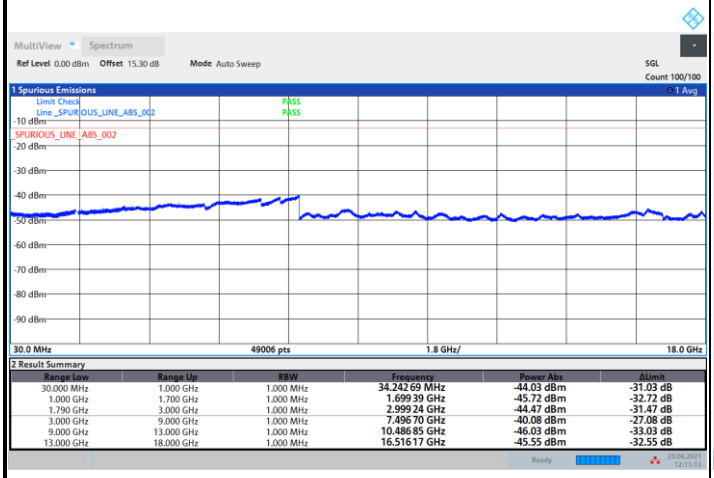
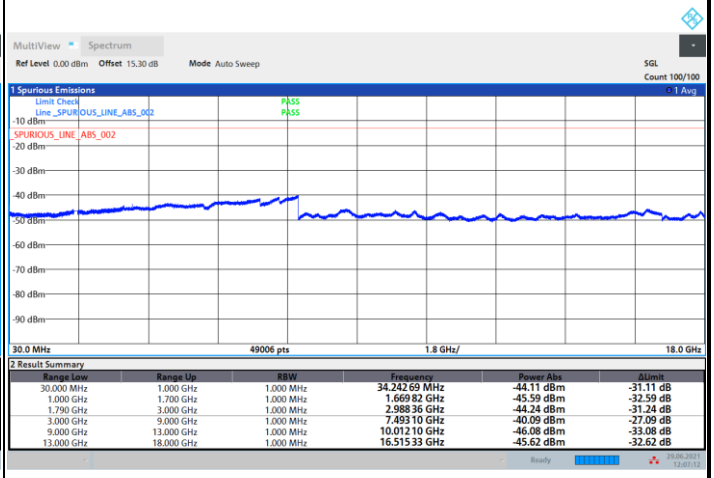
Conducted Spurious Emission

FR1 n66 / 5MHz / DFT-S OFDM / QPSK / 1RB1

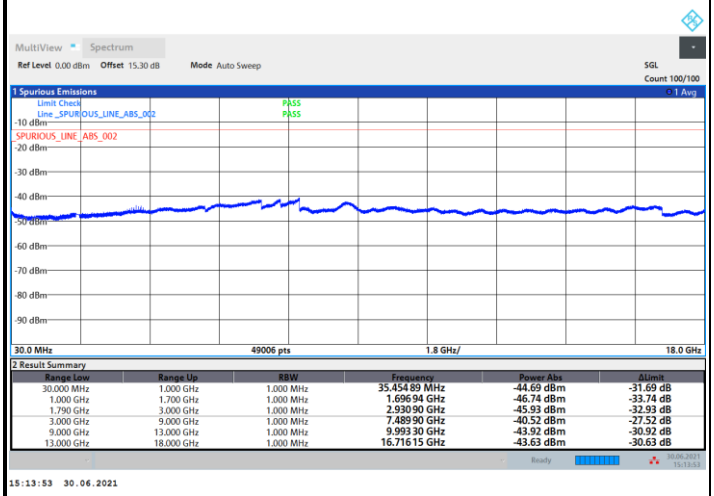
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n66 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
40	Normal Voltage	0.0062	PASS
30	Normal Voltage	0.0087	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0037	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0009	
20	Maximum Voltage	0.0042	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =3.80 V.；Battery End Point (BEP) =3.40 V.；Maximum Voltage =4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. EUT can't operate outside the temperatures between -20 °C and 40 °C.

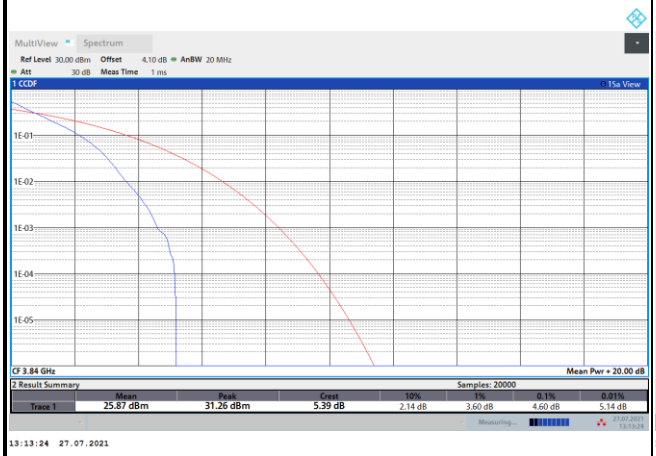
FR1 n77

Peak-to-Average Ratio

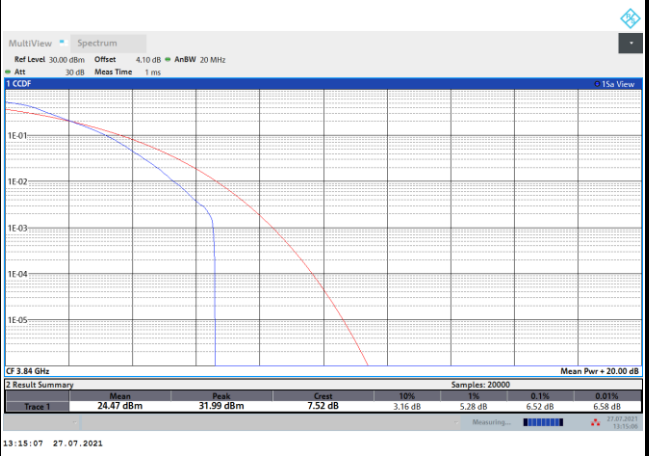
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.60	6.52	6.92	6.74	PASS
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.70				PASS

FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

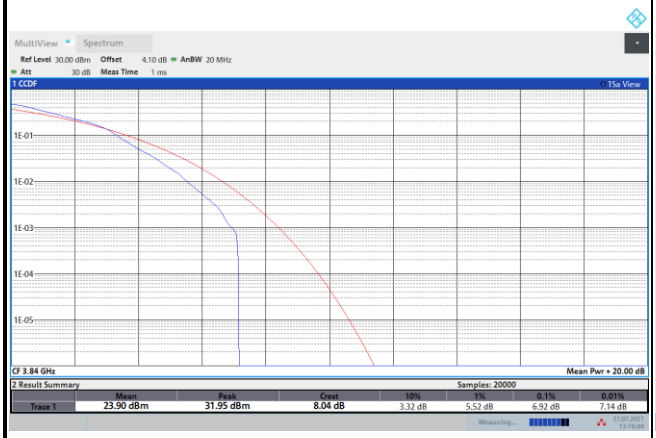
PI/2 BPSK



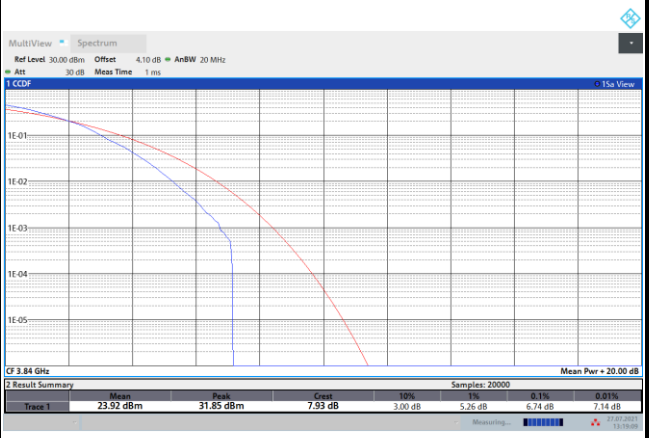
QPSK



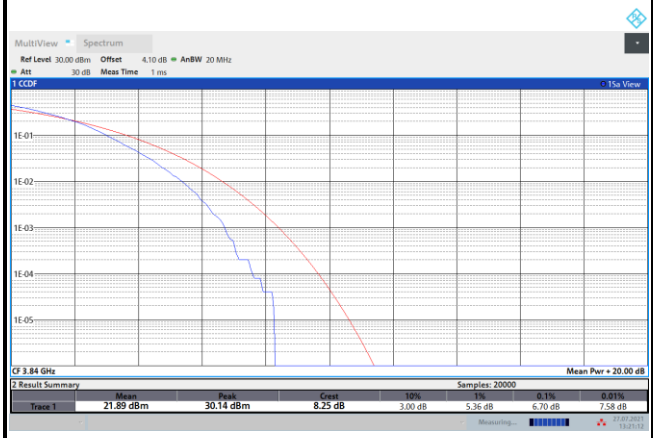
16QAM



64QAM



256QAM



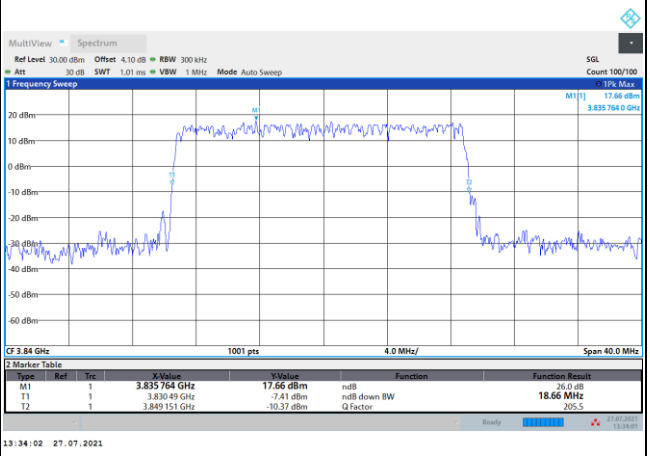
26dB Bandwidth

Mode	FR1 n77 : 26dB BW(MHz) / DFT-S OFDM							
BW	20MHz	30MHz	40MHz	50MHz	60MHz	70MHz	80MHz	90MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	18.66	-	38.20	48.35	60.54	-	80.08	89.91
BW	100MHz							
Mod.	PI/2 BPSK							
Middle CH	99.70							

Mode	FR1 n77 : 26dB BW(MHz) / CP OFDM							
BW	20MHz		30MHz		40MHz		50MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	19.22	19.02	-	-	40.28	40.28	50.05	50.05
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	19.10	19.06	-	-	40.20	40.44	49.95	49.95
BW	60MHz		70MHz		80MHz		90MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	60.54	60.42	-	-	80.40	80.56	90.45	90.45
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	60.66	60.42	-	-	80.24	80.24	90.45	90.27
BW	100MHz							
Mod.	QPSK	16QAM						
Middle CH	100.50	100.70						
Mod.	64QAM	256QAM						
Middle CH	100.50	100.70						

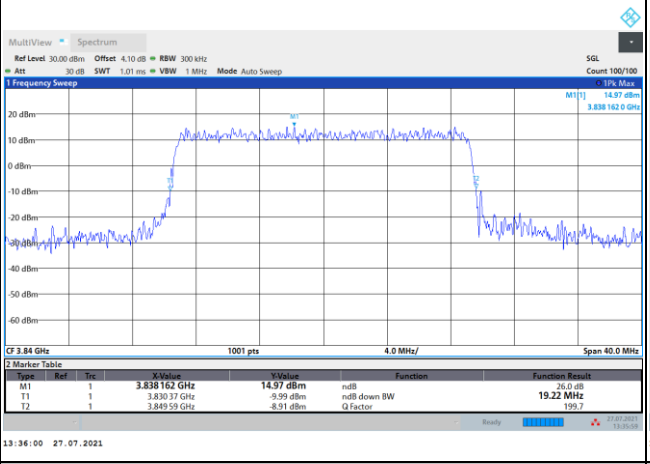
FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

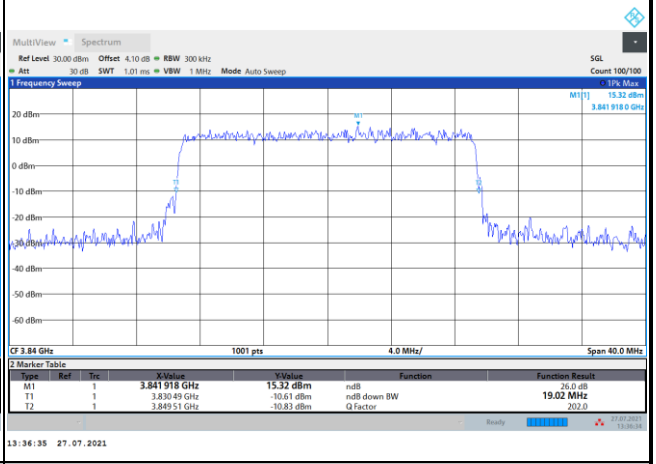


FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

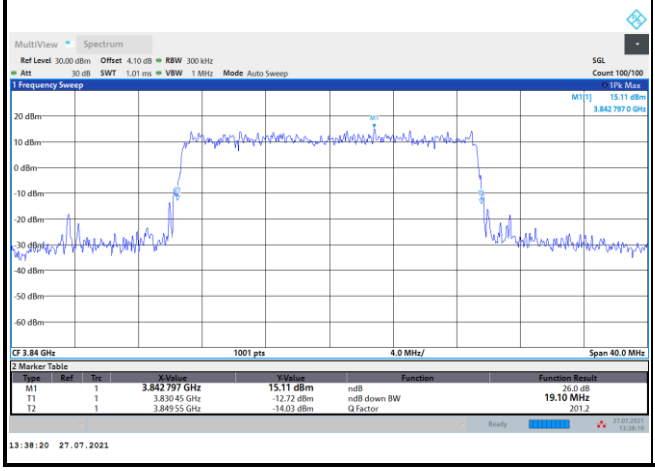
QPSK



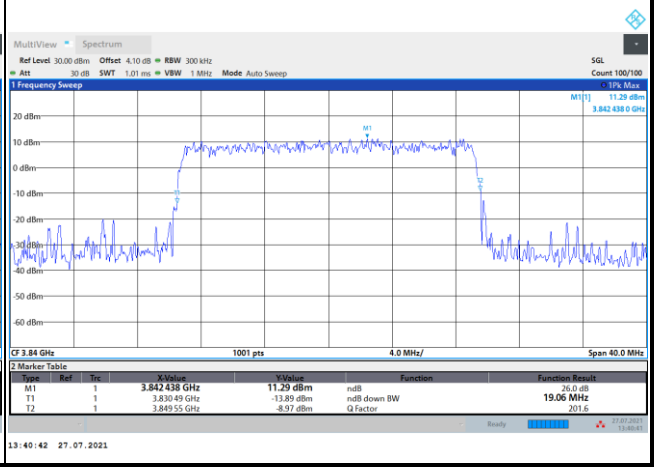
16QAM



64QAM

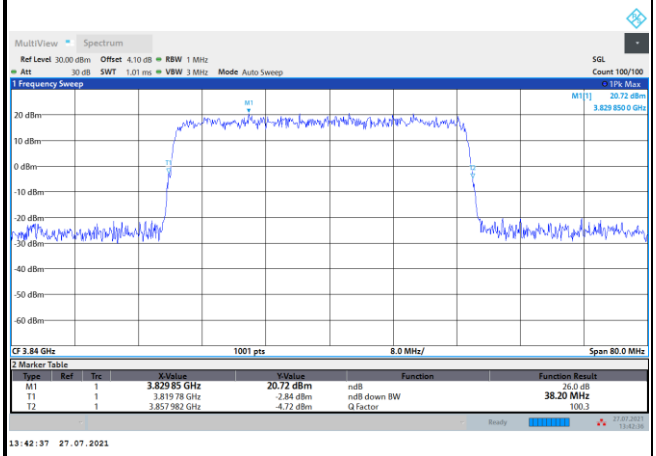


256QAM



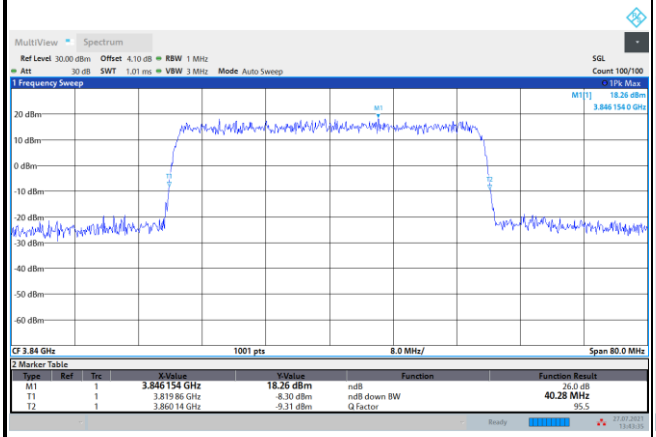
FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



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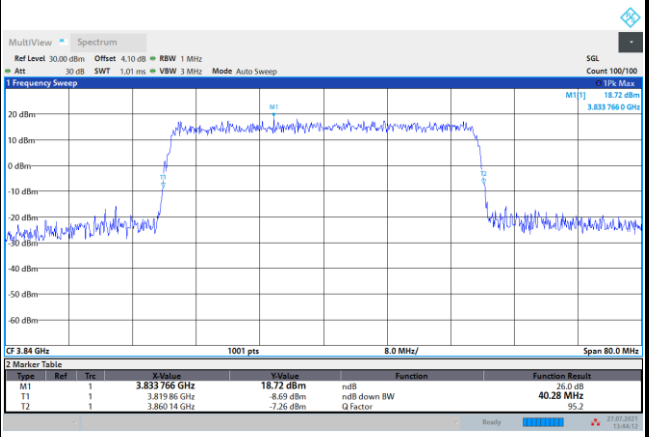

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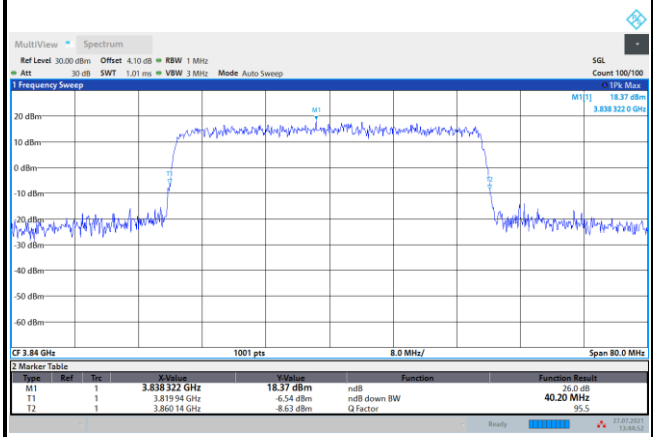

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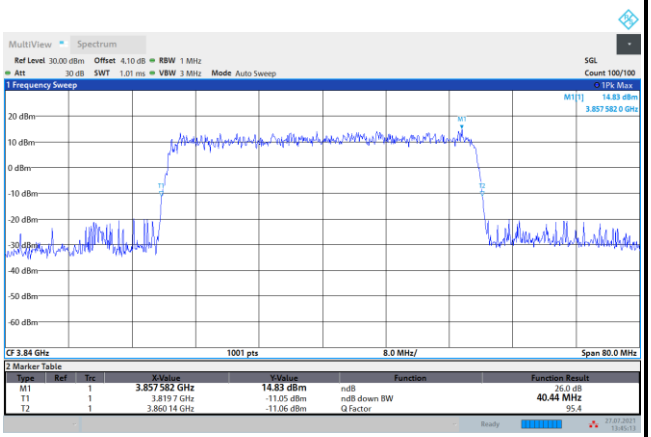
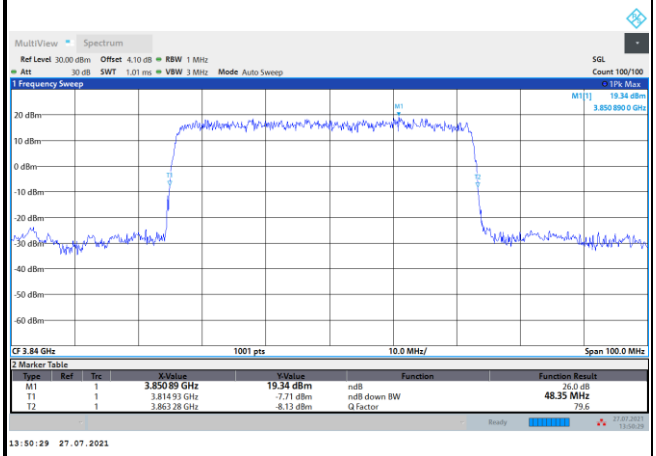


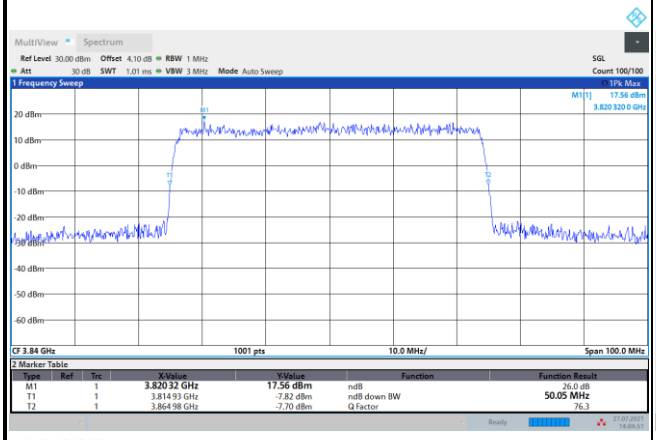
FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

QPSK



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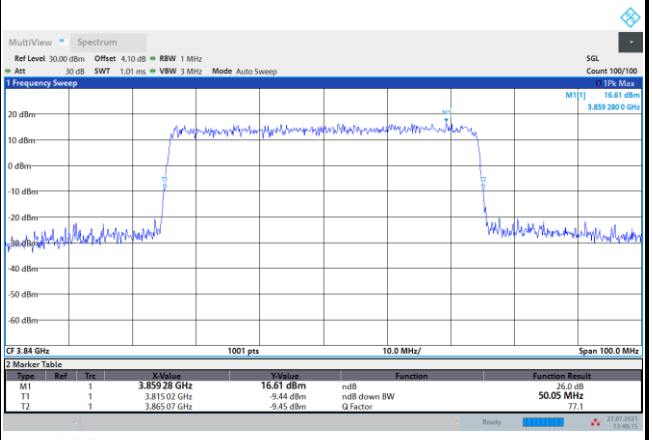
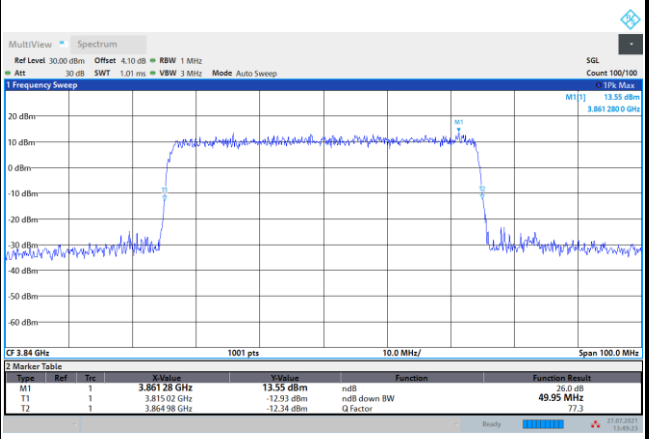


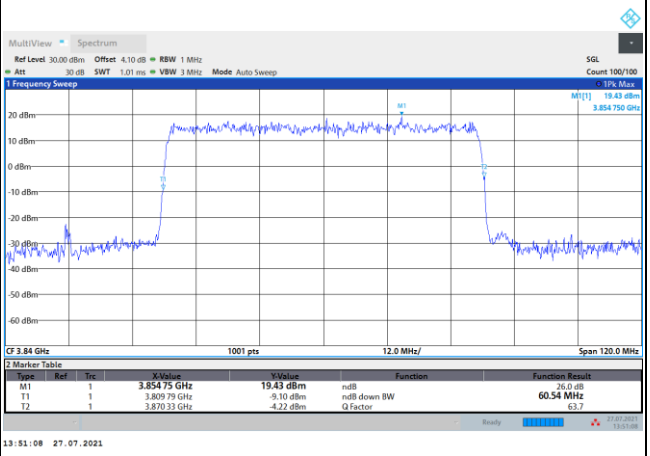
64QAM

256QAM



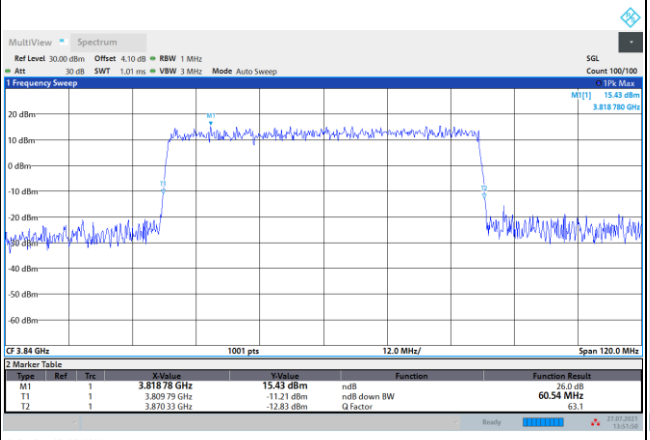
FR1 n77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB

QPSK



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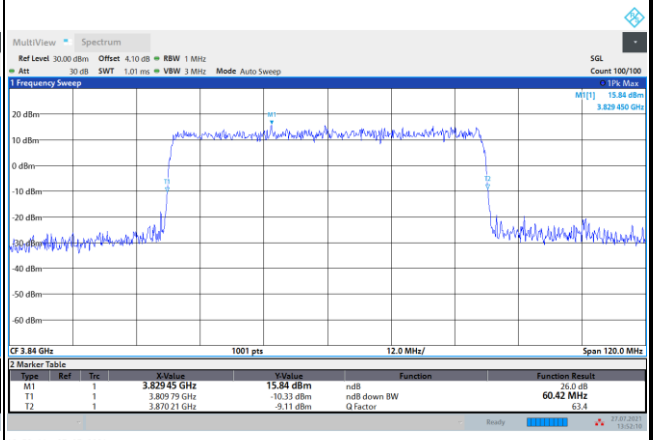

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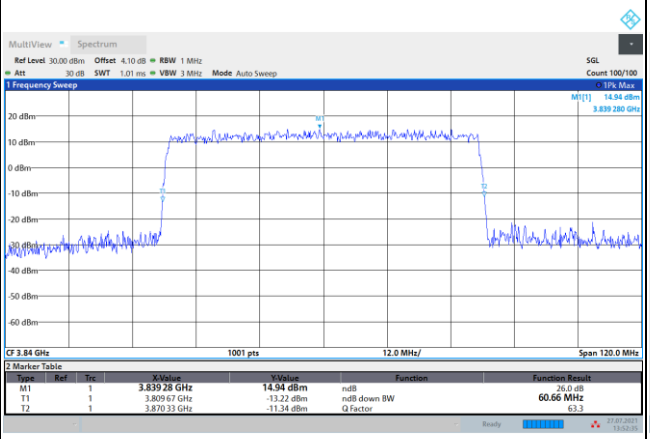

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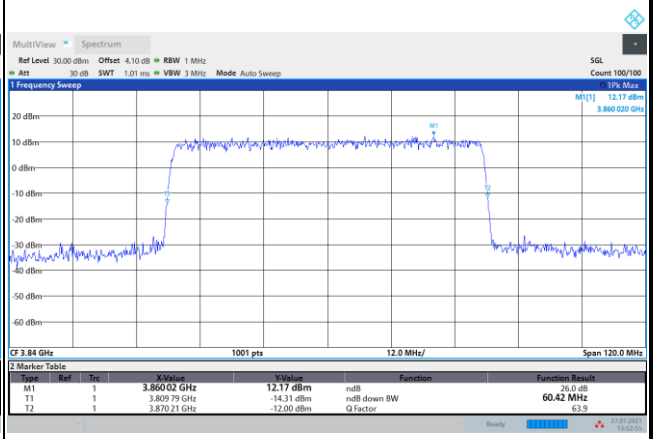
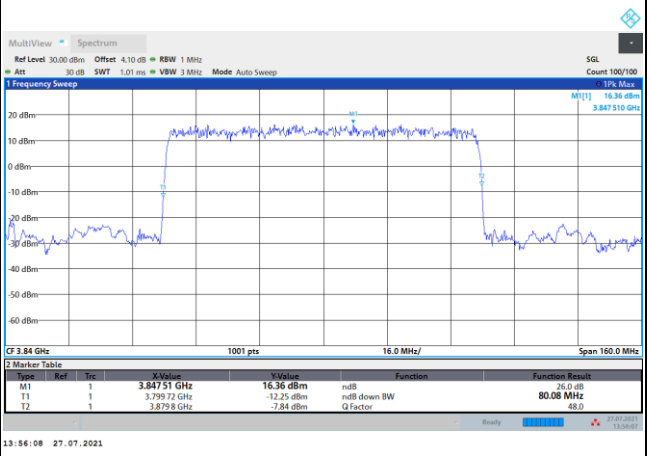


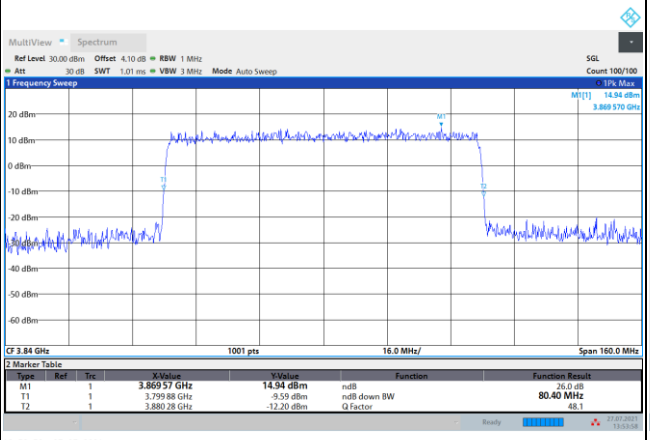
FR1 n77 / 80MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

QPSK



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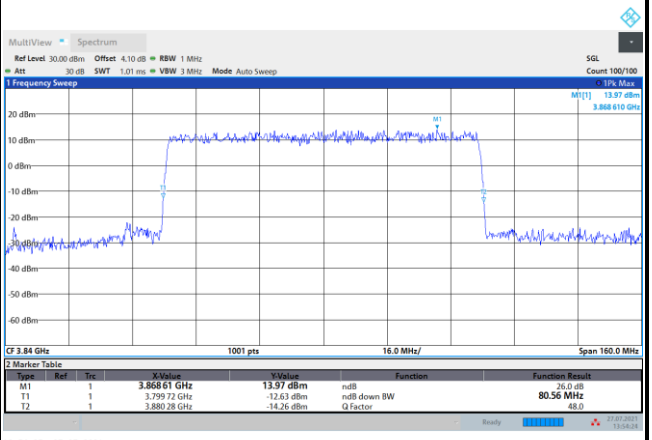

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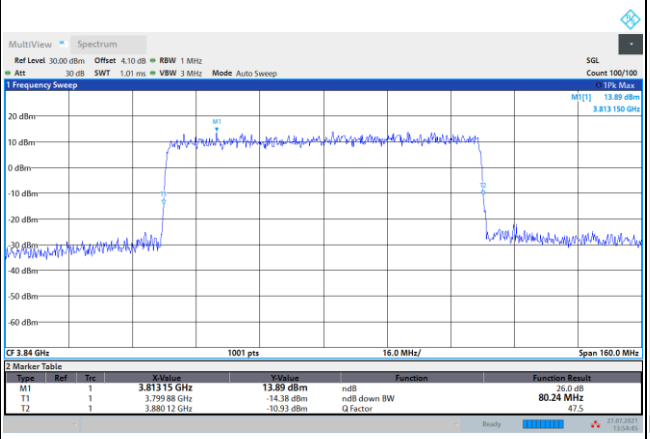

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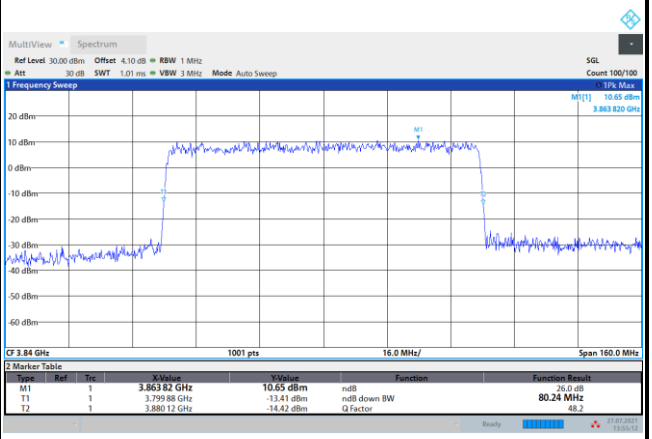
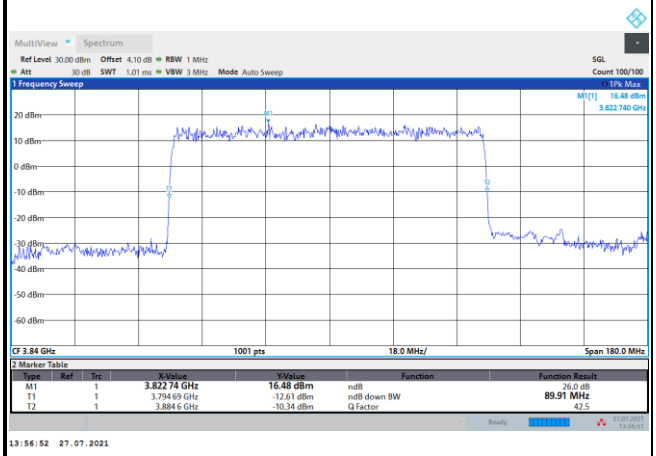


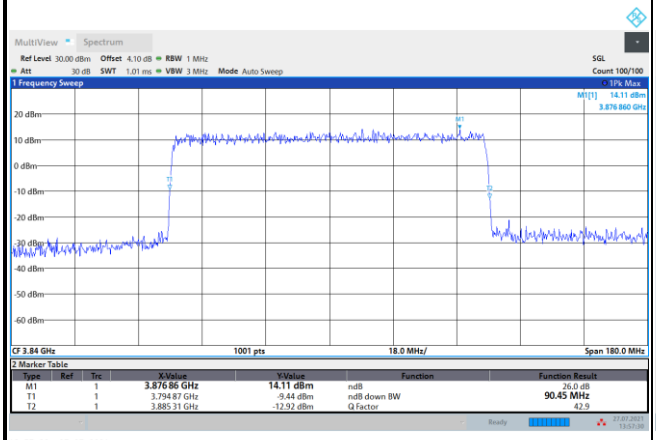
FR1 n77 / 90MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 90MHz / CP OFDM / Middle Channel / Full RB

QPSK



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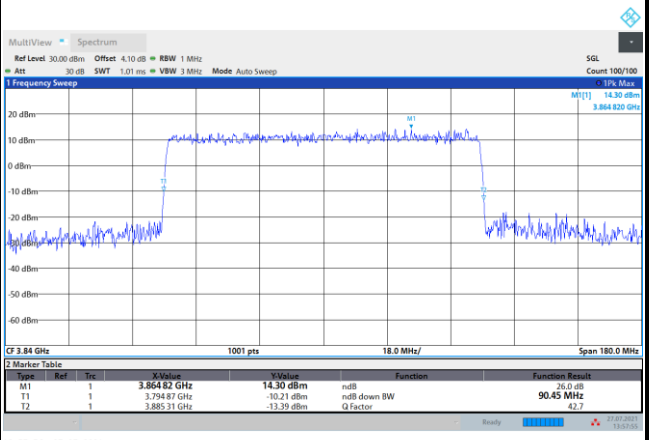

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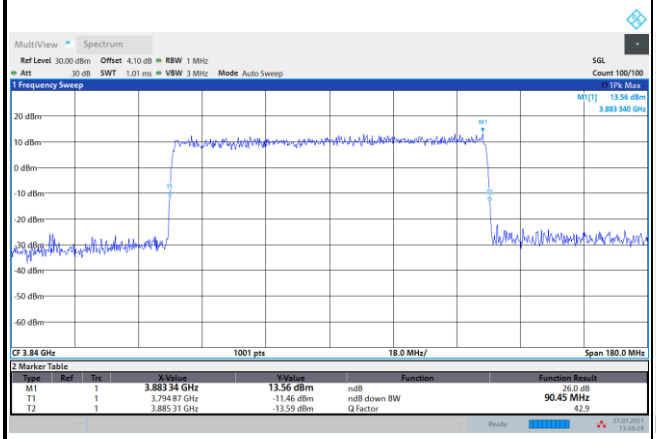

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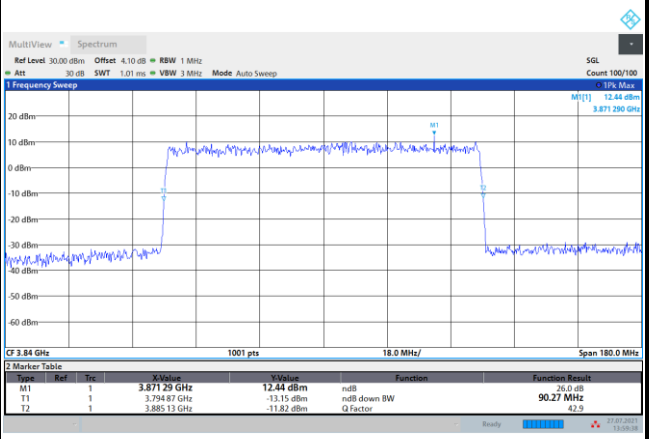
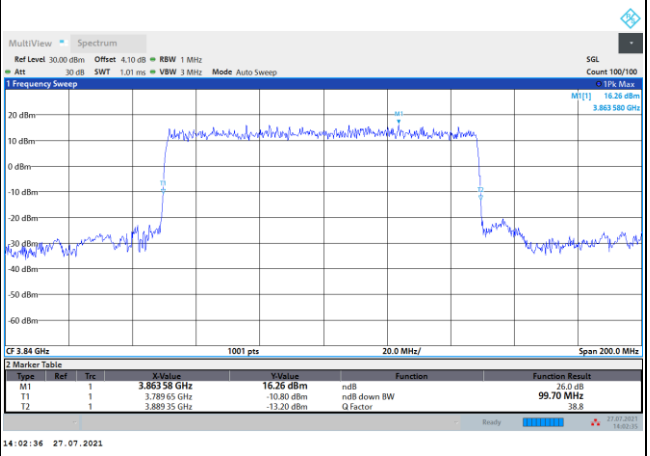


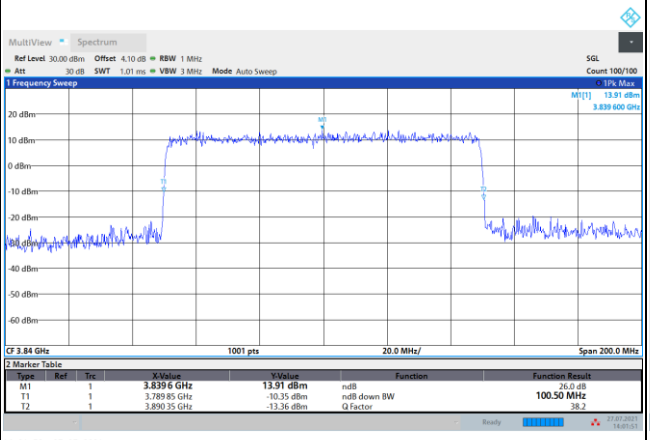
FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB

QPSK



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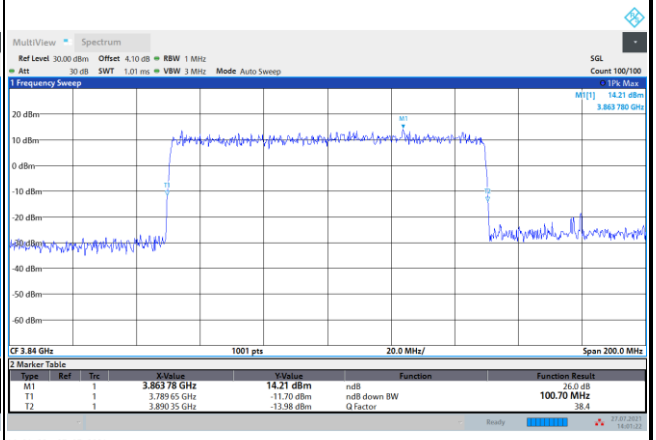
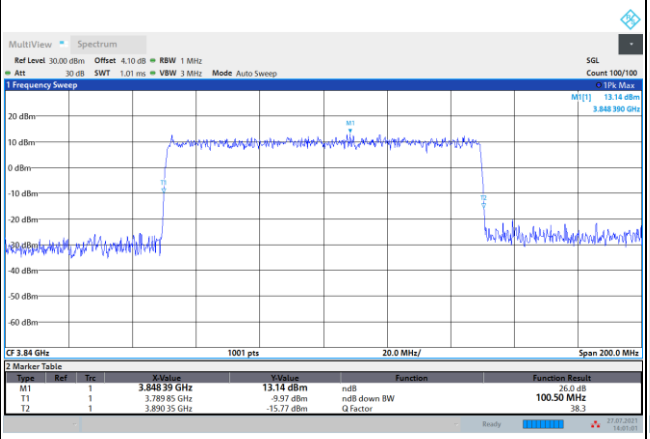
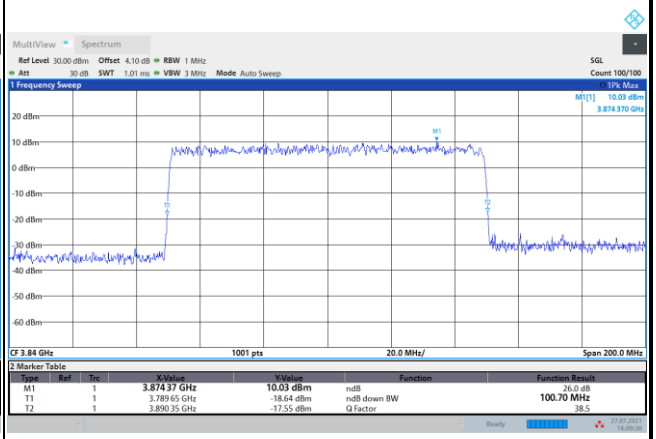


64QAM



256QAM



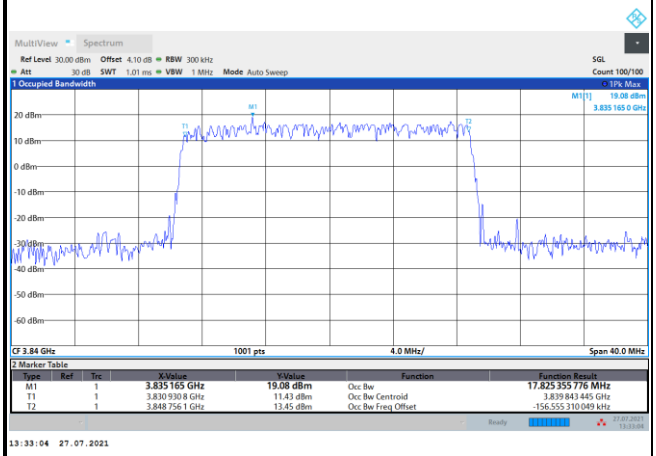
Occupied Bandwidth

Mode	FR1 n77 : OB BW(MHz) / DFT-S OFDM							
BW	20MHz	30MHz	40MHz	50MHz	60MHz	70MHz	80MHz	90MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	17.83	-	35.92	45.93	58.00	-	76.98	86.46
BW	100MHz							
Mod.	PI/2 BPSK							
Middle CH	96.27							

Mode	FR1 n77 : OB BW(MHz) / CP OFDM							
BW	20MHz		30MHz		40MHz		50MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	18.25	18.25	-	-	37.96	38.07	47.53	47.54
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	18.17	18.22	-	-	37.92	37.98	47.51	47.51
BW	60MHz		70MHz		80MHz		90MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	57.77	57.73	-	-	77.50	77.32	87.31	87.33
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	57.75	57.87	-	-	77.33	77.55	87.39	87.62
BW	100MHz							
Mod.	QPSK	16QAM						
Middle CH	97.42	97.37						
Mod.	64QAM	256QAM						
Middle CH	97.21	97.48						

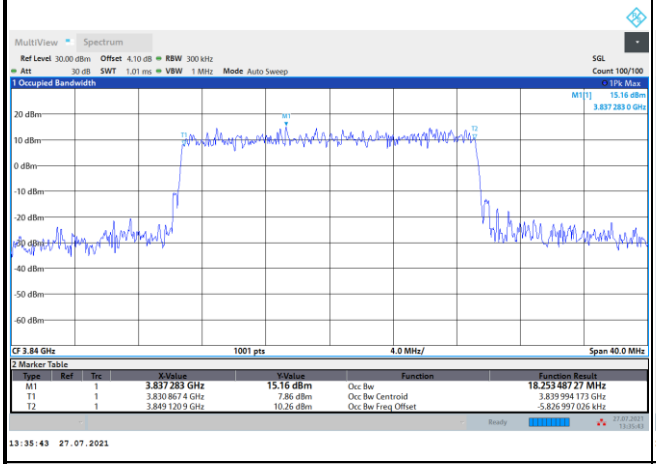
FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



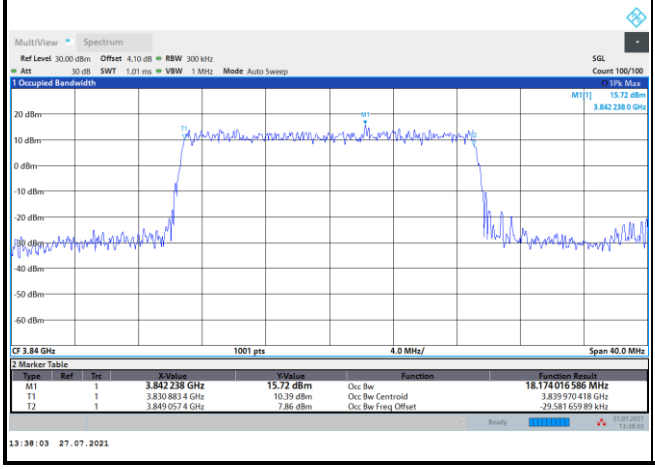
FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK

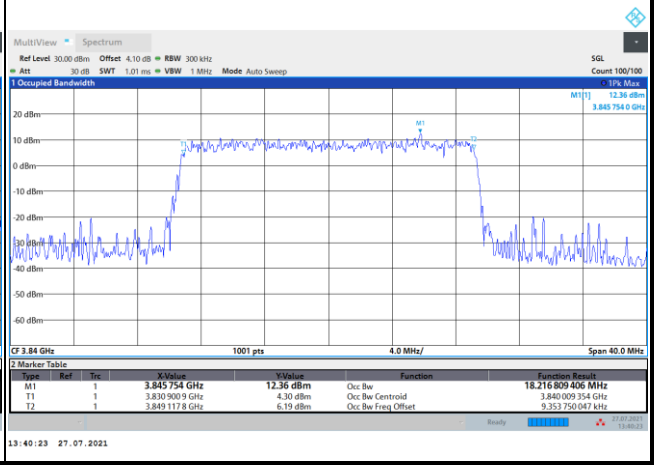


16QAM

64QAM

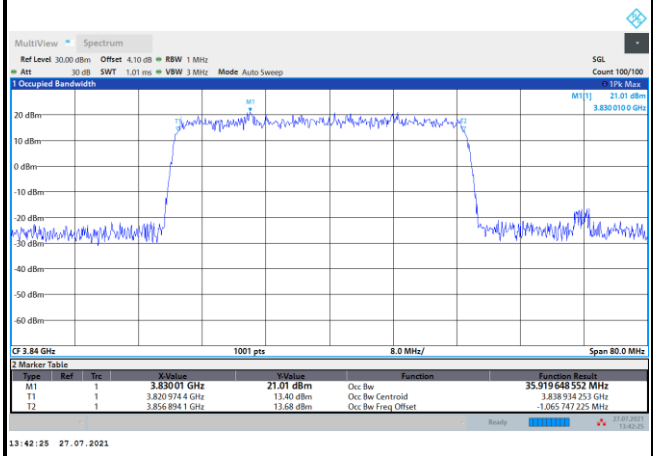


256QAM



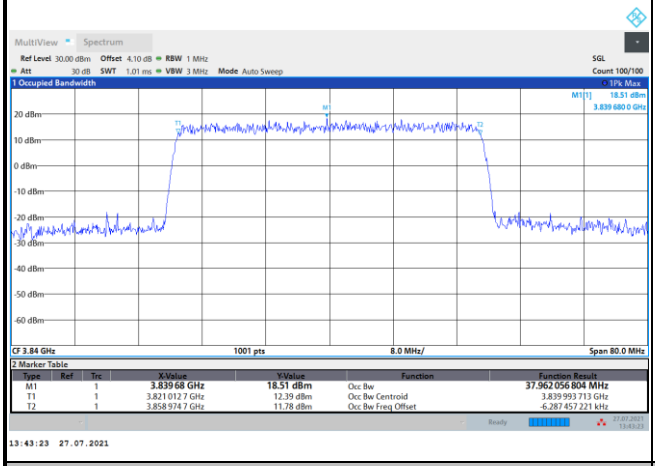
FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



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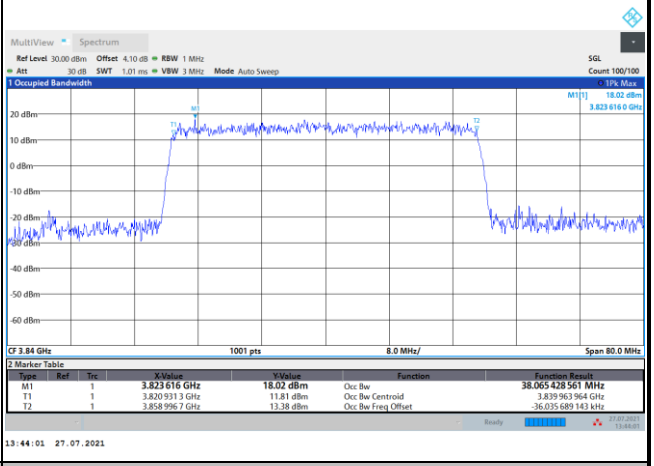

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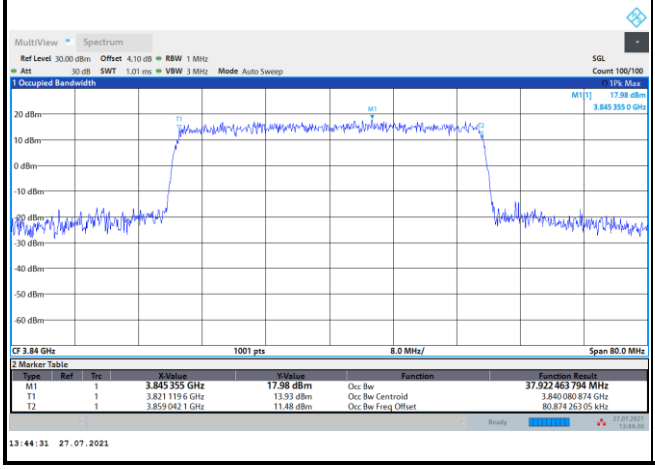

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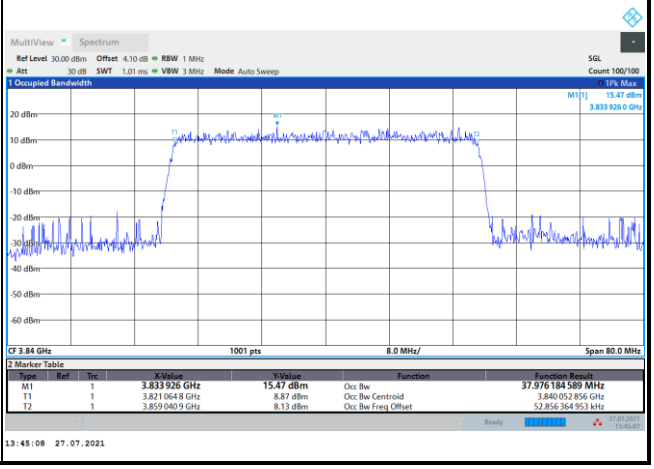
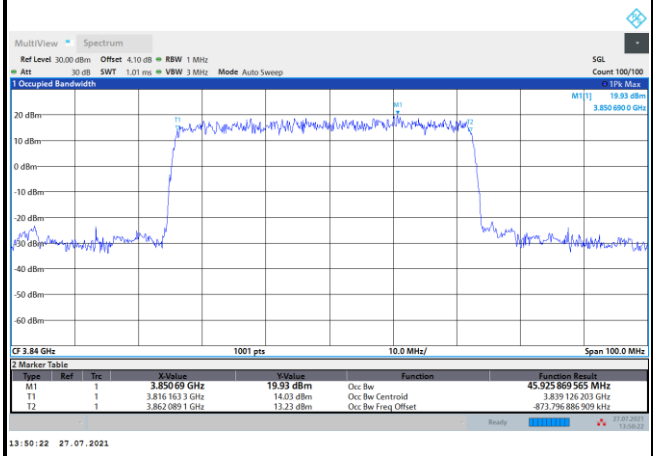


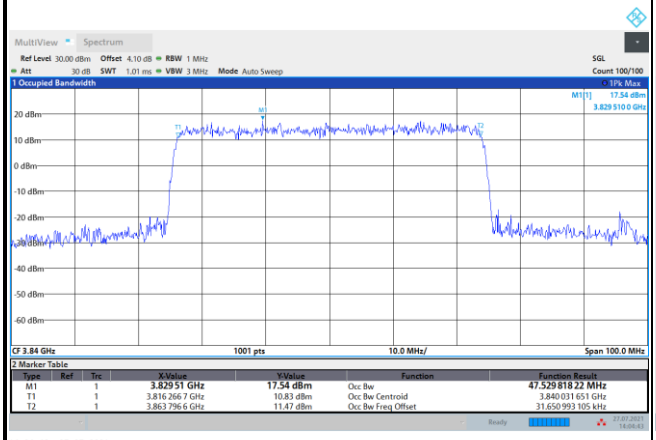
FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

QPSK



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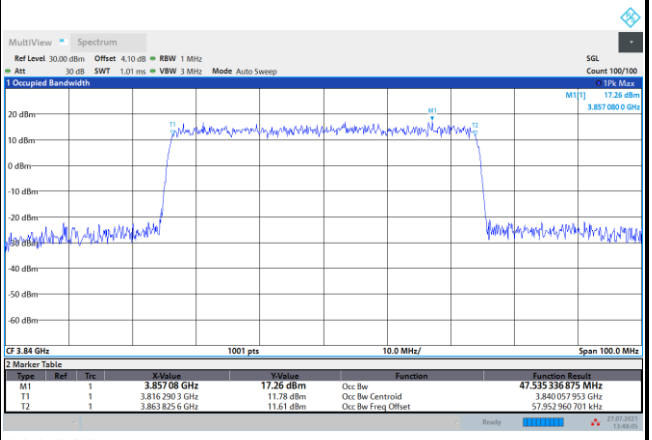

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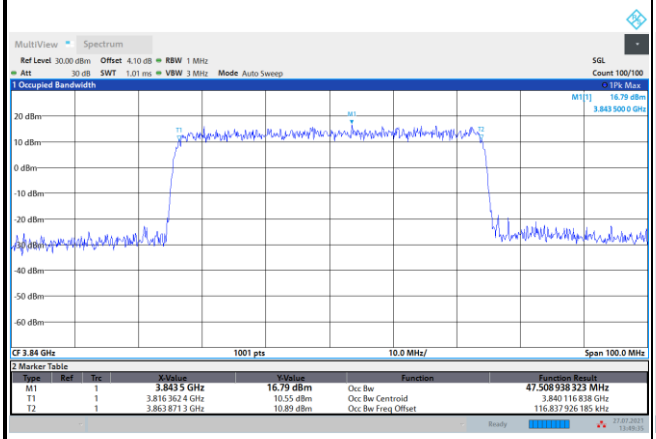

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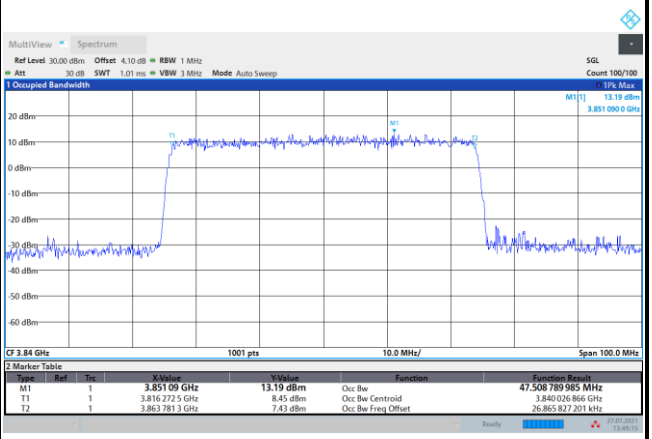
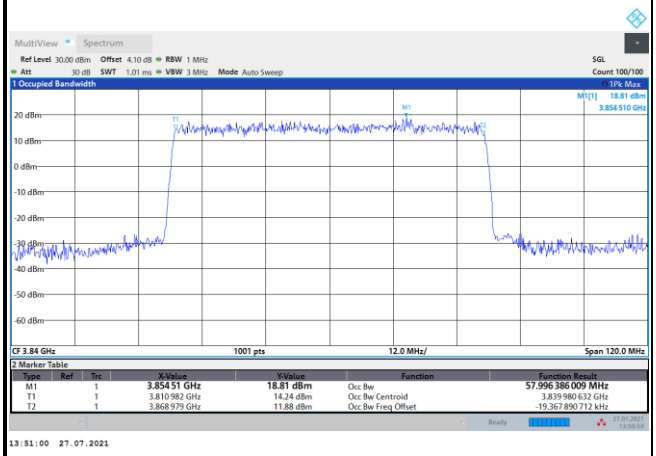


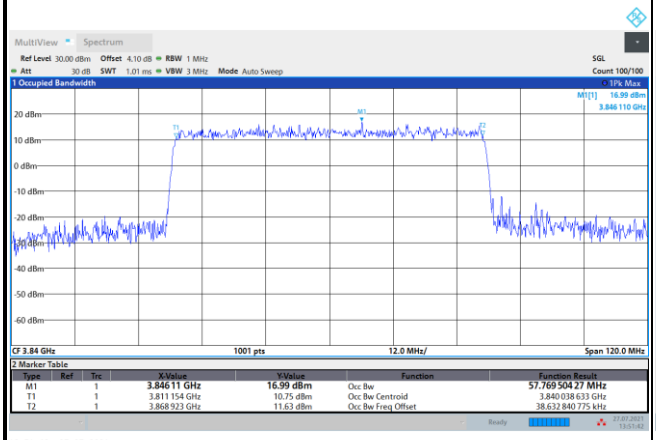
FR1 n77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB

QPSK



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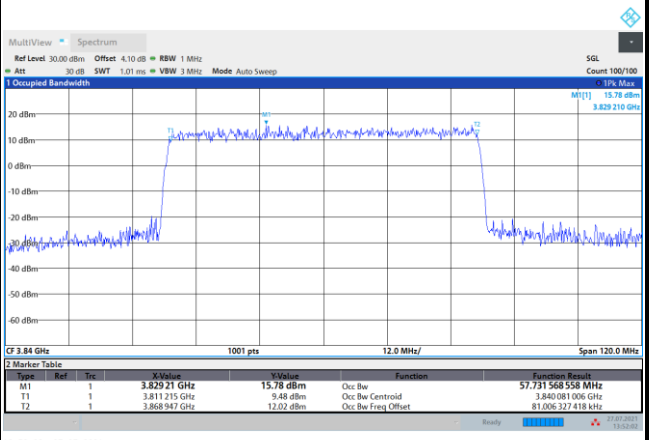

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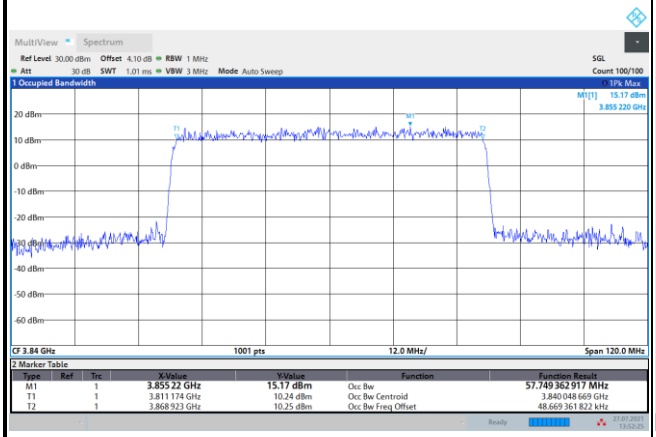

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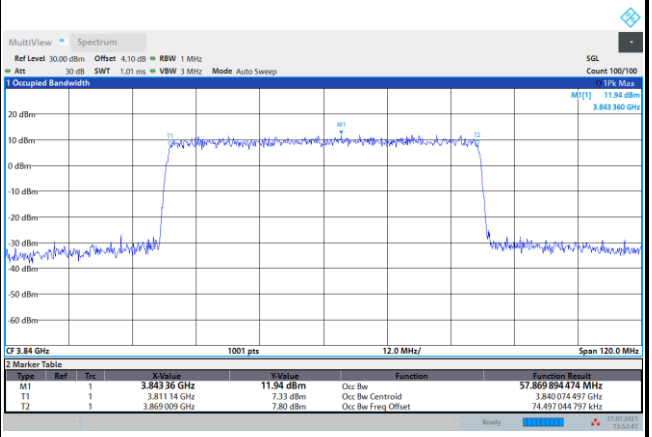
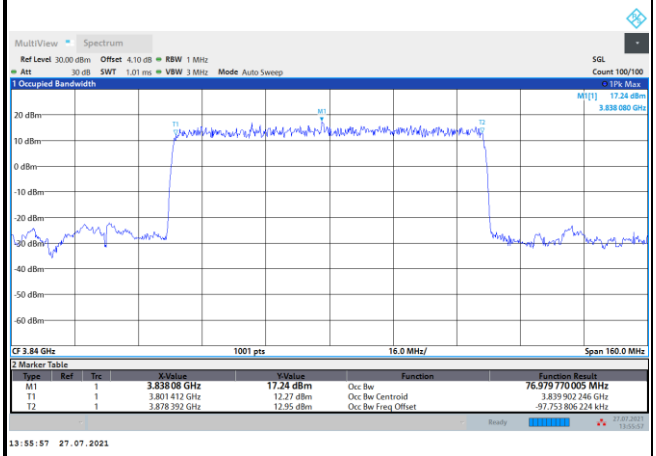


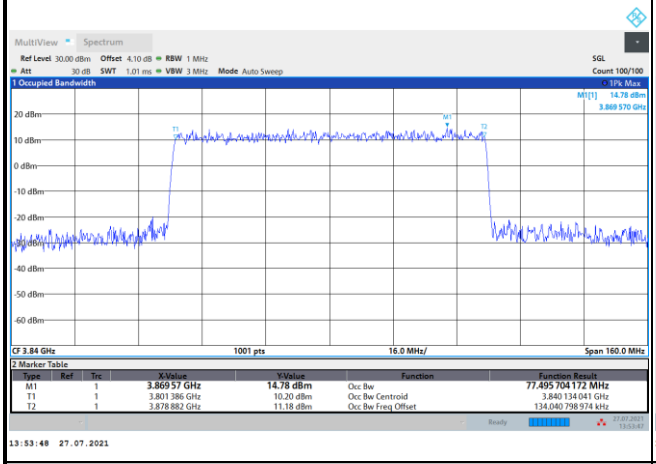
FR1 n77 / 80MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

QPSK



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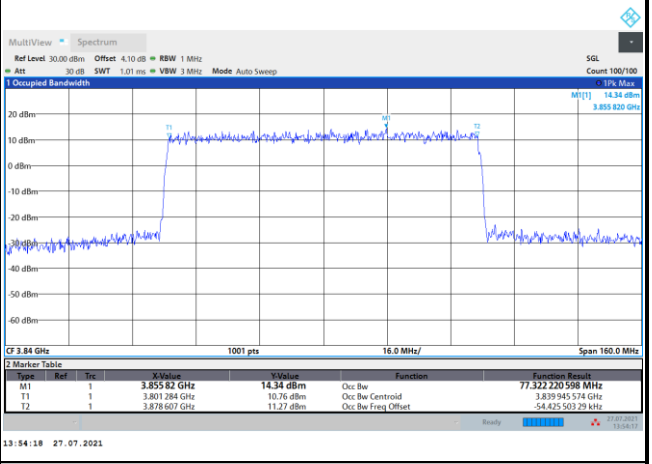

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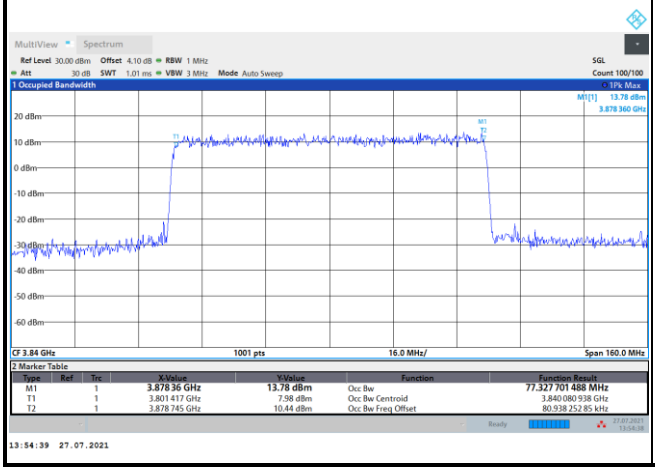

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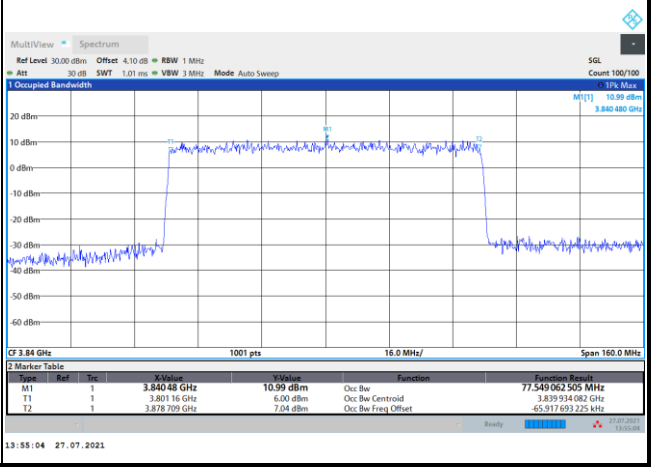
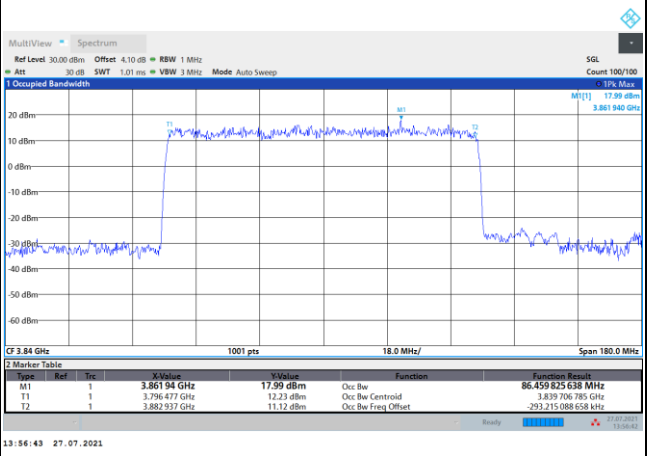


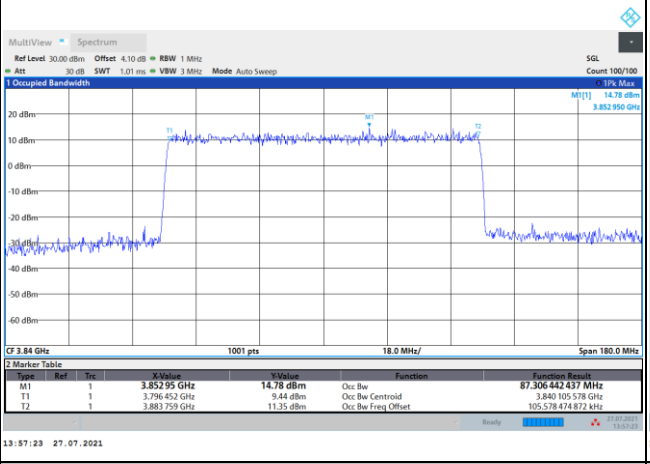
FR1 n77 / 90MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 90MHz / CP OFDM / Middle Channel / Full RB

QPSK



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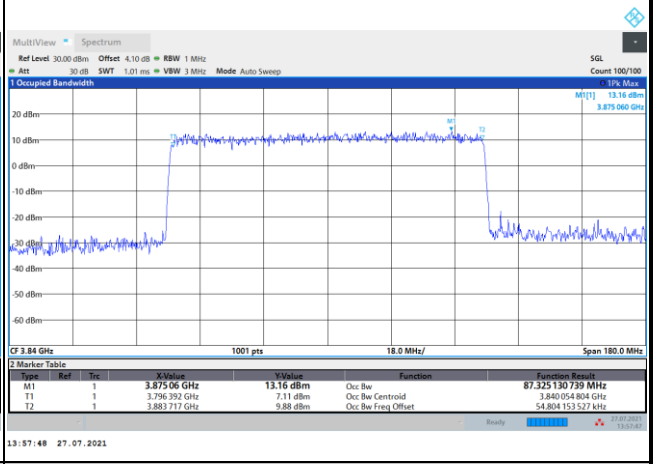

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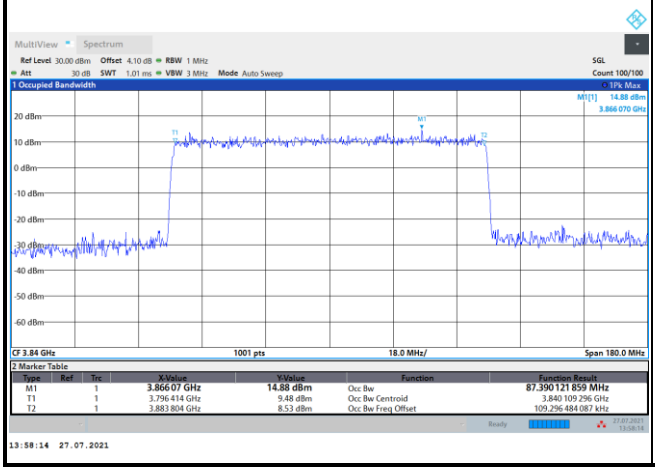

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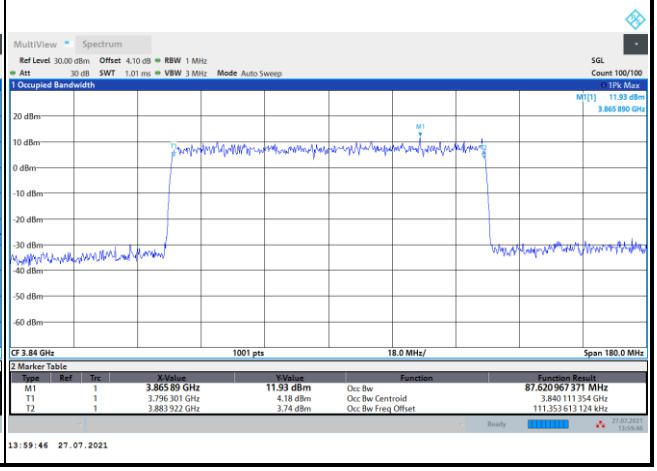
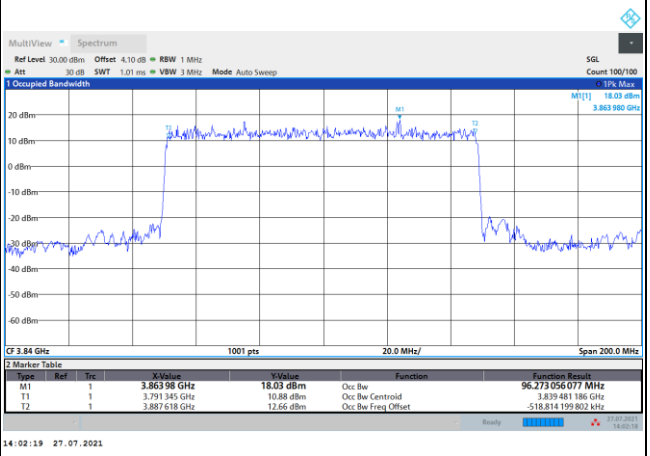


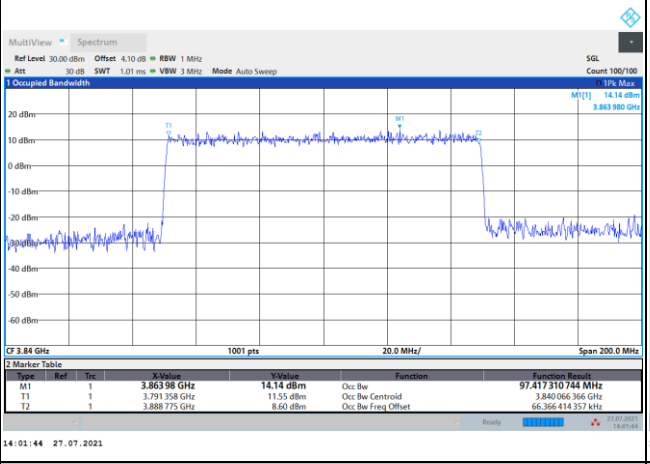
FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB

QPSK



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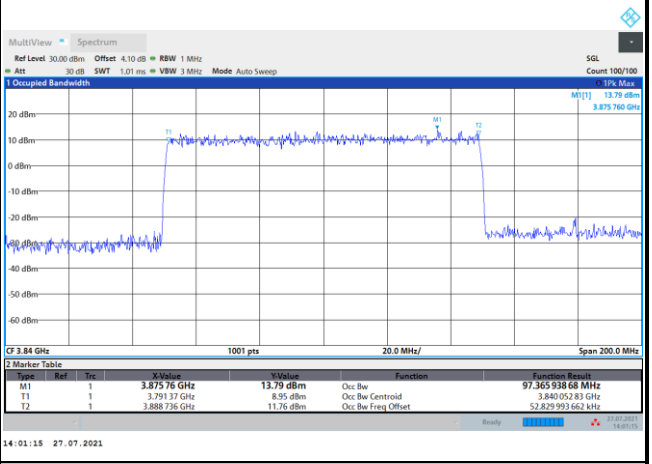

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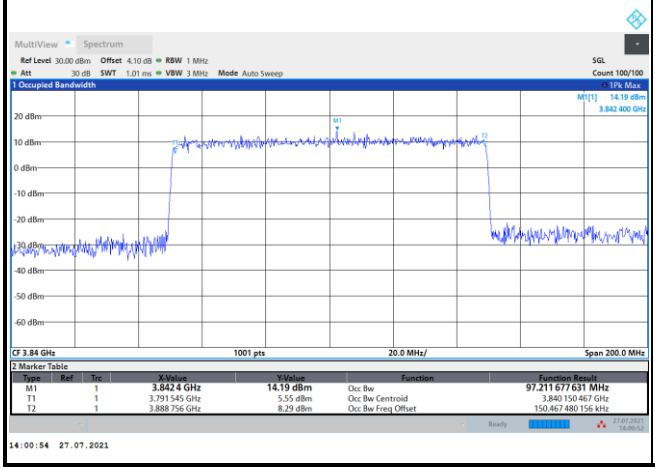

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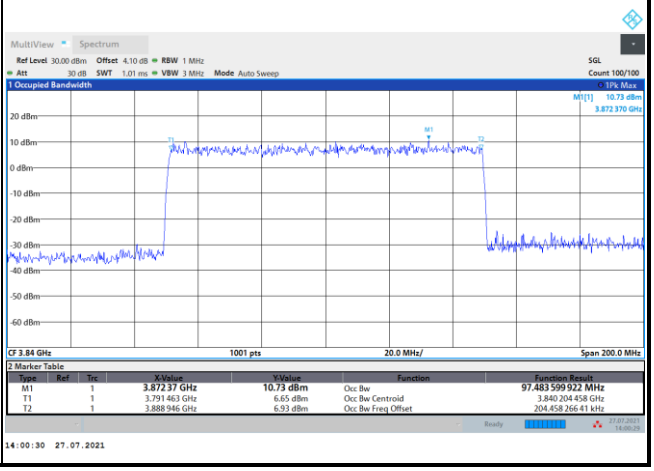
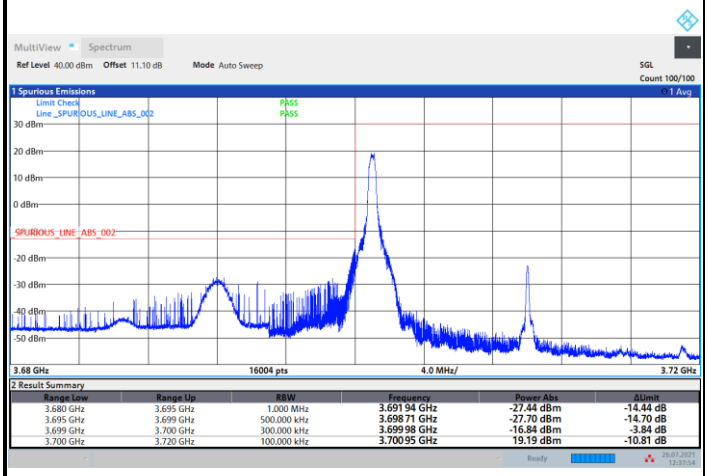


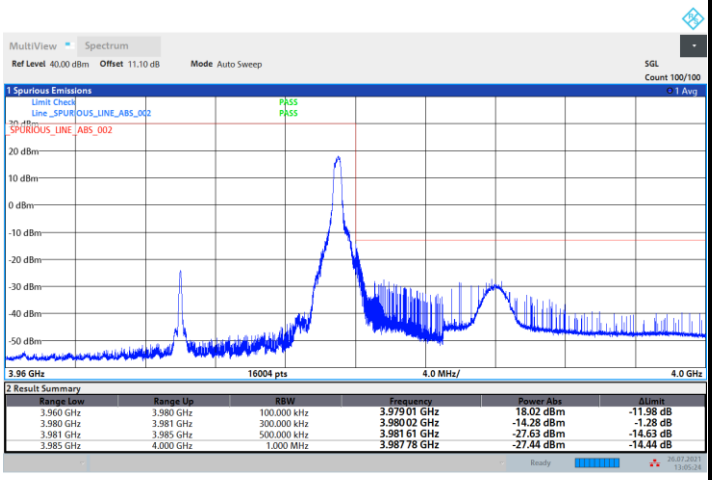
Conducted Band Edge

FR1 n77 / 20MHz / DFT-S OFDM / PI/2 BPSK

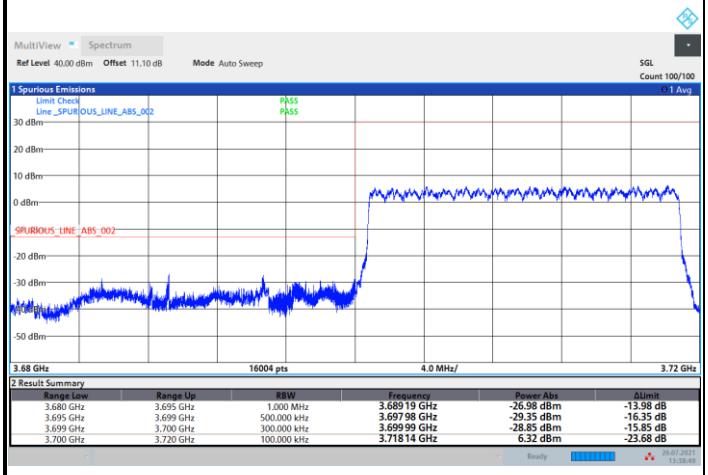
Lowest Band Edge / 1RB0



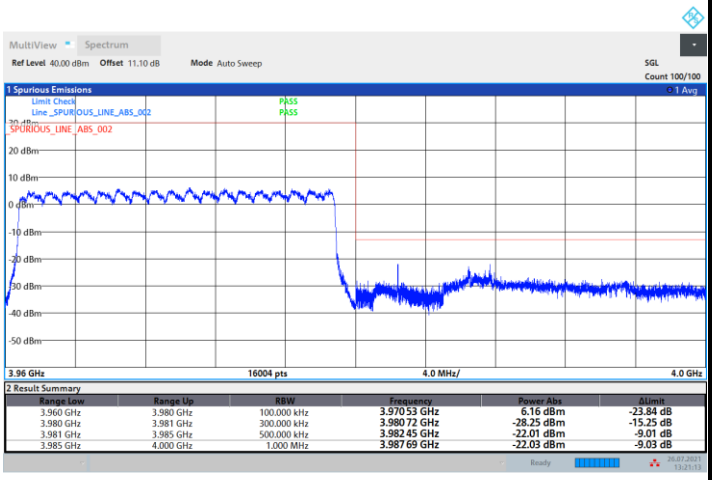
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

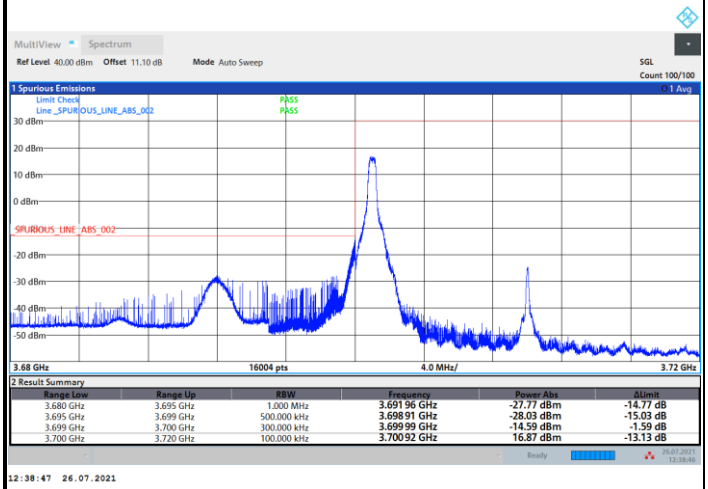


Highest Band Edge / Full RB

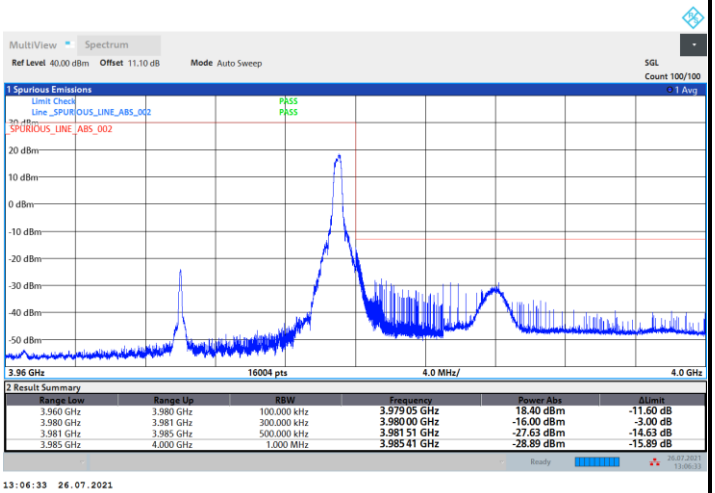


FR1 n77 / 20MHz / DFT-S OFDM / QPSK

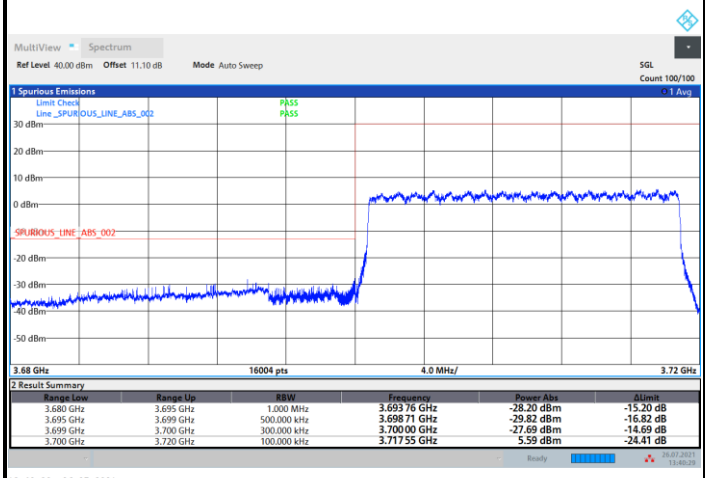
Lowest Band Edge / 1RB0



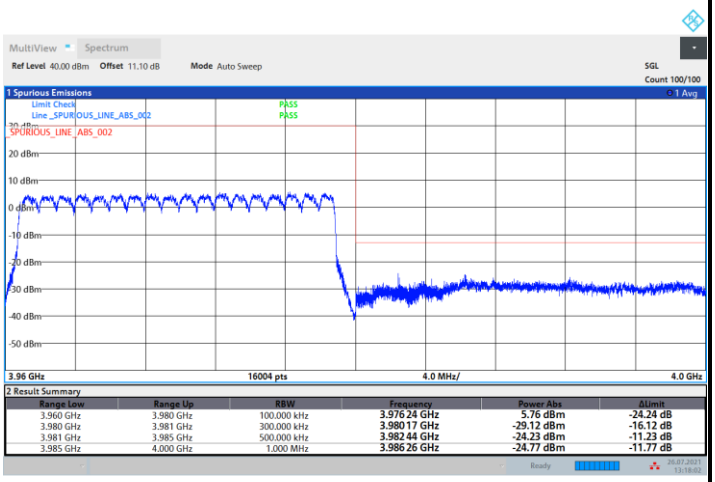
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

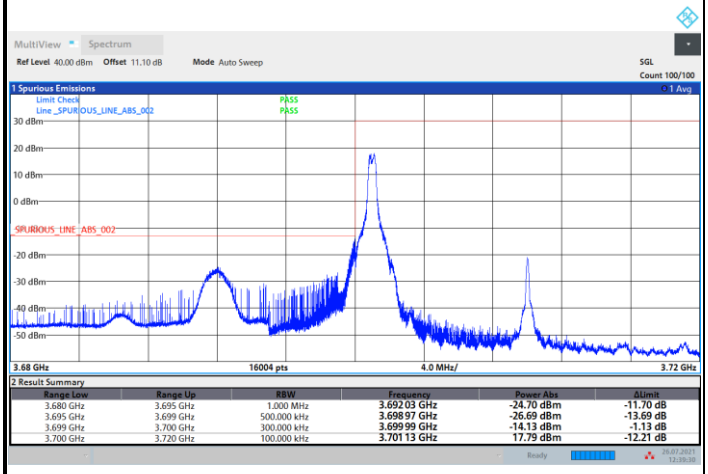


Highest Band Edge / Full RB

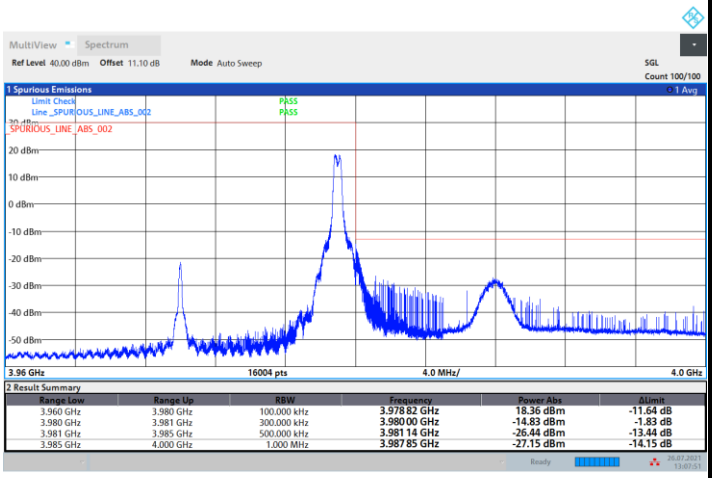


FR1 n77 / 20MHz / DFT-S OFDM / 16QAM

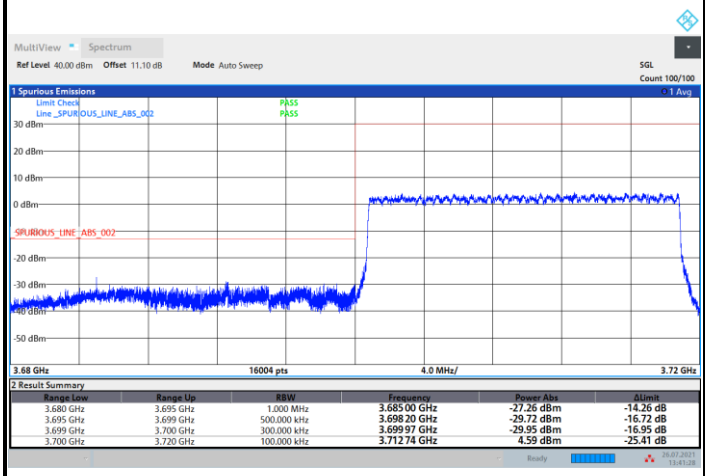
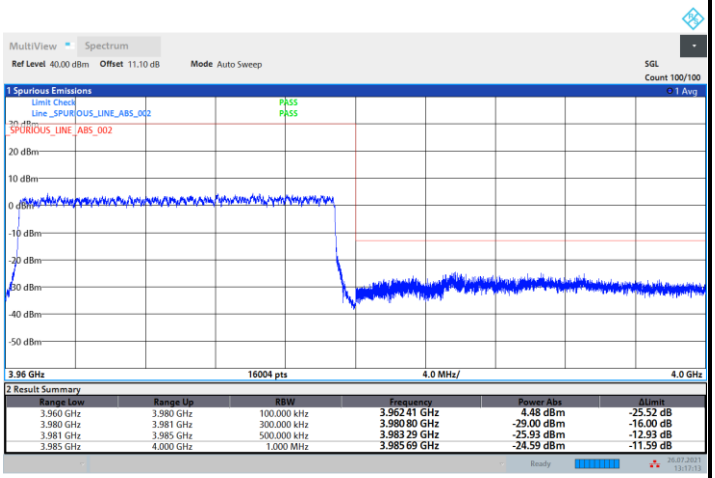
Lowest Band Edge / 1RB0



Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB