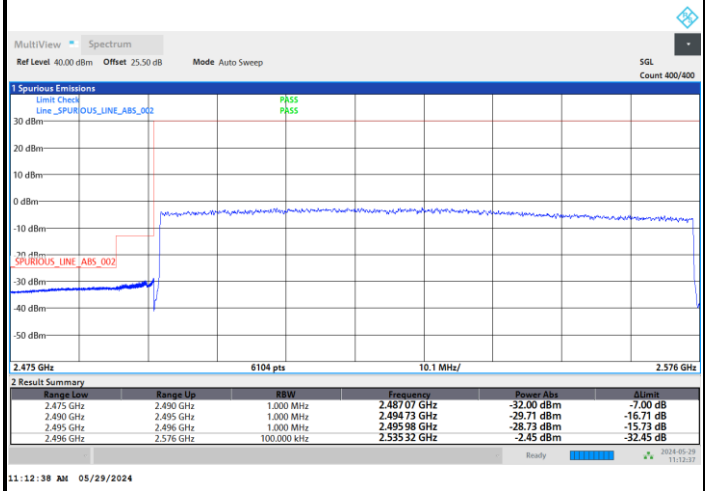
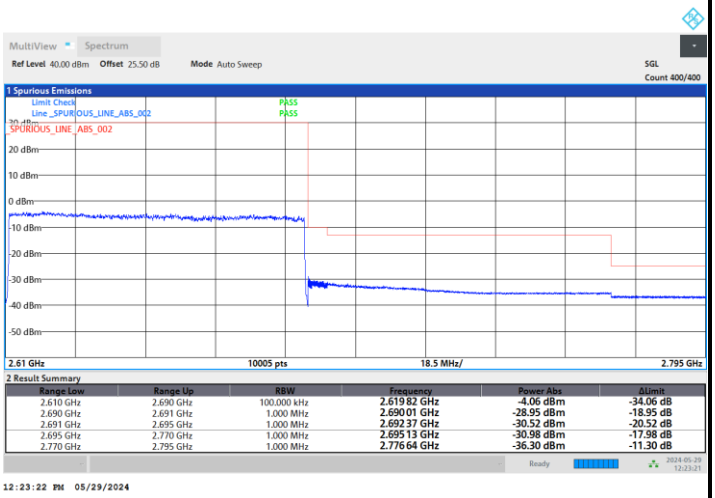
FR1 n41 / 80MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

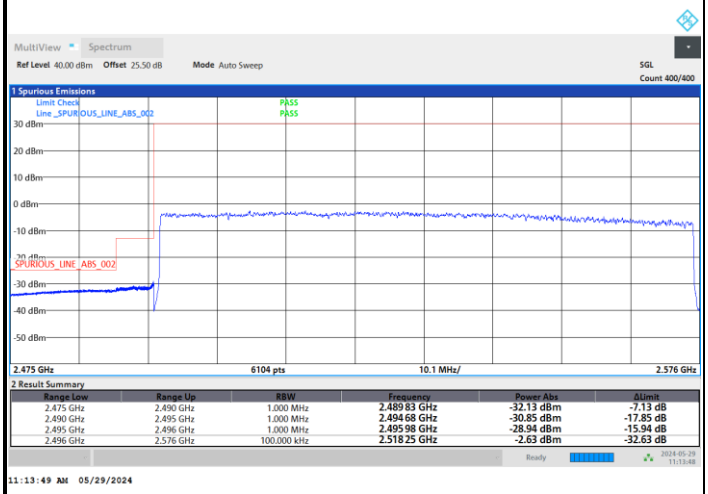


Highest Band Edge / Full RB

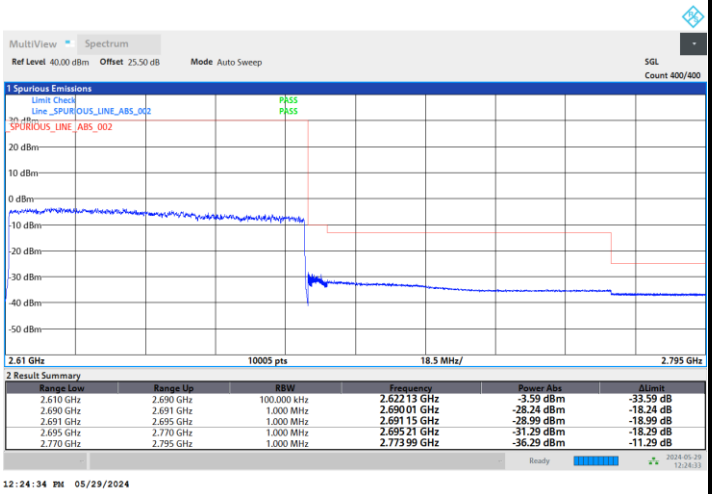


FR1 n41 / 80MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

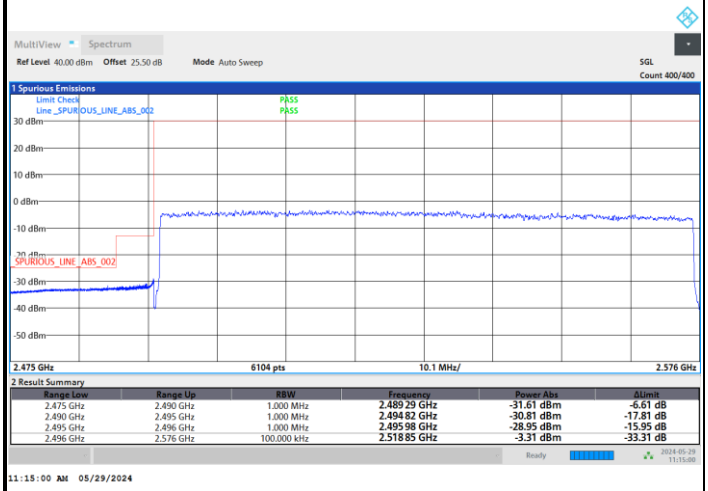


Highest Band Edge / Full RB

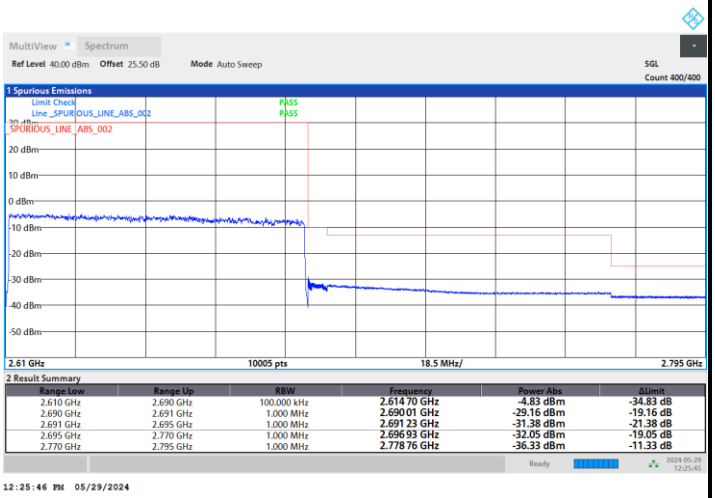


FR1 n41 / 80MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

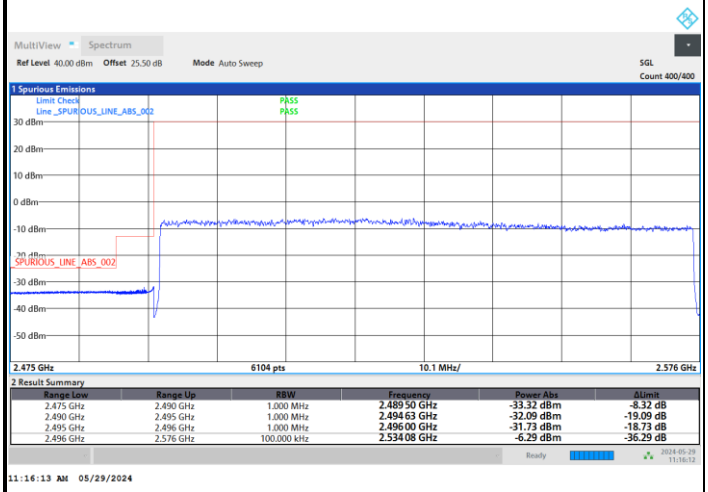


Highest Band Edge / Full RB

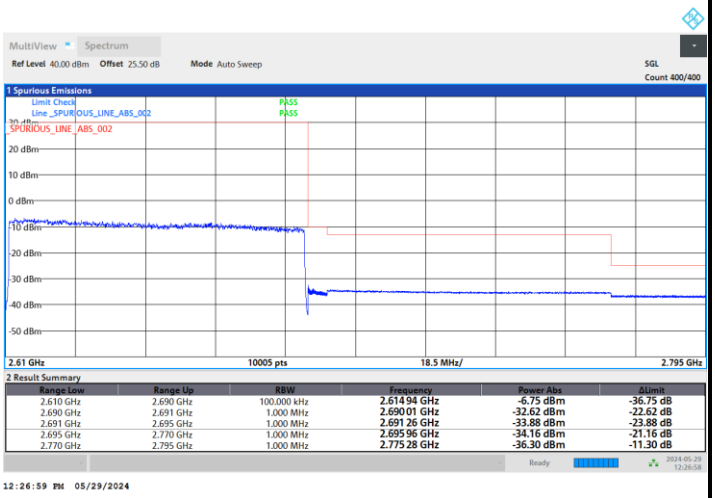


FR1 n41 / 80MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

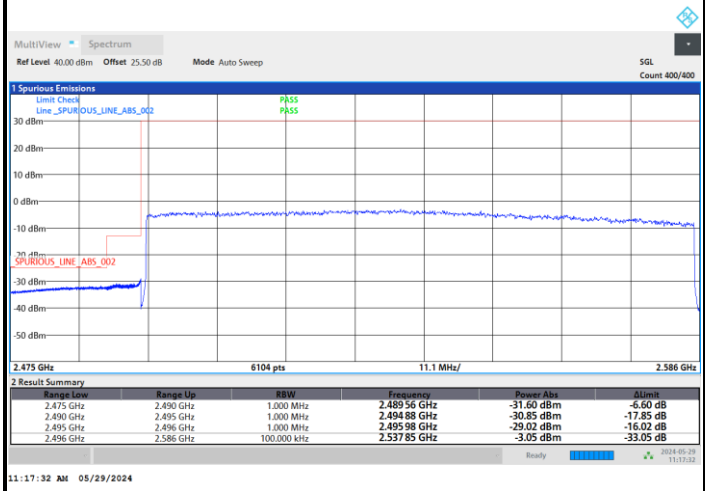


Highest Band Edge / Full RB

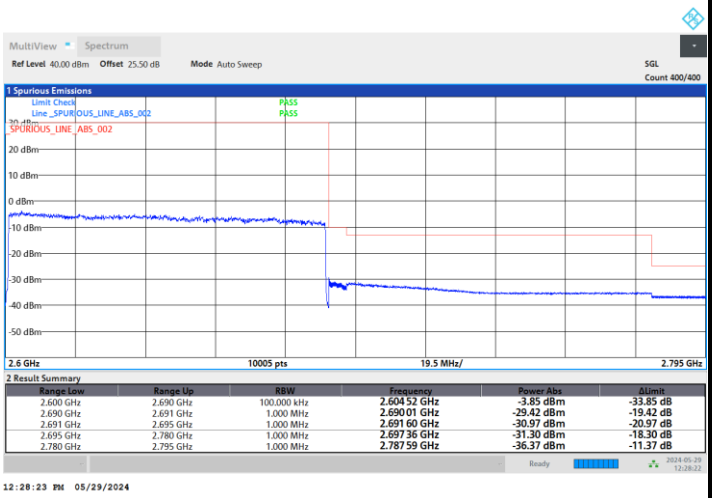


FR1 n41 / 90MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

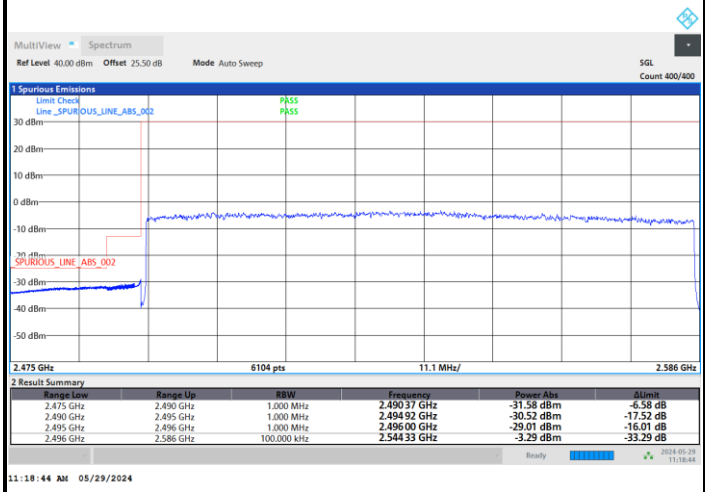


Highest Band Edge / Full RB

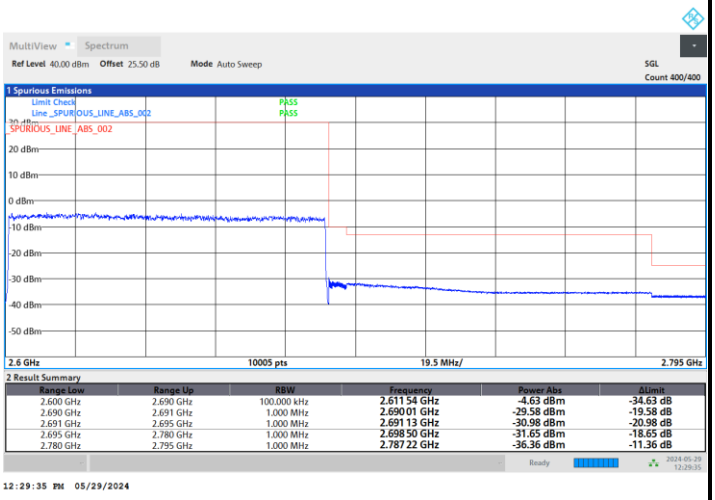


FR1 n41 / 90MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

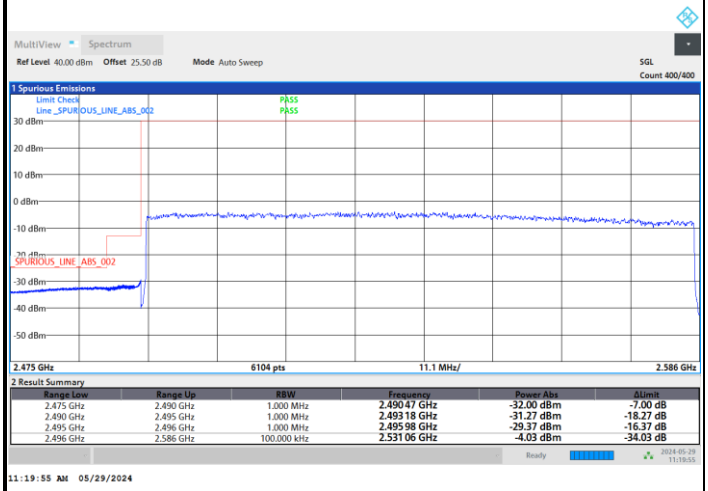


Highest Band Edge / Full RB

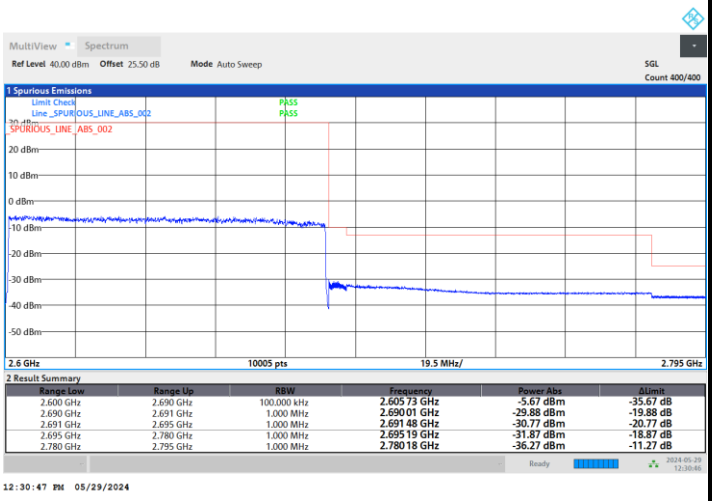


FR1 n41 / 90MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

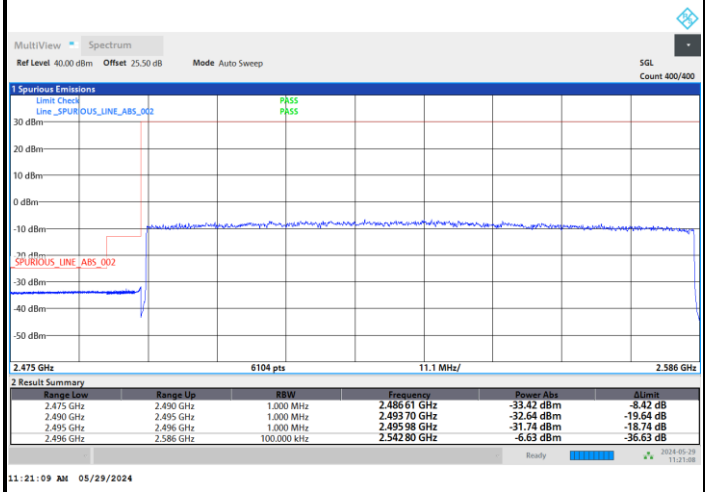


Highest Band Edge / Full RB

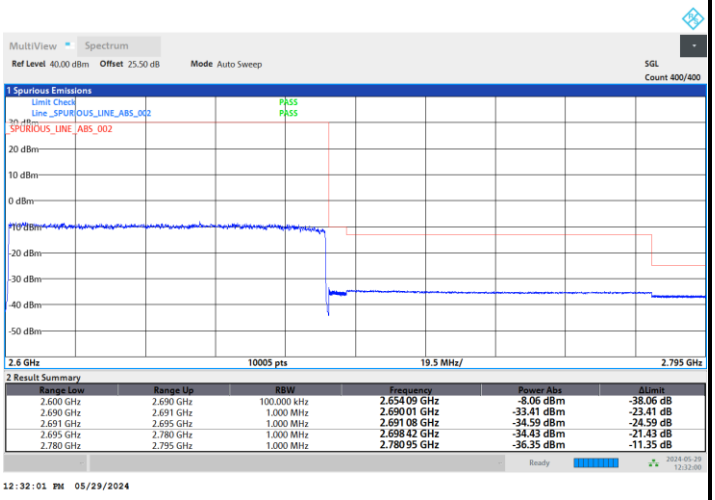


FR1 n41 / 90MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

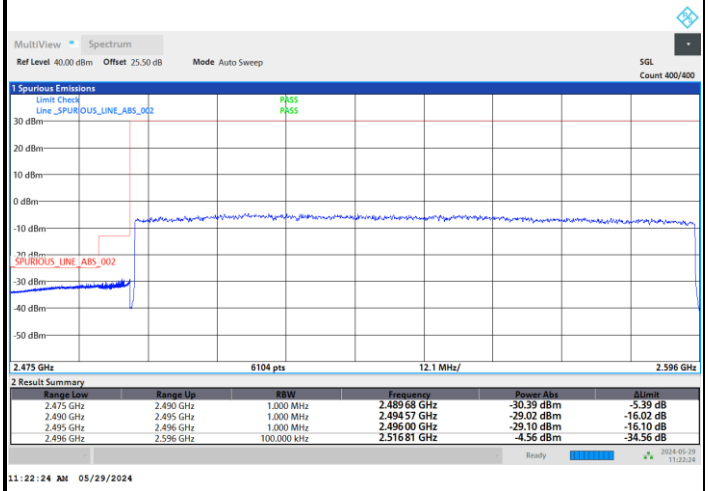


Highest Band Edge / Full RB

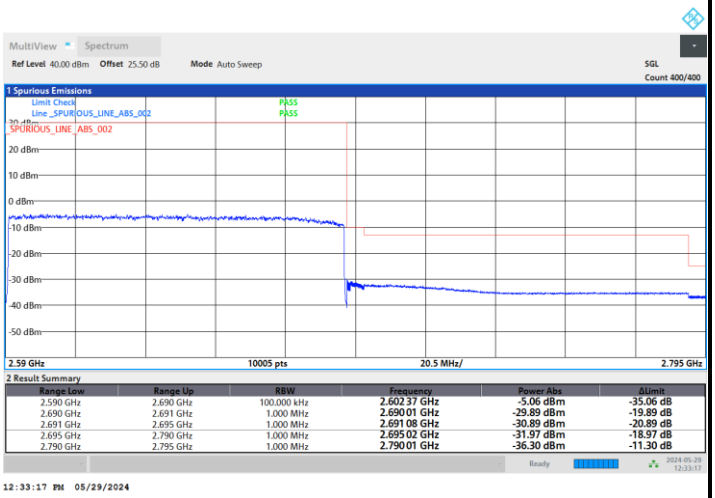


FR1 n41 / 100MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

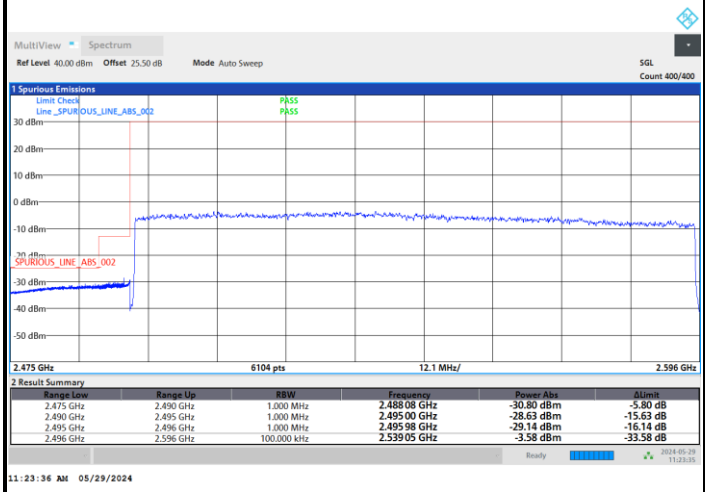


Highest Band Edge / Full RB

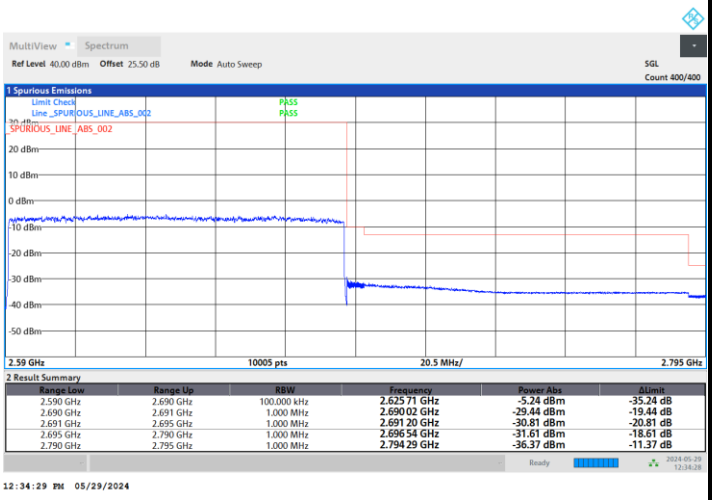


FR1 n41 / 100MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

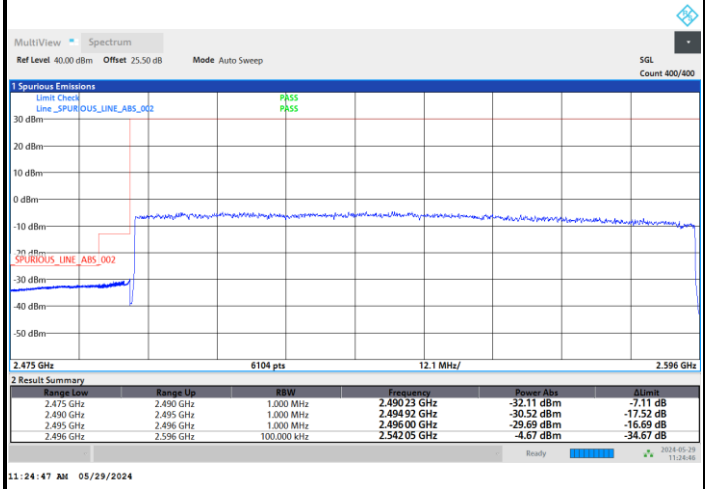


Highest Band Edge / Full RB

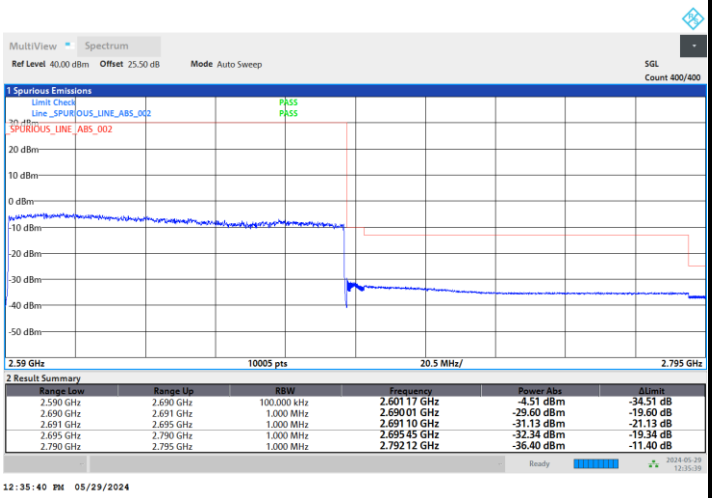


FR1 n41 / 100MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

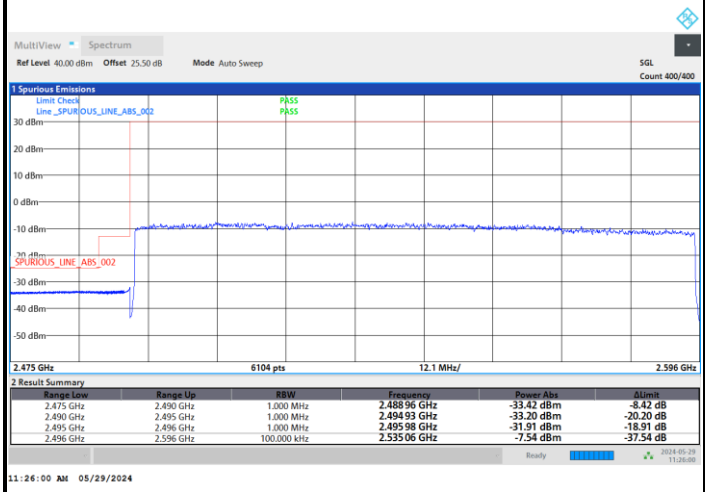


Highest Band Edge / Full RB

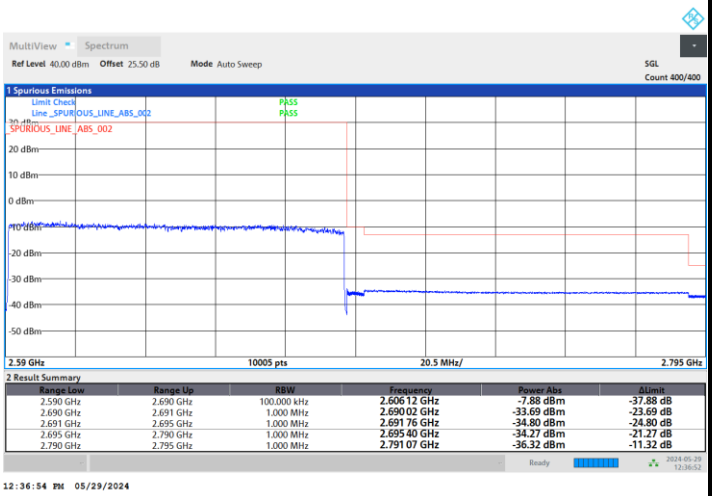


FR1 n41 / 100MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB



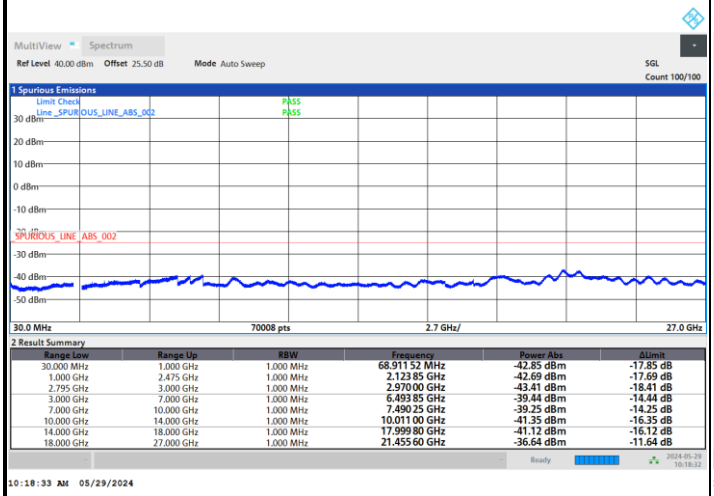
Highest Band Edge / Full RB



Conducted Spurious Emission

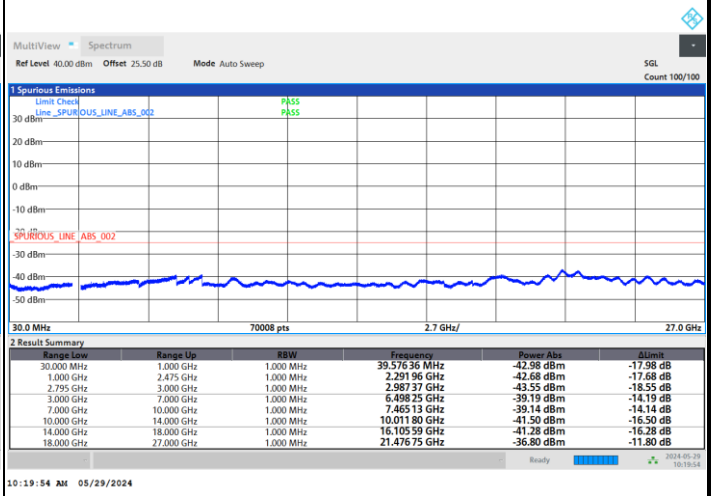
FR1 n41 / 10MHz / CP OFDM / QPSK / 1RB1

Lowest Channel



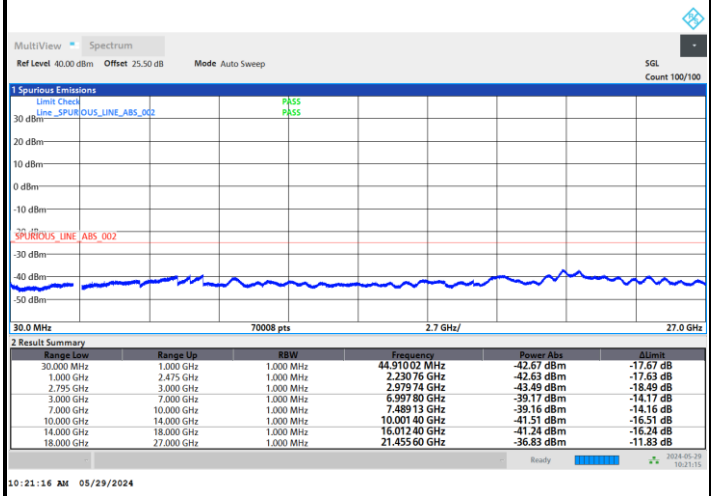
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	68.911 52 MHz	-42.85 dBm	-17.85 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.123 85 GHz	-42.69 dBm	-17.69 dB
2.795 GHz	3.000 GHz	1.000 MHz	2.970 00 GHz	-43.41 dBm	-18.41 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.493 85 GHz	-39.44 dBm	-14.44 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.490 25 GHz	-39.25 dBm	-14.25 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.011 00 GHz	-41.35 dBm	-16.35 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.999 80 GHz	-41.12 dBm	-16.12 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.455 60 GHz	-36.64 dBm	-11.64 dB

Middle Channel



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	39.576 36 MHz	-42.98 dBm	-17.98 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.291 96 GHz	-42.68 dBm	-17.68 dB
2.795 GHz	3.000 GHz	1.000 MHz	2.987 37 GHz	-43.55 dBm	-18.55 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.498 25 GHz	-39.19 dBm	-14.19 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.465 13 GHz	-39.14 dBm	-14.14 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.011 80 GHz	-41.50 dBm	-16.50 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.105 59 GHz	-41.28 dBm	-16.28 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.476 75 GHz	-36.80 dBm	-11.80 dB

Highest Channel



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	44.910 02 MHz	-42.67 dBm	-17.67 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.230 76 GHz	-42.63 dBm	-17.63 dB
2.795 GHz	3.000 GHz	1.000 MHz	2.979 74 GHz	-43.49 dBm	-18.49 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.997 80 GHz	-39.17 dBm	-14.17 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.489 13 GHz	-39.16 dBm	-14.16 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.001 40 GHz	-41.51 dBm	-16.51 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.012 40 GHz	-41.24 dBm	-16.24 dB
18.000 GHz	27.000 GHz	1.000 MHz	21.455 60 GHz	-36.83 dBm	-11.83 dB

Frequency Stability

Test Conditions		FR1 n41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0055	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0043	
20	Maximum Voltage	0.0040	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0027	

Note:

1. Normal Voltage = 3.3 V.；Battery End Point (BEP) = 3.135 V.；Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

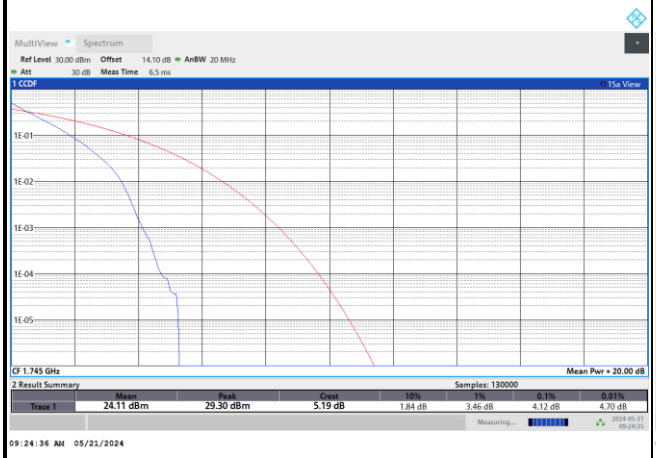
FR1 n66

Peak-to-Average Ratio

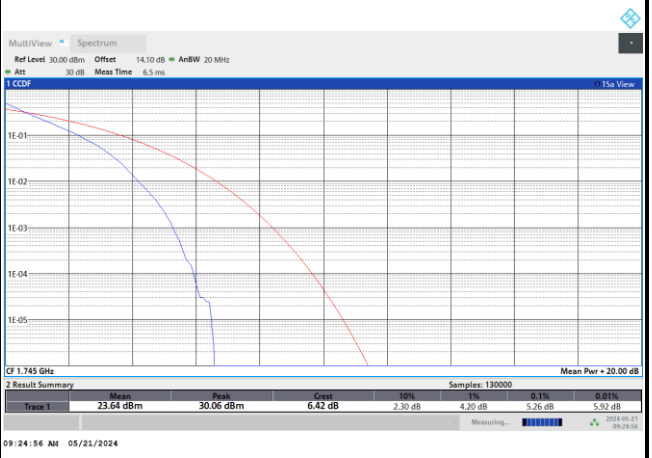
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.12	5.26	5.80	6.06	PASS
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.28				PASS

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

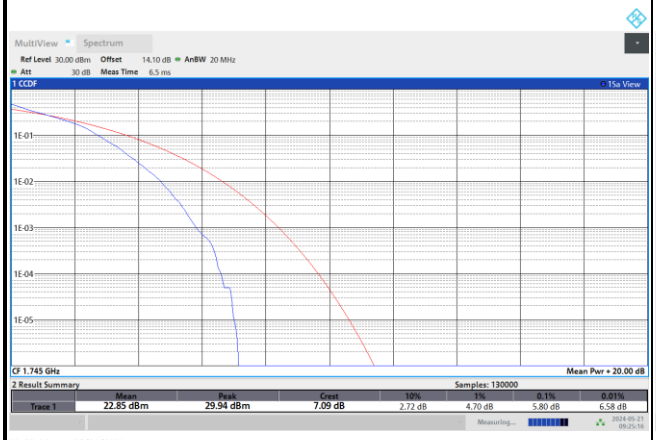
PI/2 BPSK



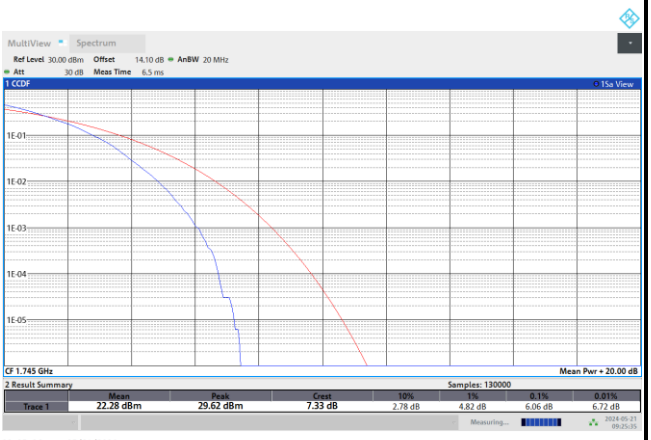
QPSK



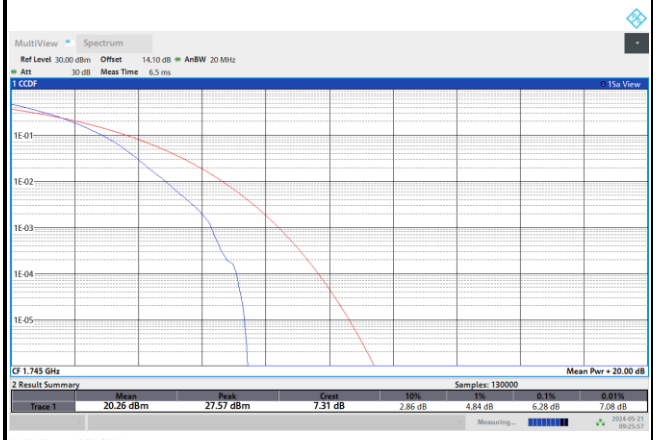
16QAM



64QAM



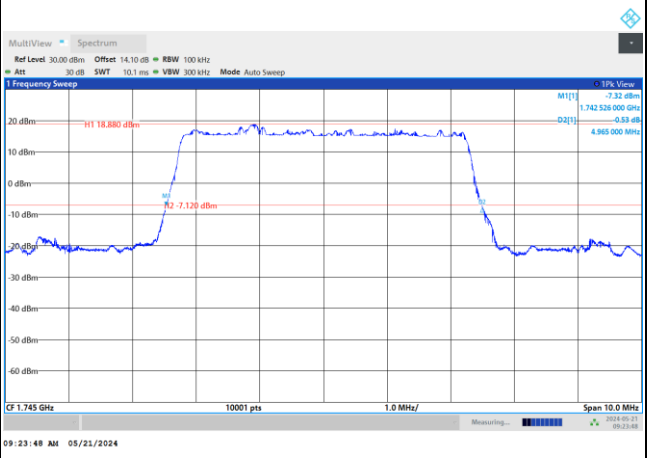
256QAM

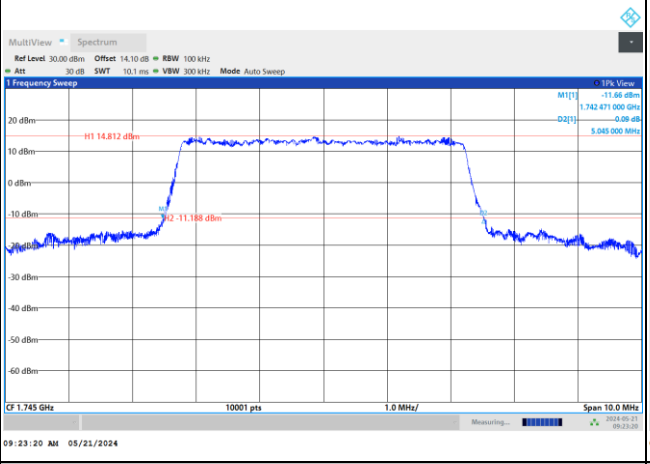
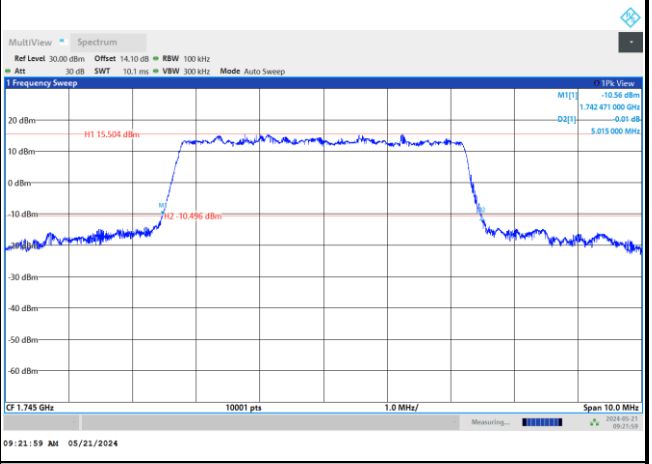
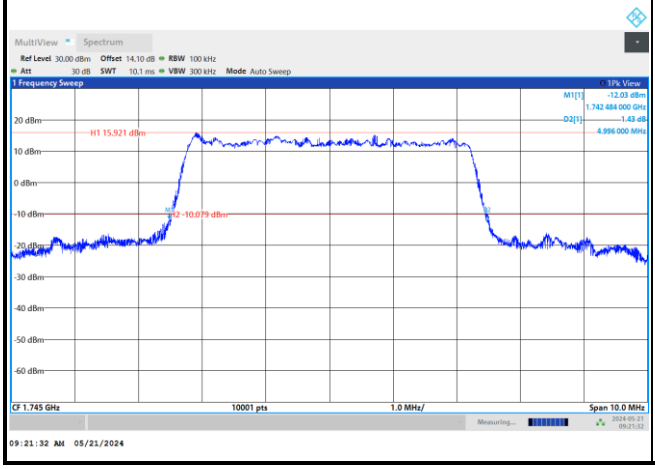
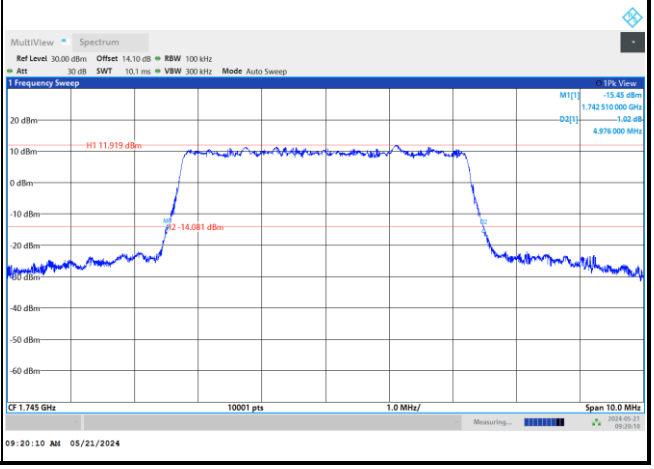


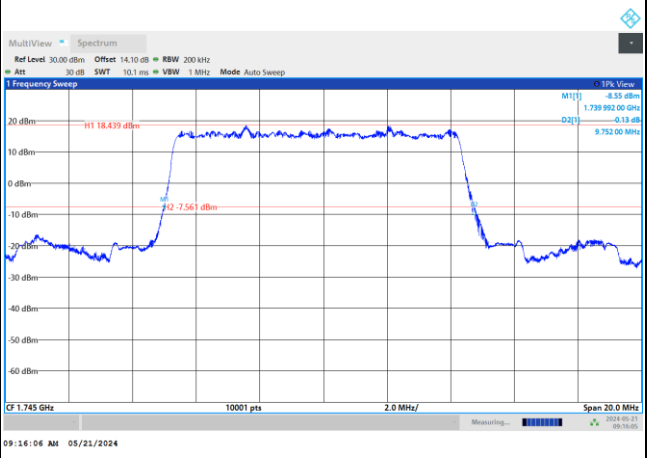
26dB Bandwidth

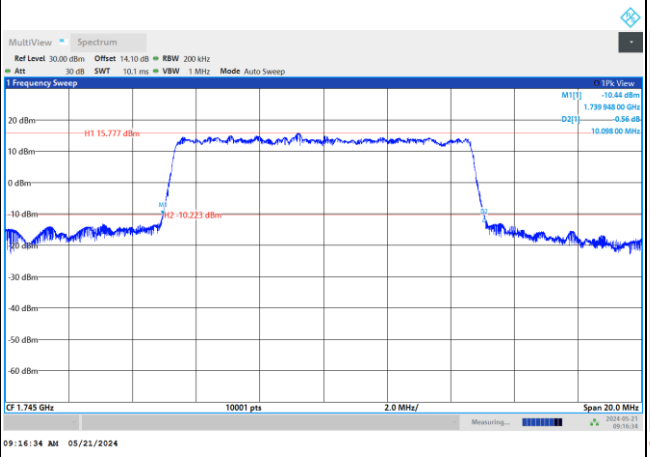
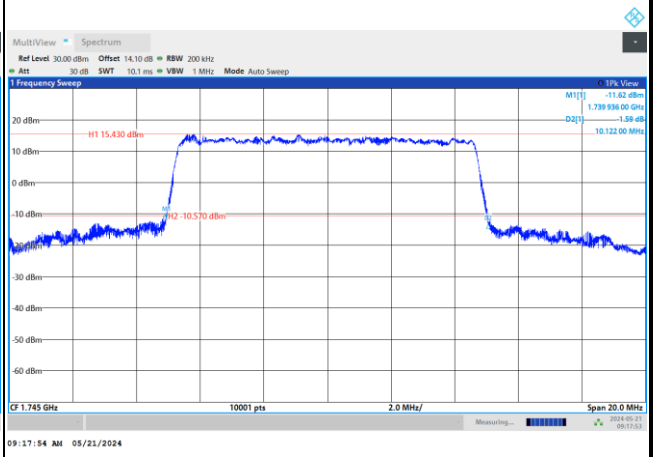
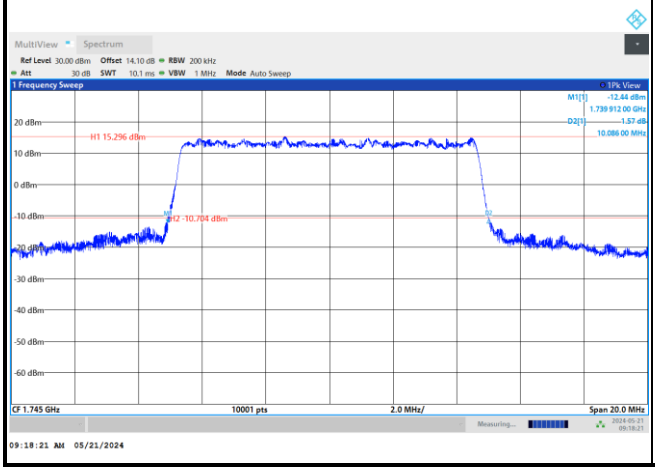
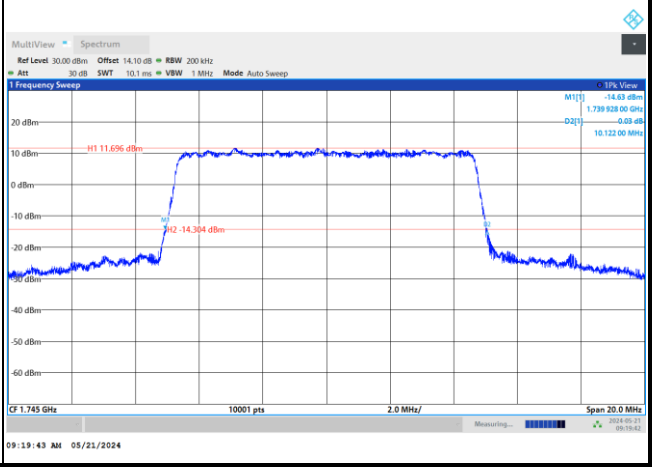
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.97		9.75		14.39		19.61	
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	24.54		31.03		35.46		41.11	
BW	45MHz							
Mod.	PI/2 BPSK							
Middle CH	45.80							

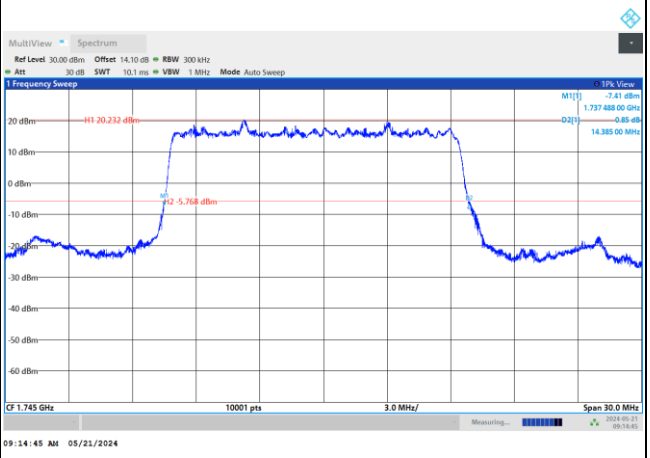
Mode	FR1 n66 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.05	5.02	10.10	10.12	15.47	15.59	20.70	21.16
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	5.00	4.98	10.09	10.12	15.12	15.11	20.48	20.51
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	25.56	25.52	32.39	32.51	36.62	36.74	41.28	41.22
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	25.51	25.38	31.18	31.07	36.52	36.59	41.27	41.33
BW	45MHz							
Mod.	QPSK	16QAM						
Middle CH	46.29	46.21						
Mod.	64QAM	256QAM						
Middle CH	46.26	46.15						

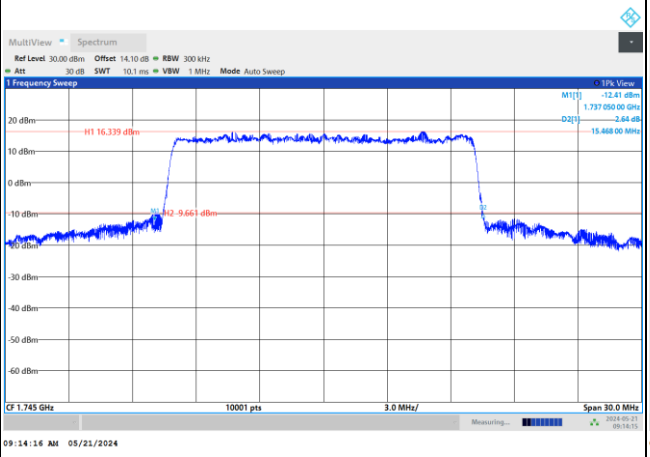
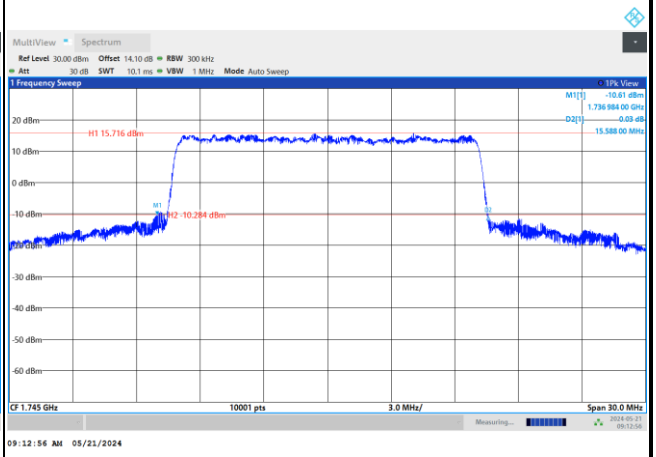
FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

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
	
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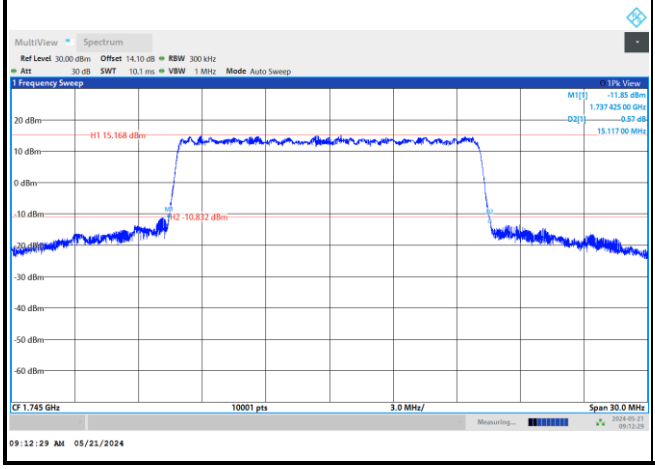	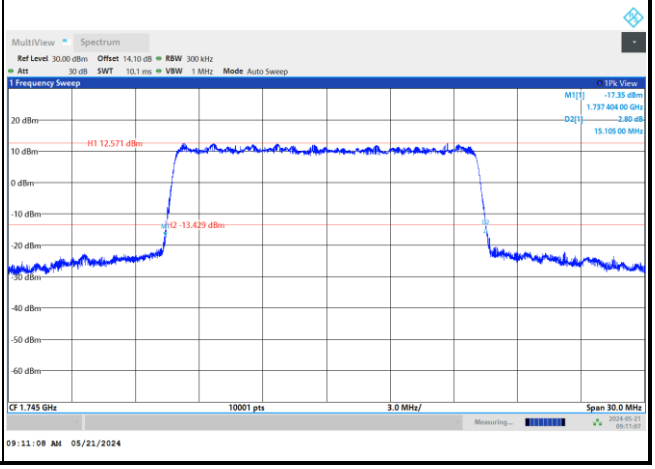

FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB	
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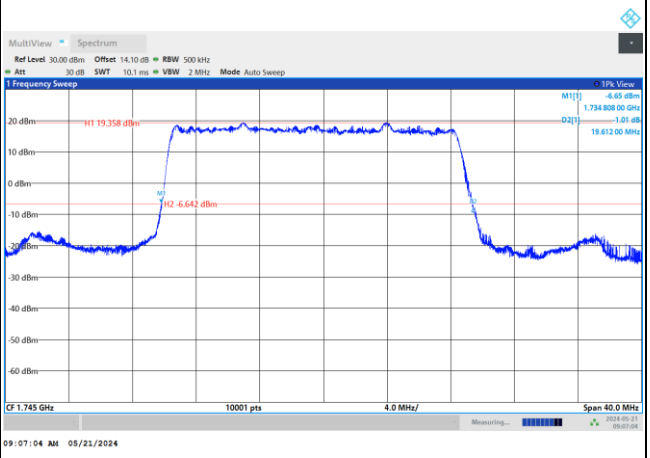
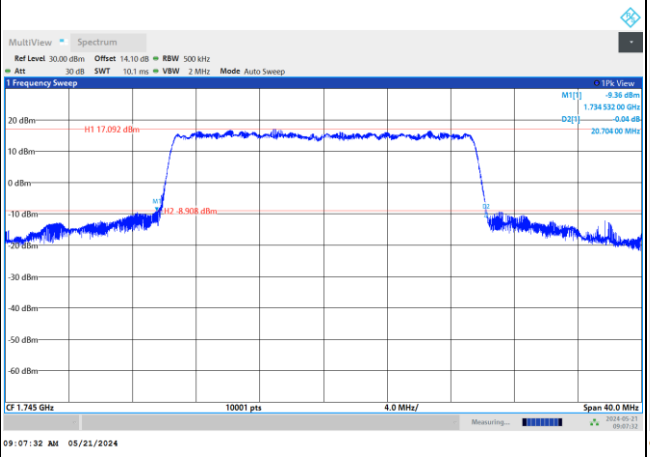
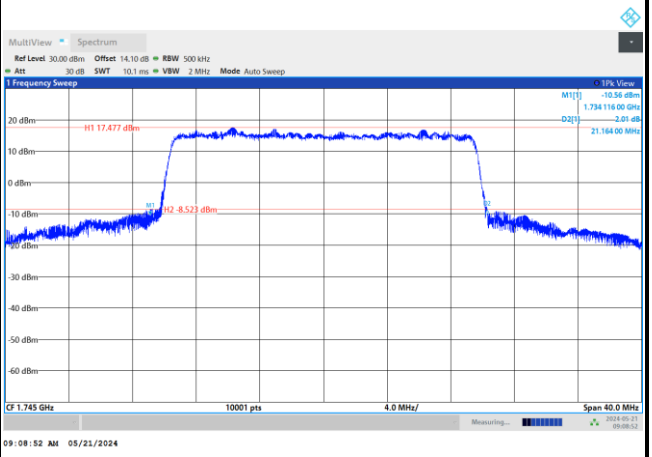
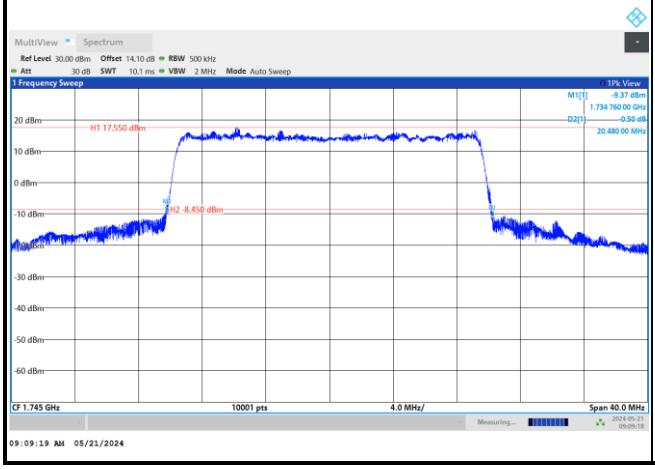
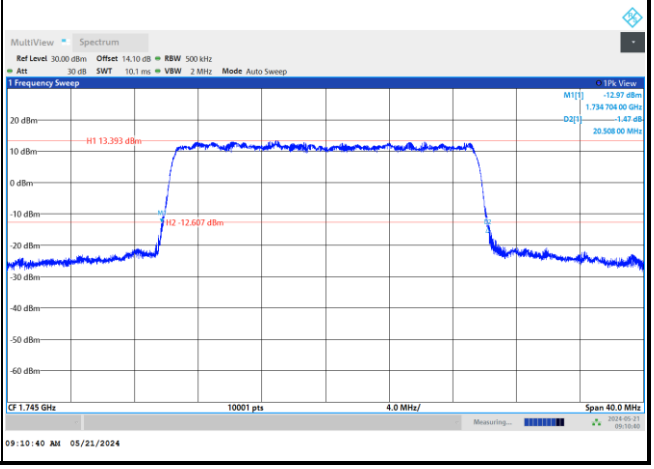
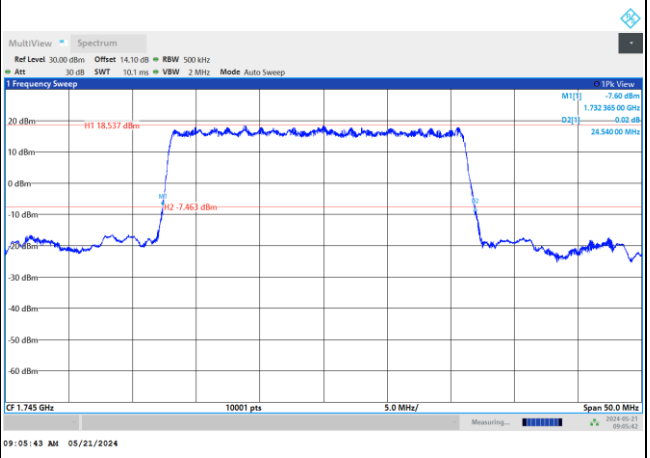
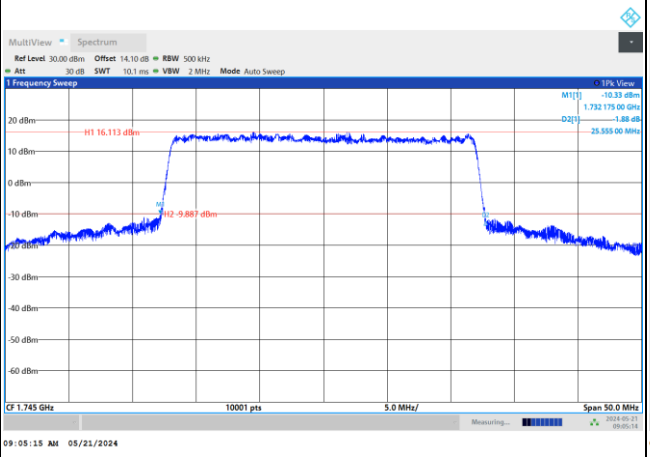
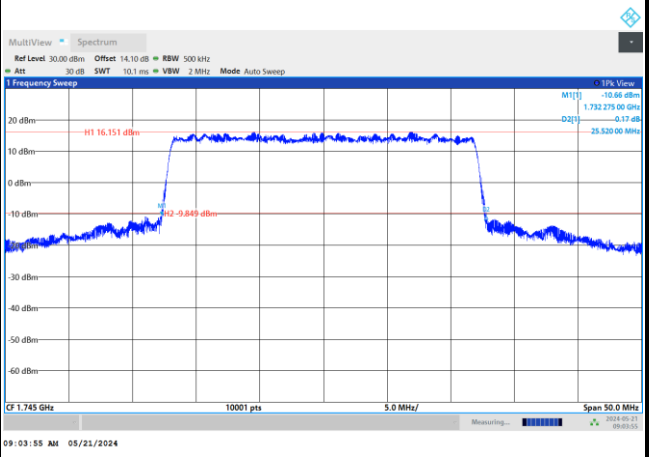
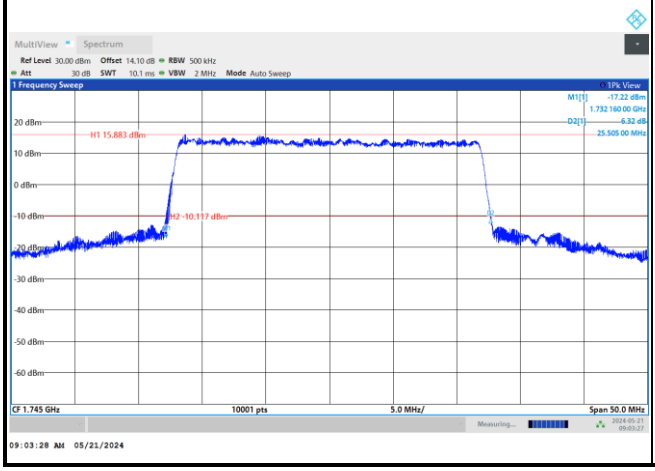
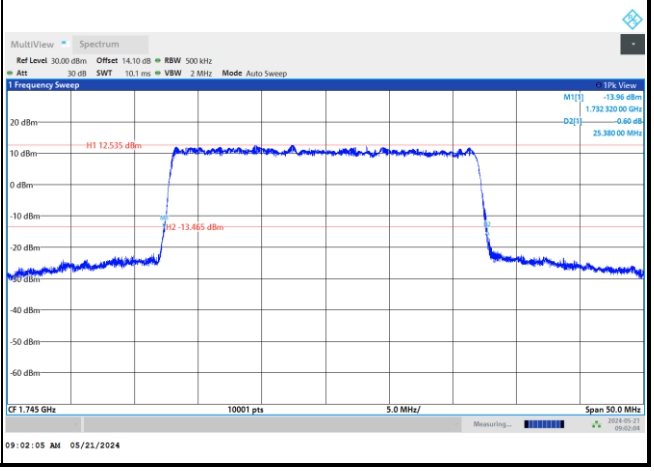
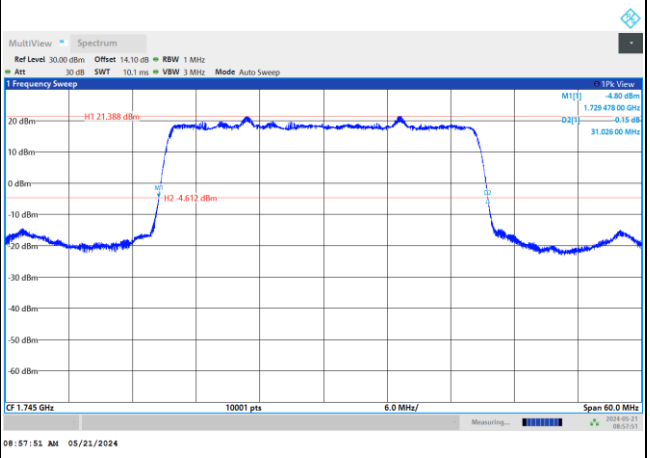
	

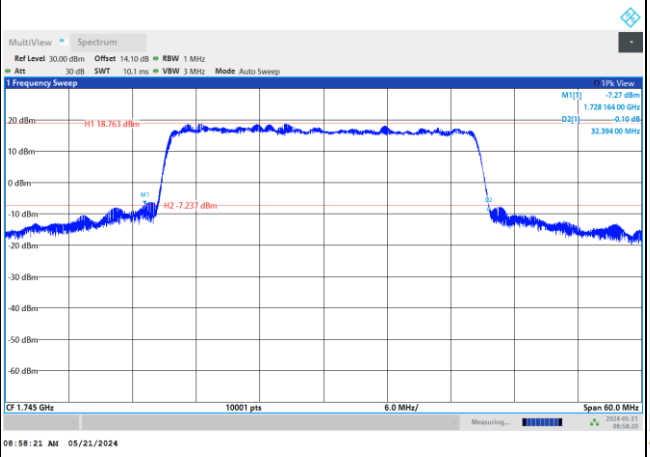
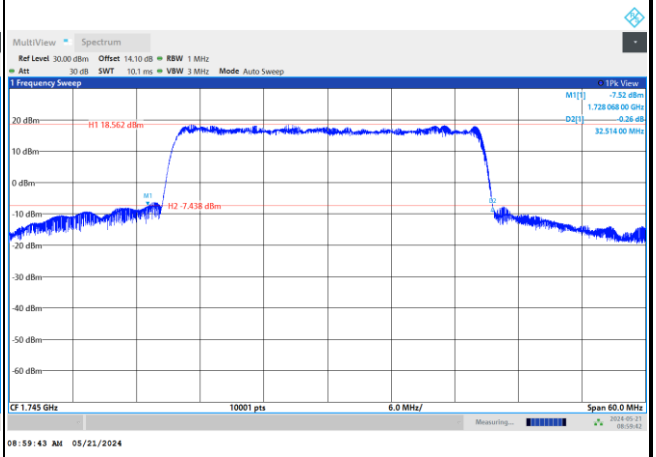
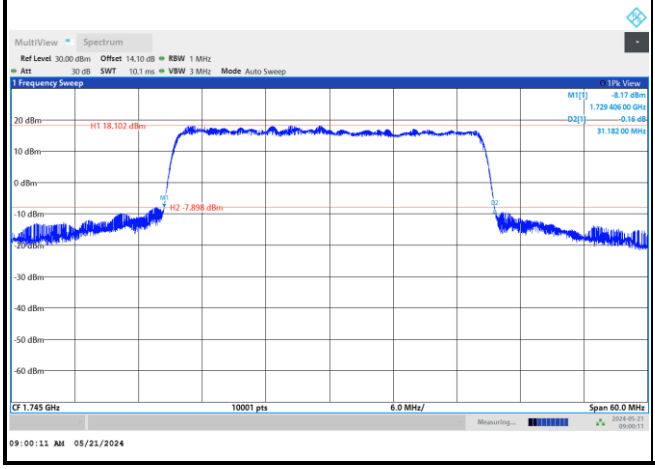
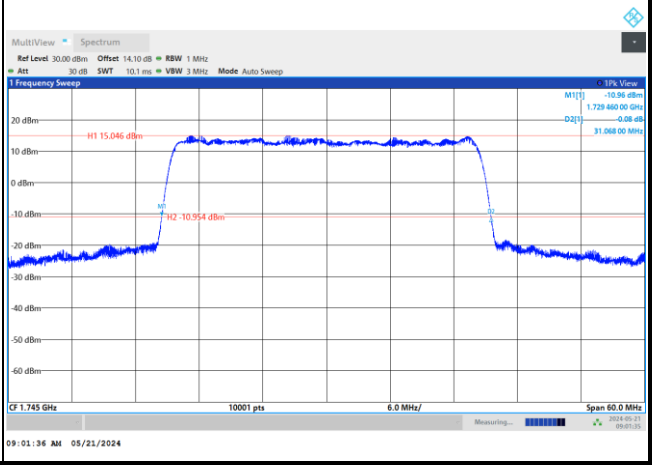
FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

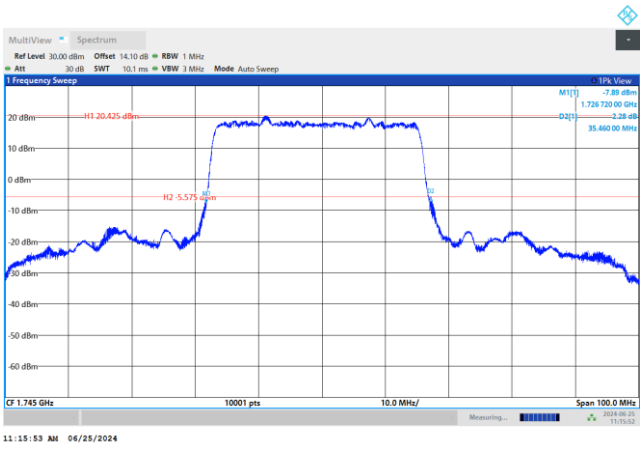
FR1 n66 / 25MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

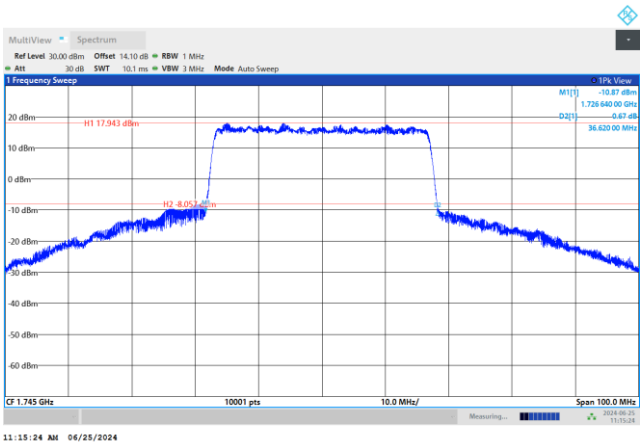
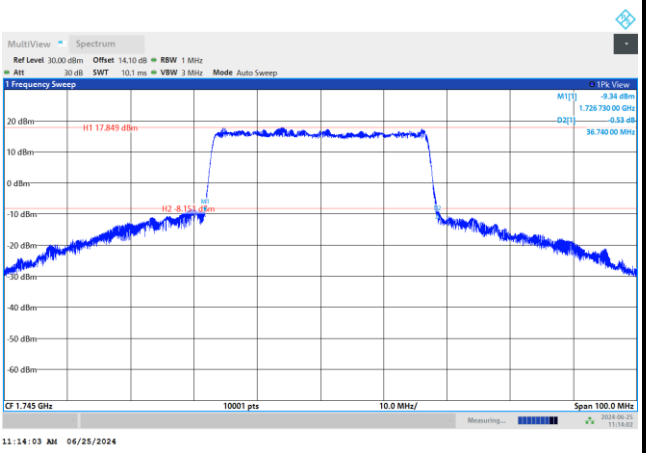
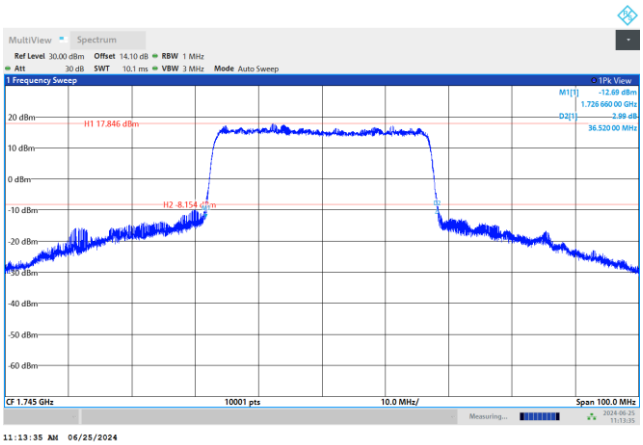
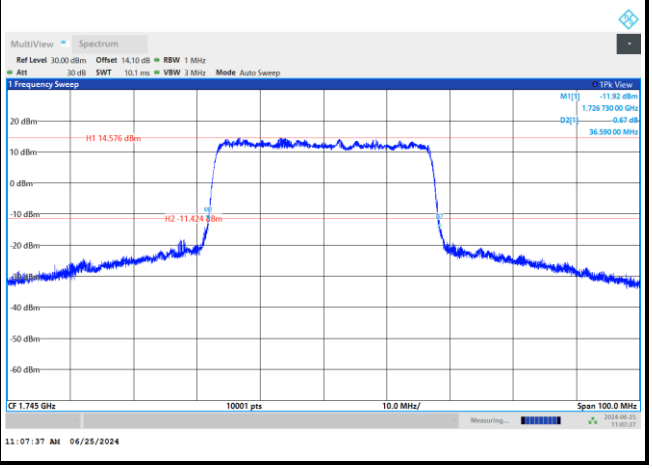
FR1 n66 / 25MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	

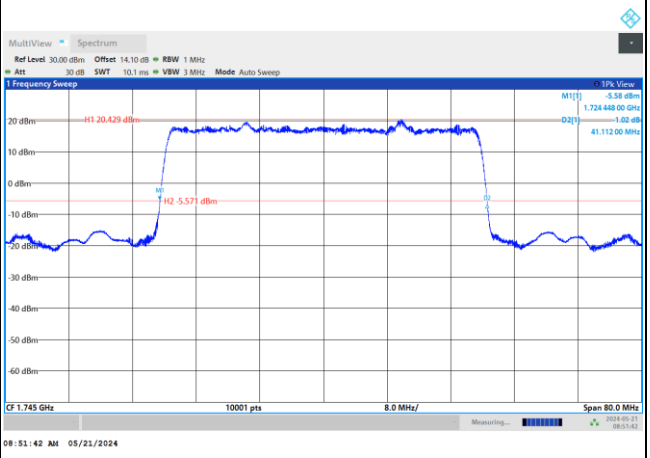
64QAM	256QAM
	

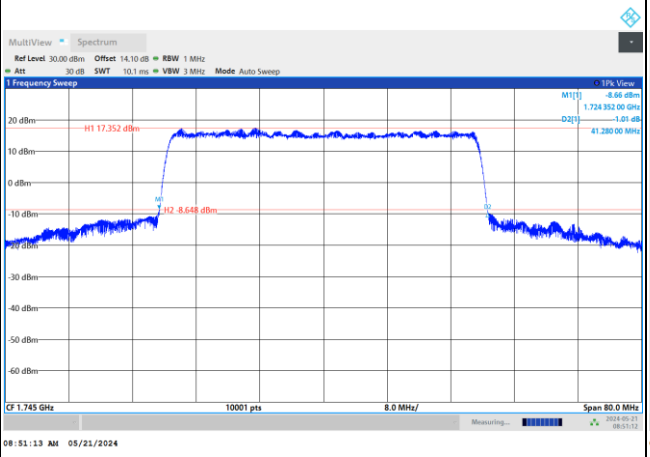
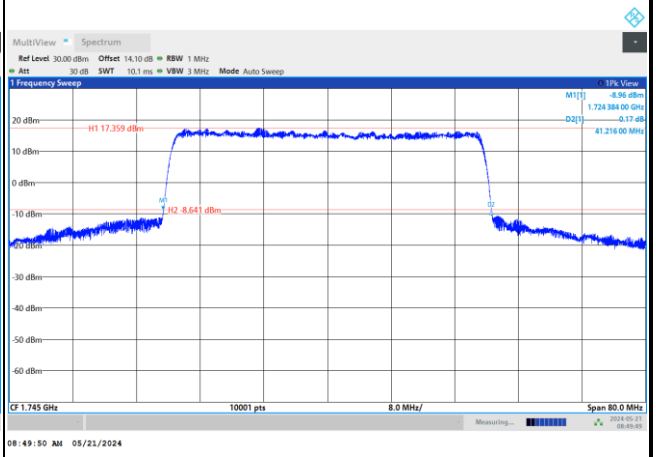
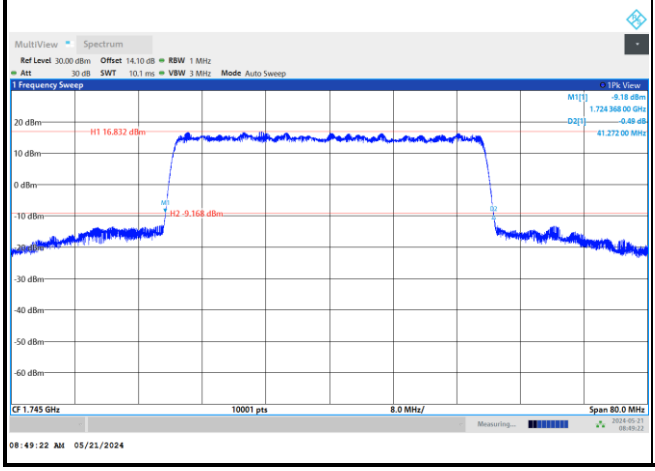
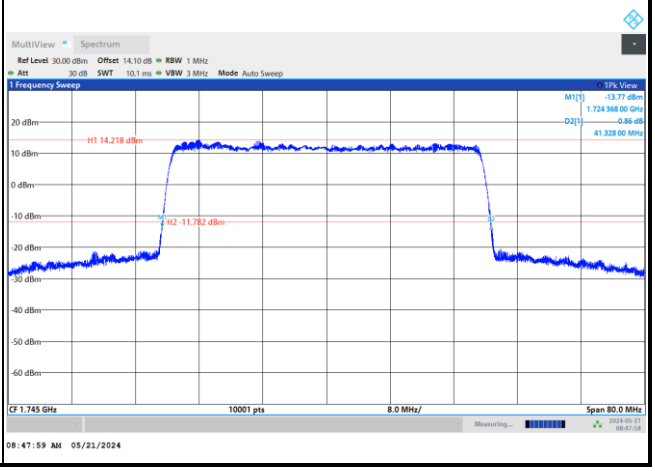
FR1 n66 / 30MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

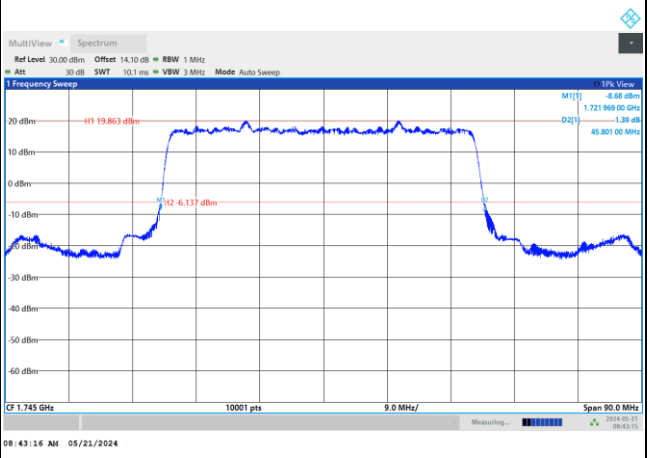
FR1 n66 / 30MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

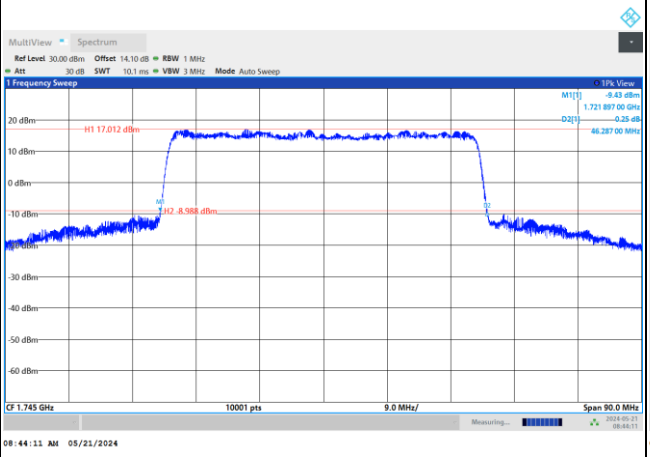
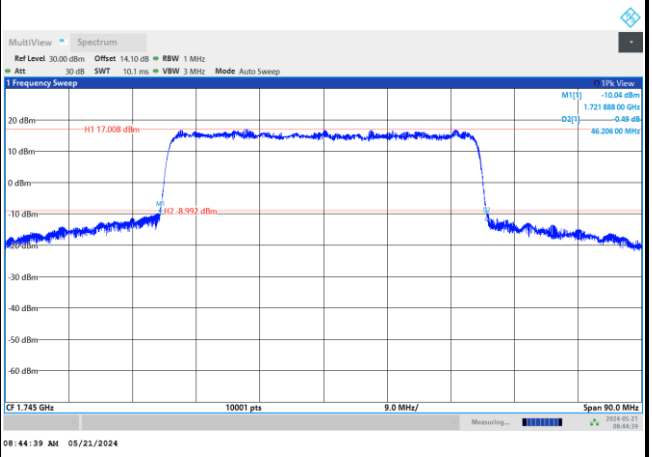
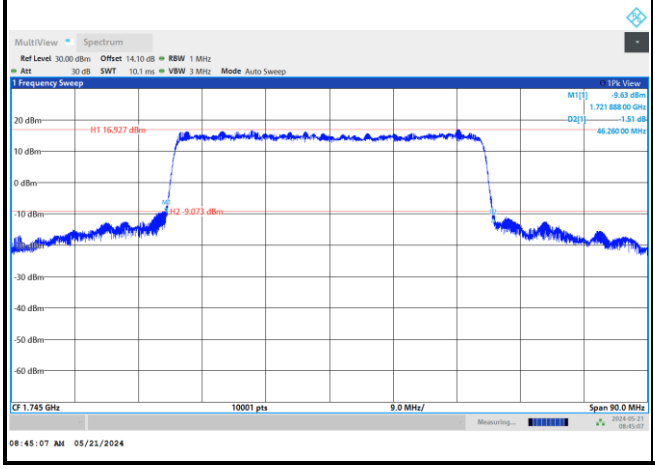
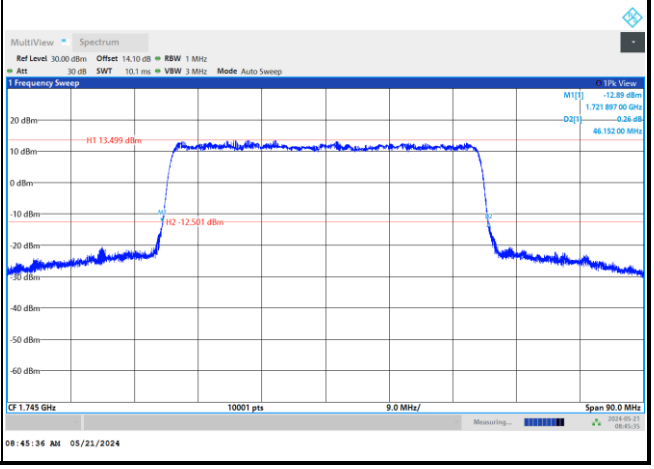
FR1 n66 / 35MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

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
	

FR1 n66 / 45MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n66 / 45MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

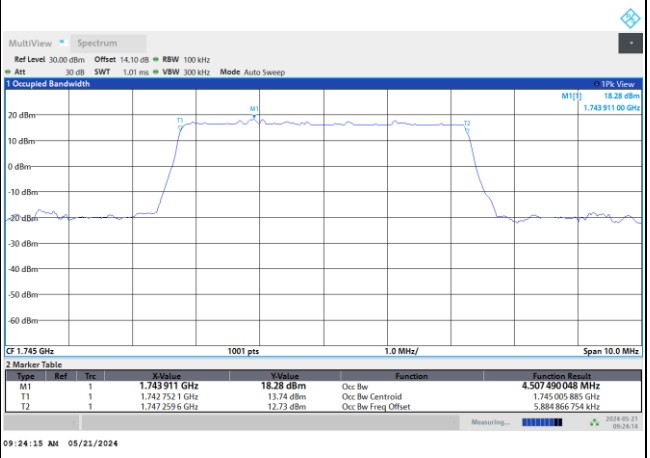
Occupied Bandwidth

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	4.50		8.96		13.48		18.08	
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	23.02		29.02		32.47		38.95	
BW	45MHz							
Mod.	PI/2 BPSK							
Middle CH	43.02							

Mode	FR1 n66 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.50	4.51	9.34	9.37	14.18	14.21	19.05	19.08
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.51	4.48	9.33	9.34	14.18	14.16	19.04	19.00
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	23.88	23.88	29.07	29.09	33.98	34.06	38.81	38.86
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	23.84	23.90	29.06	28.88	33.93	33.92	38.8	38.83
BW	45MHz							
Mod.	QPSK	16QAM						
Middle CH	43.47	43.41						
Mod.	64QAM	256QAM						
Middle CH	43.44	43.33						

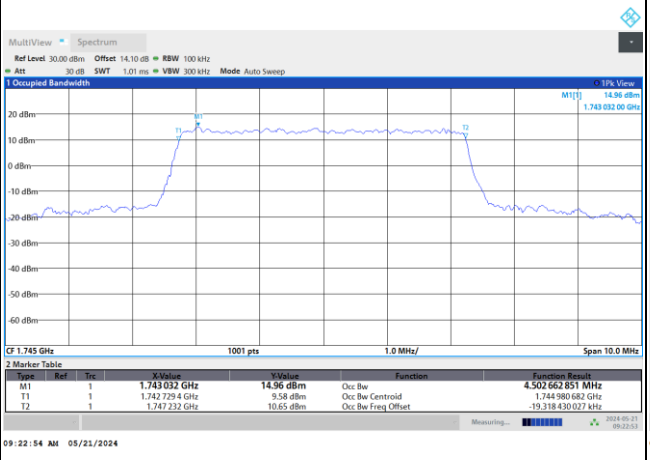
FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

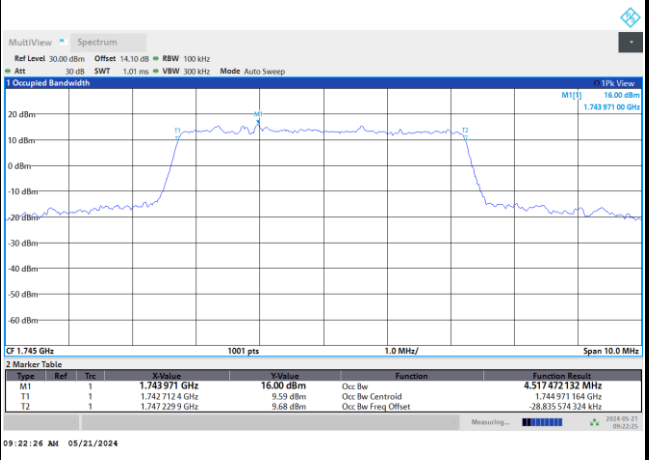


FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB

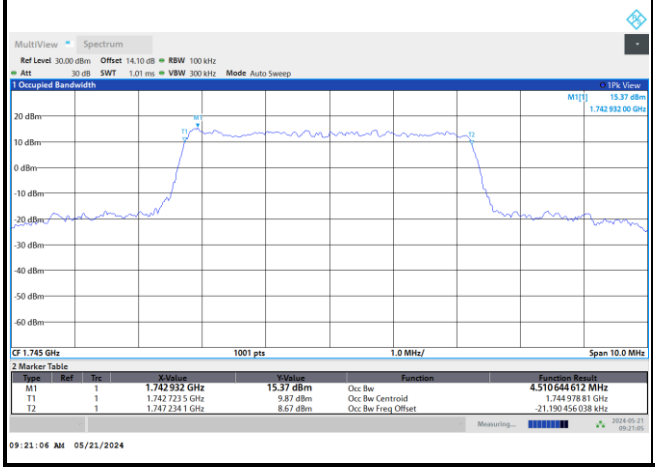
QPSK



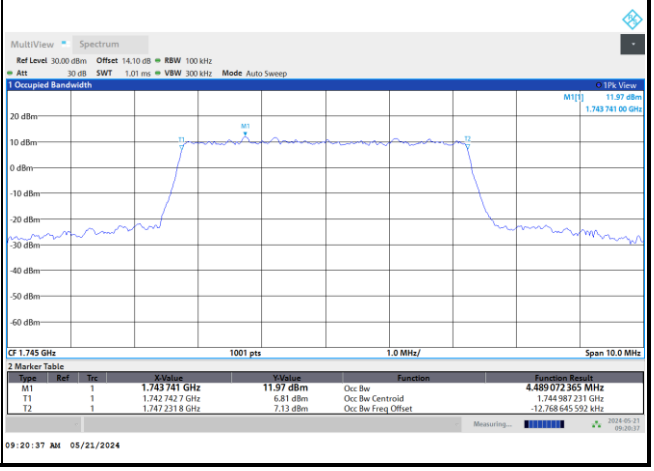
16QAM



64QAM

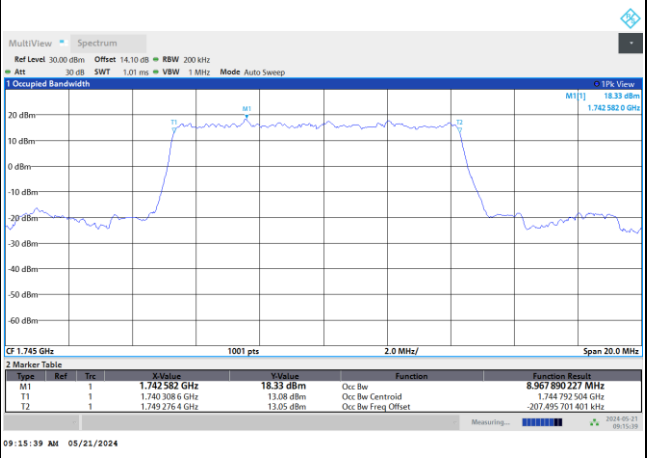


256QAM



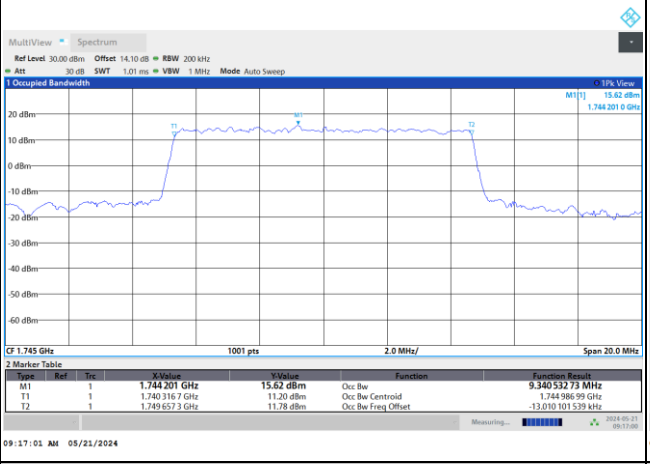
FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

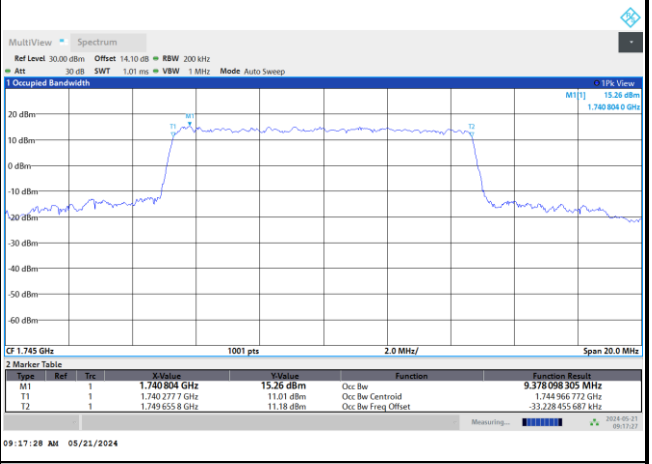


FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK

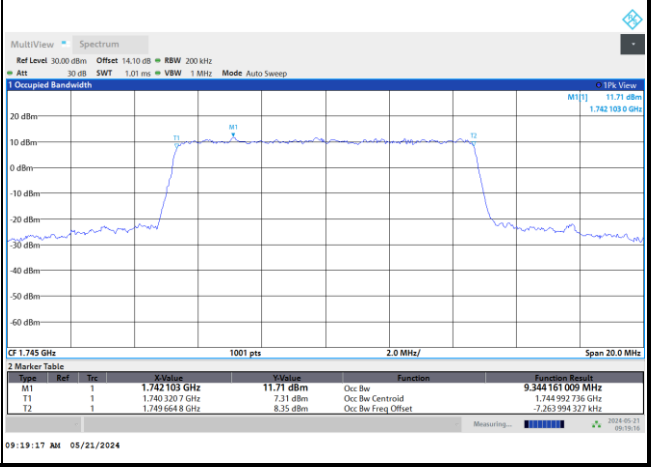


16QAM



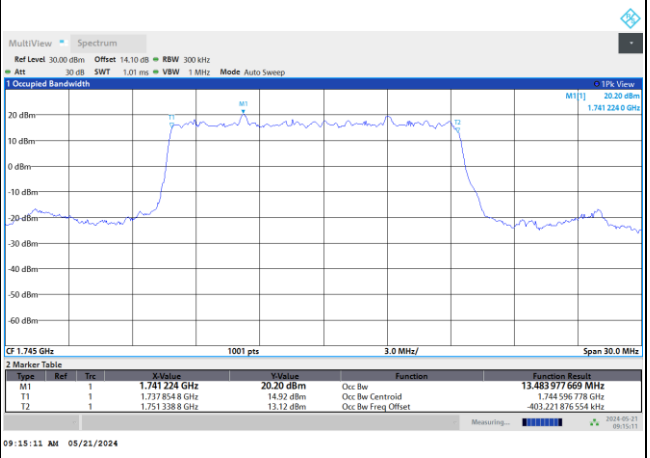
64QAM

256QAM



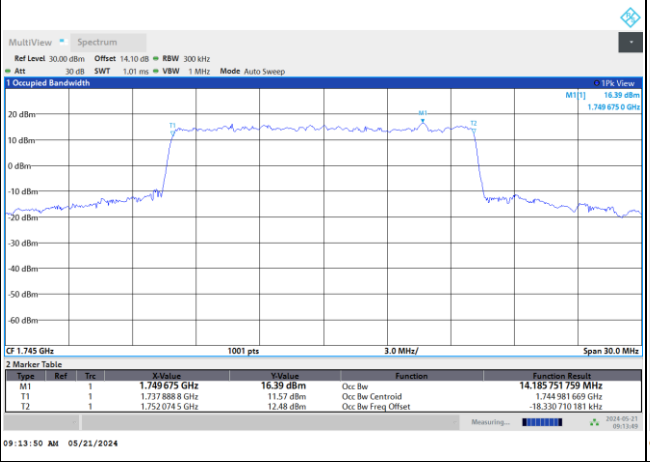
FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

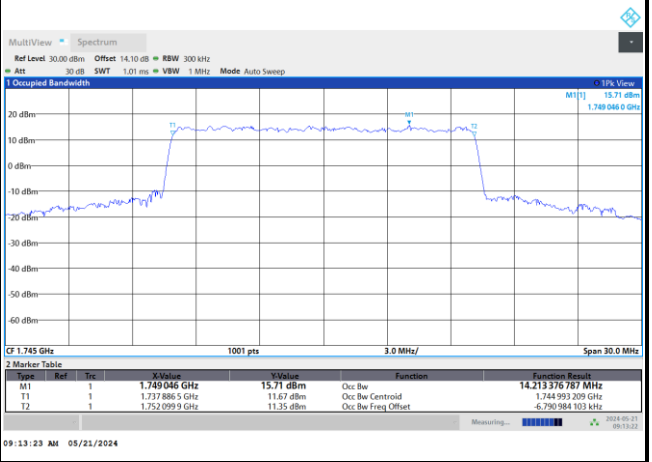


FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB

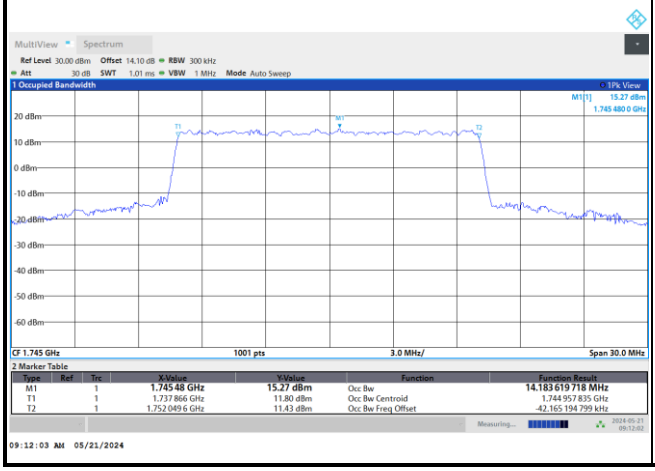
QPSK



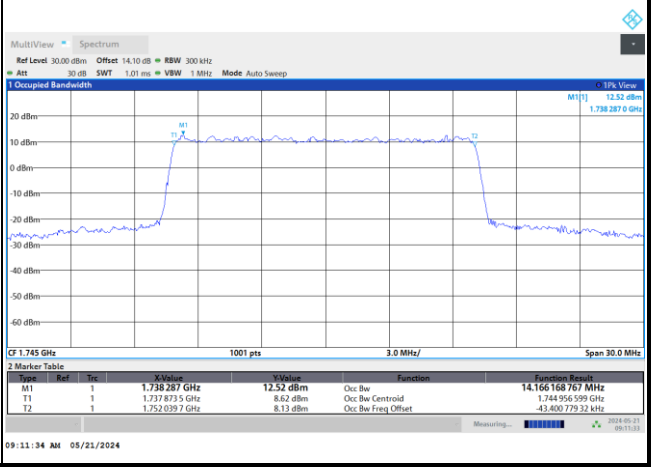
16QAM



64QAM

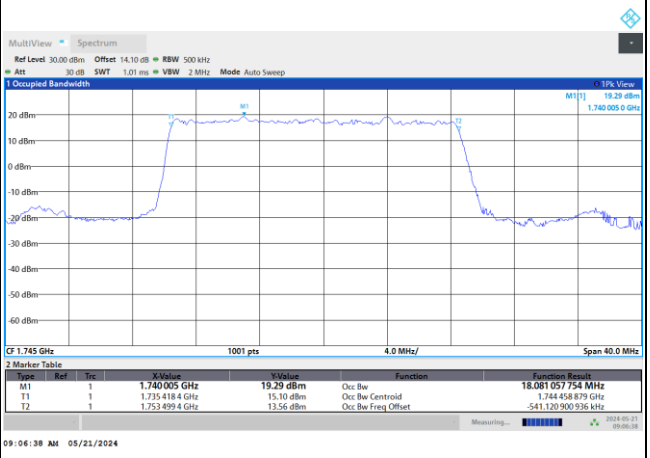


256QAM



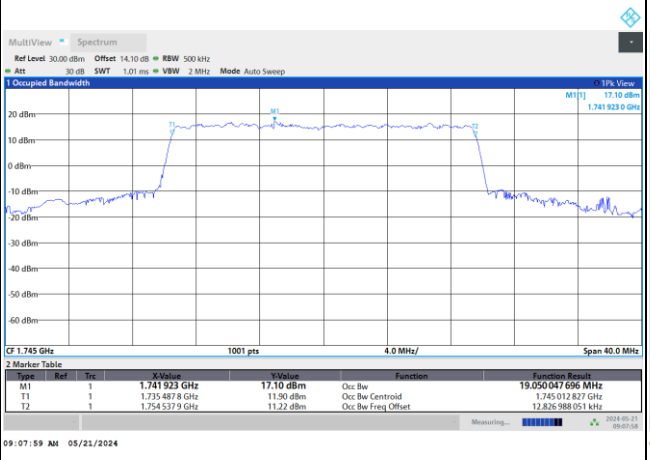
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



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

QPSK



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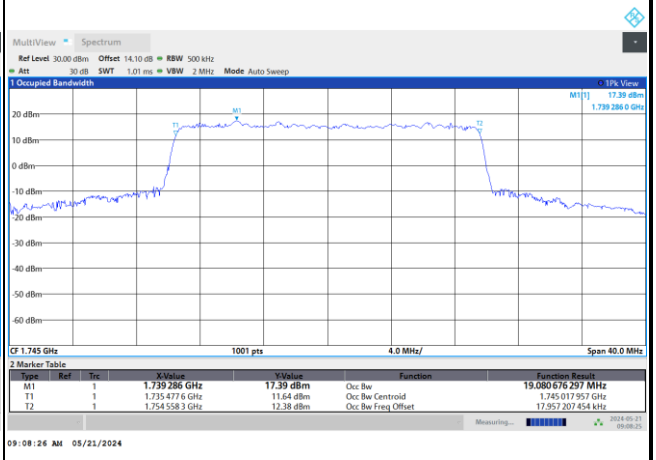

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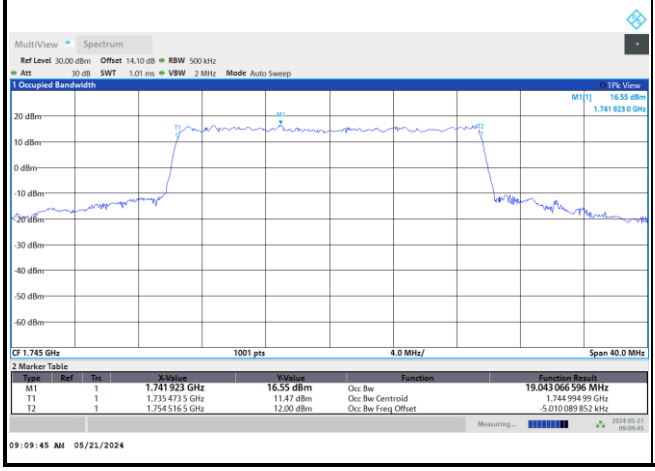
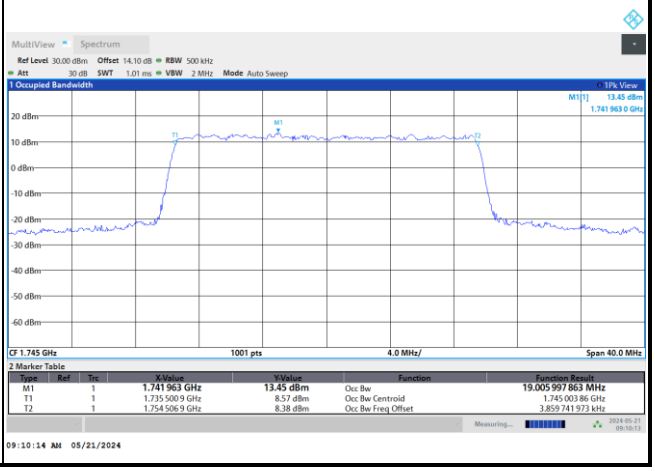
256QAM