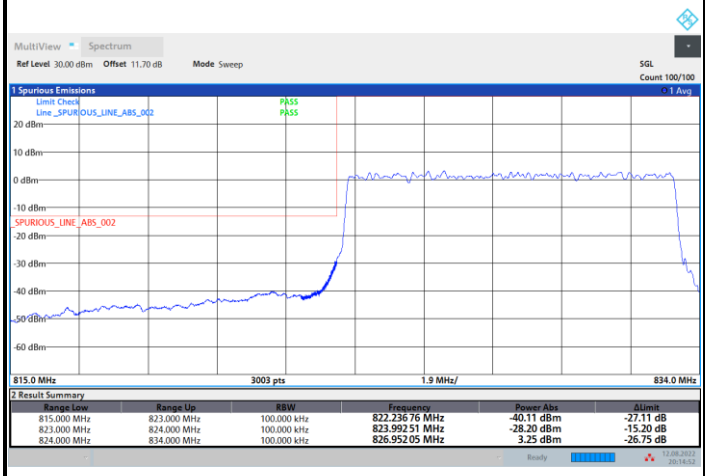
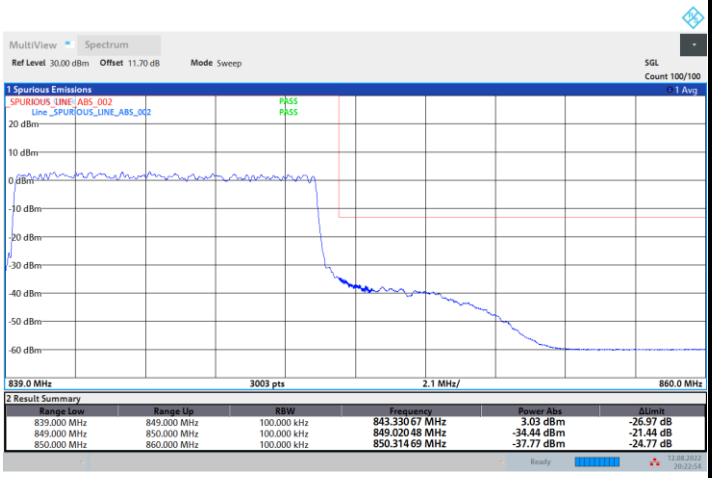
FR1 n5 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

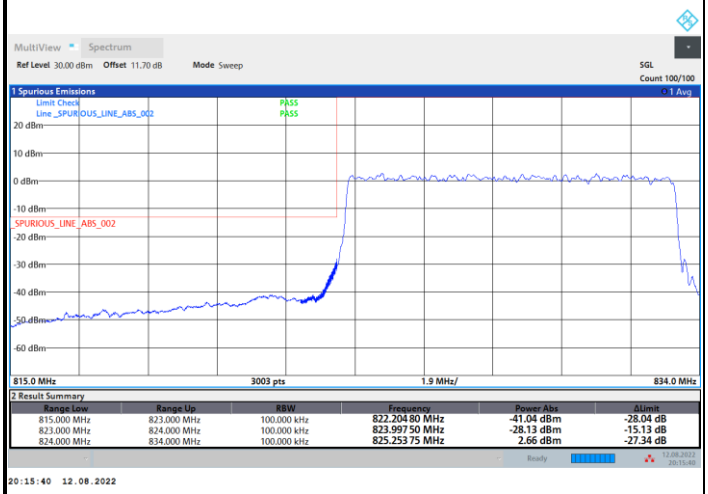


Highest Band Edge

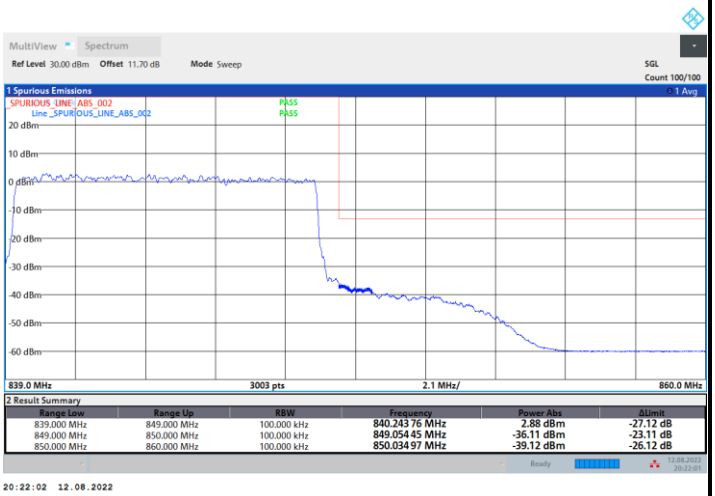


FR1 n5 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

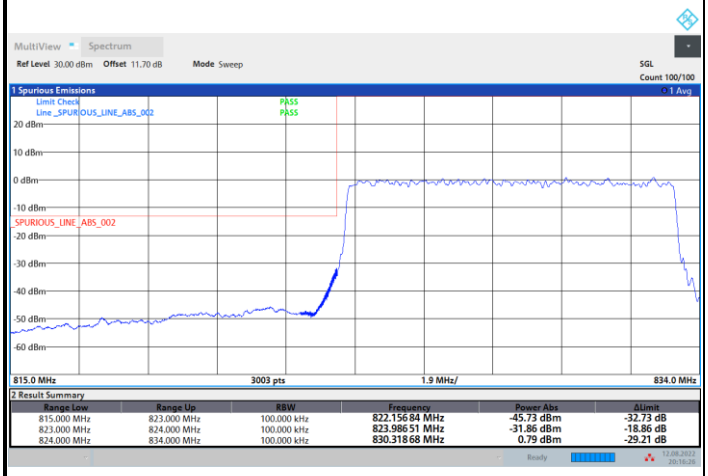


Highest Band Edge

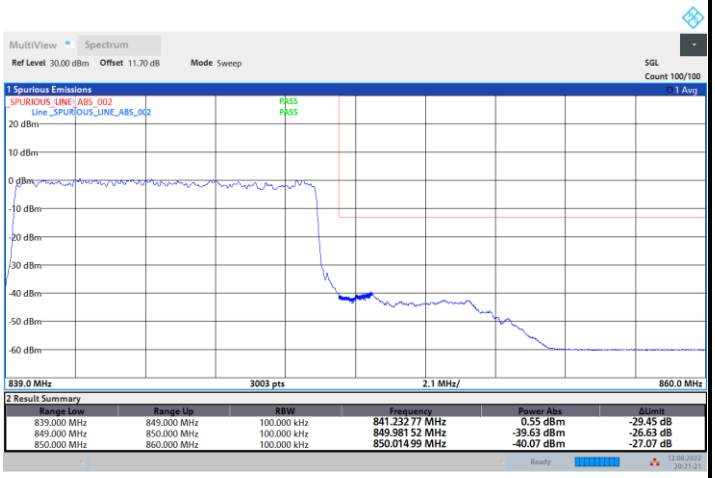


FR1 n5 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

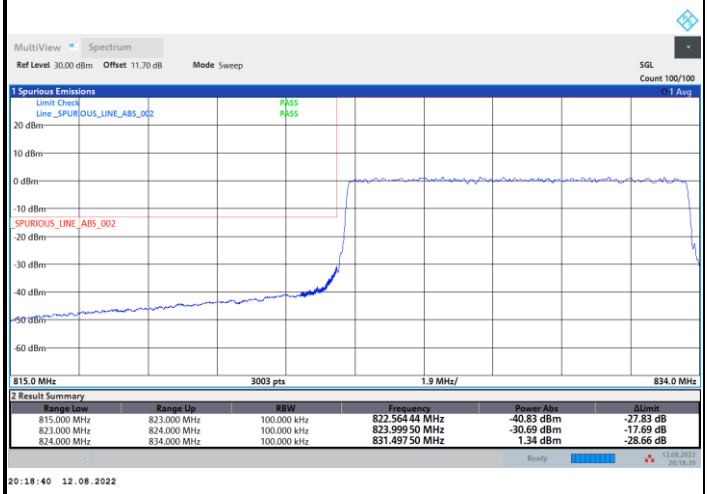


Highest Band Edge

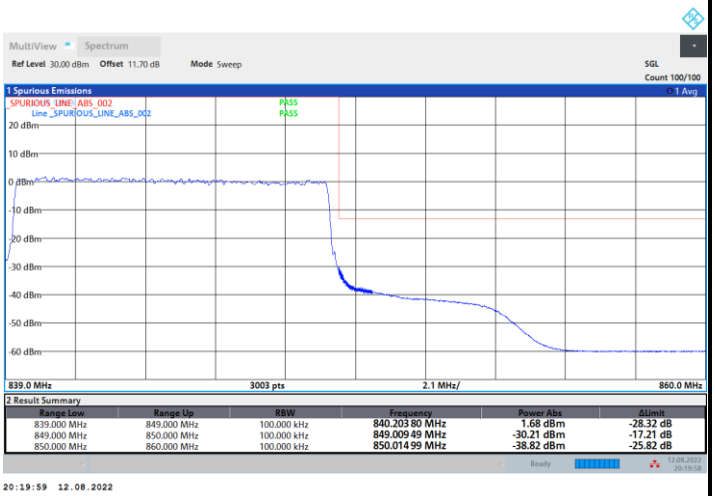


FR1 n5 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

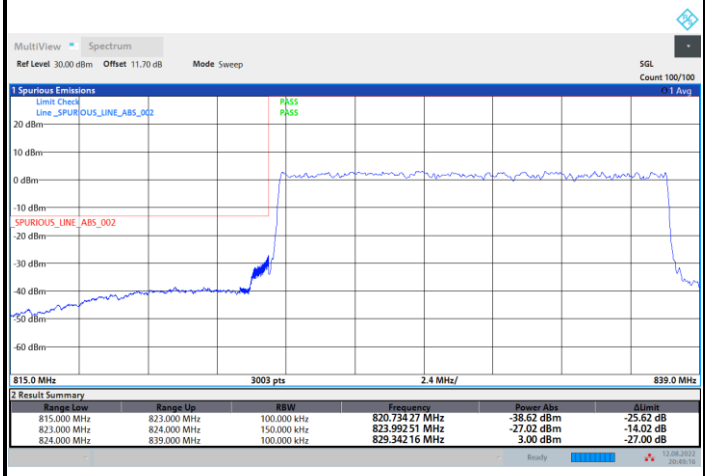


Highest Band Edge

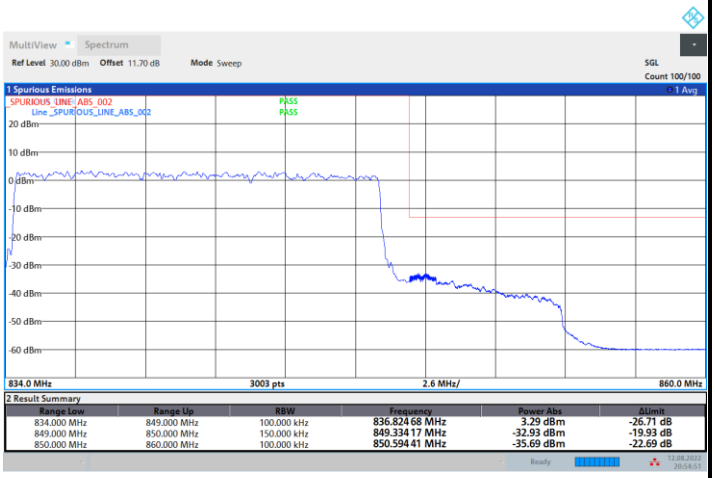


FR1 n5 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

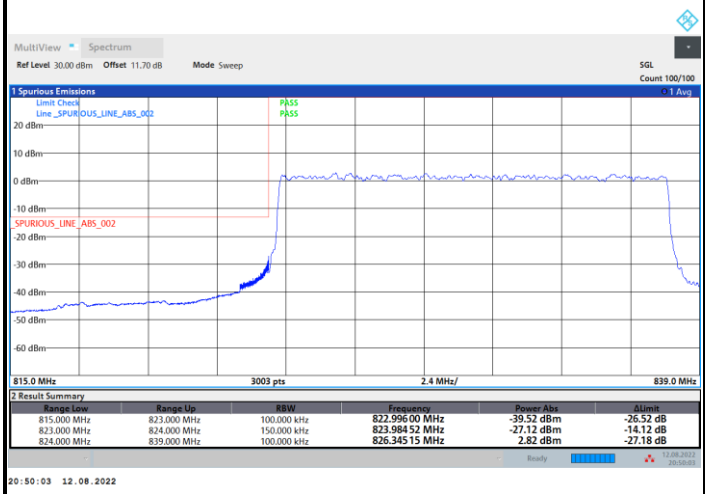


Highest Band Edge

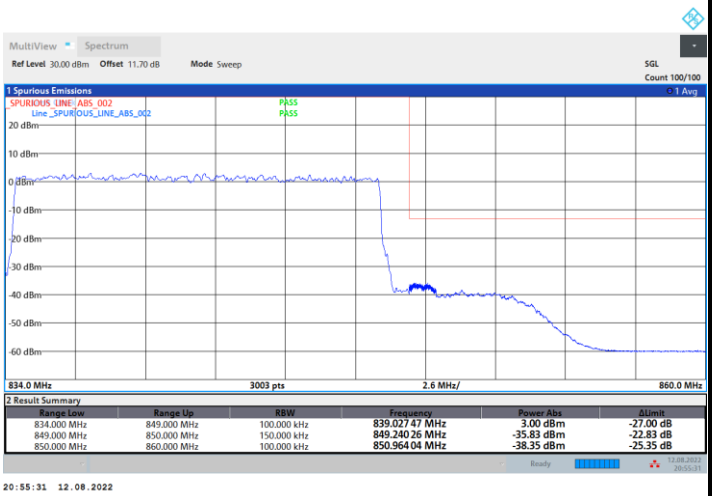


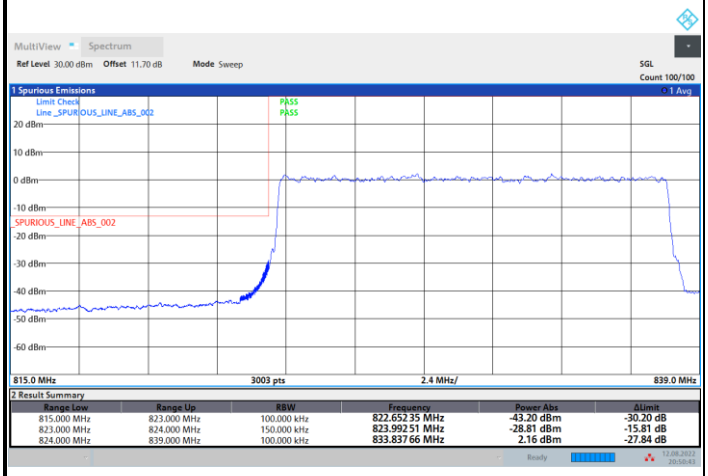
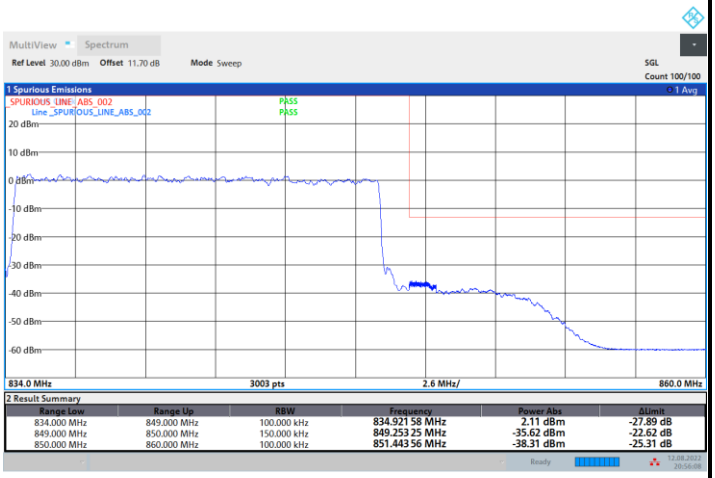
FR1 n5 / 15MHz / DFT-s-OFDM / QPSK / Full RB

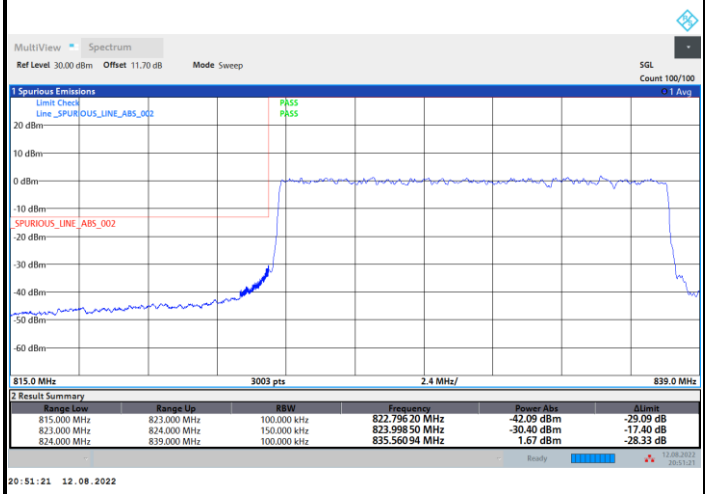
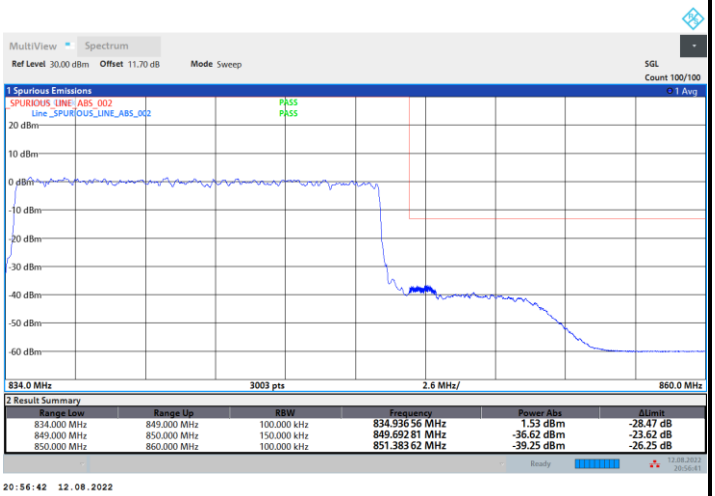
Lowest Band Edge



Highest Band Edge

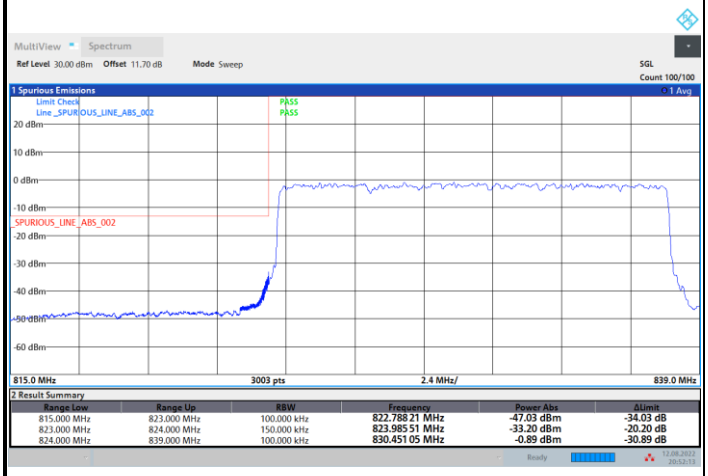


FR1 n5 / 15MHz / DFT-s-OFDM / 16QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

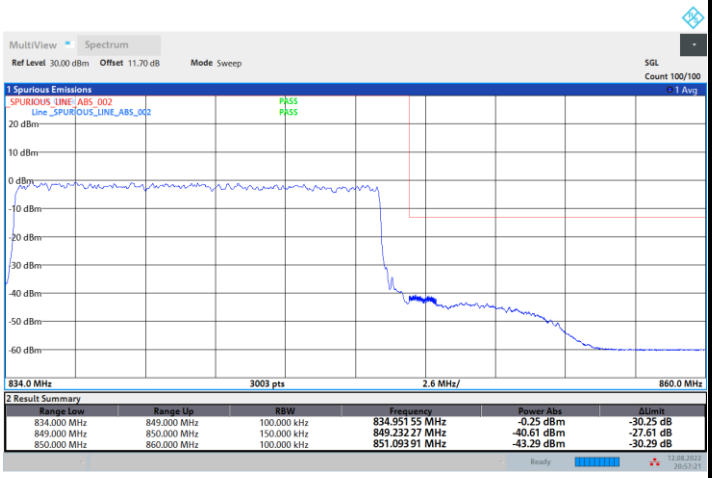
FR1 n5 / 15MHz / DFT-s-OFDM / 64QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n5 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

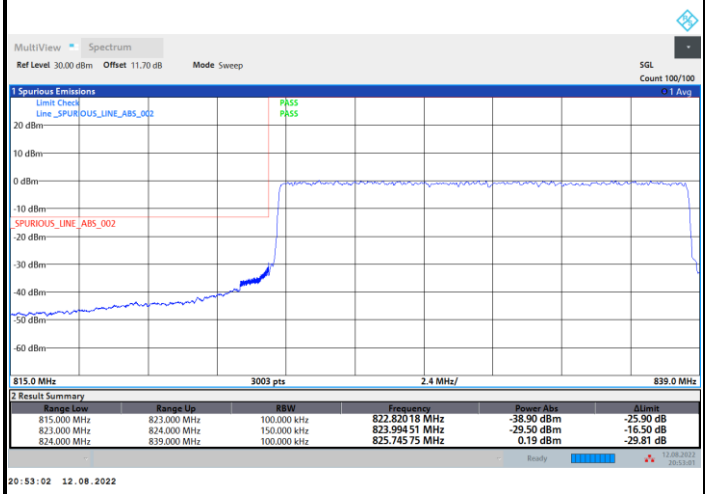


Highest Band Edge

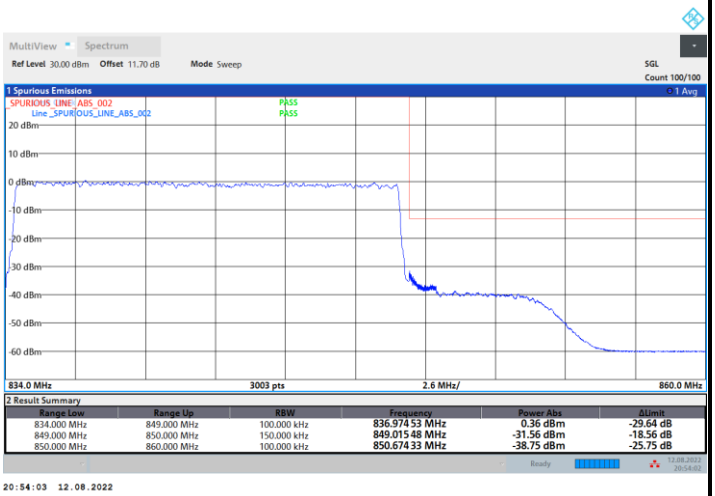


FR1 n5 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

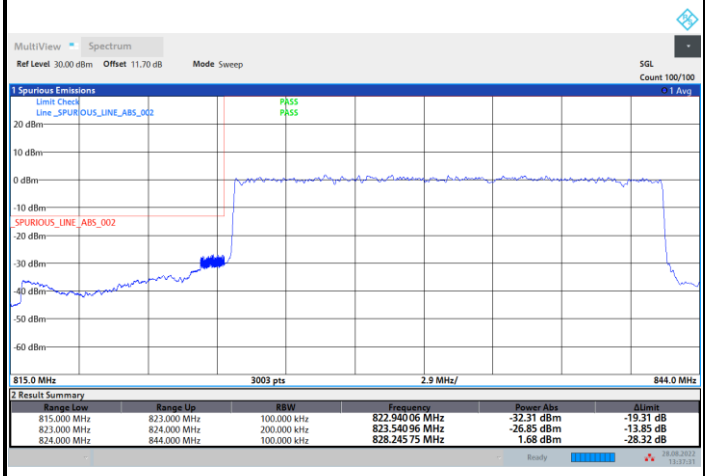


Highest Band Edge

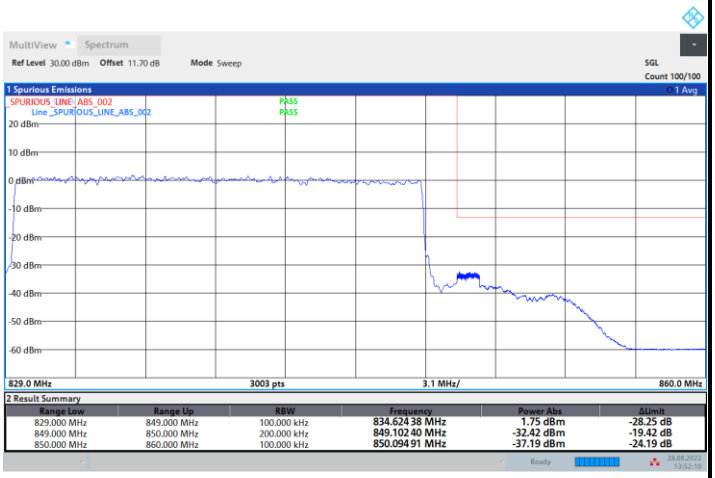


FR1 n5 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

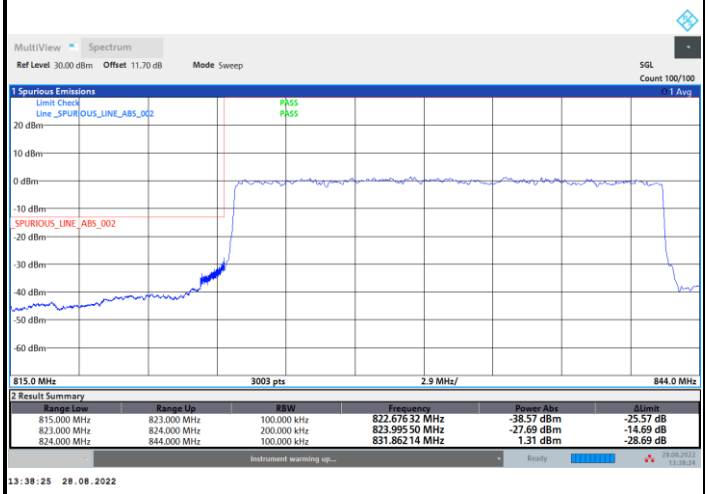


Highest Band Edge

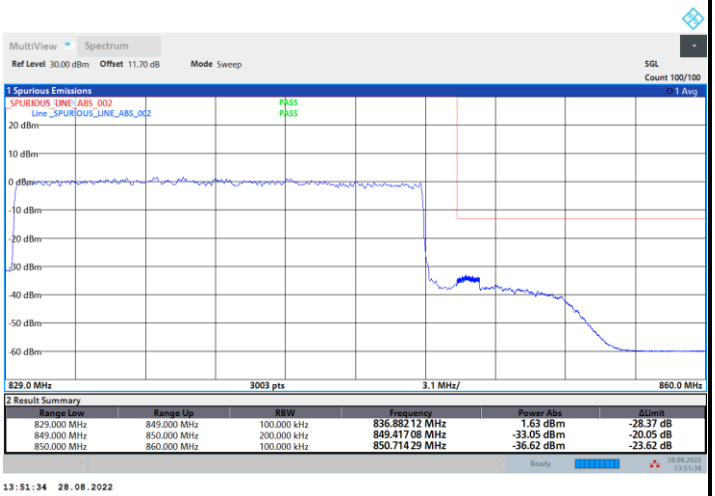


FR1 n5 / 20MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

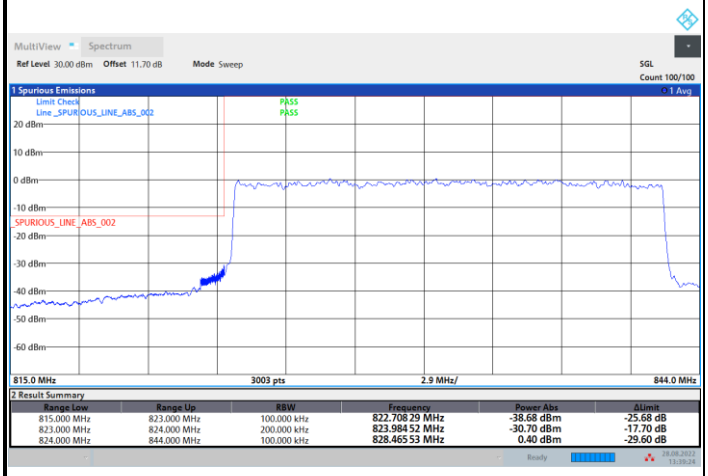


Highest Band Edge

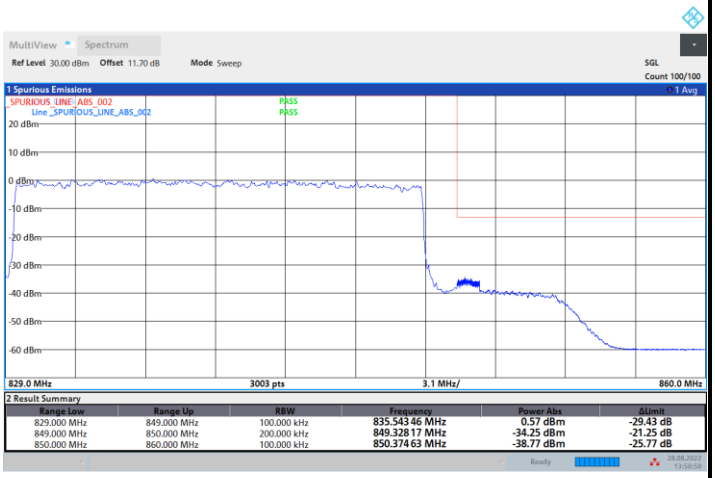


FR1 n5 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

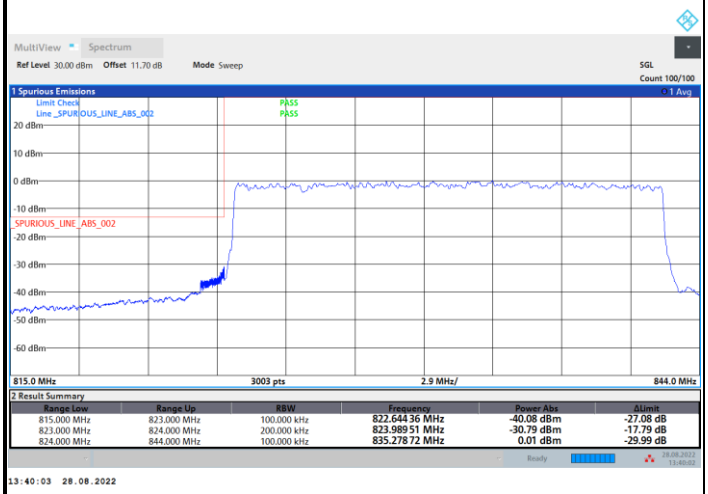


Highest Band Edge

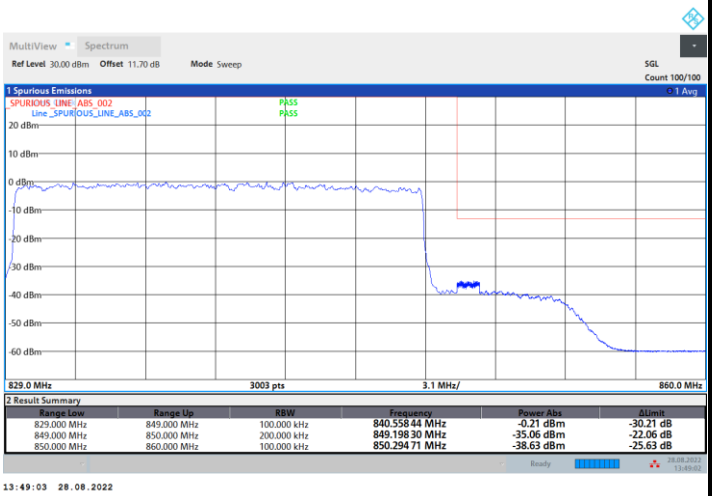


FR1 n5 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

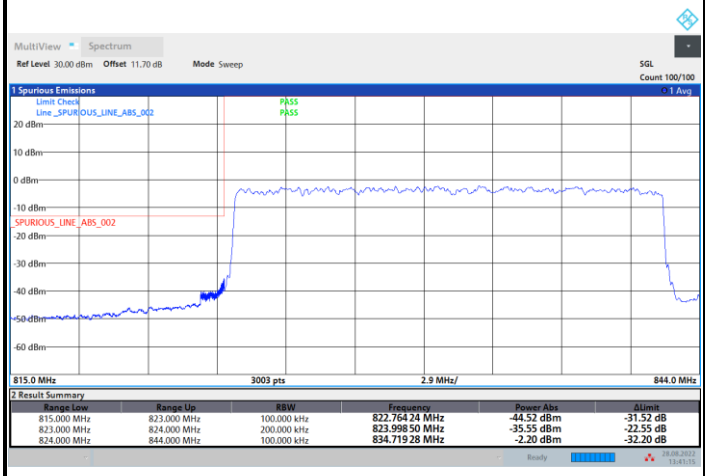


Highest Band Edge

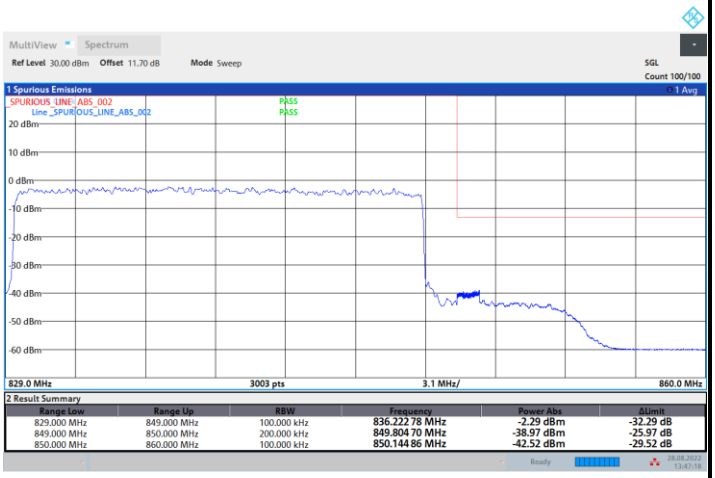


FR1 n5 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

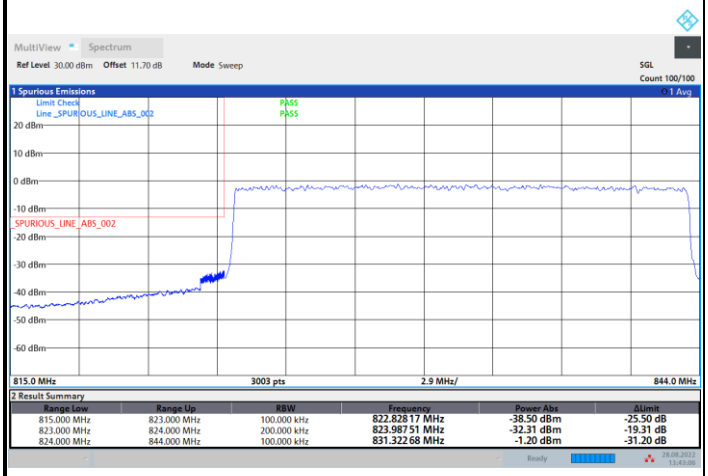


Highest Band Edge



FR1 n5 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

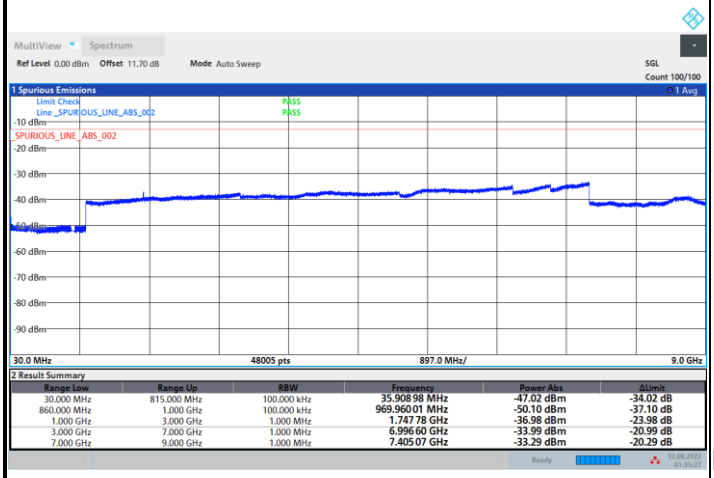


Highest Band Edge

Conducted Spurious Emission

FR1 n5 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel

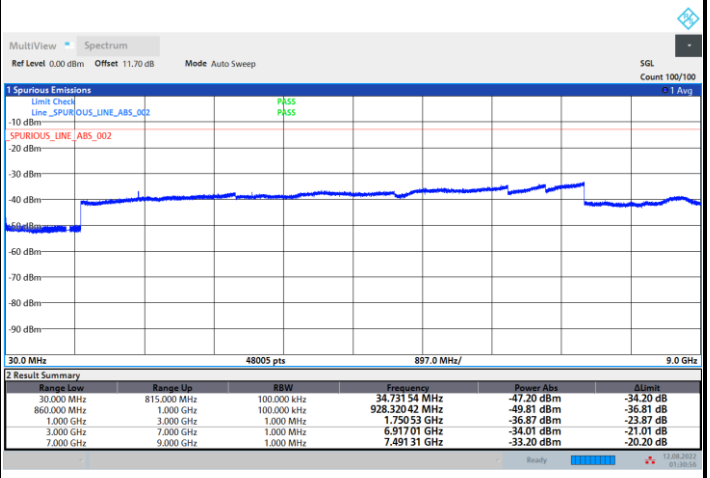


2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	35.908 98 MHz	-47.02 dBm	-34.02 dB
860.000 MHz	1.000 GHz	100.000 kHz	969.960 01 MHz	-50.10 dBm	-37.10 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.747 78 GHz	-36.98 dBm	-23.98 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.996 60 GHz	-33.99 dBm	-20.99 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.405 07 GHz	-33.29 dBm	-20.29 dB

01:35:28 12.08.2022

Middle Channel

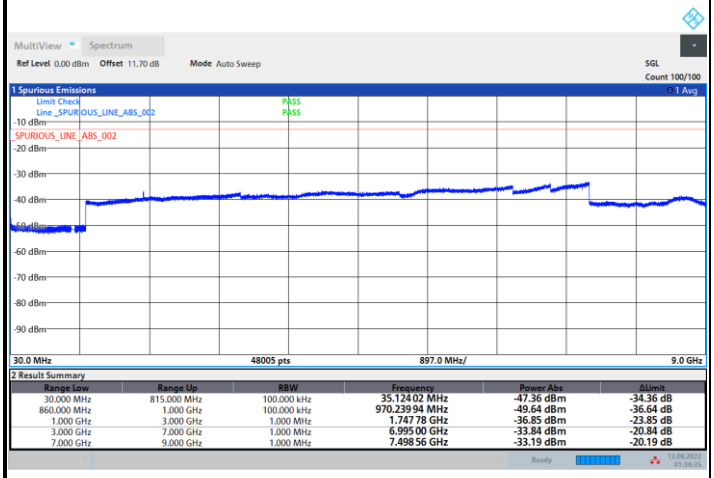


2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	34.731 54 MHz	-47.20 dBm	-34.20 dB
860.000 MHz	1.000 GHz	100.000 kHz	928.320 42 MHz	-49.81 dBm	-36.81 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.750 53 GHz	-36.87 dBm	-23.87 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.917 01 GHz	-34.01 dBm	-21.01 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.491 31 GHz	-33.20 dBm	-20.20 dB

01:30:57 12.08.2022

Highest Channel



2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	35.124 02 MHz	-47.36 dBm	-34.36 dB
860.000 MHz	1.000 GHz	100.000 kHz	970.239 94 MHz	-49.64 dBm	-36.64 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.747 78 GHz	-36.85 dBm	-23.85 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.995 00 GHz	-33.84 dBm	-20.84 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.498 56 GHz	-33.19 dBm	-20.19 dB

01:34:36 12.08.2022

Frequency Stability

Test Conditions		FR1 n5 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0093	PASS
40	Normal Voltage	0.0060	
30	Normal Voltage	0.0069	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0096	
0	Normal Voltage	0.0105	
-10	Normal Voltage	0.0055	
-20	Normal Voltage	0.0035	
-30	Normal Voltage	0.0087	
20	Maximum Voltage	0.0055	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0053	

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.

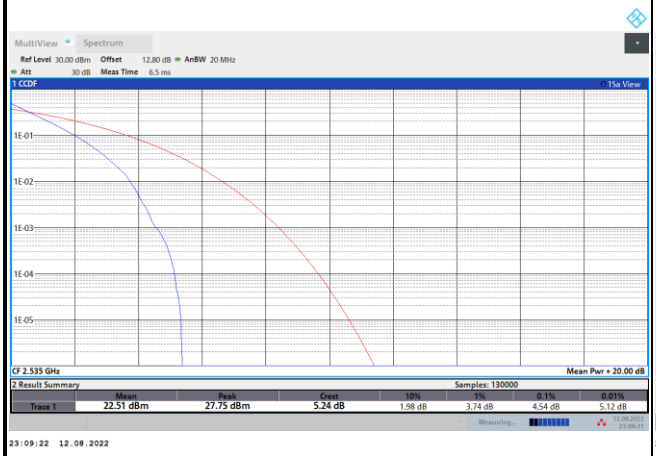
FR1 n7

Peak-to-Average Ratio

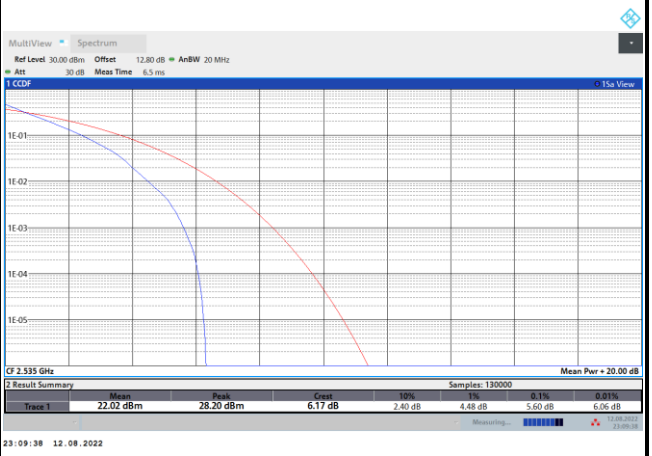
Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.54	5.60	6.30	6.42	PASS
Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.82				PASS

FR1 n7 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

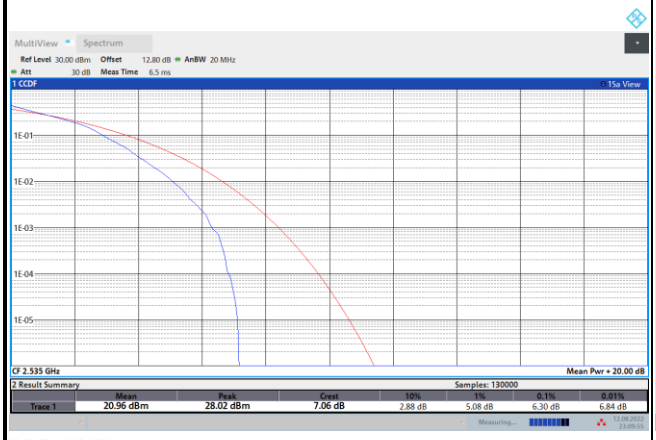
PI/2 BPSK



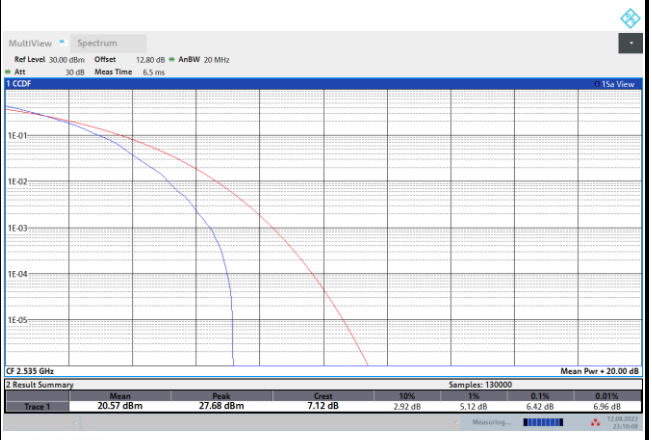
QPSK



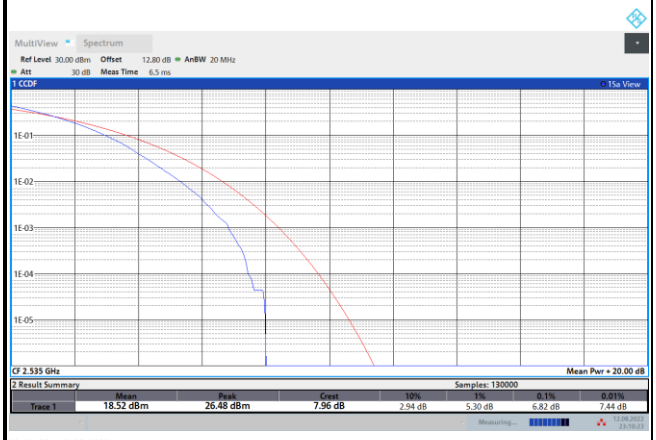
16QAM



64QAM



256QAM



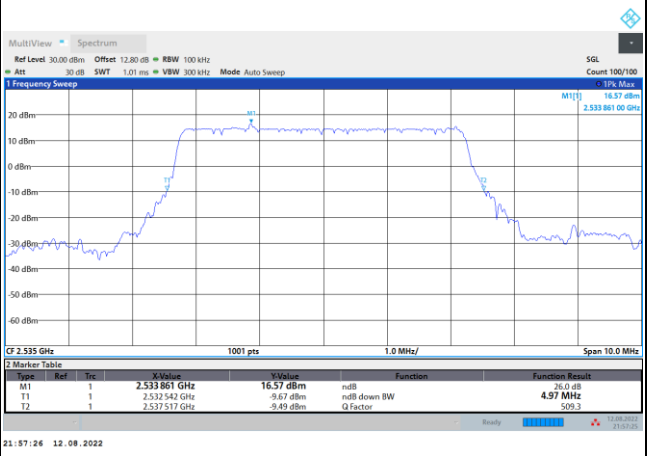
26dB Bandwidth

Mode	FR1 n7 : 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		9.53		14.30		18.78	

Mode	FR1 n7 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.00	5.07	10.07	9.83	15.05	15.02	20.02	19.94
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	5.04	5.14	10.09	9.95	15.20	15.05	19.90	20.10

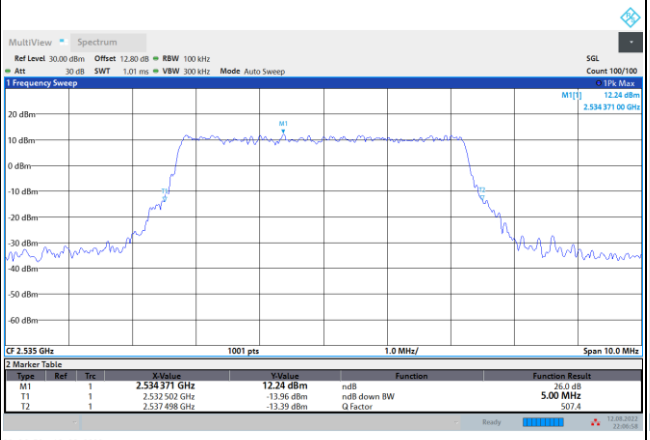
FR1 n7 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

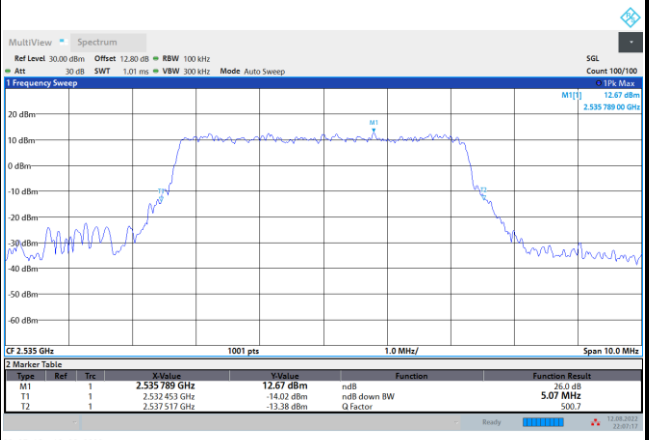


FR1 n7 / 5MHz / CP OFDM / Middle Channel / Full RB

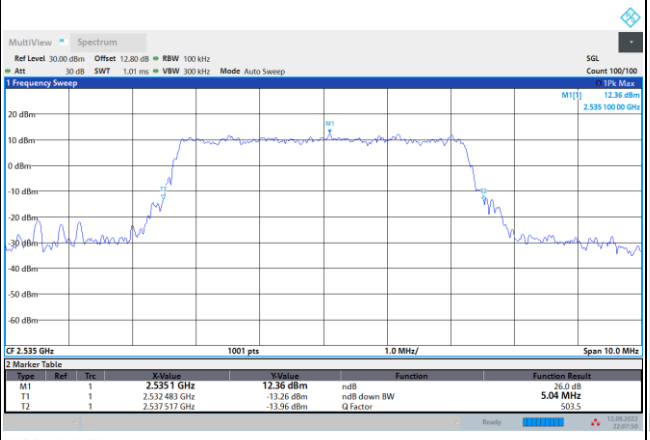
QPSK



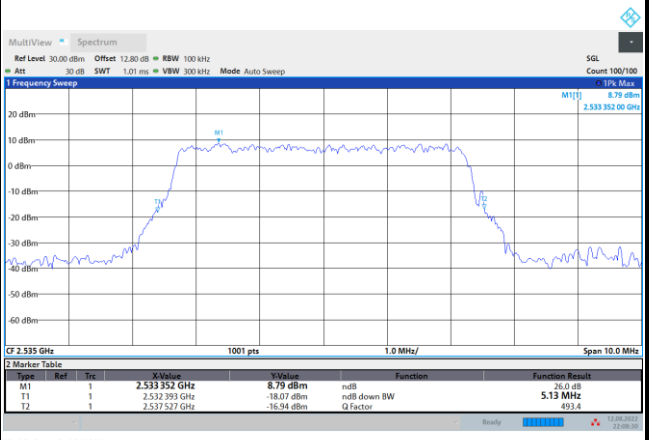
16QAM



64QAM

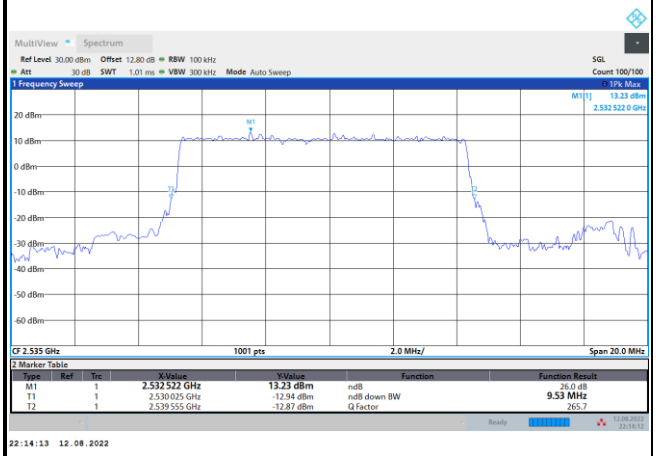


256QAM



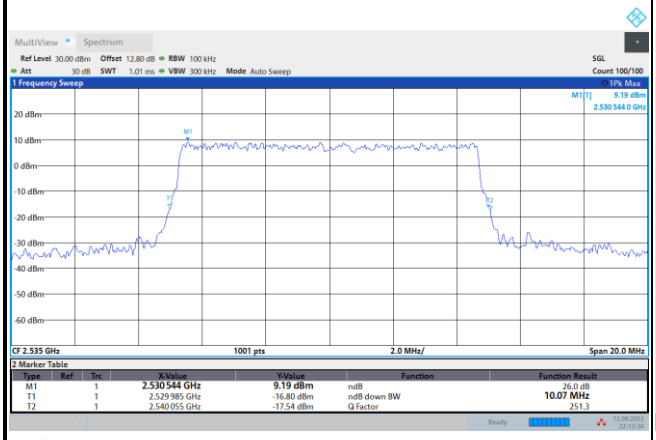
FR1 n7 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n7 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



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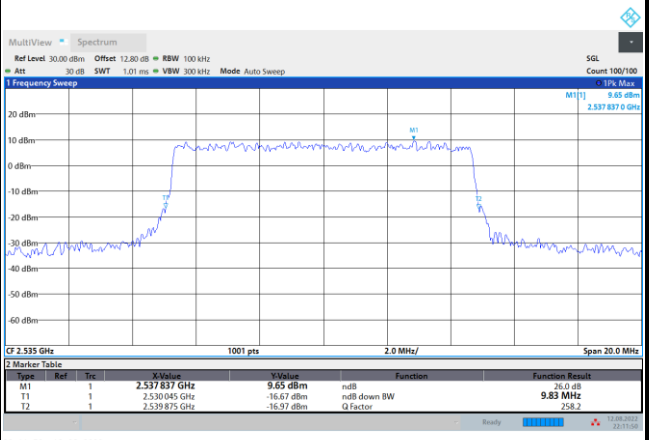

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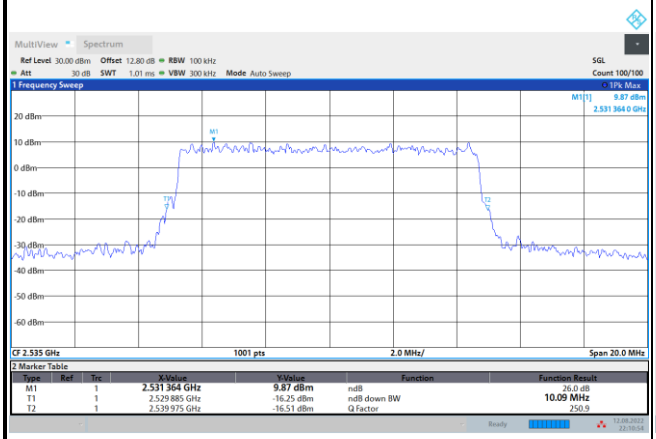

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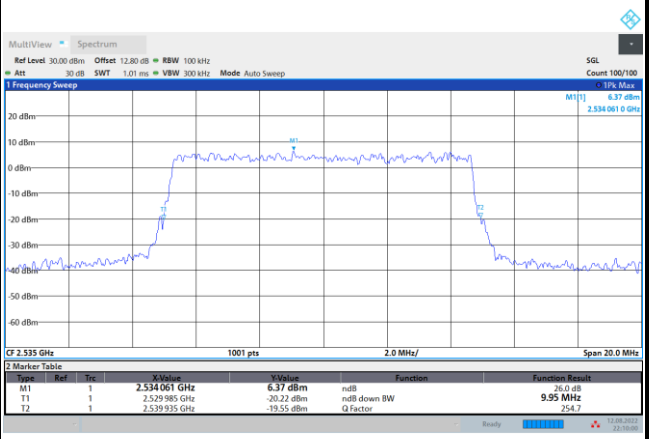
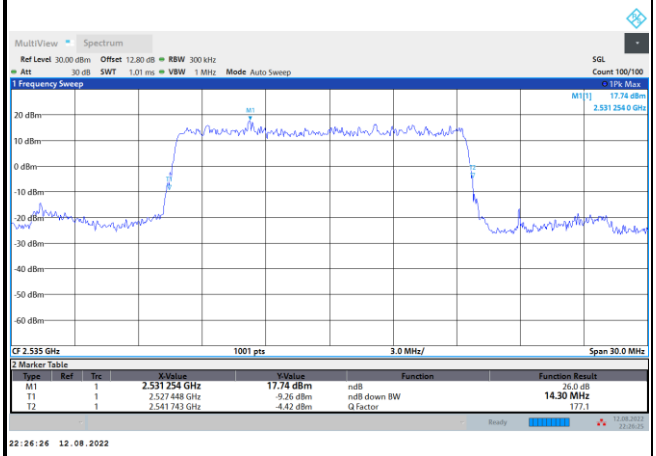


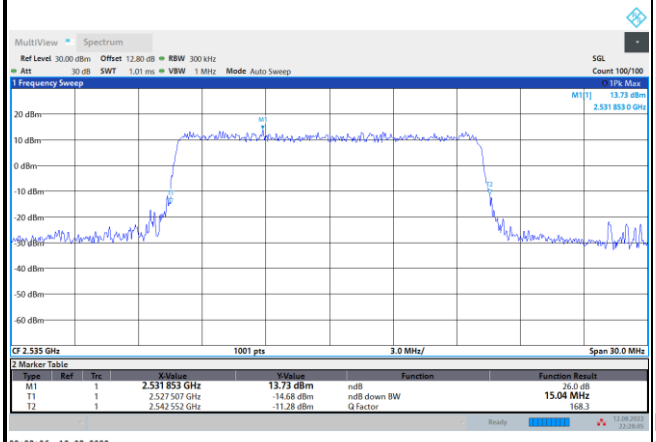
FR1 n7 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n7 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



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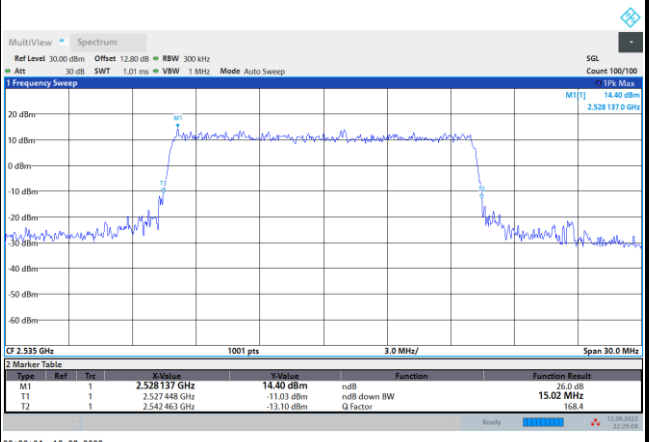

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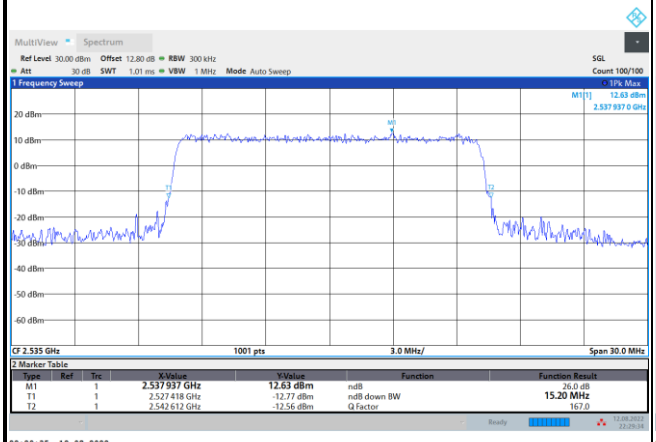

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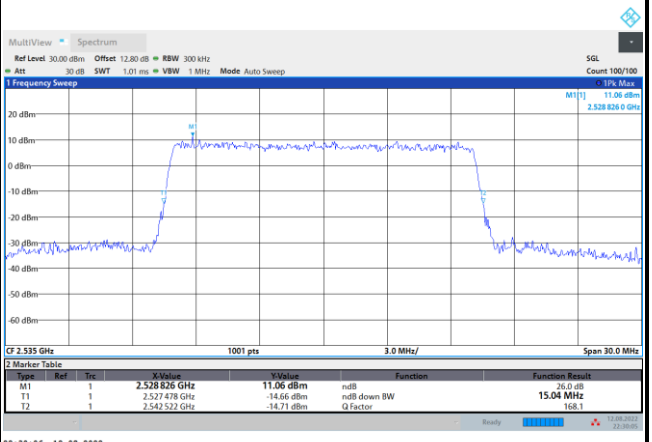
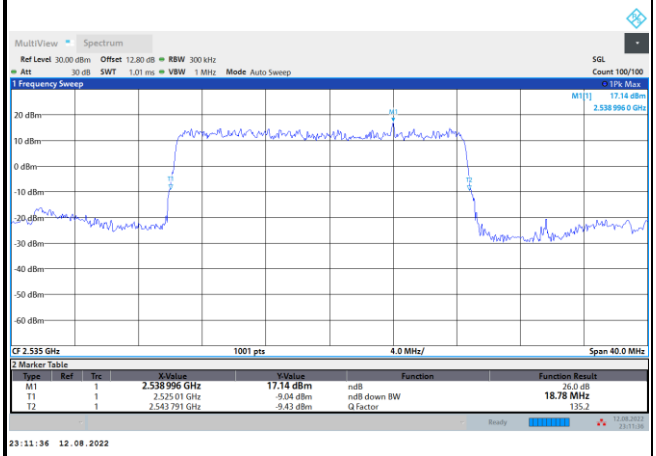


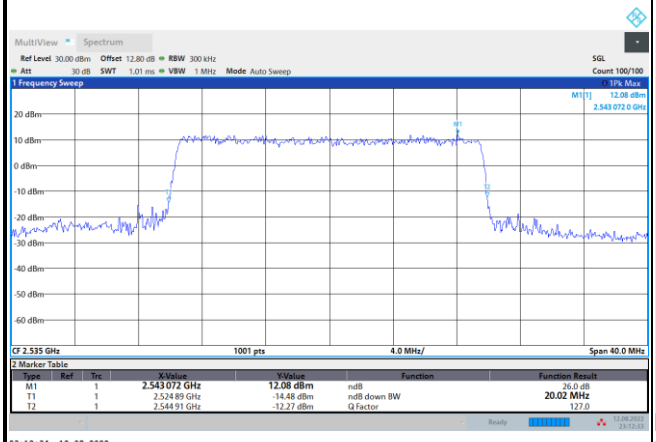
FR1 n7 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n7 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



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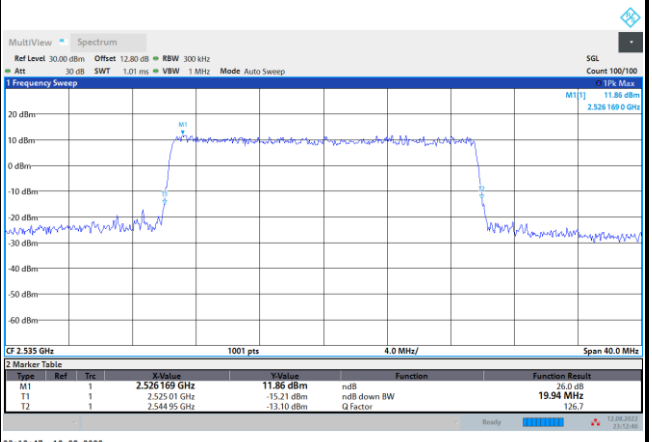

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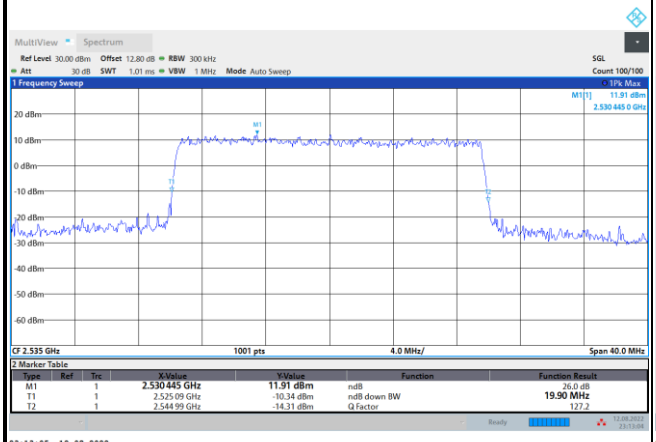

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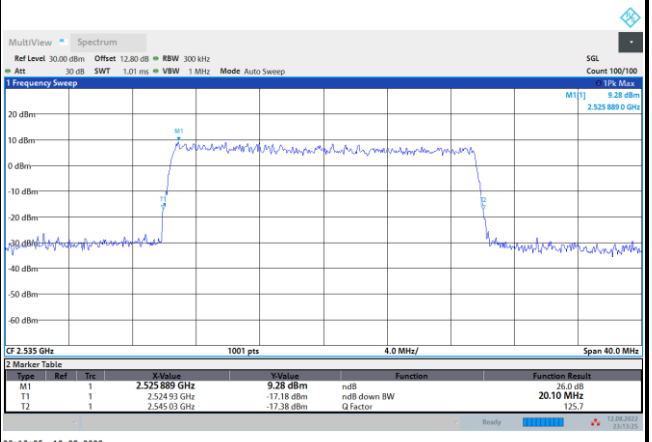


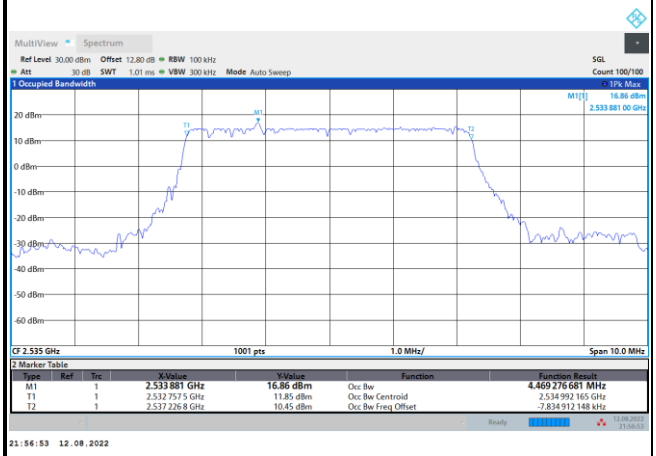
Occupied Bandwidth

Mode	FR1 n7 : 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	4.46		8.91		13.49		17.92	

Mode	FR1 n7 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.48	9.28	9.27	14.17	14.13	18.96	18.98
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.49	4.48	9.29	9.31	14.19	14.15	18.94	18.97

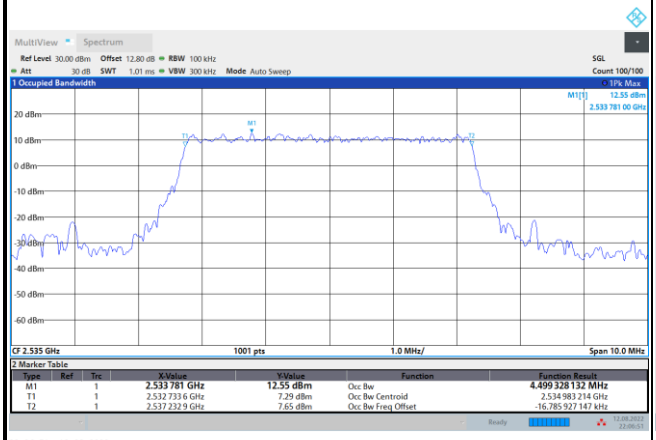
FR1 n7 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n7 / 5MHz / CP OFDM / Middle Channel / Full RB

QPSK



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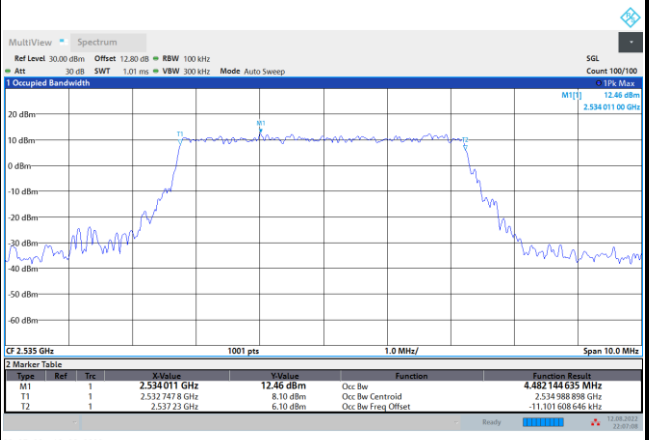

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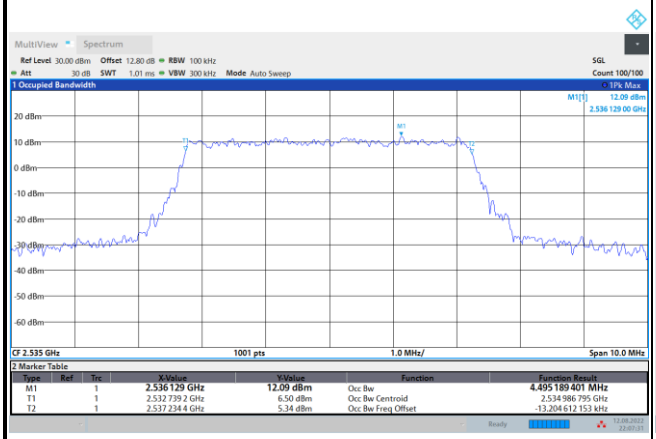

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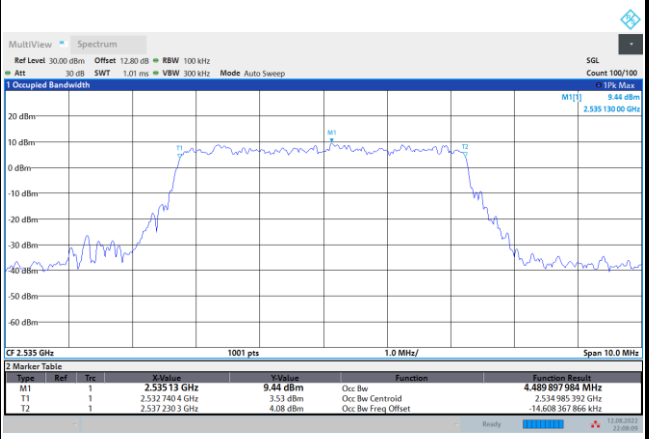
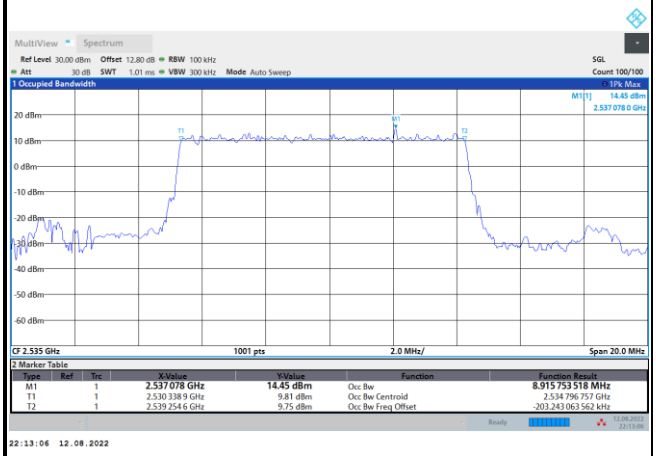


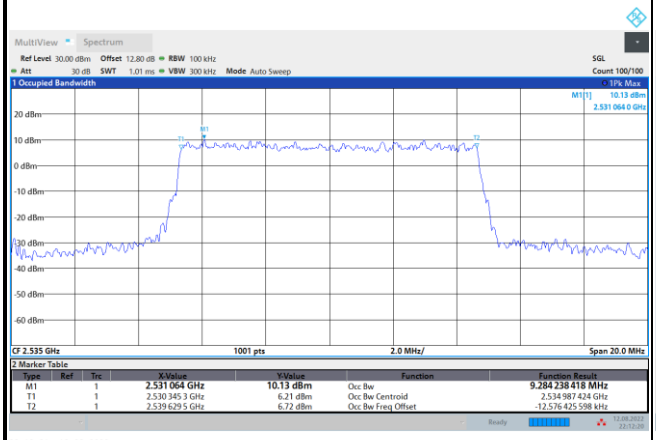
FR1 n7 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n7 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



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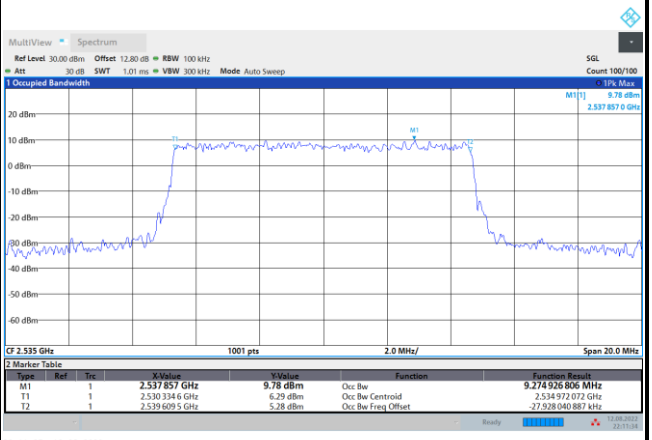

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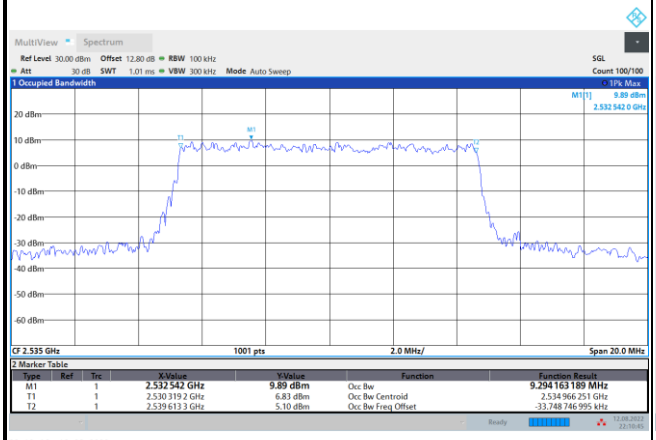

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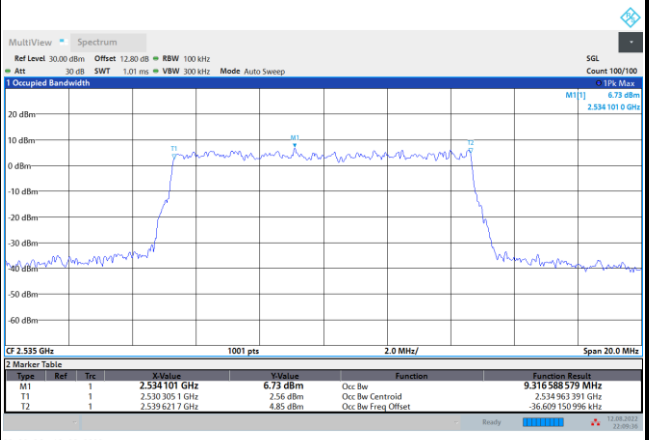
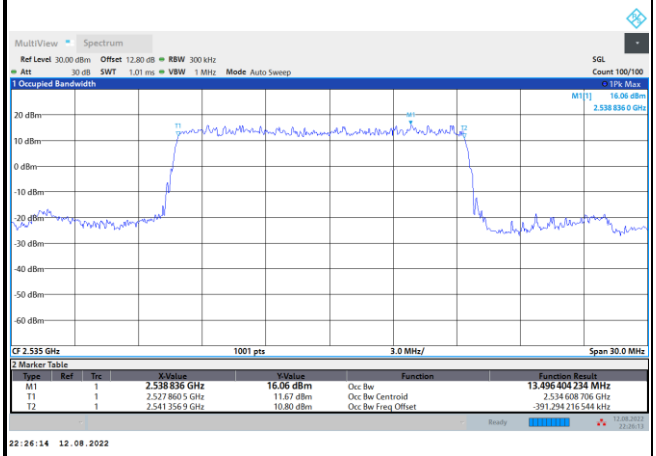


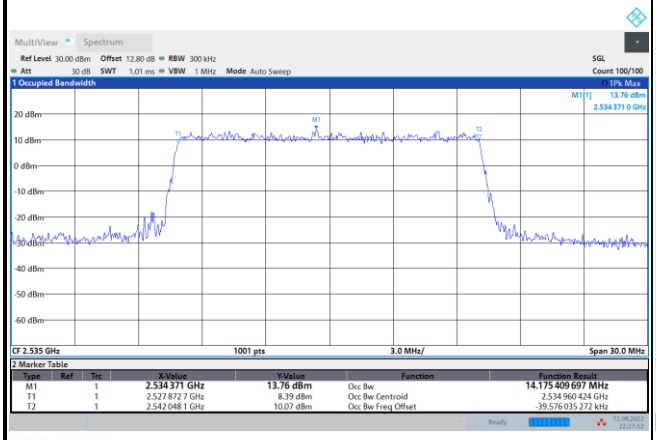
FR1 n7 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n7 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



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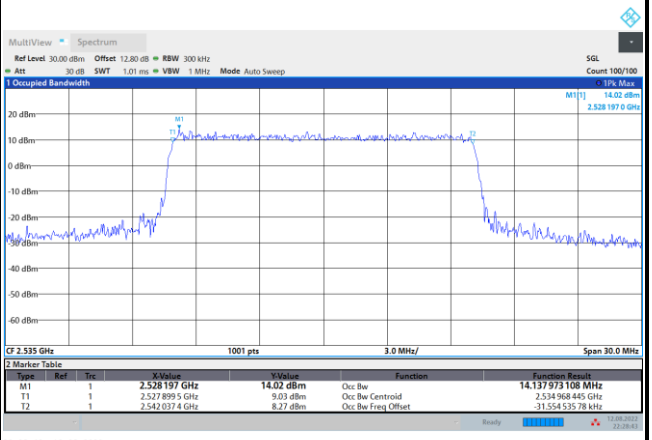

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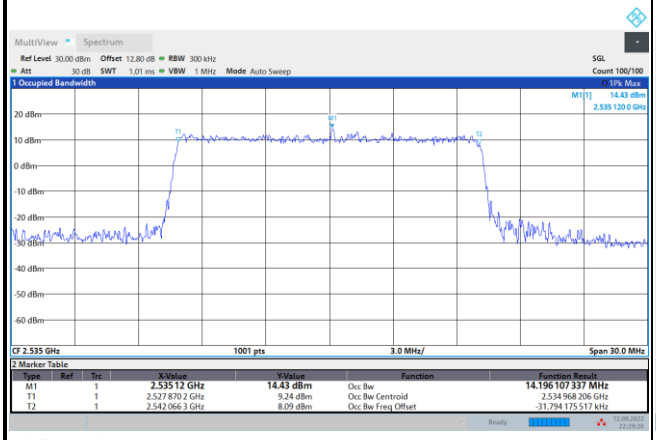

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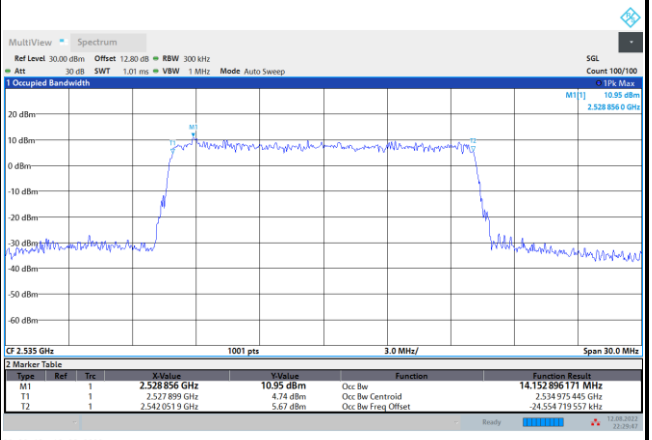
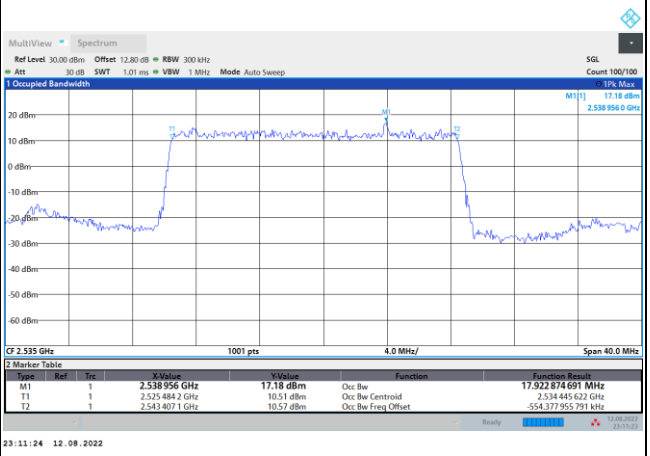


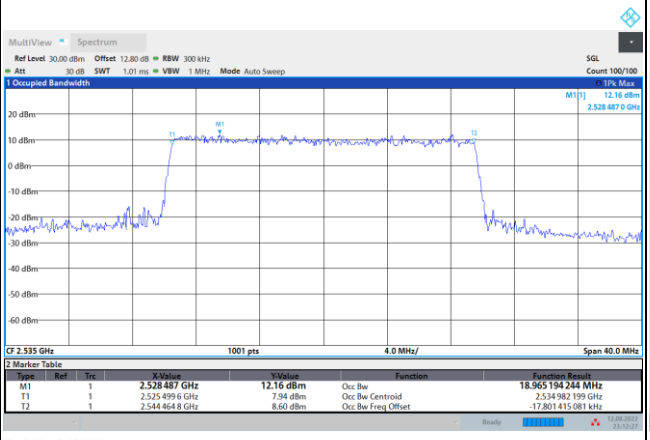
FR1 n7 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n7 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



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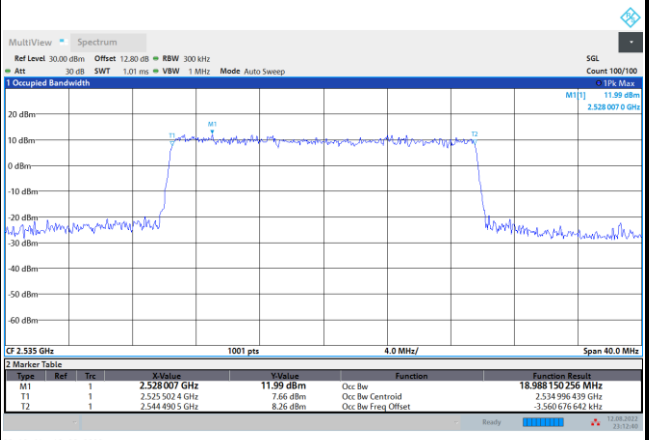

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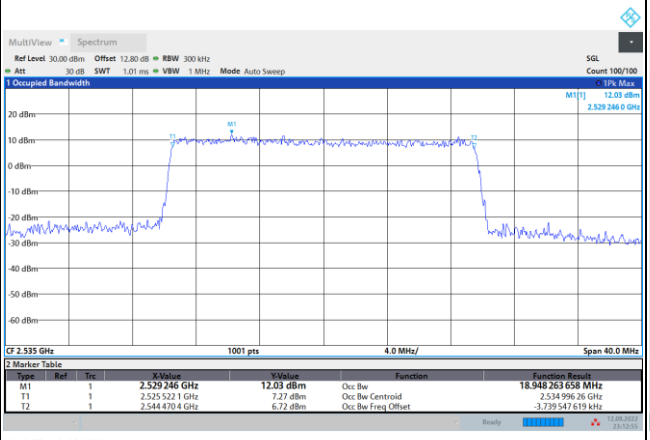

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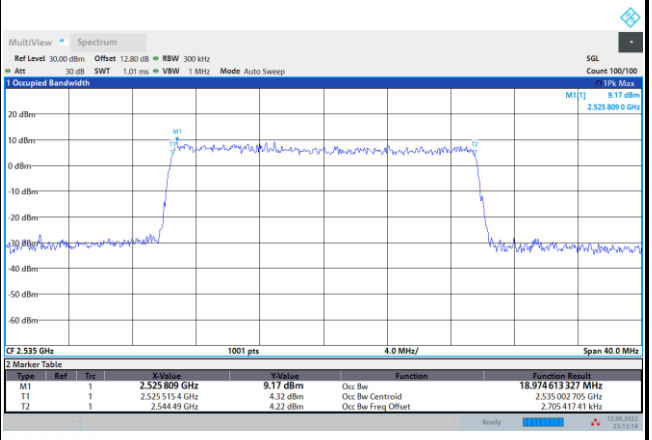
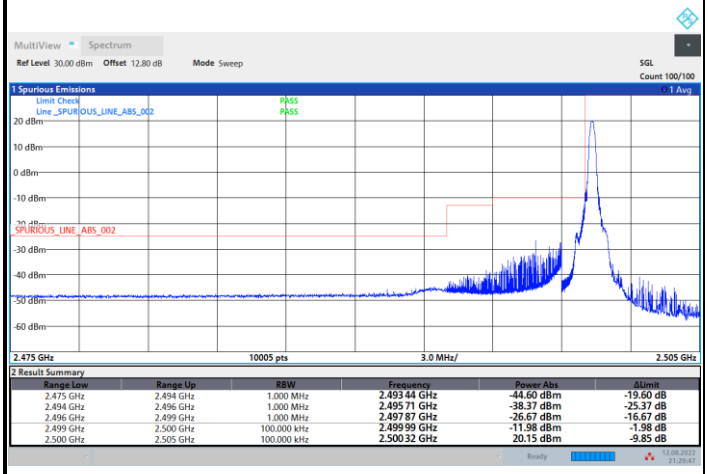


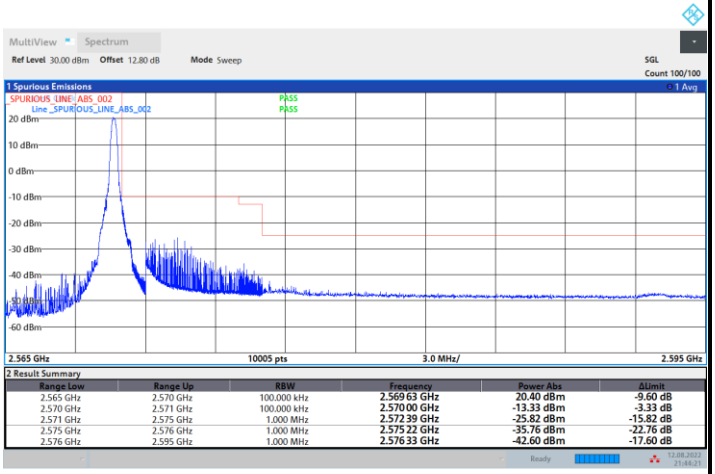
Conducted Band Edge

FR1 n7 / 5MHz / DFT-S OFDM / PI/2 BPSK

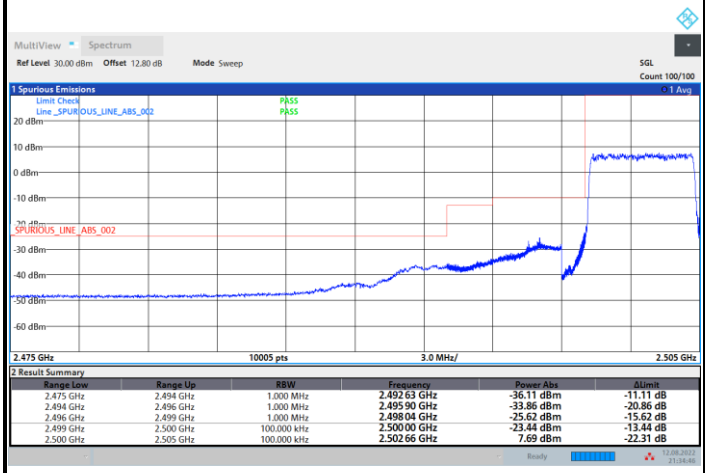
Lowest Band Edge / 1RB0



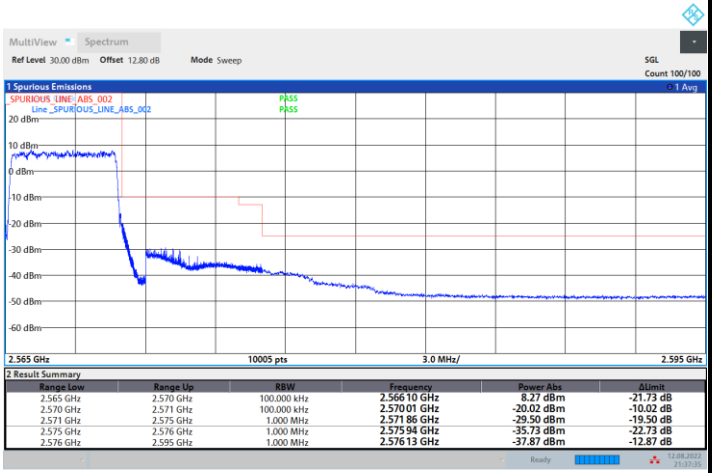
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

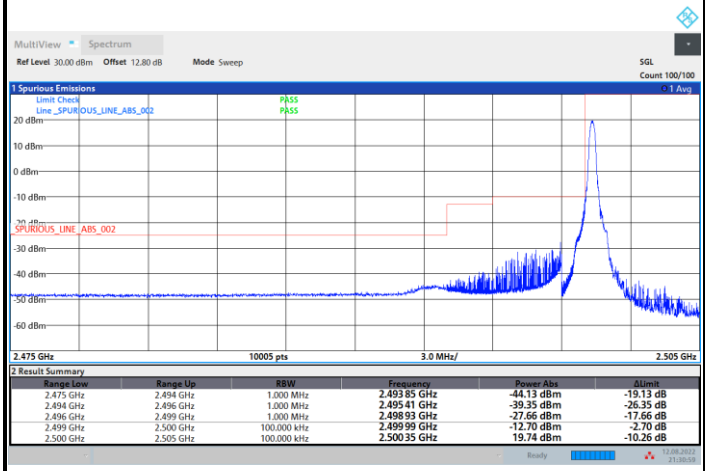


Highest Band Edge / Full RB



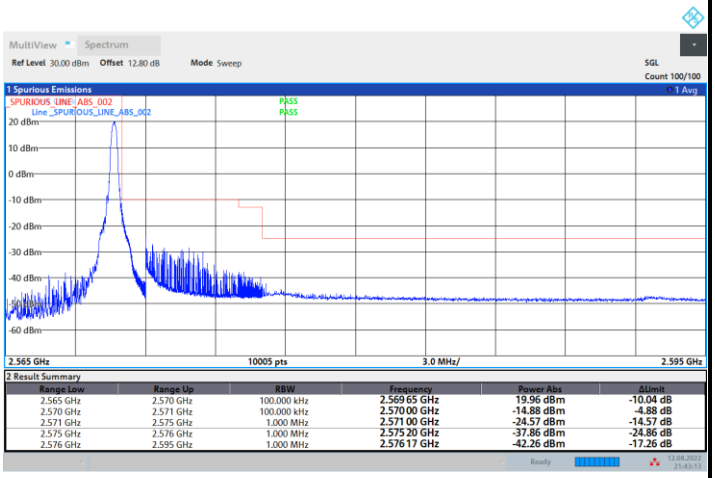
FR1 n7 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0



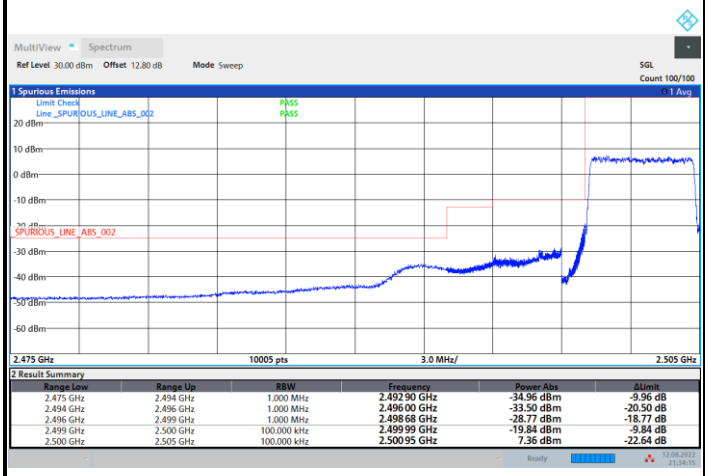
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.493 85 GHz	-44.13 dBm	-19.13 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.495 41 GHz	-39.35 dBm	-26.35 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.498 93 GHz	-27.66 dBm	-17.66 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.499 99 GHz	-12.70 dBm	-2.70 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.500 35 GHz	19.74 dBm	-10.26 dB

Highest Band Edge / 1RBmax



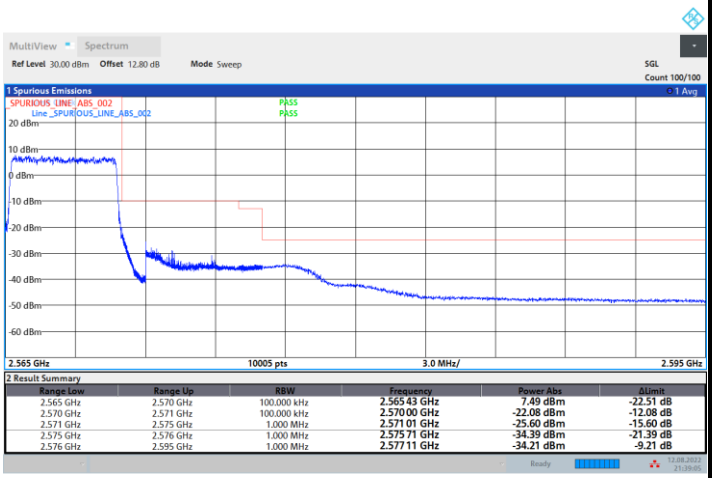
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.569 65 GHz	19.96 dBm	-10.04 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.570 00 GHz	-14.88 dBm	-4.88 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.571 00 GHz	-24.57 dBm	-14.57 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.575 20 GHz	-37.86 dBm	-24.86 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.576 17 GHz	-42.26 dBm	-17.26 dB

Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.492 90 GHz	-34.96 dBm	-9.96 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.496 00 GHz	-33.50 dBm	-20.50 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.498 68 GHz	-28.77 dBm	-18.77 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.499 99 GHz	-19.84 dBm	-9.84 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.500 95 GHz	7.36 dBm	-22.64 dB

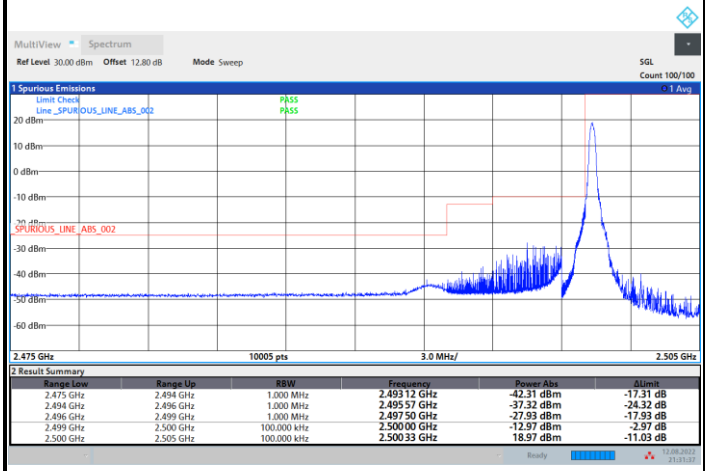
Highest Band Edge / Full RB



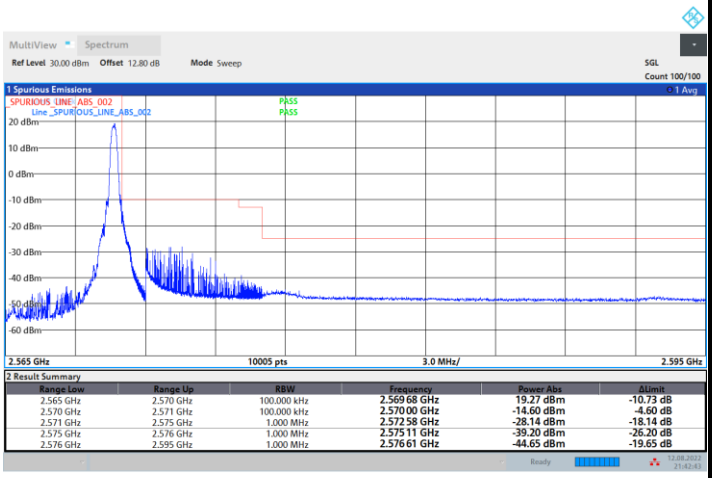
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.565 43 GHz	7.49 dBm	-22.51 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.570 00 GHz	-22.08 dBm	-12.08 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.571 01 GHz	-25.60 dBm	-15.60 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.575 71 GHz	-34.39 dBm	-21.39 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.577 11 GHz	-34.21 dBm	-9.21 dB

FR1 n7 / 5MHz / DFT-S OFDM / 16QAM

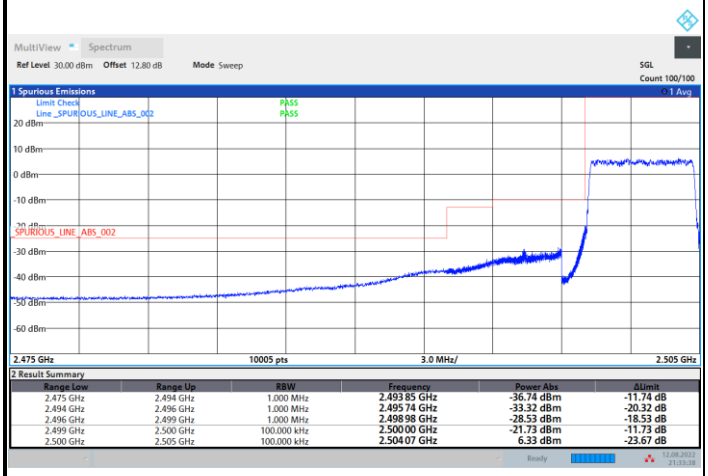
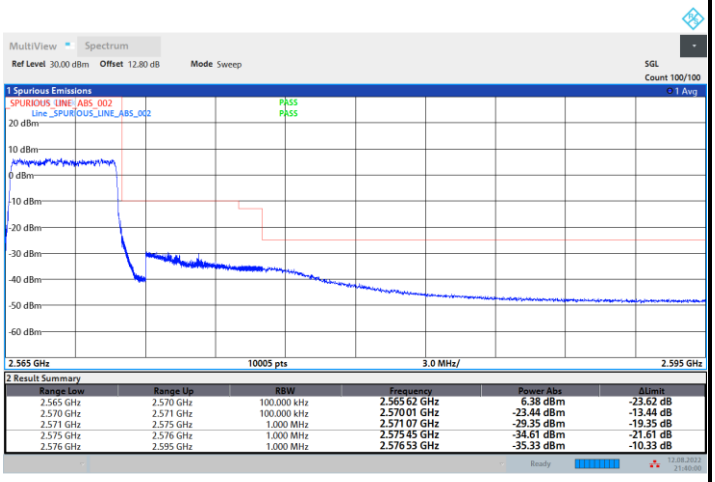
Lowest Band Edge / 1RB0



Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB