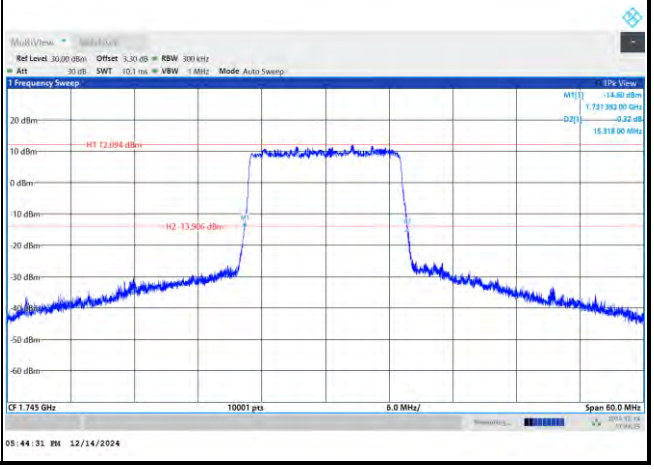
FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

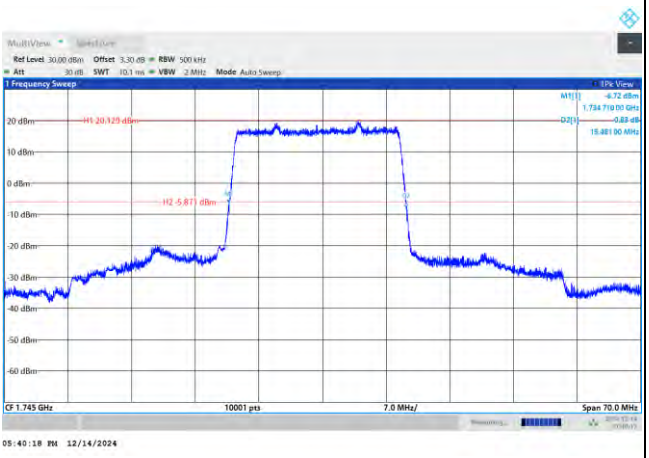
FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

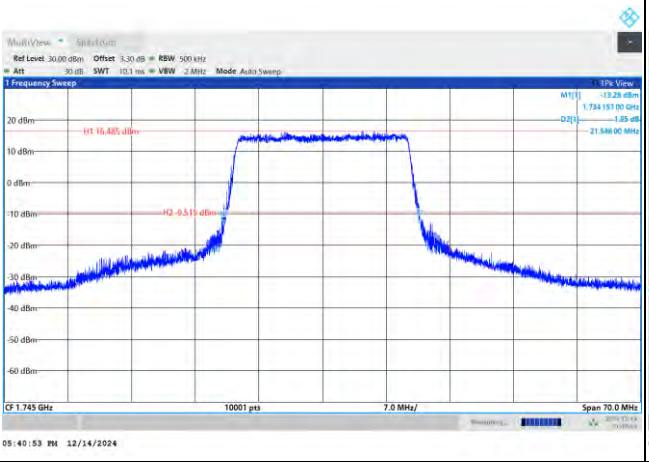
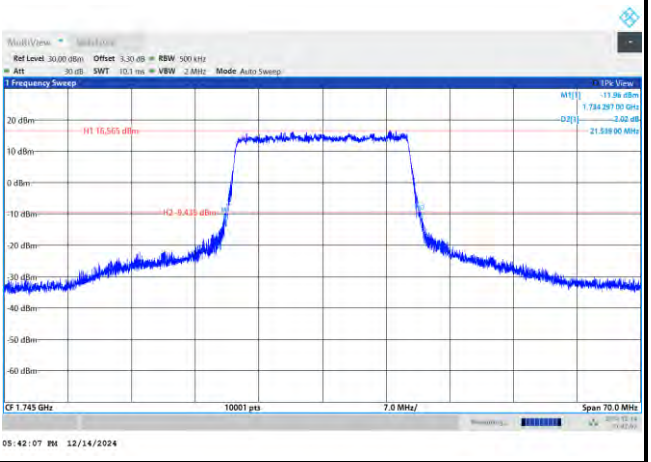
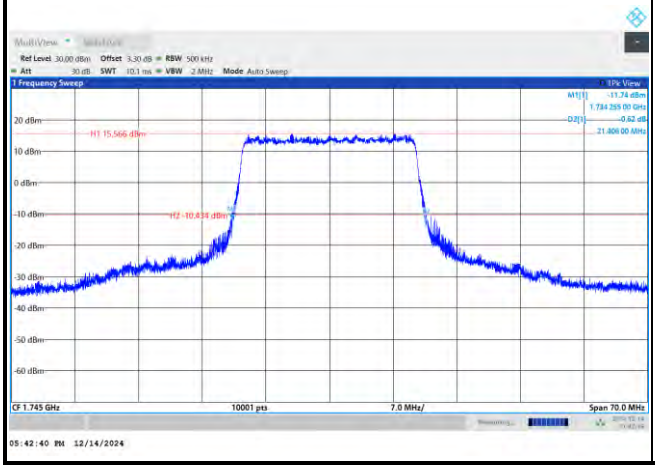
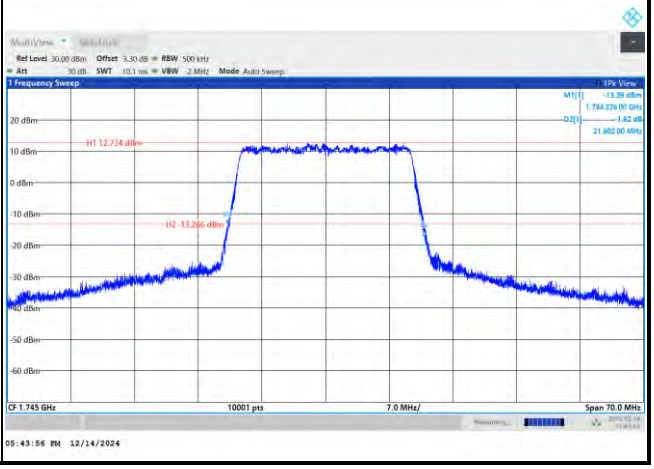
FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

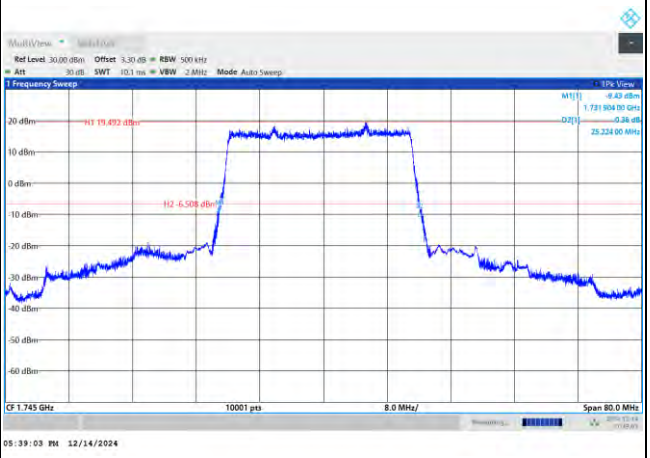
FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

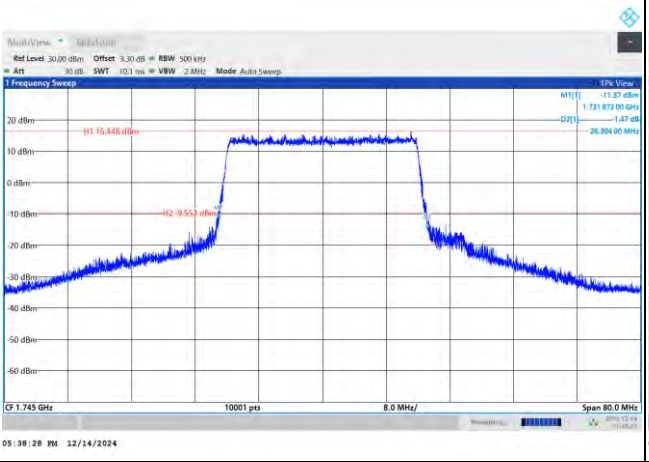
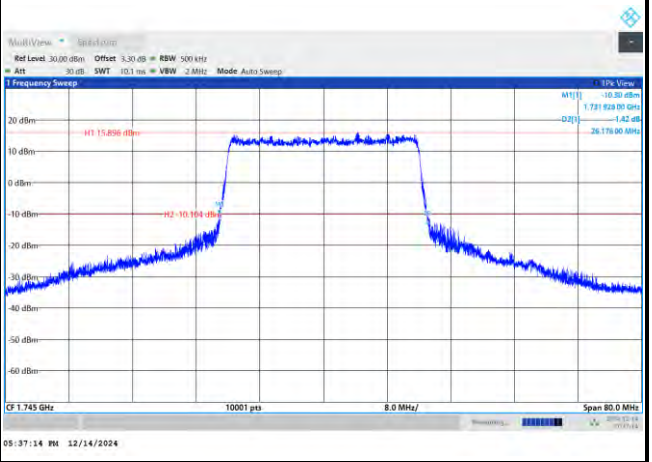
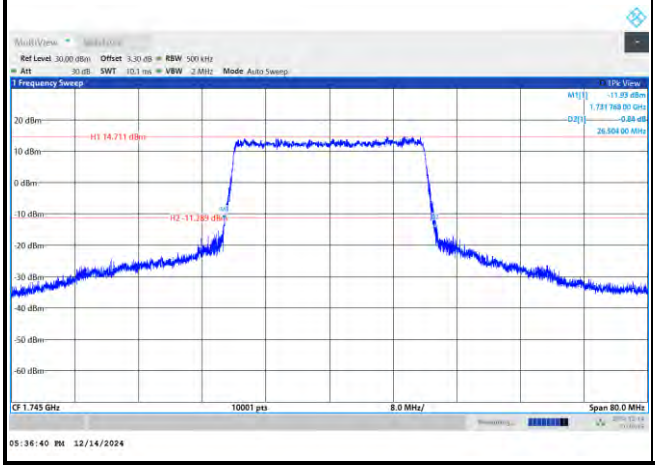
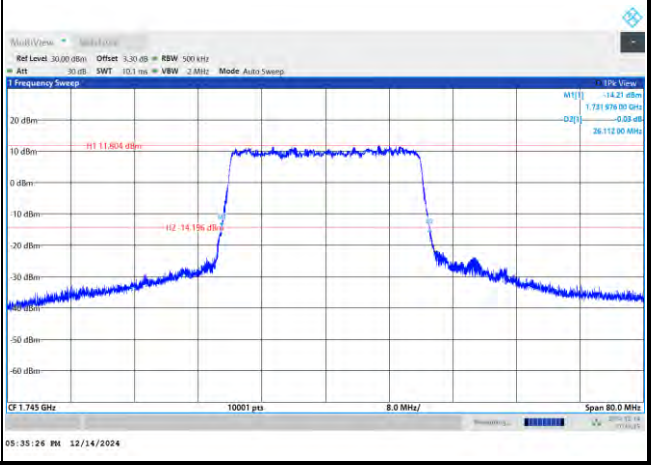
FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

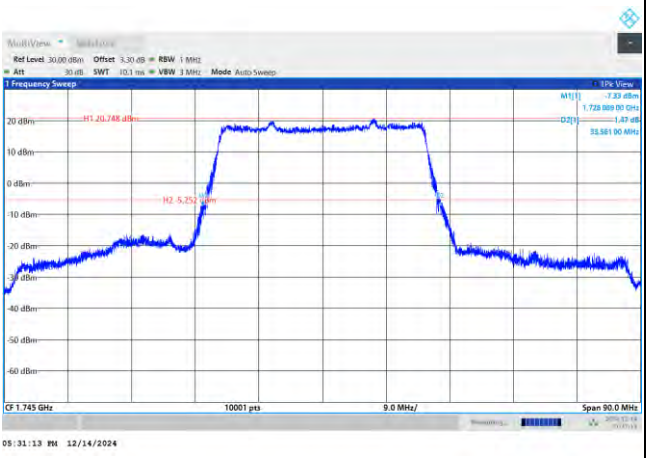
FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

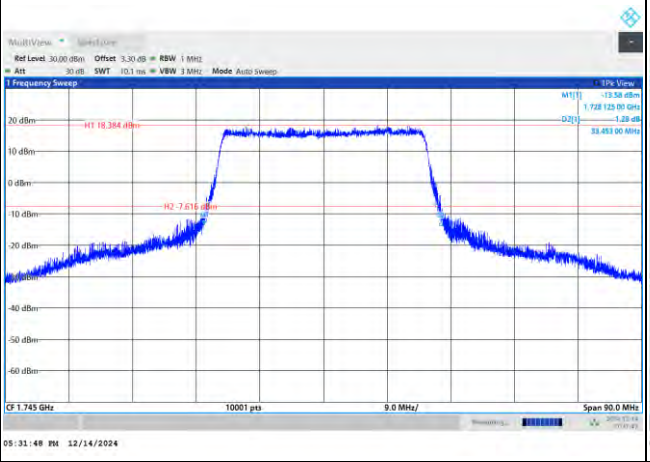
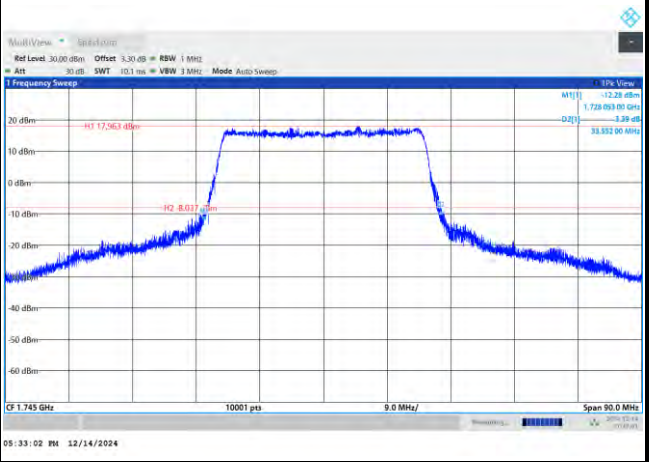
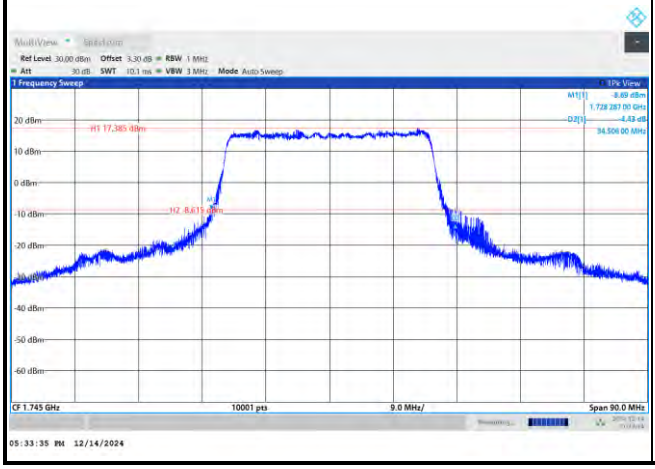
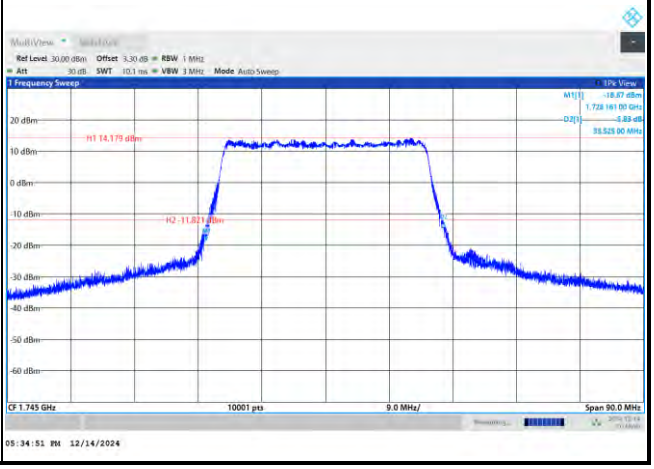
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

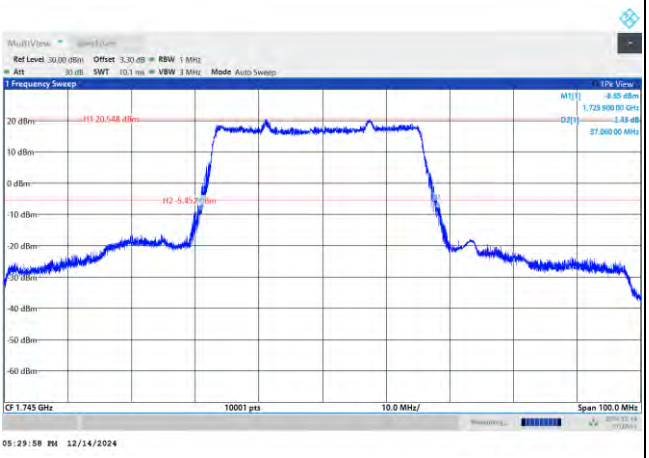
FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

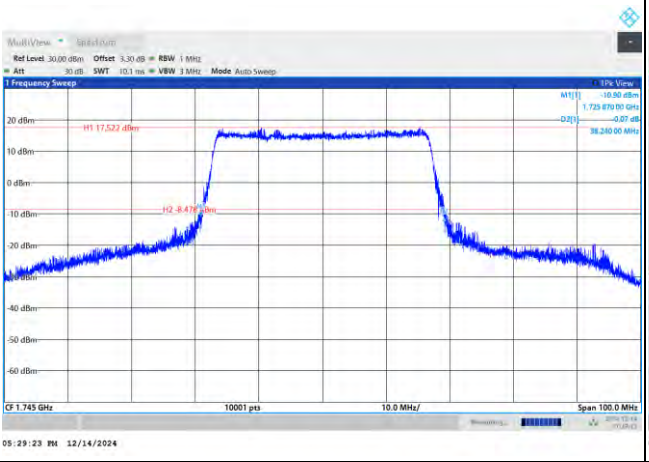
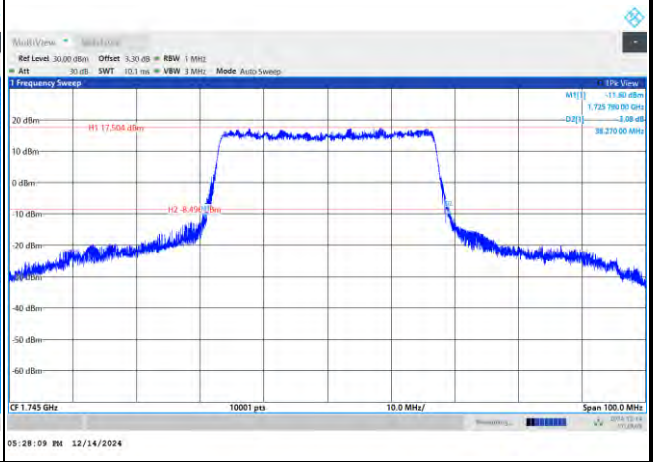
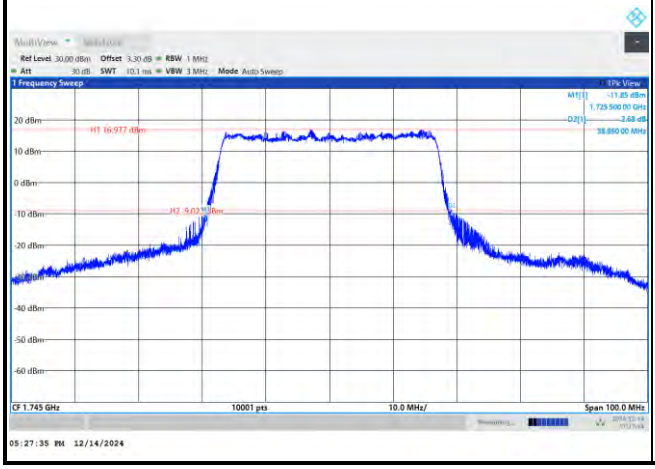
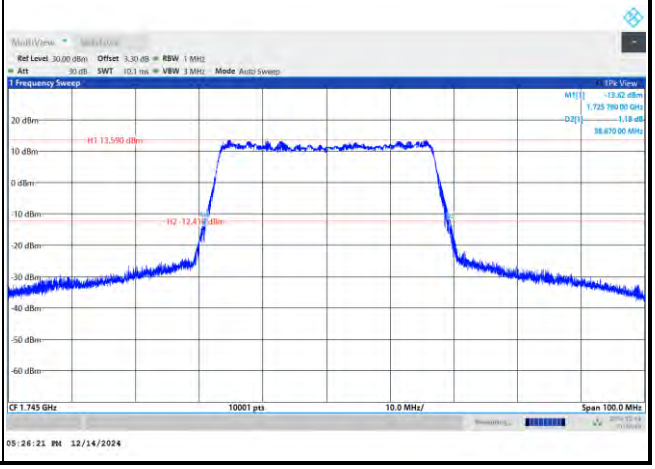
FR1 n66 / 25MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

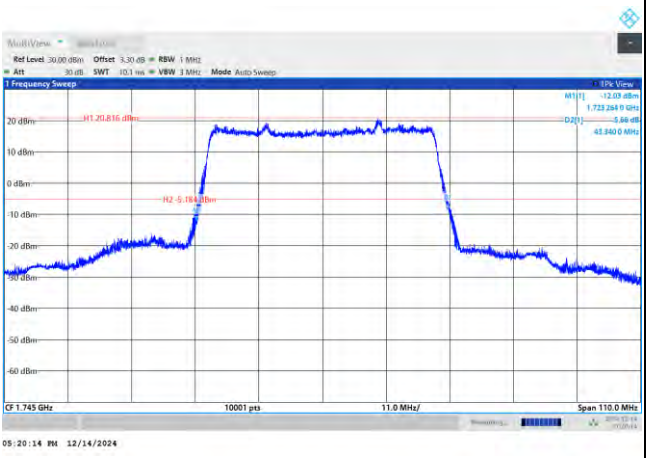
FR1 n66 / 25MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

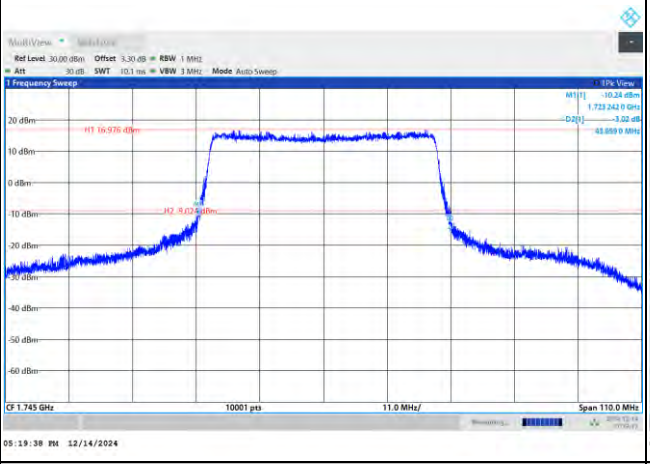
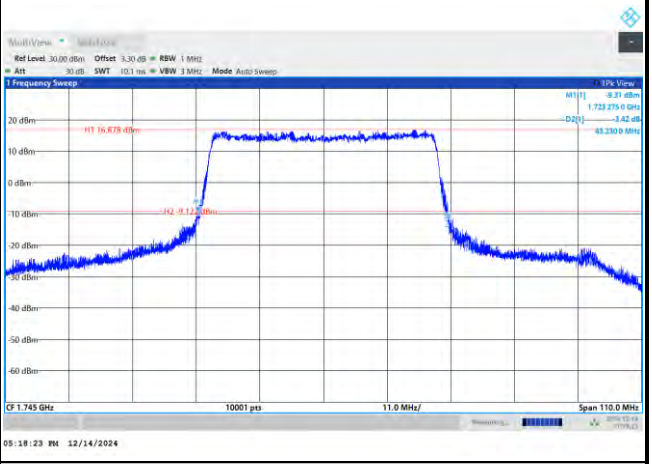
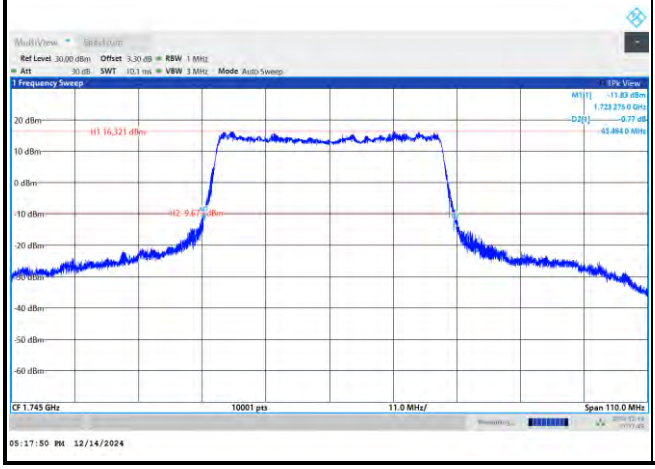
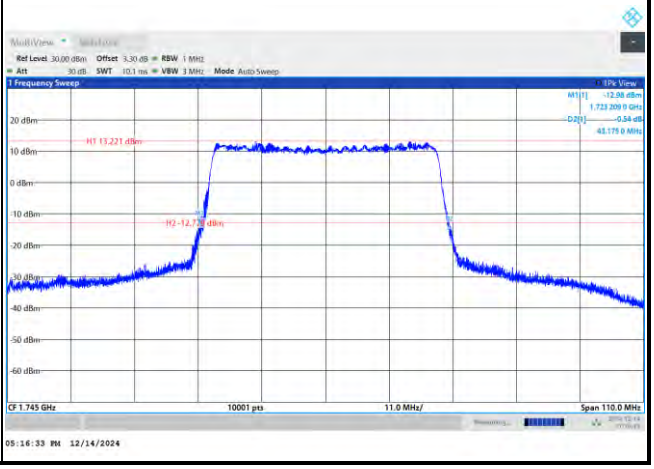
FR1 n66 / 30MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n66 / 30MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

FR1 n66 / 35MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

FR1 n66 / 40MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n66 / 40MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

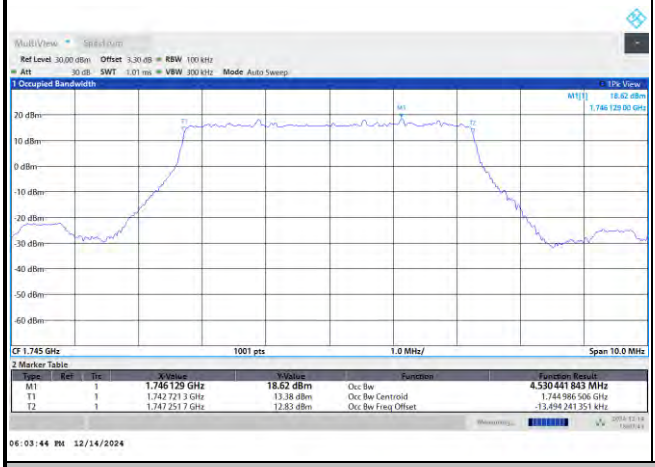
Occupied Bandwidth

Mode	FR1 n66 : 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	4.53		9.00		13.50		18.12	
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	23.06		29.32		32.82		39.09	

Mode	FR1 n66 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.53	4.52	9.34	9.34	14.19	14.17	19.13	19.08
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.52	4.52	9.34	9.33	14.19	14.16	19.07	19.16
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	23.89	23.87	29.08	29.02	33.98	34.00	38.97	38.95
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	23.93	23.86	29.07	29.00	34.06	33.99	38.94	38.97

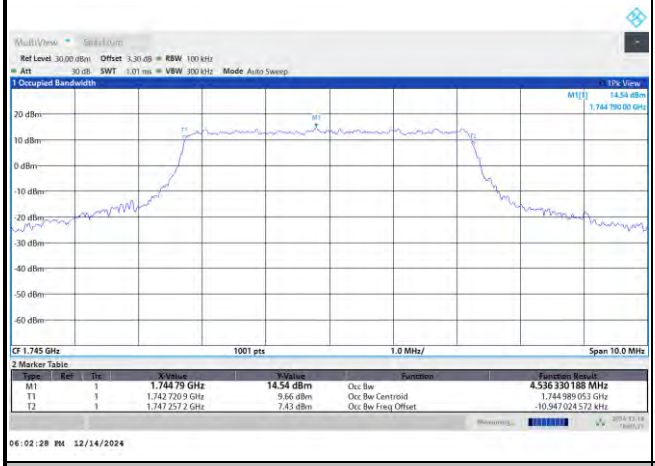
FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

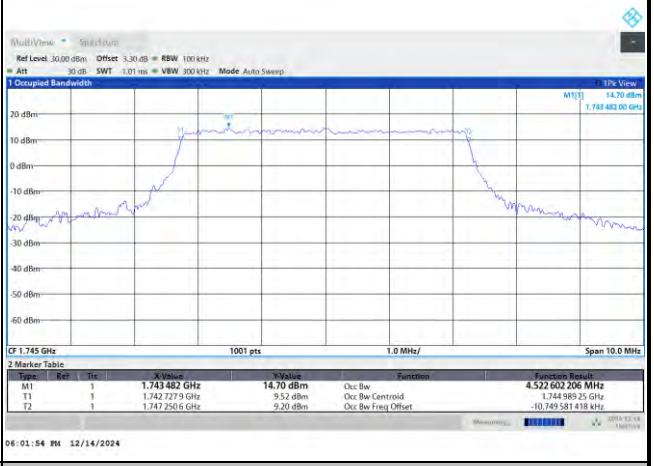


FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB

QPSK



16QAM

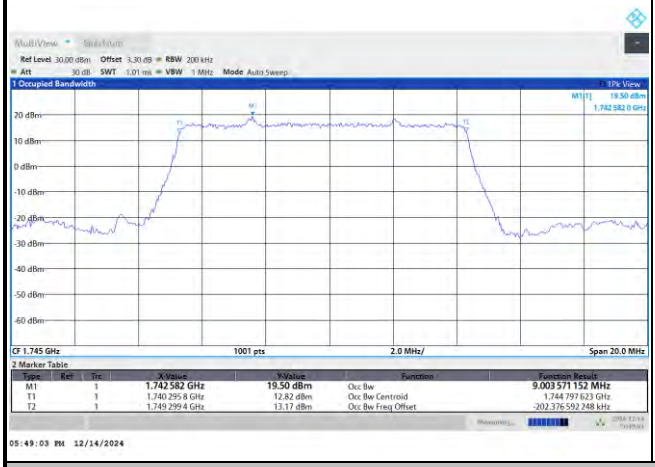


64QAM

256QAM

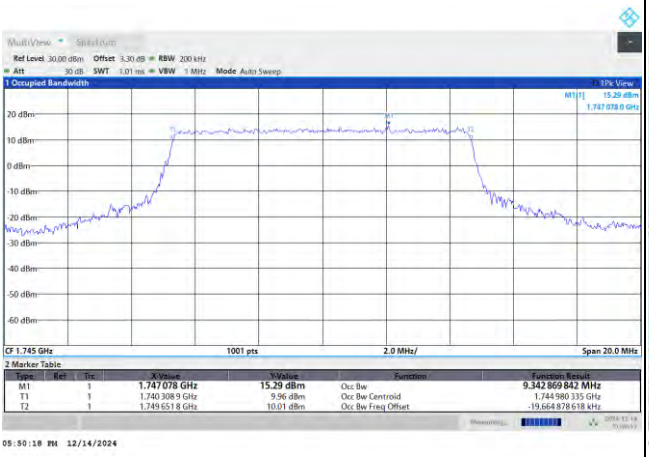
FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

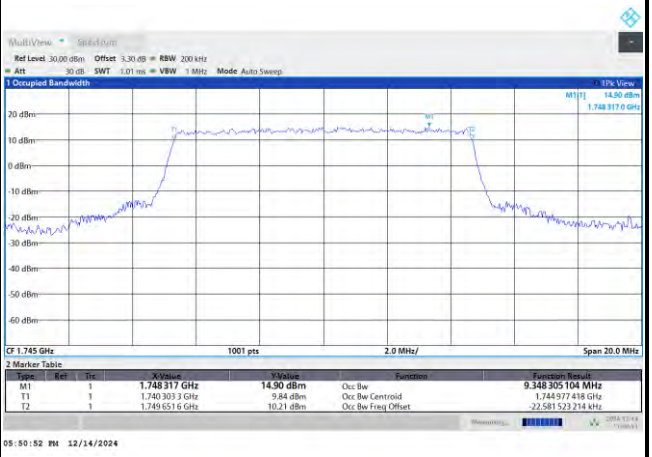


FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB

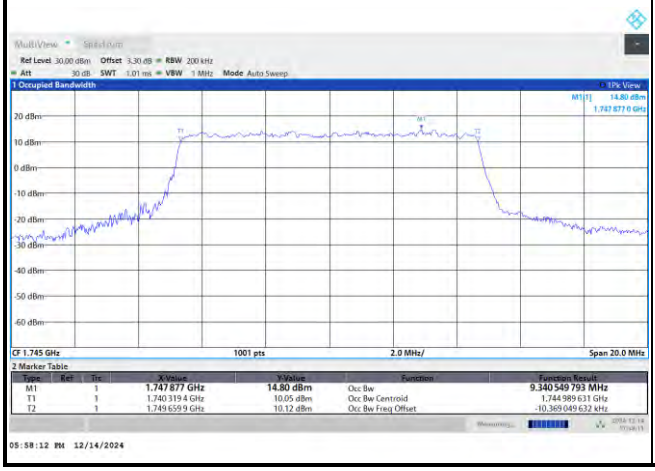
QPSK



16QAM



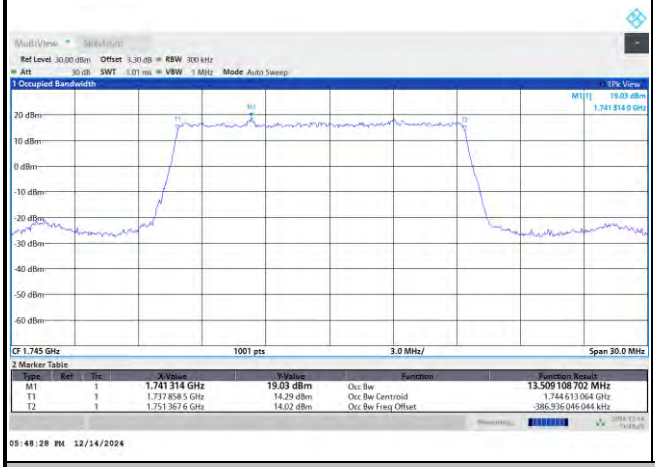
64QAM



256QAM

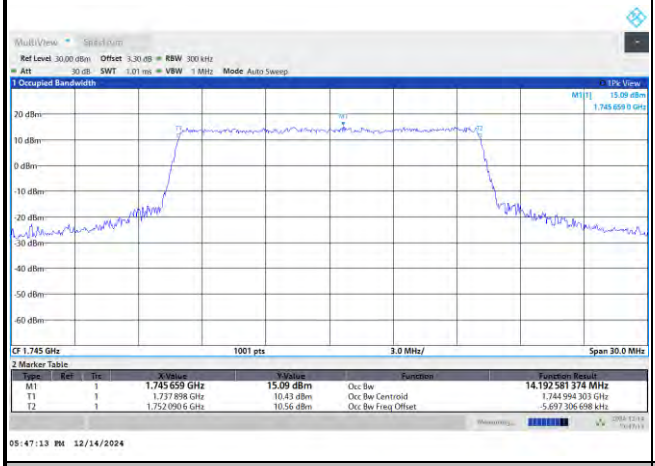
FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

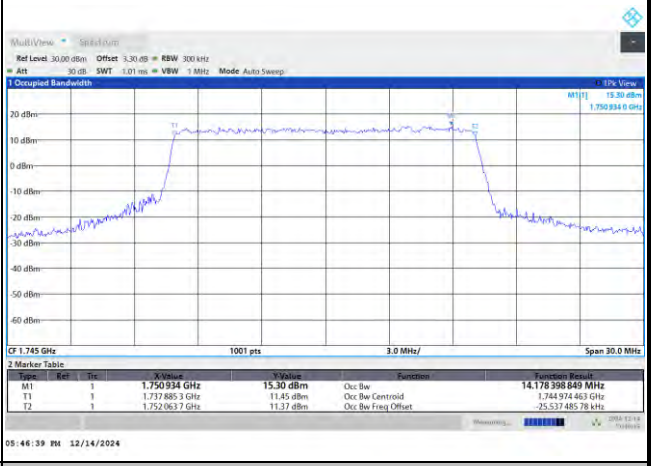


FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB

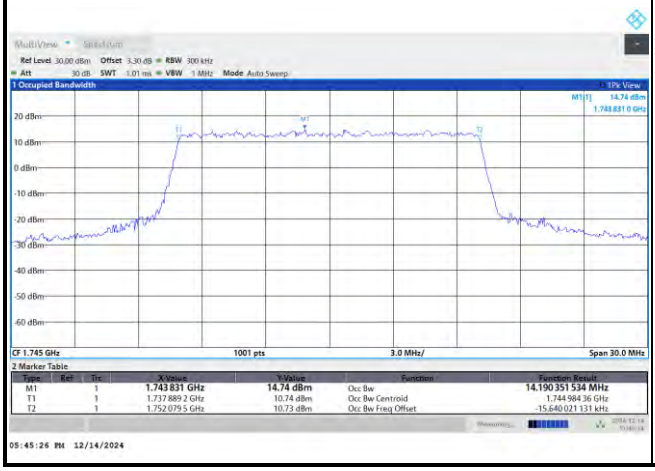
QPSK



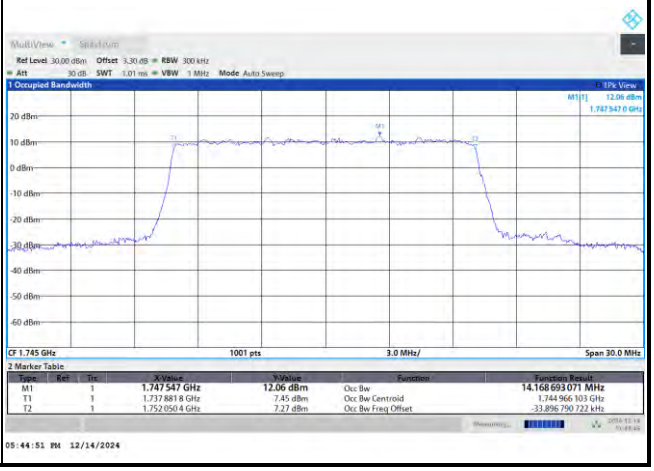
16QAM



64QAM

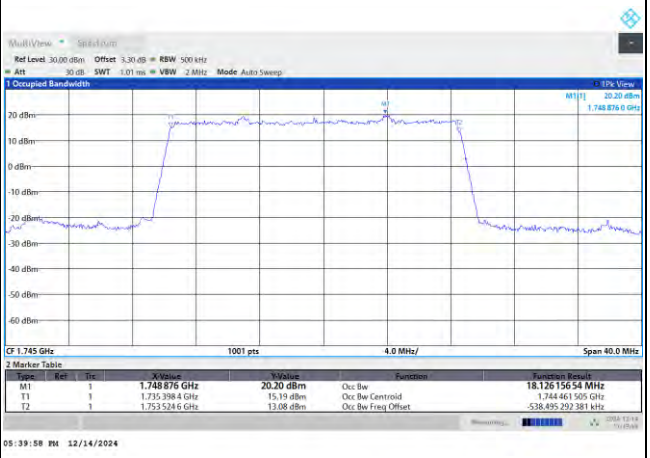


256QAM



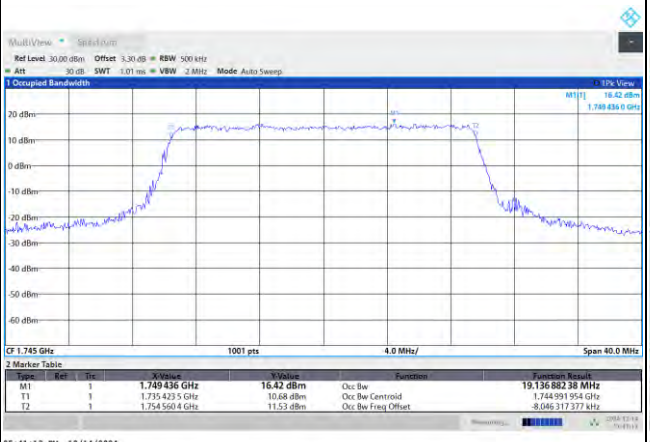
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

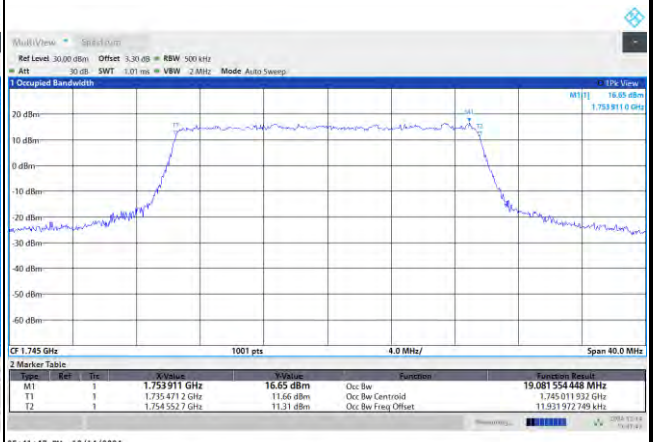


FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB

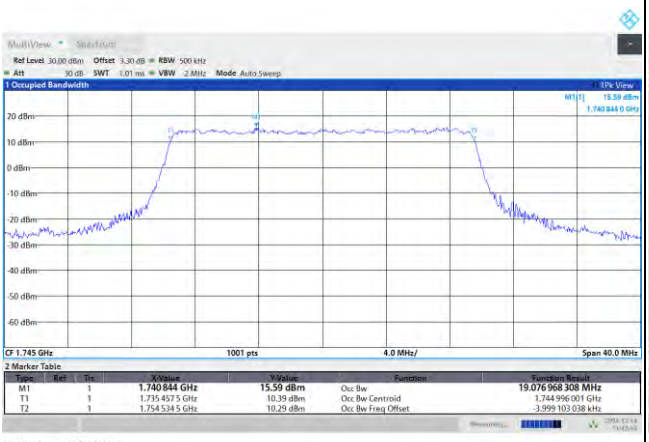
QPSK



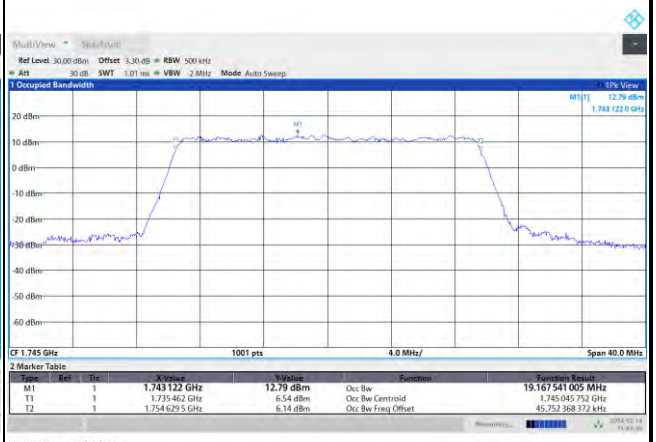
16QAM



64QAM



256QAM



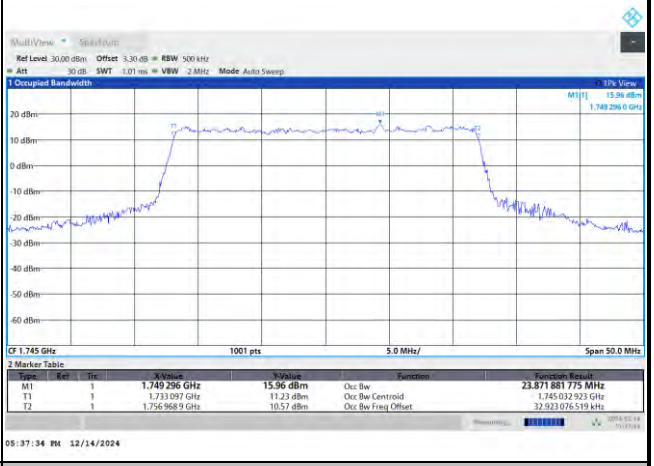
FR1 n66 / 25MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

FR1 n66 / 25MHz / CP OFDM / Middle Channel / Full RB

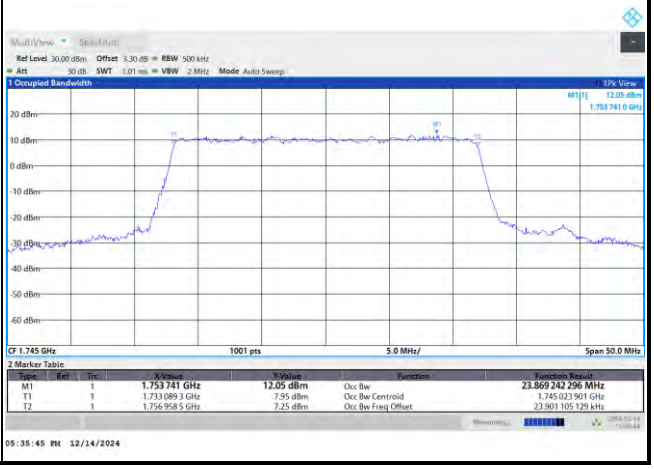
QPSK

16QAM



64QAM

256QAM

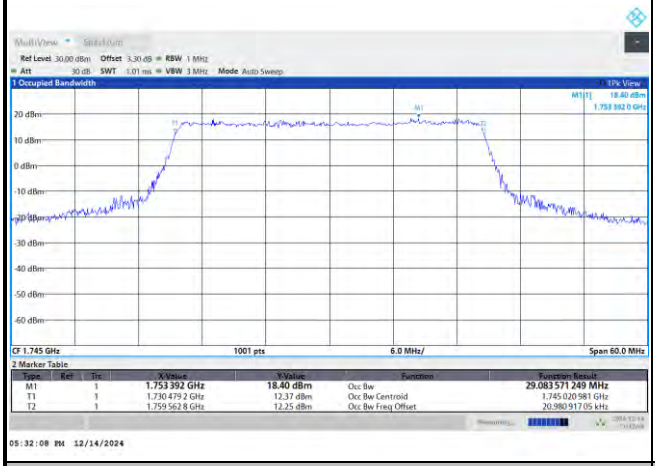


FR1 n66 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

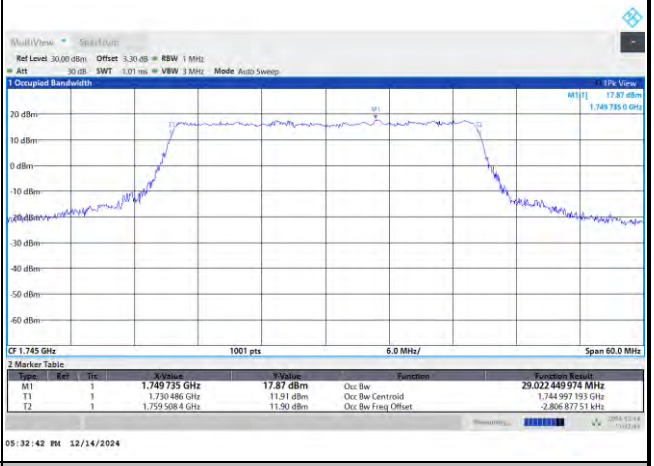
PI/2 BPSK

FR1 n66 / 30MHz / CP OFDM / Middle Channel / Full RB

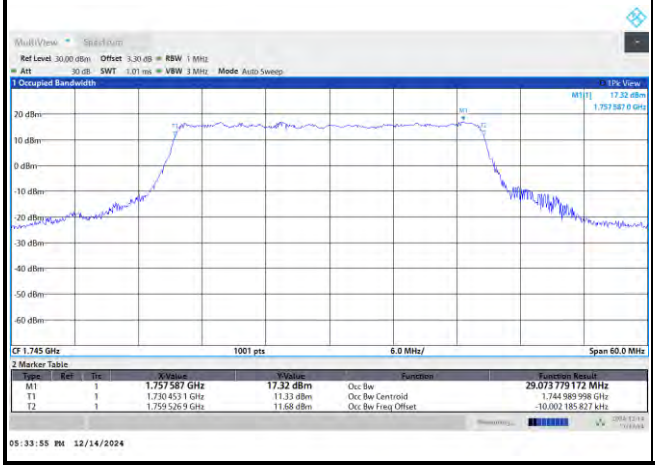
QPSK



16QAM



64QAM



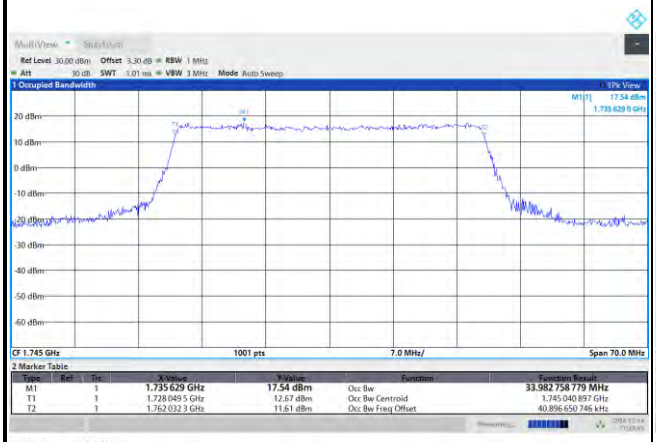
256QAM

FR1 n66 / 35MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

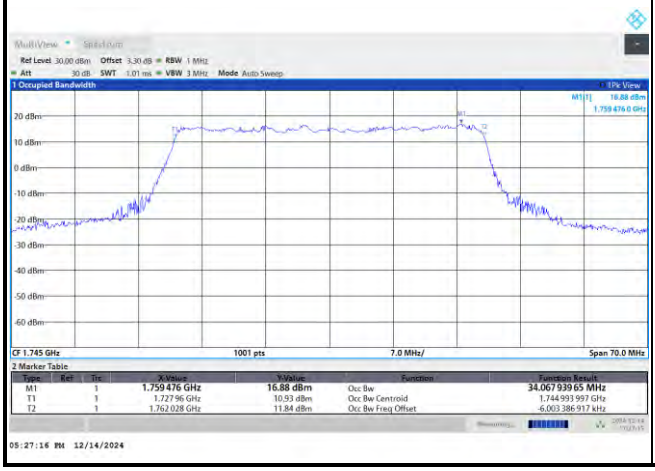
FR1 n66 / 35MHz / CP OFDM / Middle Channel / Full RB

QPSK



16QAM

64QAM



256QAM

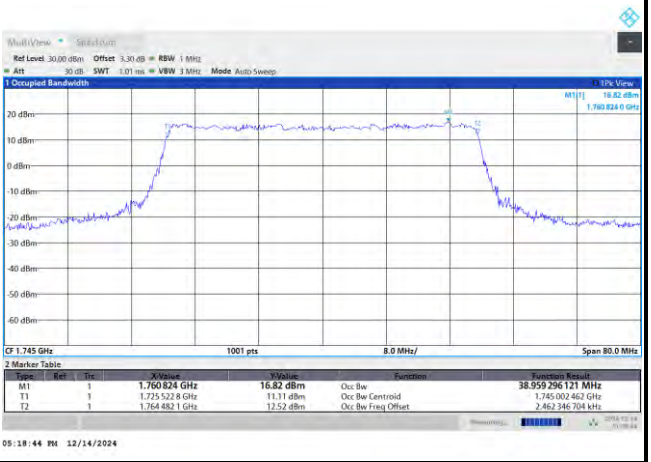
FR1 n66 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

FR1 n66 / 40MHz / CP OFDM / Middle Channel / Full RB

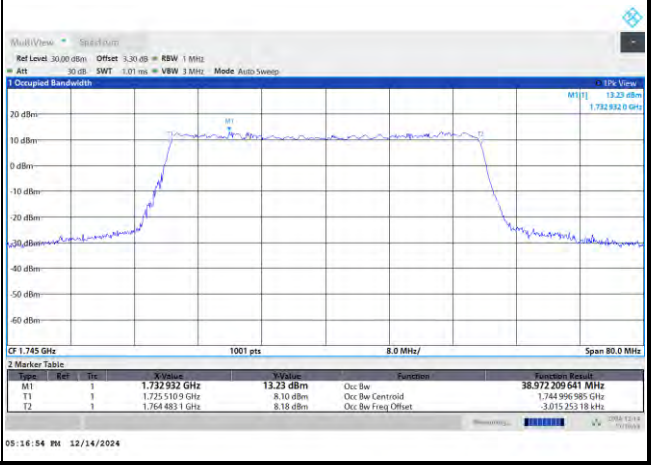
QPSK

16QAM



64QAM

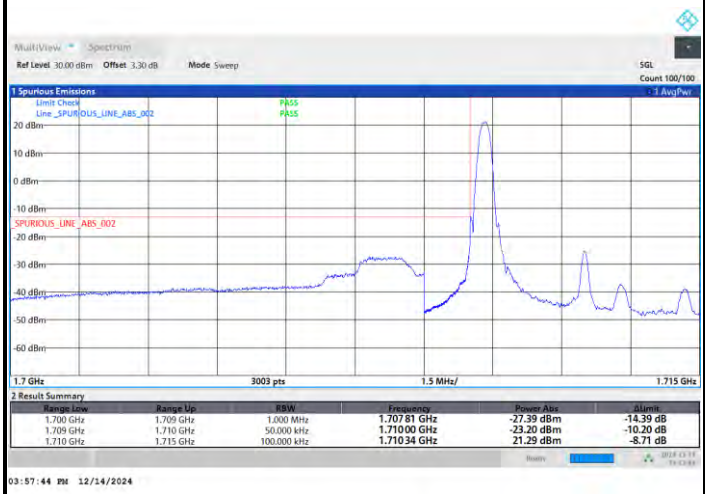
256QAM



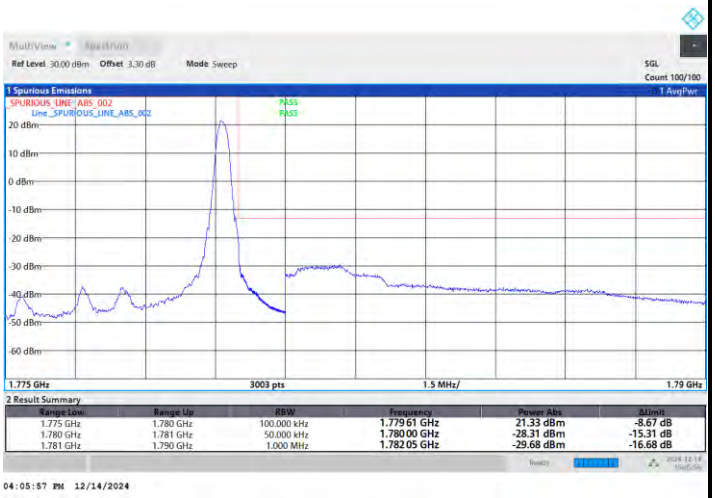
Conducted Band Edge

FR1 n66 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0



Highest Band Edge / 1RBmax

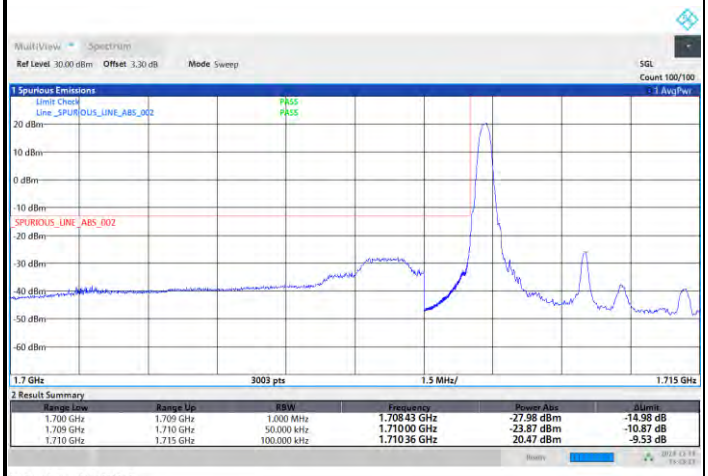


Lowest Band Edge / Full RB

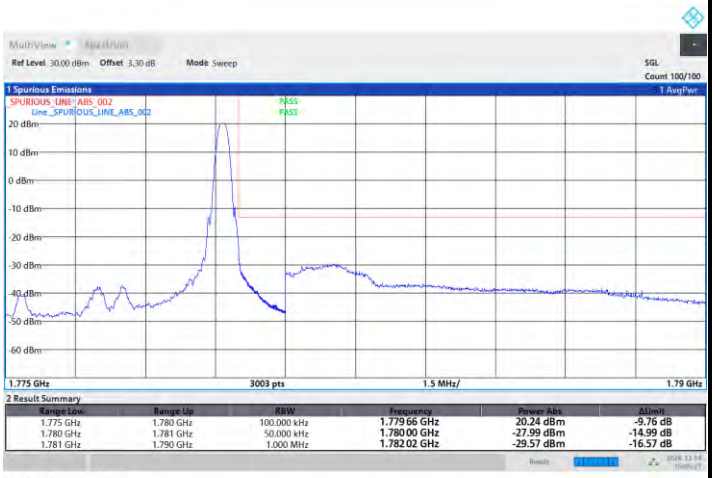
Highest Band Edge / Full RB

FR1 n66 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

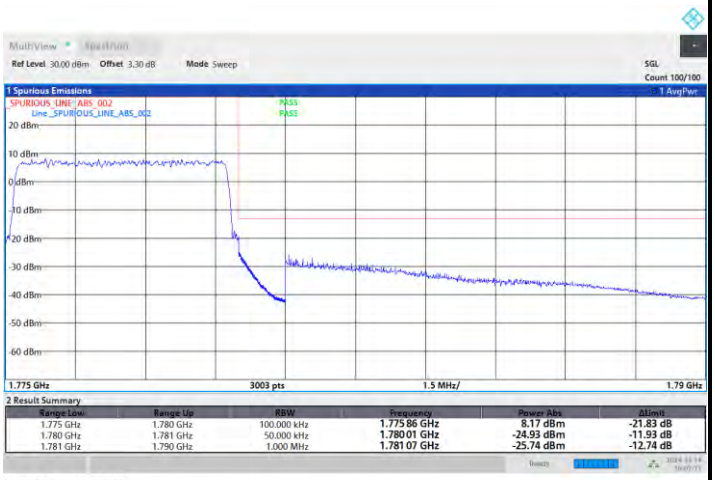


Highest Band Edge / 1RBmax



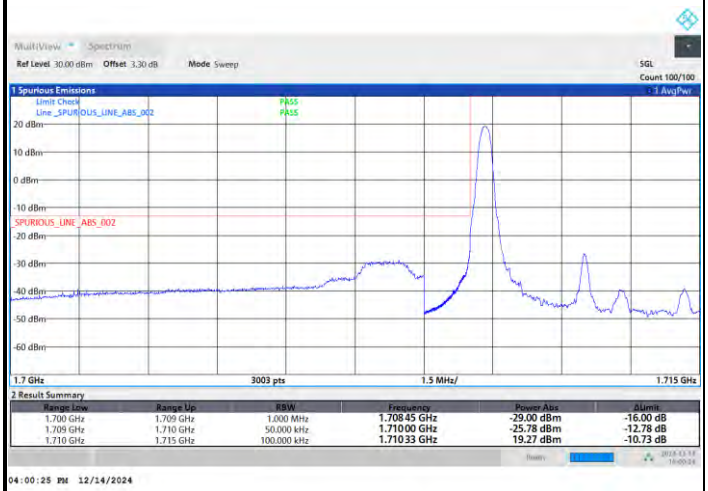
Lowest Band Edge / Full RB

Highest Band Edge / Full RB

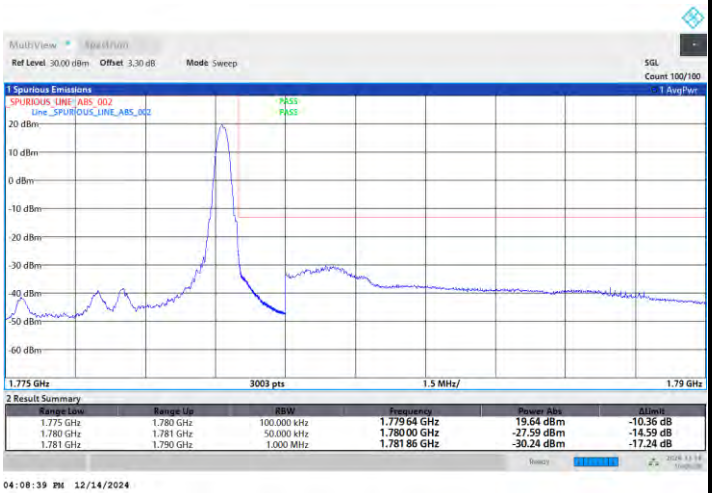


FR1 n66 / 5MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0



Highest Band Edge / 1RBmax

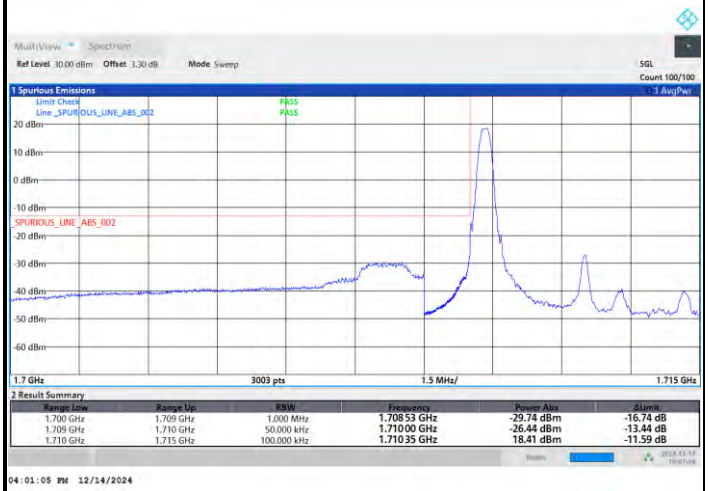


Lowest Band Edge / Full RB

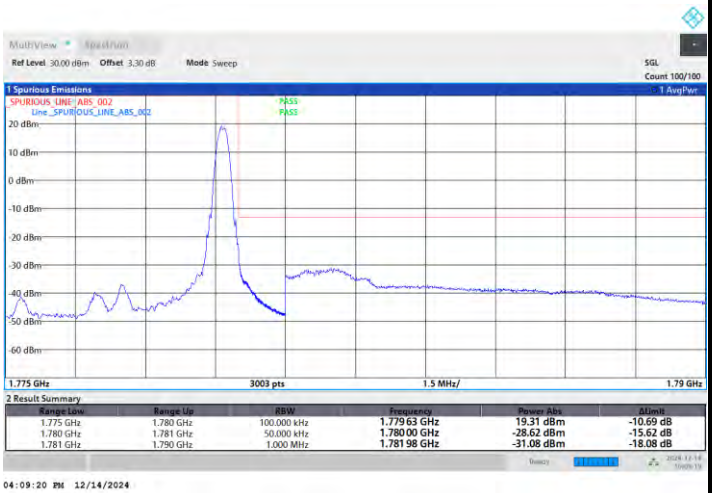
Highest Band Edge / Full RB

FR1 n66 / 5MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0



Highest Band Edge / 1RBmax

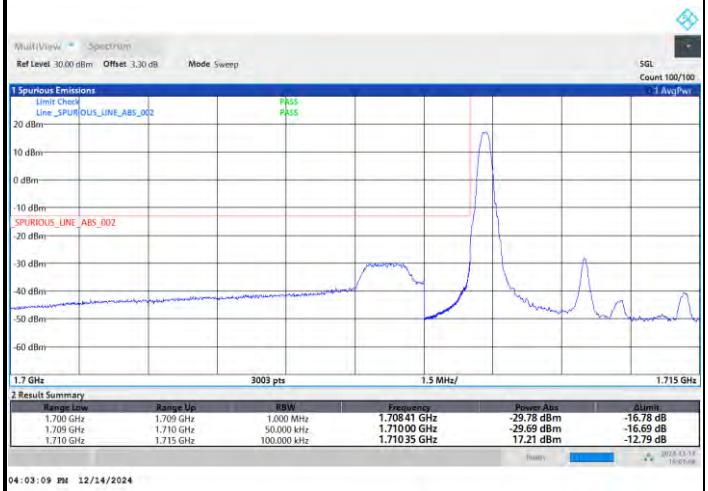


Lowest Band Edge / Full RB

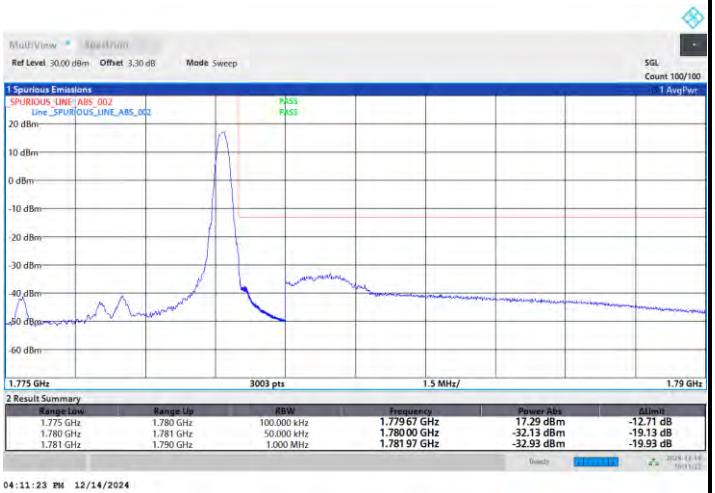
Highest Band Edge / Full RB

FR1 n66 / 5MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

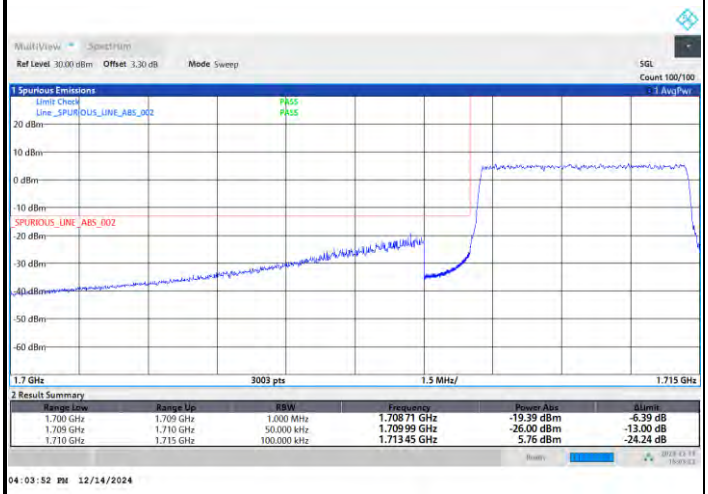
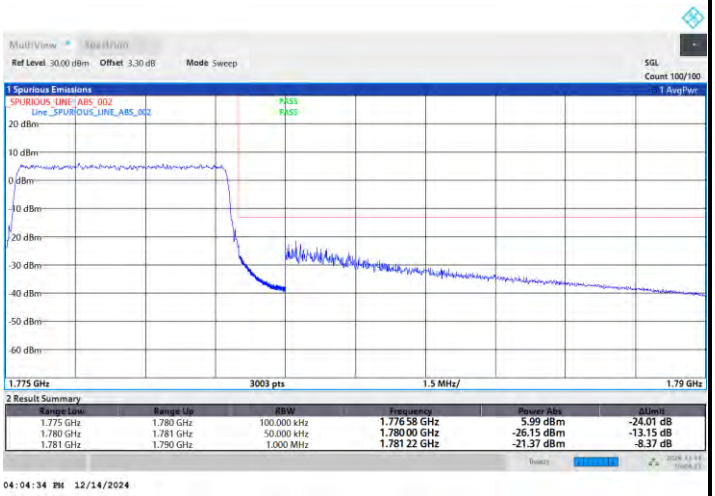


Highest Band Edge / 1RBmax

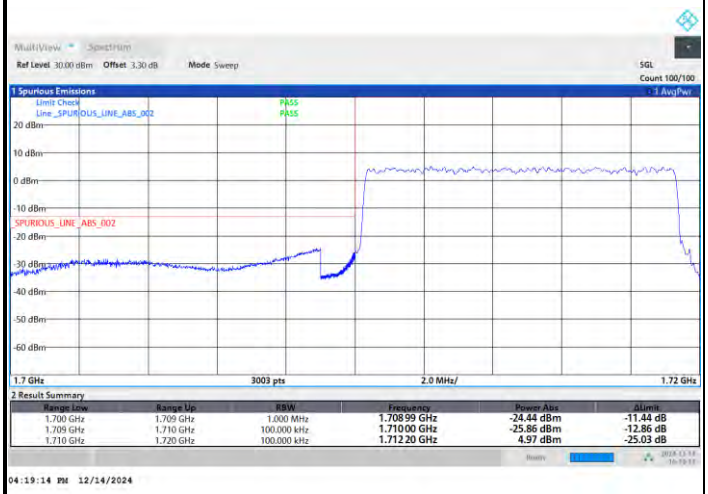
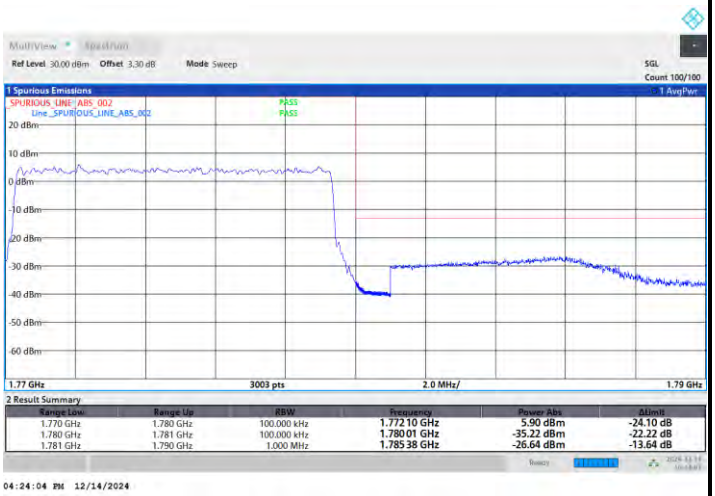


Lowest Band Edge / Full RB

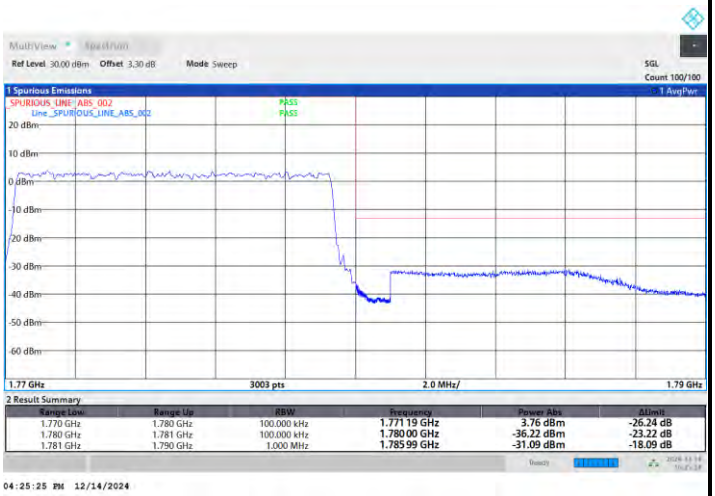
Highest Band Edge / Full RB

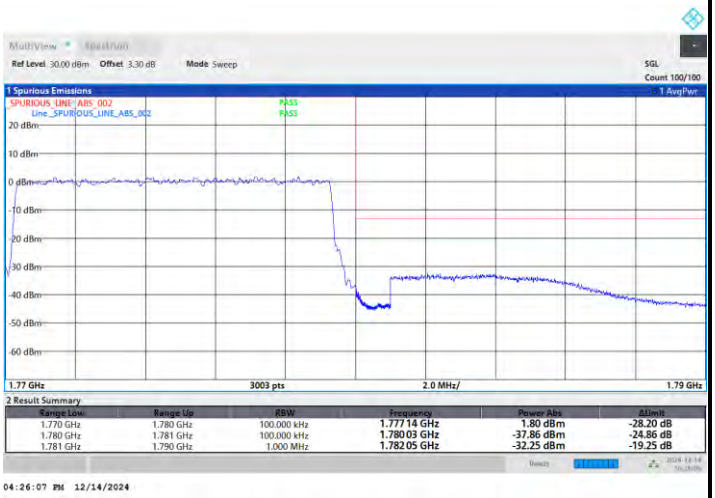
FR1 n66 / 5MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

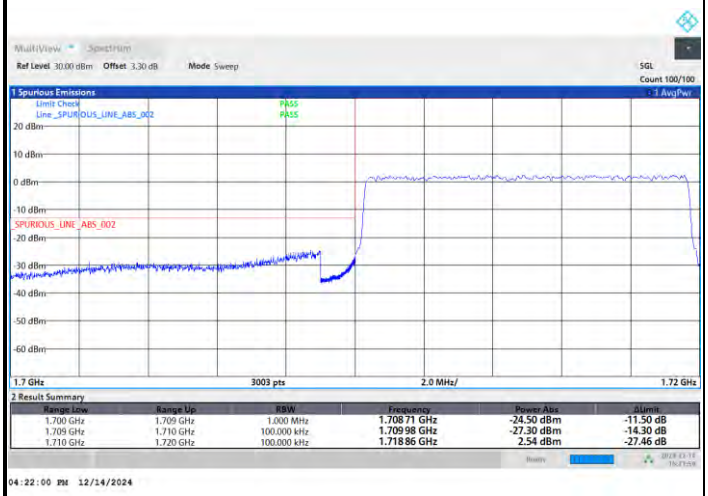
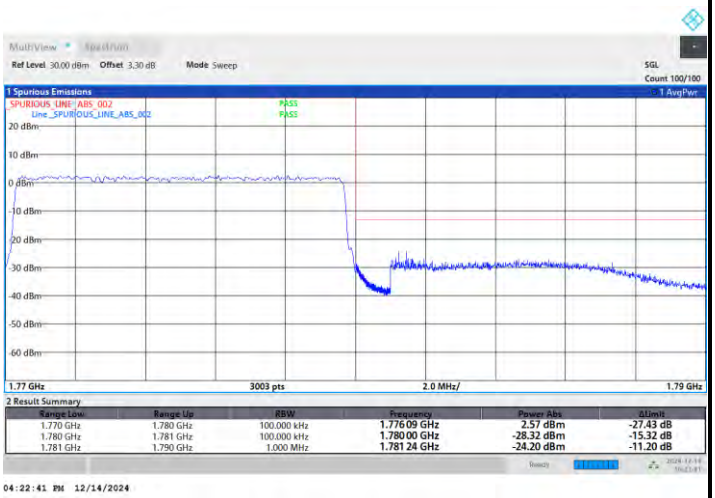
FR1 n66 / 10MHz / DFT-s-OFDM / PI/2 BPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**

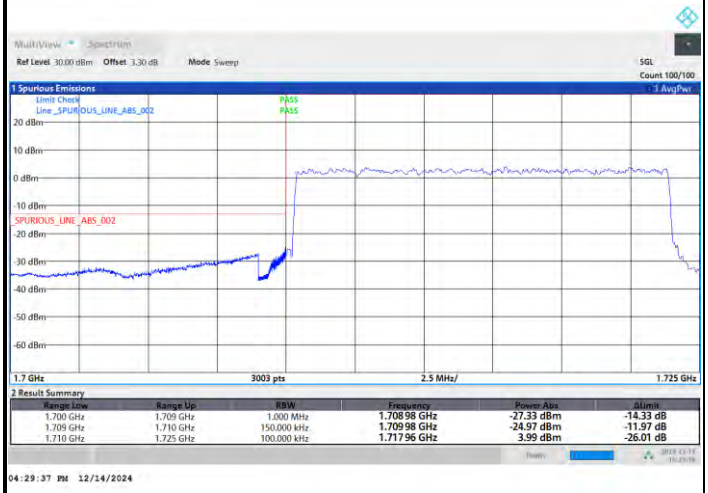
FR1 n66 / 10MHz / DFT-s-OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

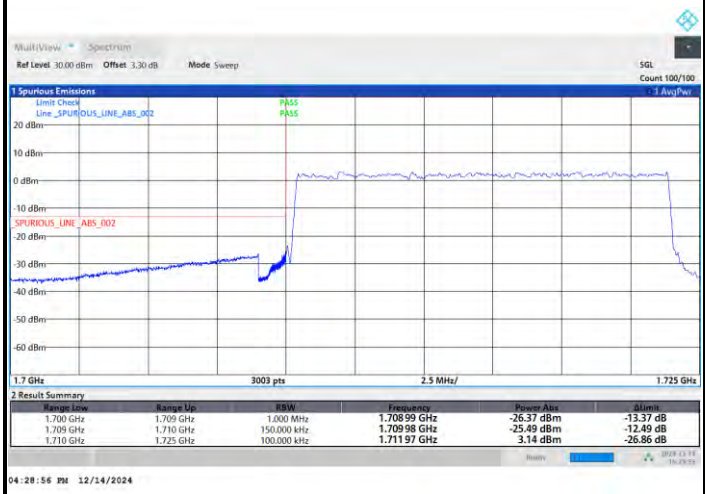
FR1 n66 / 10MHz / DFT-s-OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**

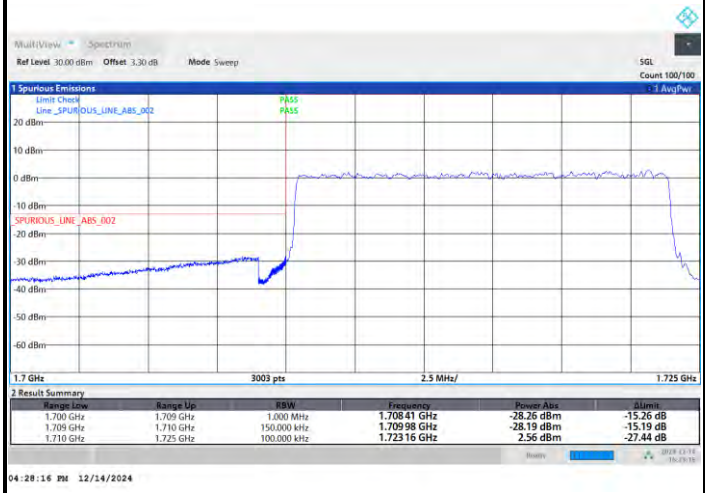
FR1 n66 / 10MHz / DFT-s-OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

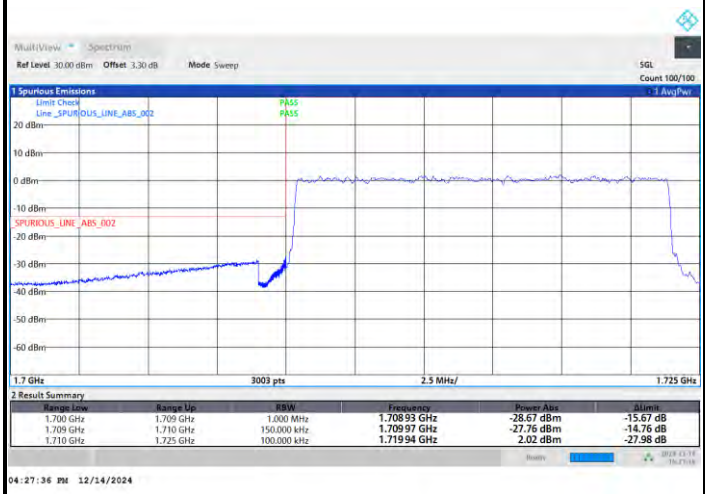
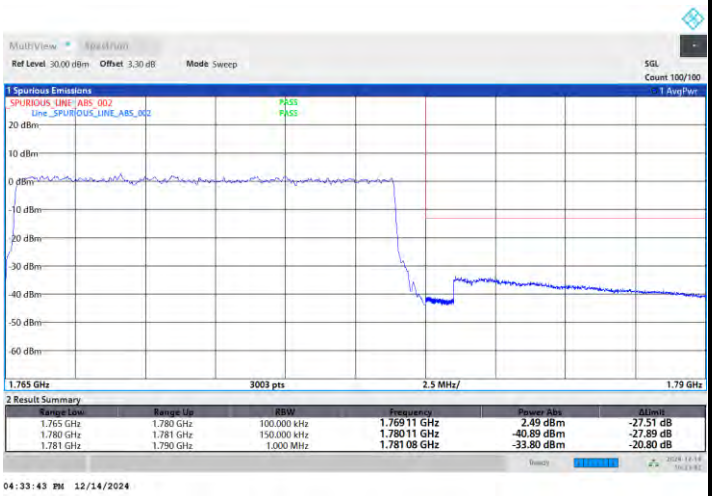
FR1 n66 / 10MHz / DFT-s-OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n66 / 10MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

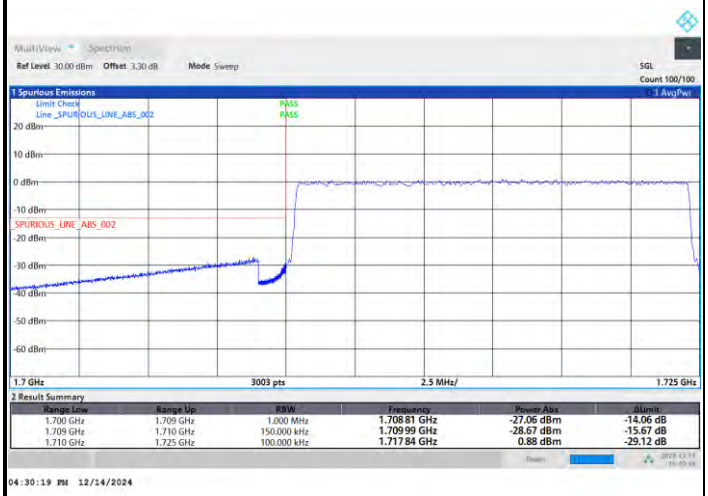
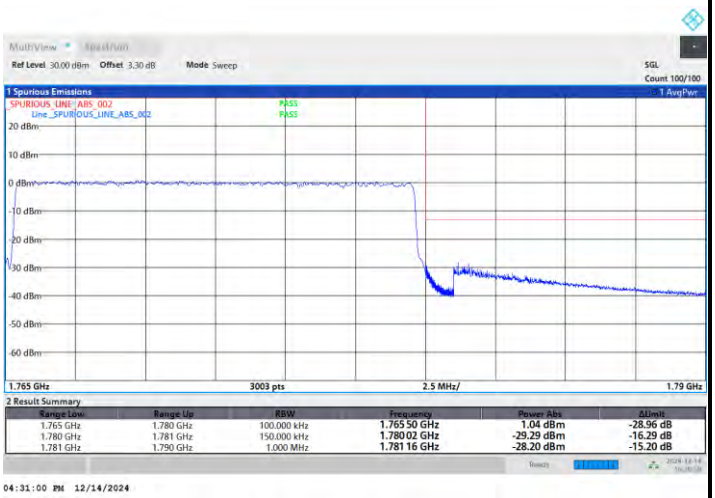
FR1 n66 / 15MHz / DFT-s-OFDM / PI/2 BPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

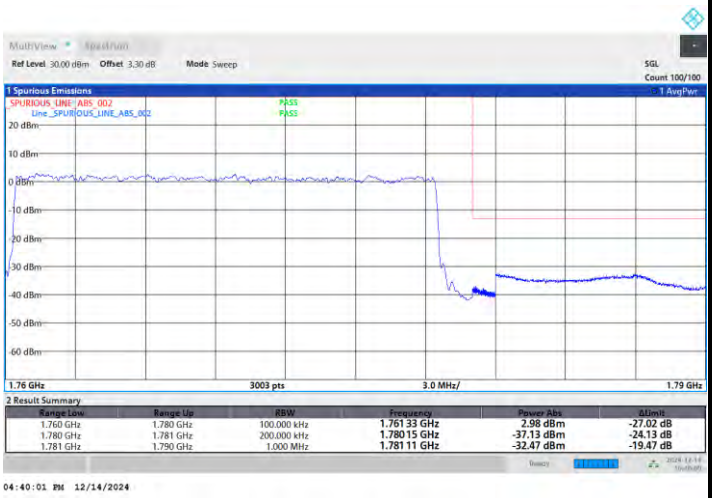
FR1 n66 / 15MHz / DFT-s-OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

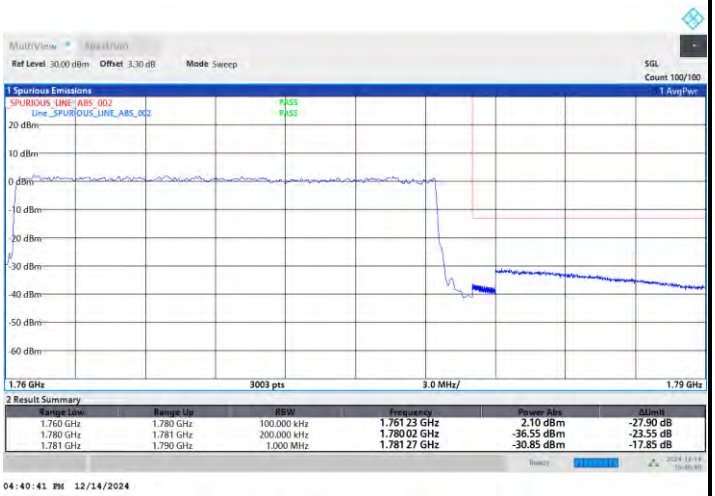
FR1 n66 / 15MHz / DFT-s-OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

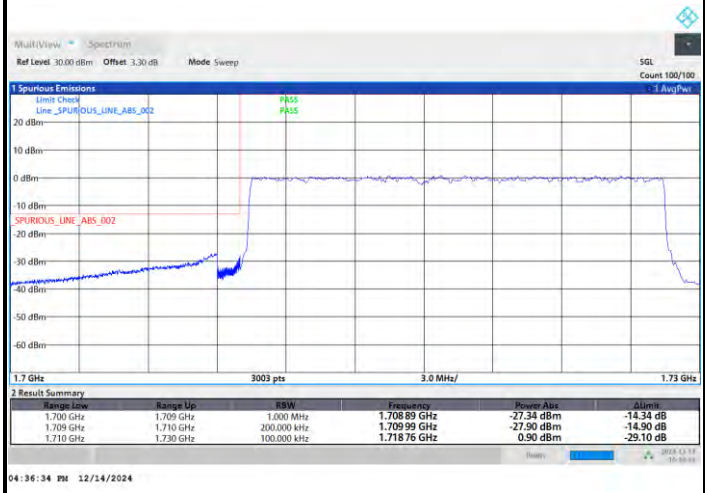
FR1 n66 / 15MHz / DFT-s-OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

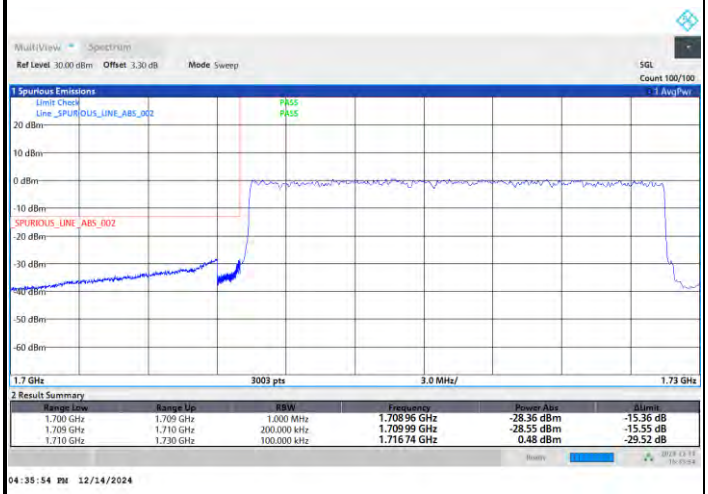
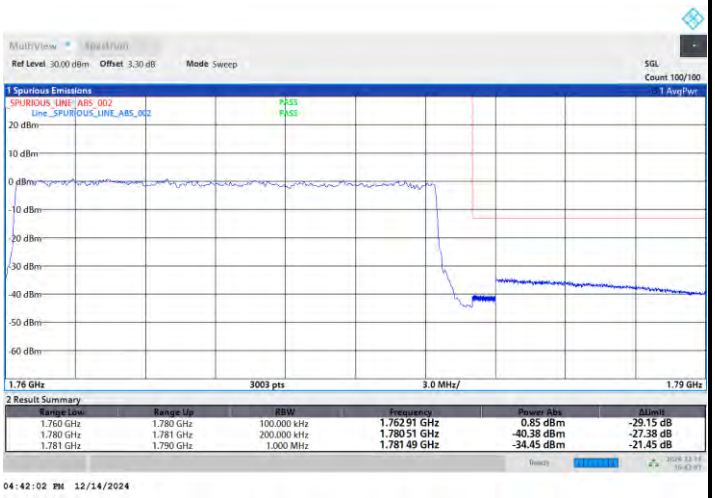
FR1 n66 / 15MHz / DFT-s-OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**

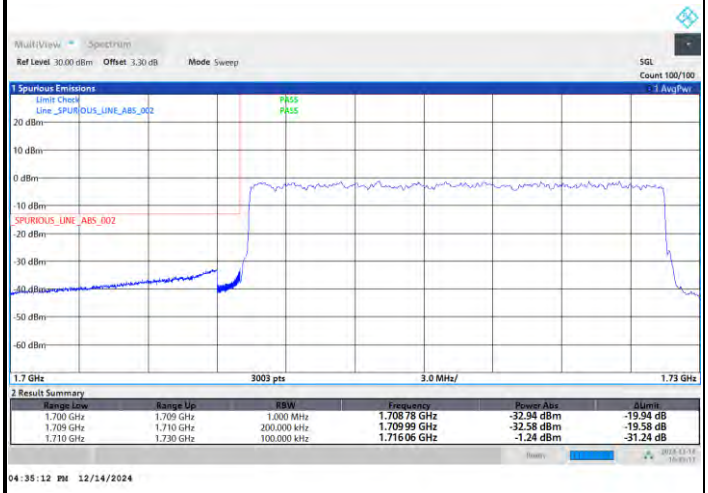
FR1 n66 / 15MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n66 / 20MHz / DFT-s-OFDM / PI/2 BPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

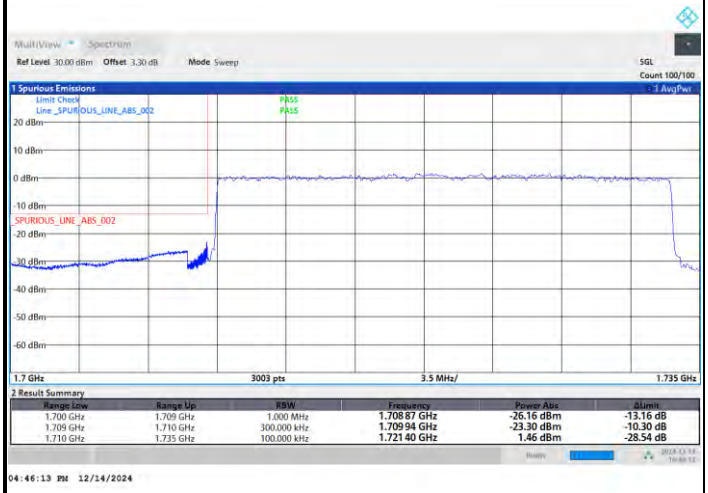
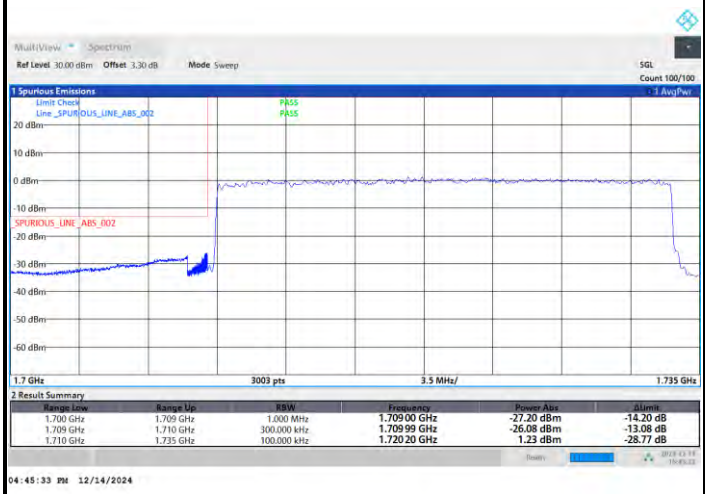
FR1 n66 / 20MHz / DFT-s-OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n66 / 20MHz / DFT-s-OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n66 / 20MHz / DFT-s-OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n66 / 20MHz / DFT-s-OFDM / 256QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n66 / 20MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**

FR1 n66 / 25MHz / DFT-s-OFDM / PI/2 BPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n66 / 25MHz / DFT-s-OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**