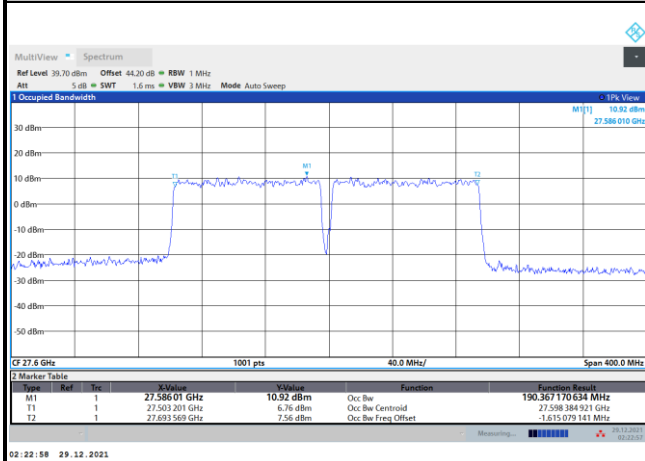




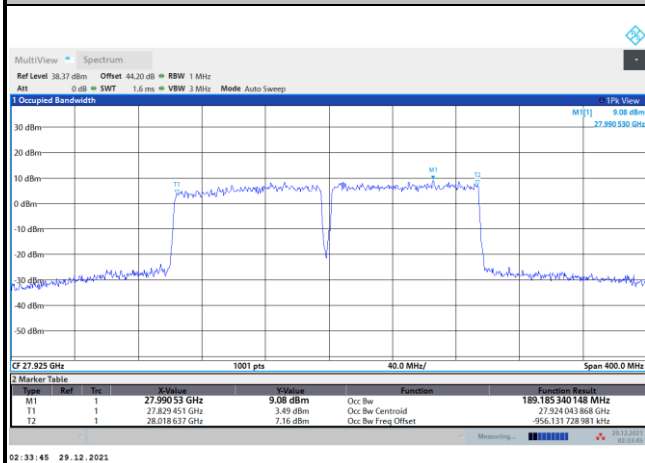
DFT-s-OFDM Module 0

NR Band n261

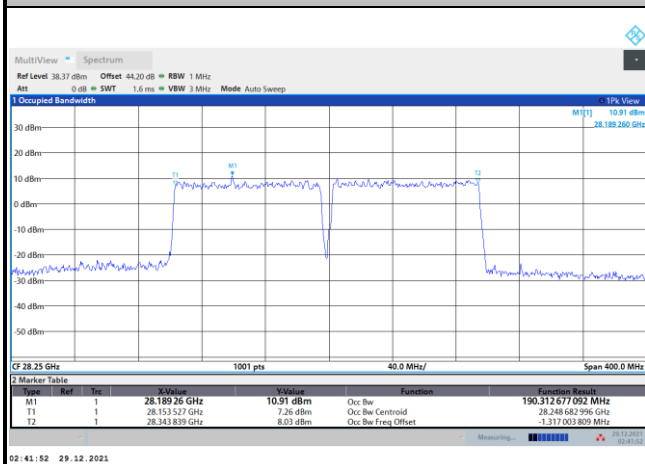
Lowest Channel / 200MHz / 64QAM



Middle Channel / 200MHz / 64QAM



Highest Channel / 200MHz / 64QAM

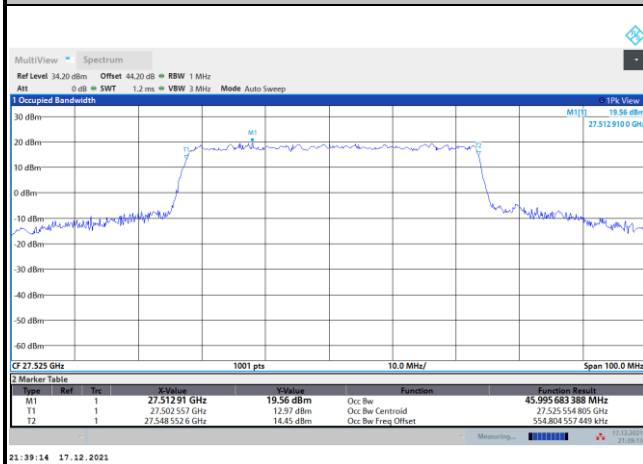




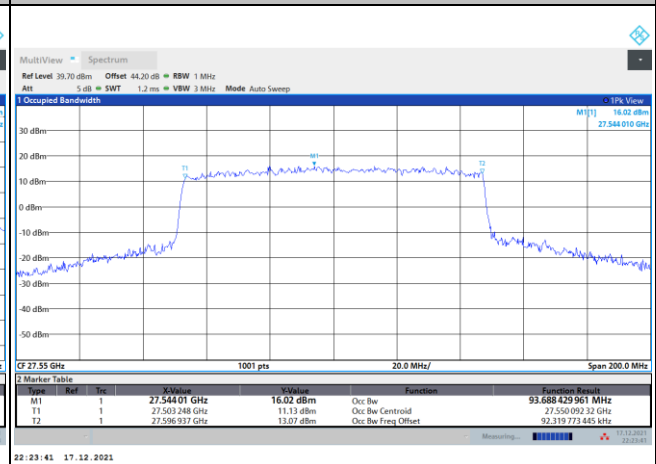
CP-OFDM Module 0

NR Band n261

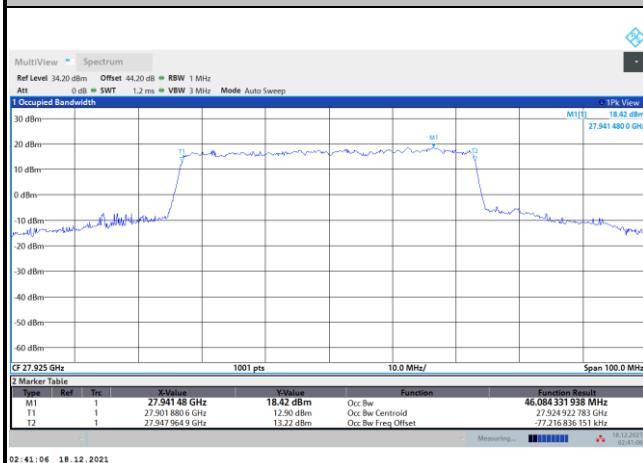
Lowest Channel / 50MHz / QPSK



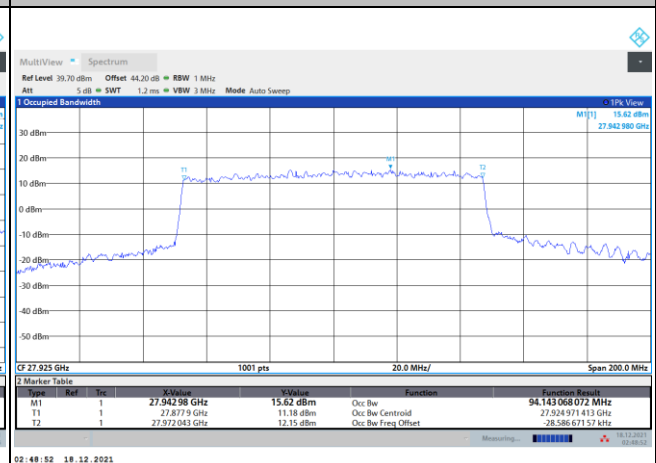
Lowest Channel / 100MHz / QPSK



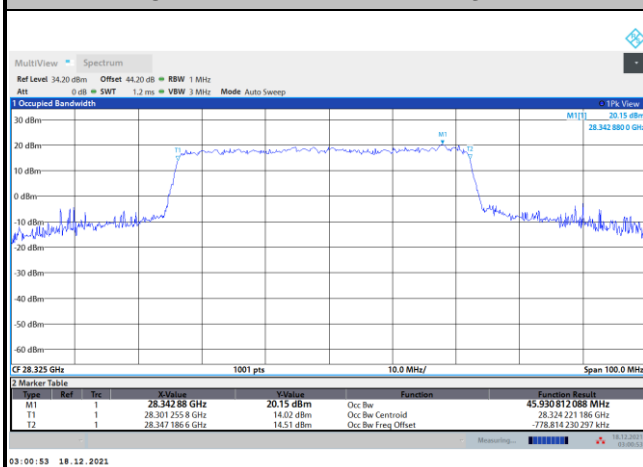
Middle Channel / 50MHz / QPSK



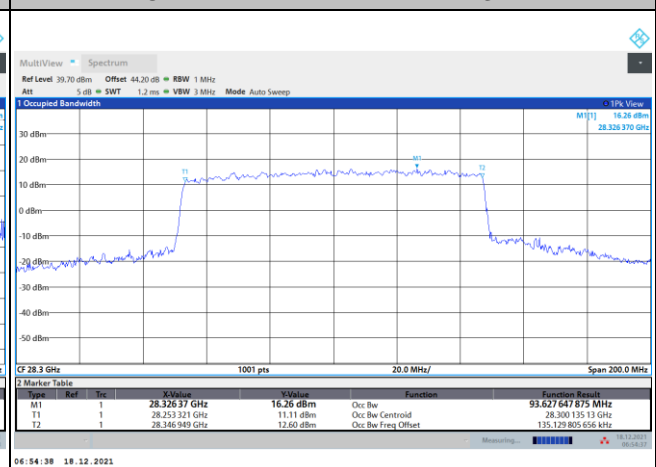
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / QPSK



Highest Channel / 100MHz / QPSK

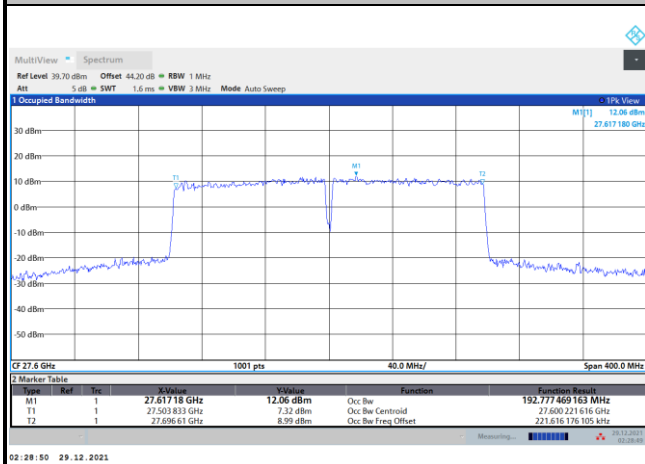




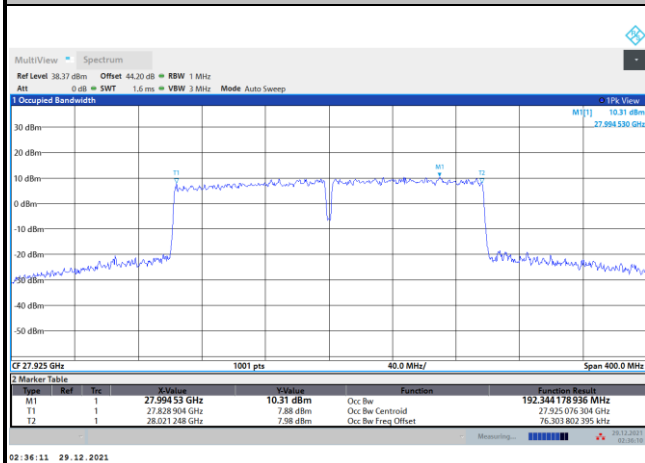
CP-OFDM Module 0

NR Band n261

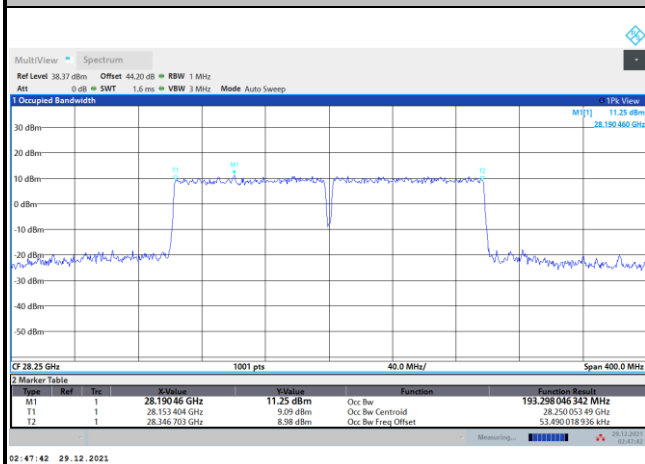
Lowest Channel / 200MHz / QPSK



Middle Channel / 200MHz / QPSK



Highest Channel / 200MHz / QPSK



Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module 0 NR Band n261 : BE (dBm) 1 RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-10.53	-12.13	-14.80	-9.38	-12.40	-14.64
	>10%OB	≤ -13	-20.33	-21.85	-23.81	-28.99	-30.20	-32.49
High CH	0~10%OB	≤ -5	-13.07	-13.99	-15.82	-9.15	-9.81	-12.84
	>10%OB	≤ -13	-22.26	-23.83	-26.12	-27.85	-29.60	-31.54
Result			Compliance					
Mode			DFT-s-OFDM Module 0 NR Band n261 : BE (dBm) 1 RB					
BW			200MHz					
Limit (dBm)			QPSK	16QAM	64QAM			
Low CH	0~10%OB	≤ -5	-13.94	-14.68	-16.33			
	>10%OB	≤ -13	-13.89	-14.65	-16.51			
High CH	0~10%OB	≤ -5	-16.16	-17.34	-18.58			
	>10%OB	≤ -13	-19.16	-20.65	-21.92			
Result			Compliance					

Mode			CP-OFDM Module 0 NR Band n261 : BE (dBm) 1 RB	
BW			50MHz	100MHz
Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≤ -5	-12.63	-14.42
	>10%OB	≤ -13	-22.99	-29.92
High CH	0~10%OB	≤ -5	-13.75	-11.04
	>10%OB	≤ -13	-24.18	-30.28
Result			Compliance	
Mode			CP-OFDM Module 0 NR Band n261 : BE (dBm) 1 RB	
BW			200MHz	
Limit (dBm)			QPSK	
Low CH	0~10%OB	≤ -5	-20.09	
	>10%OB	≤ -13	-23.04	
High CH	0~10%OB	≤ -5	-16.94	
	>10%OB	≤ -13	-19.06	
Result			Compliance	

Mode			DFT-s-OFDM Module 0 NR Band n261 : BE (dBm) Full RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-18.68	-21.29	-24.02	-21.79	-24.51	-28.13
	>10%OB	≤-13	-21.20	-23.06	-26.70	-26.90	-28.69	-31.36
High CH	0~10%OB	≤-5	-15.29	-20.85	-24.95	-19.80	-24.22	-29.05
	>10%OB	≤-13	-17.80	-22.34	-27.98	-22.41	-26.80	-30.93
Result			Compliance					
Mode			DFT-s-OFDM Module 0 NR Band n261 : BE (dBm) Full RB					
BW			200MHz					
Limit (dBm)			QPSK	16QAM	64QAM			
Low CH	0~10%OB	≤-5	-22.75	-25.75	-28.79			
	>10%OB	≤-13	-23.62	-27.73	-31.15			
High CH	0~10%OB	≤-5	-26.18	-31.02	-34.41			
	>10%OB	≤-13	-27.38	-32.10	-35.37			
Result			Compliance					

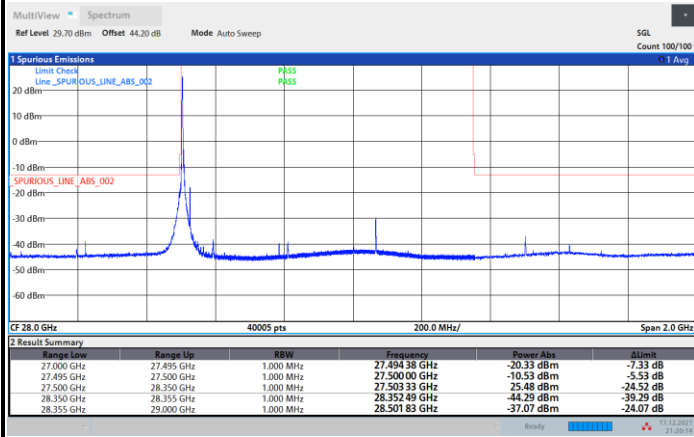
Mode			CP-OFDM Module 0 NR Band n261 : BE (dBm) Full RB	
BW			50MHz	100MHz
Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≤-5	-17.52	-23.05
	>10%OB	≤-13	-21.65	-26.62
High CH	0~10%OB	≤-5	-17.28	-20.04
	>10%OB	≤-13	-20.15	-22.54
Result			Compliance	
Mode			CP-OFDM Module 0 NR Band n261 : BE (dBm) Full RB	
BW			200MHz	
Limit (dBm)			QPSK	
Low CH	0~10%OB	≤-5	-27.51	
	>10%OB	≤-13	-29.93	
High CH	0~10%OB	≤-5	-27.98	
	>10%OB	≤-13	-31.02	
Result			Compliance	



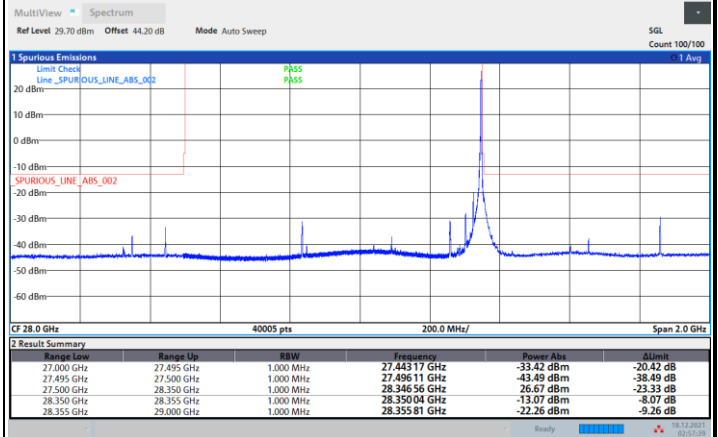
DFT-s-OFDM Module 0

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

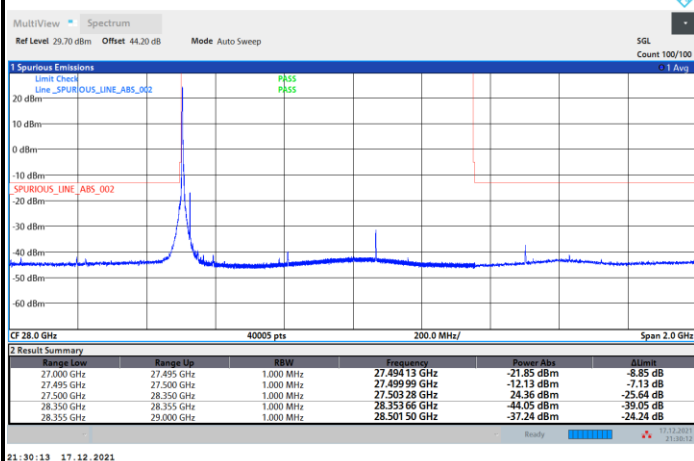


Highest Band Edge / 1 RB

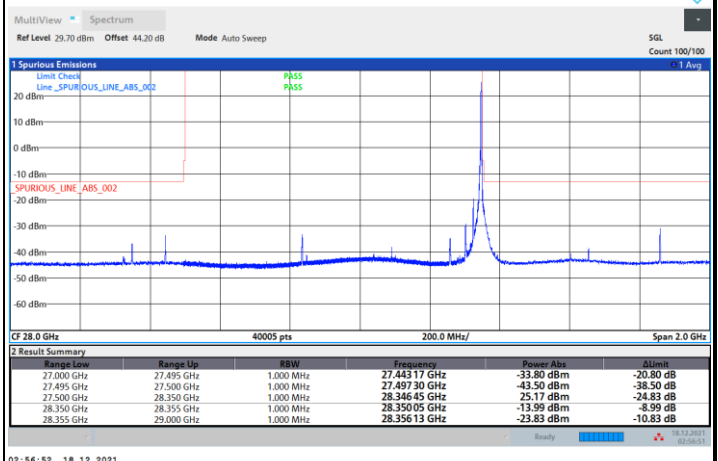


NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

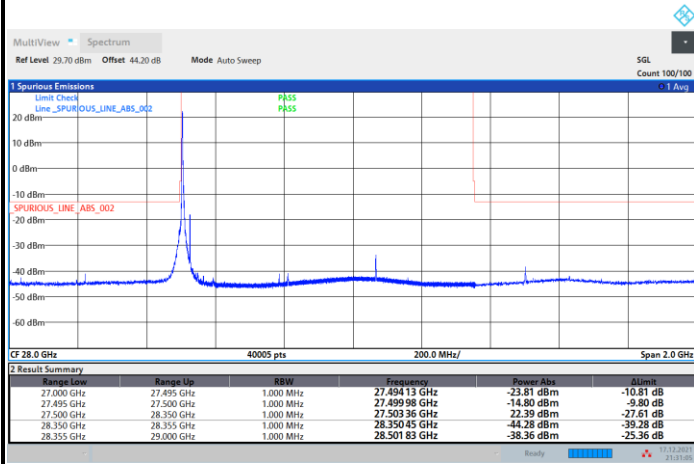




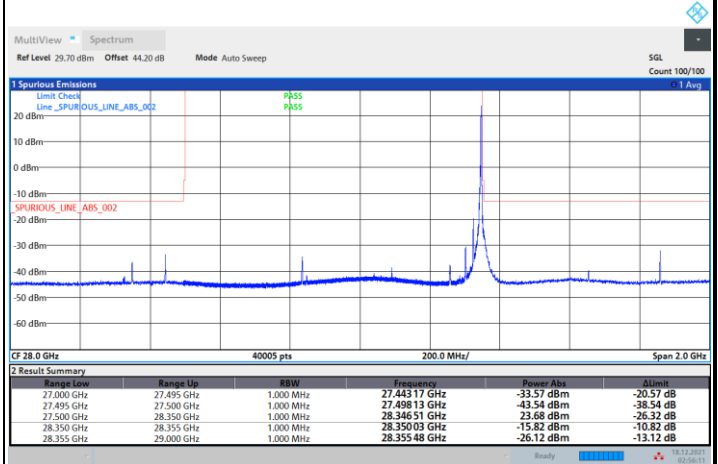
DFT-s-OFDM Module 0

NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / 1 RB

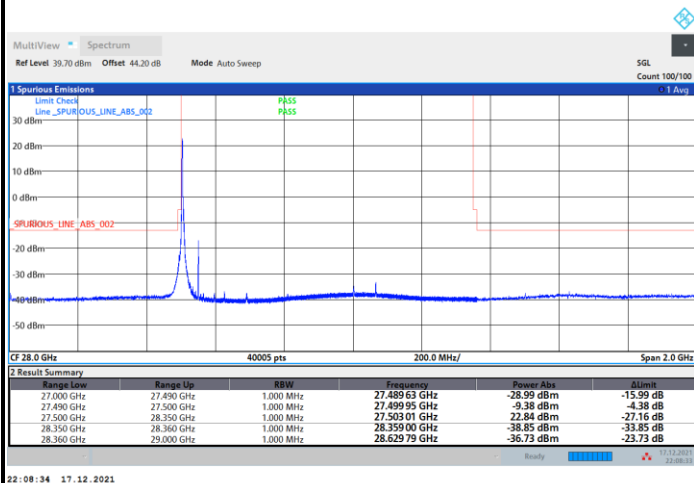


Highest Band Edge / 1 RB

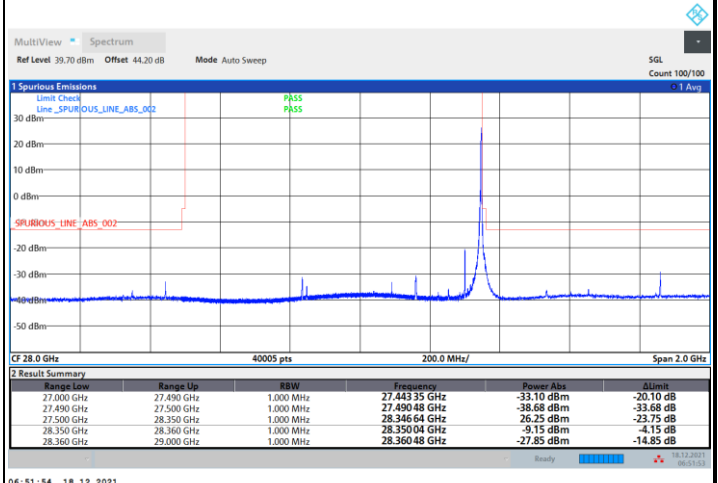


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

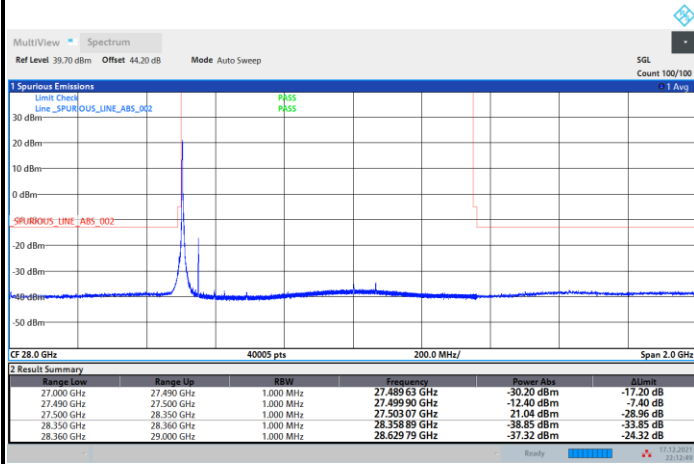




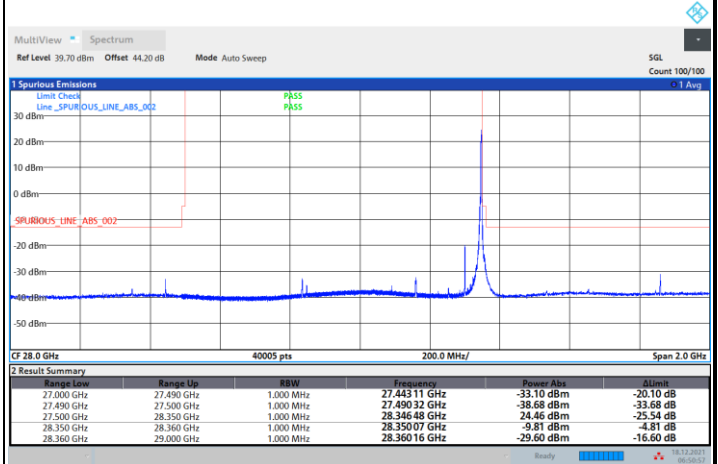
DFT-s-OFDM Module 0

NR Band n261 / 100MHz / 16QAM

Lowest Band Edge / 1 RB

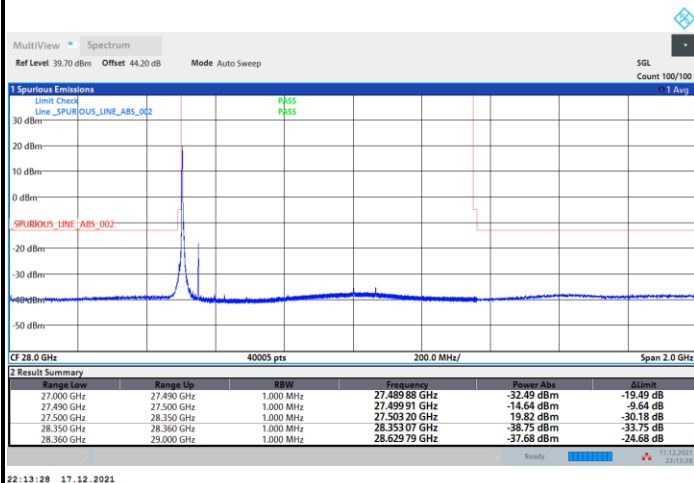


Highest Band Edge / 1 RB

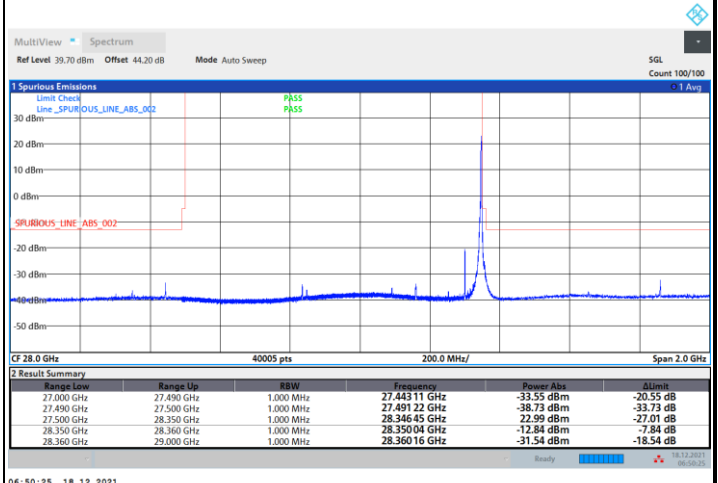


NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

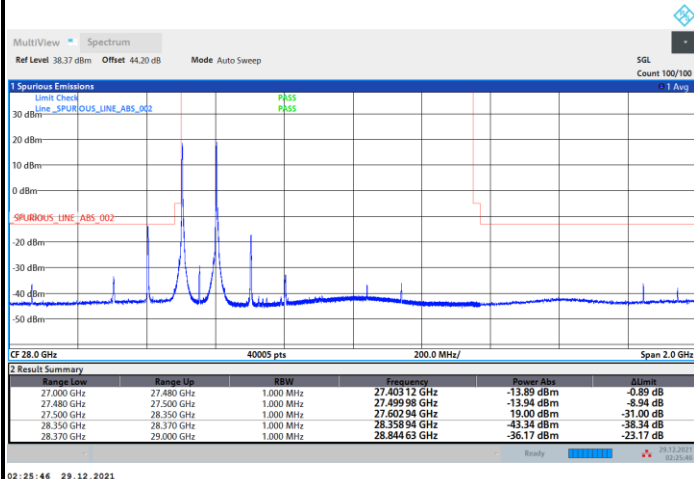




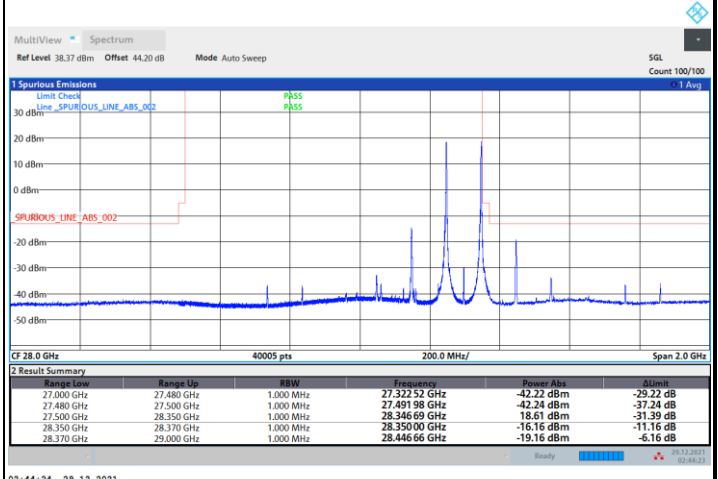
DFT-s-OFDM Module 0

NR Band n261 / 200MHz / QPSK

Lowest Band Edge / 1 RB

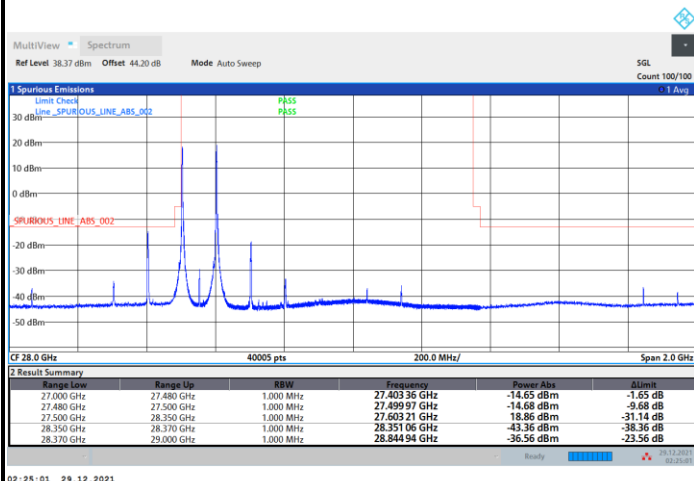


Highest Band Edge / 1 RB

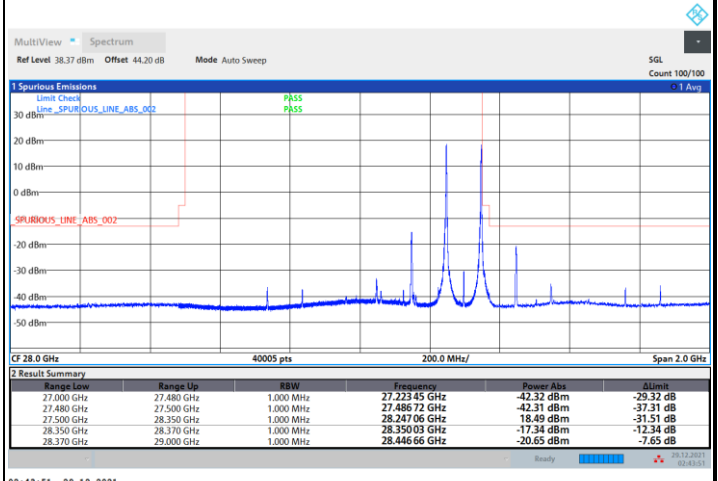


NR Band n261 / 200MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

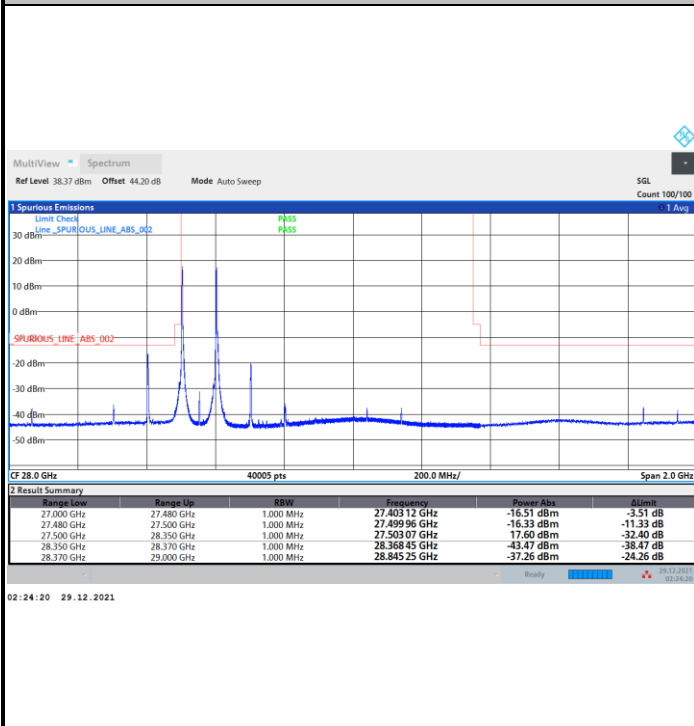




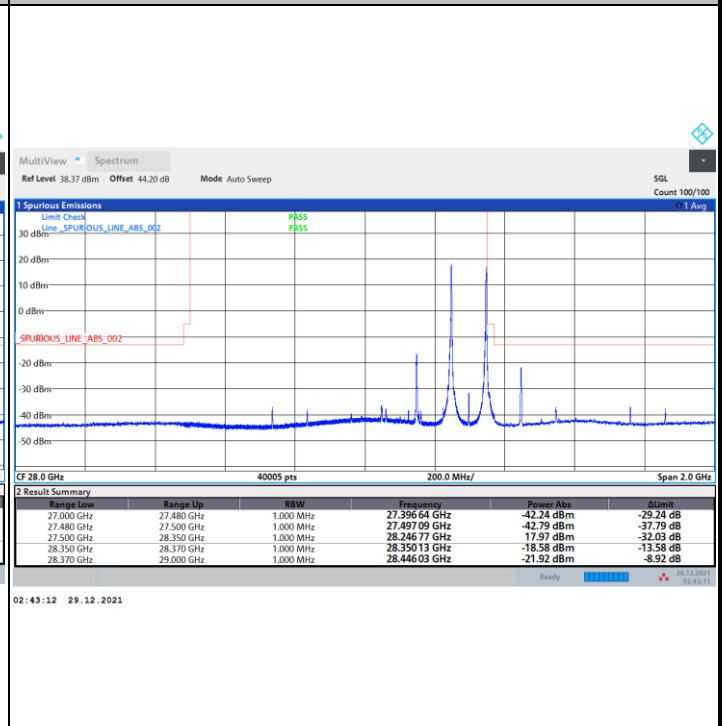
DFT-s-OFDM Module 0

NR Band n261 / 200MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

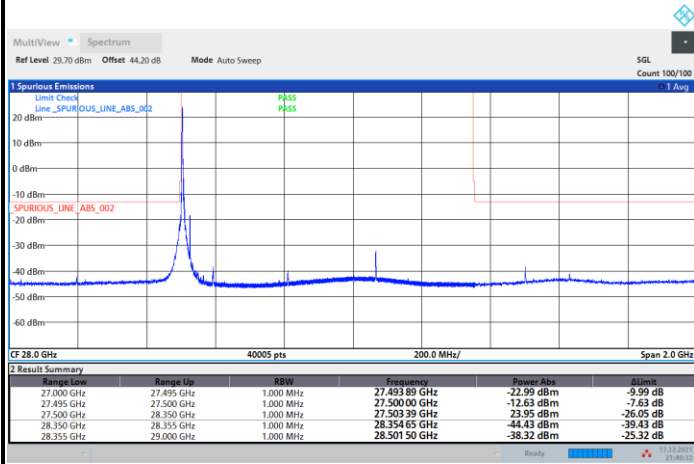




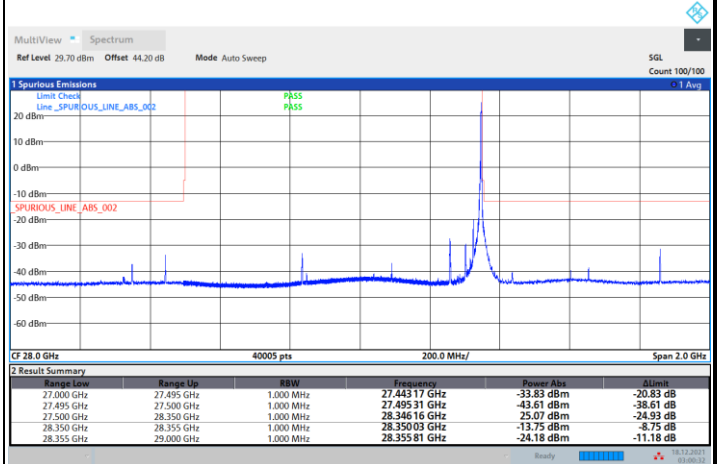
CP-OFDM Module 0

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

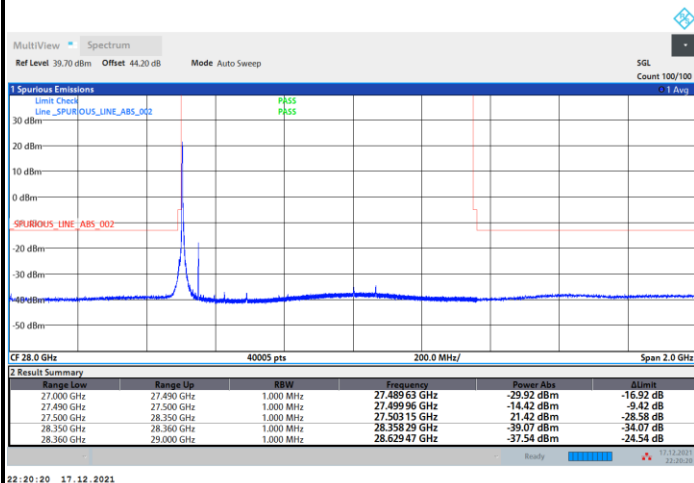


Highest Band Edge / 1 RB

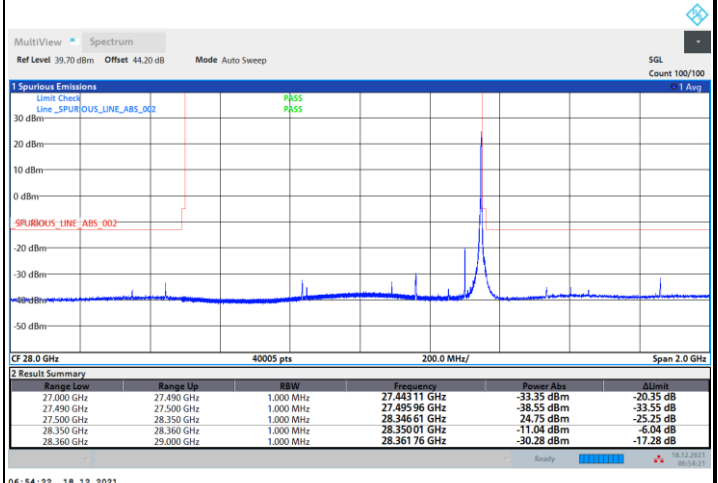


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / 1 RB



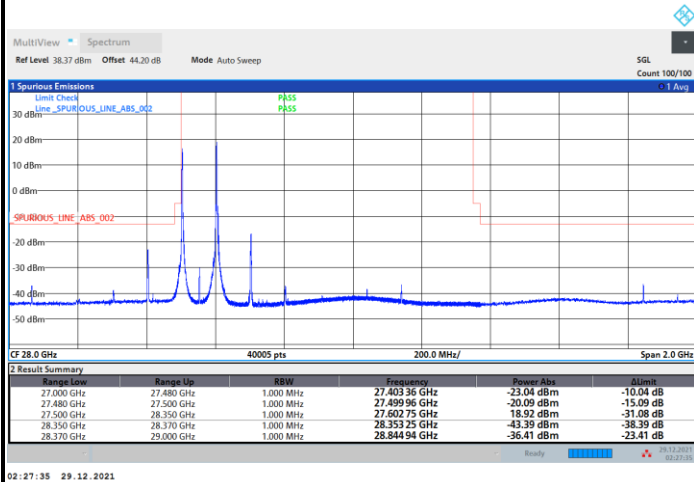
Highest Band Edge / 1 RB



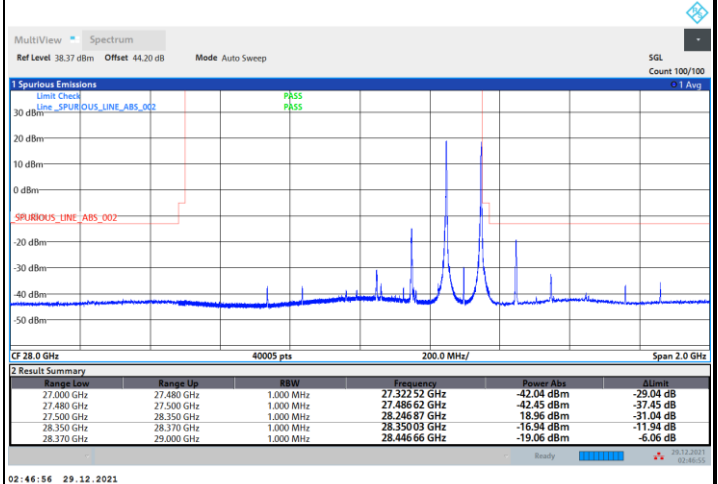


NR Band n261 / 200MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

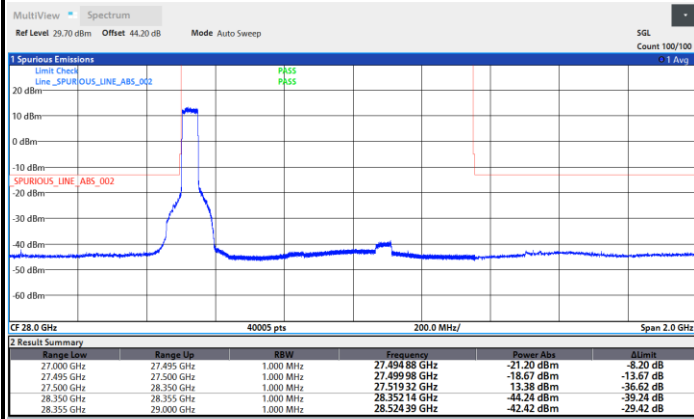




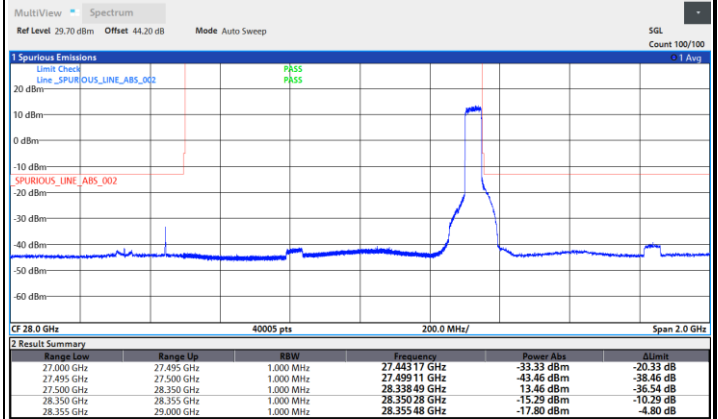
DFT-s-OFDM Module 0

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

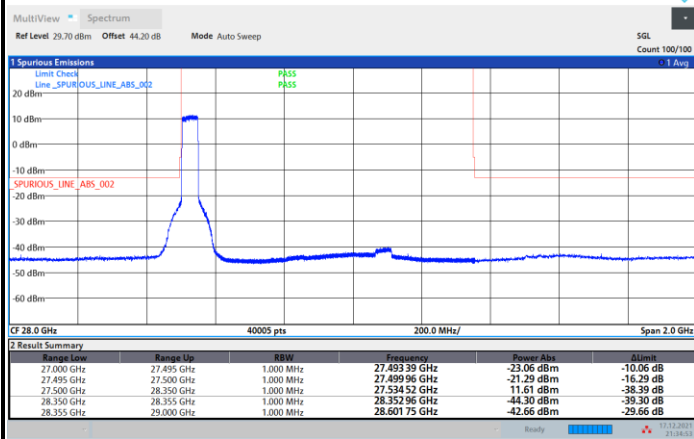


Highest Band Edge / Full RB

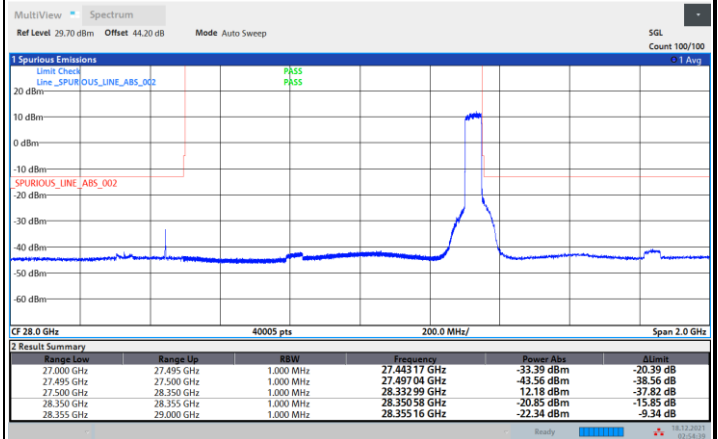


NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

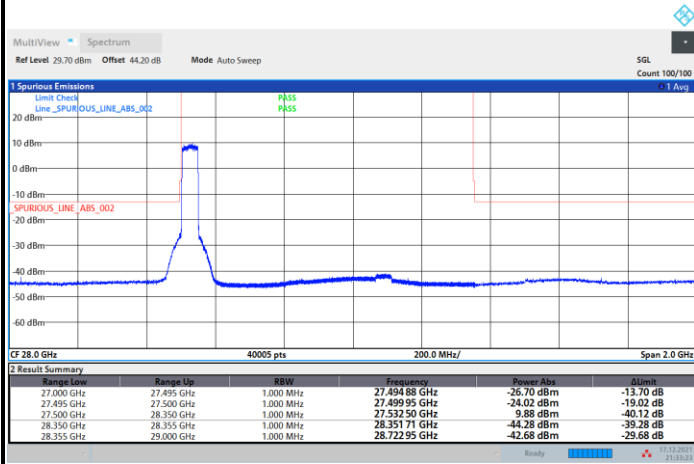




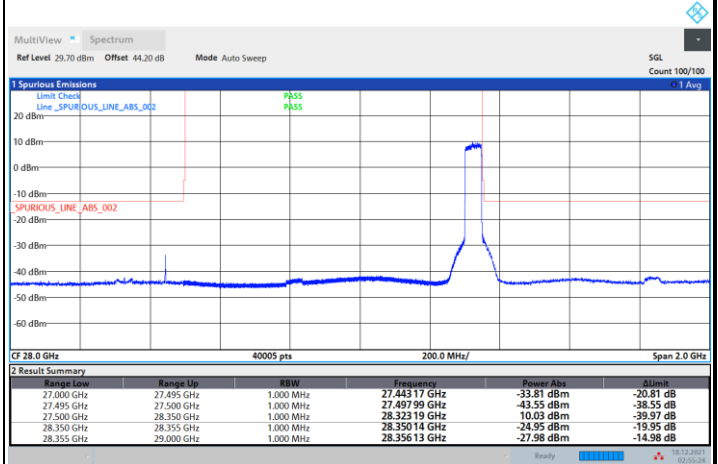
DFT-s-OFDM Module 0

NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / Full RB

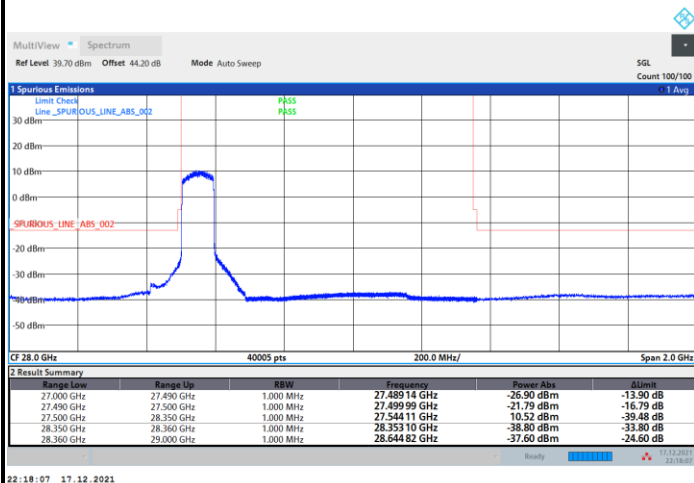


Highest Band Edge / Full RB

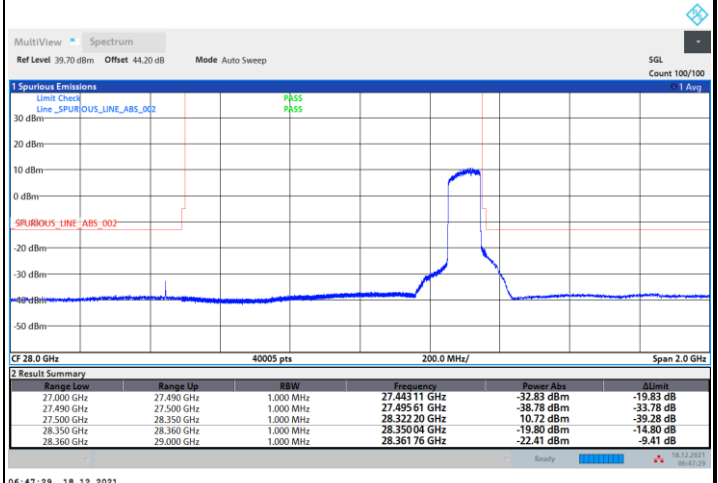


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

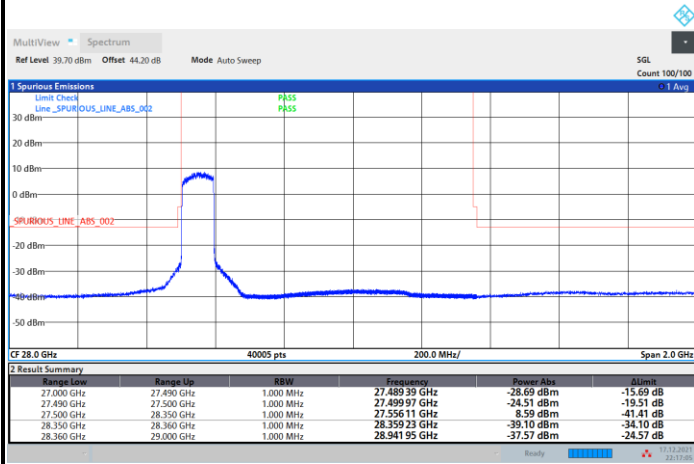




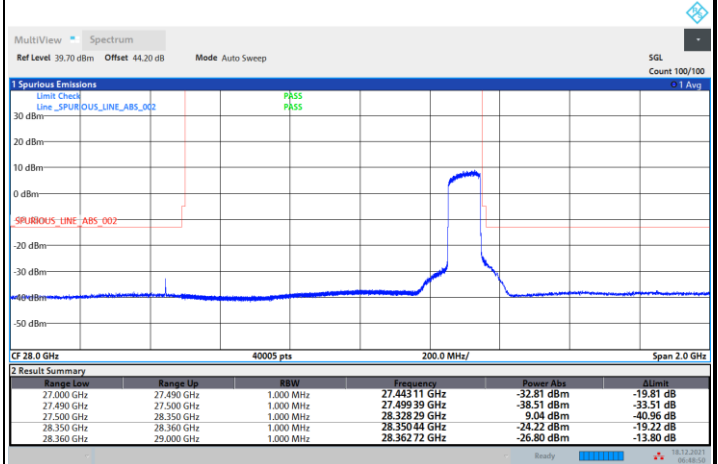
DFT-s-OFDM Module 0

NR Band n261 / 100MHz / 16QAM

Lowest Band Edge / Full RB

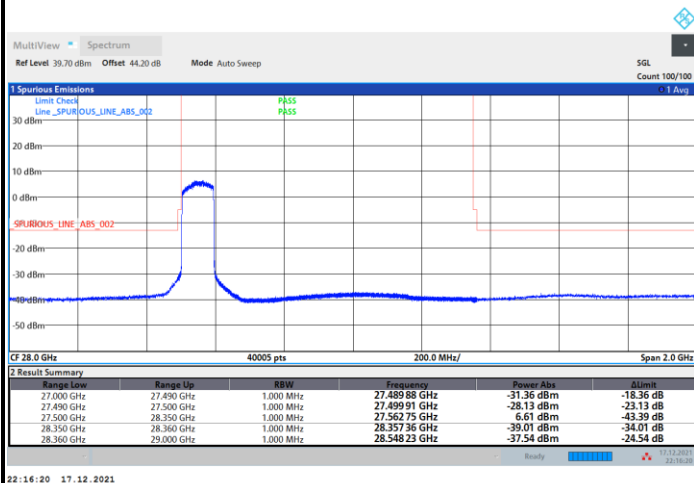


Highest Band Edge / Full RB

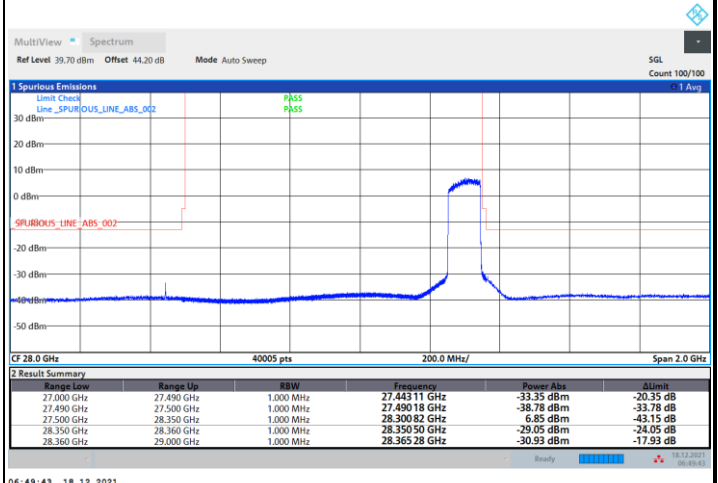


NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

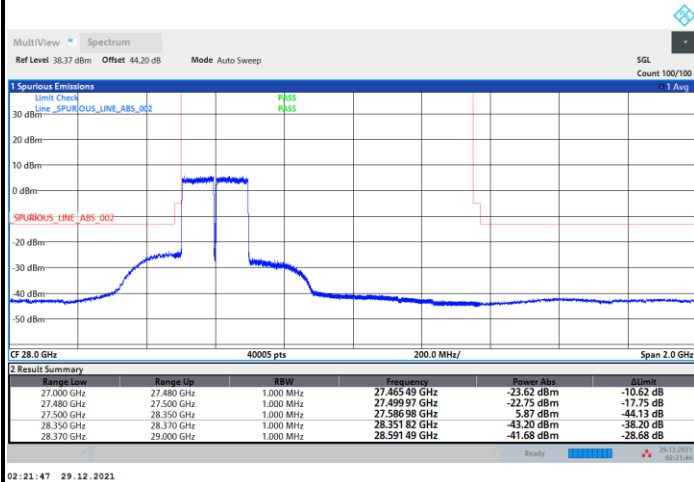




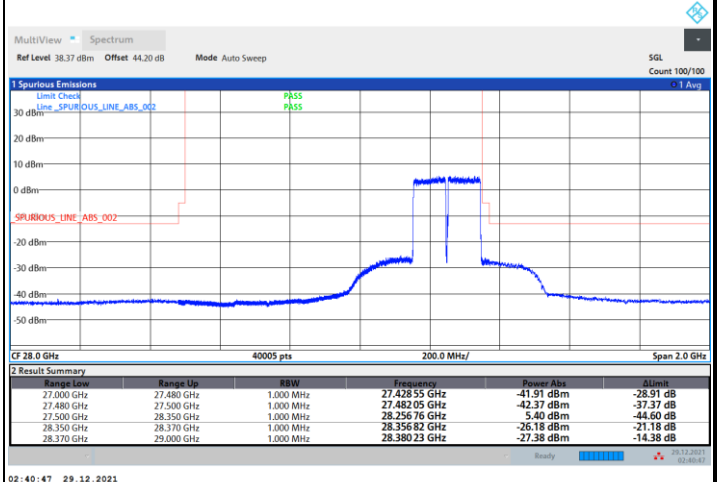
DFT-s-OFDM Module 0

NR Band n261 / 200MHz / QPSK

Lowest Band Edge / Full RB

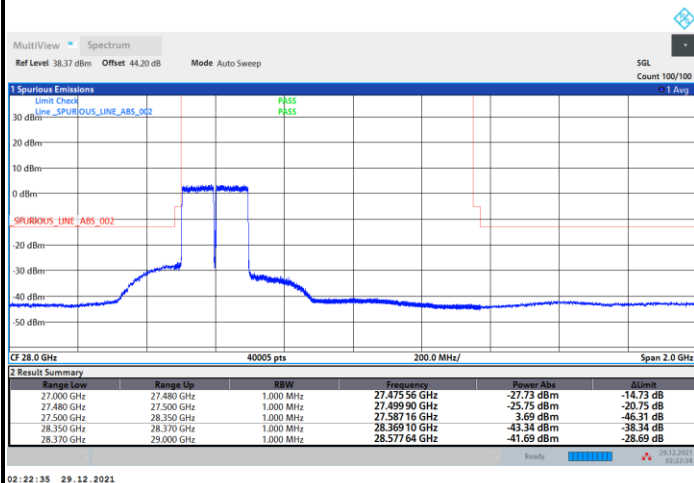


Highest Band Edge / Full RB

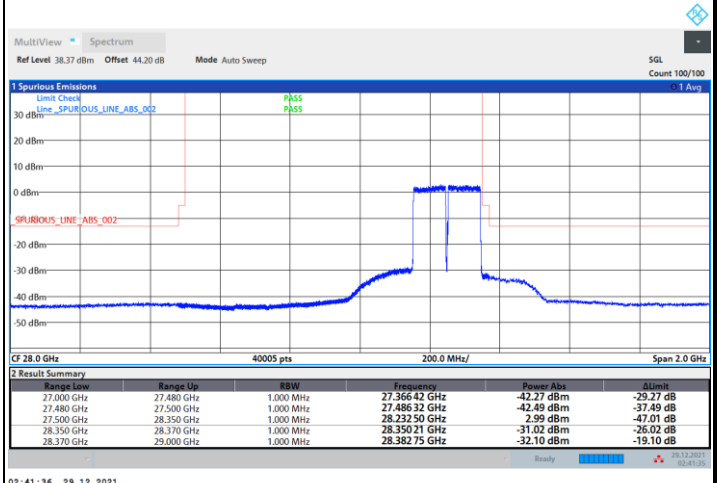


NR Band n261 / 200MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

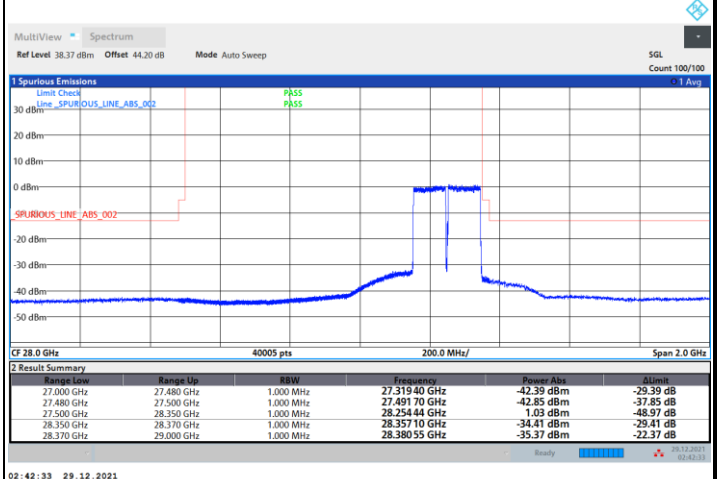
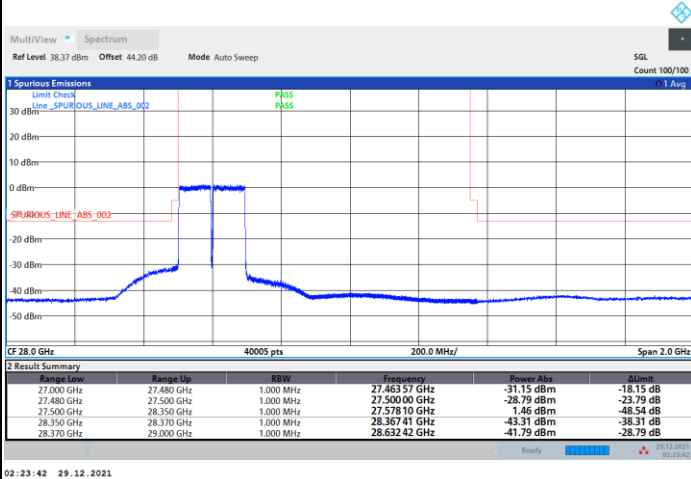




NR Band n261 / 200MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

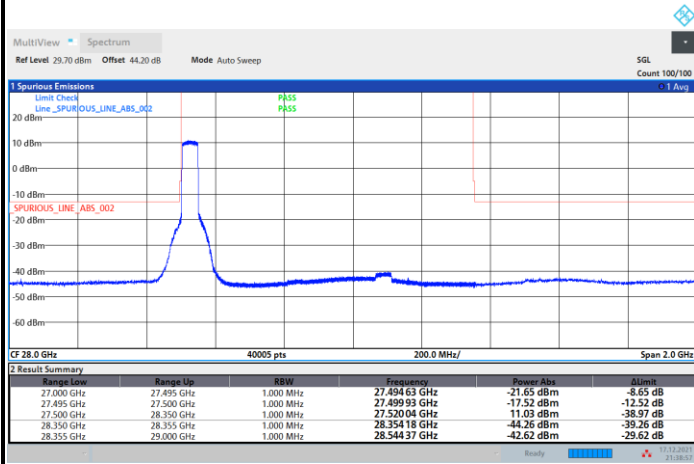




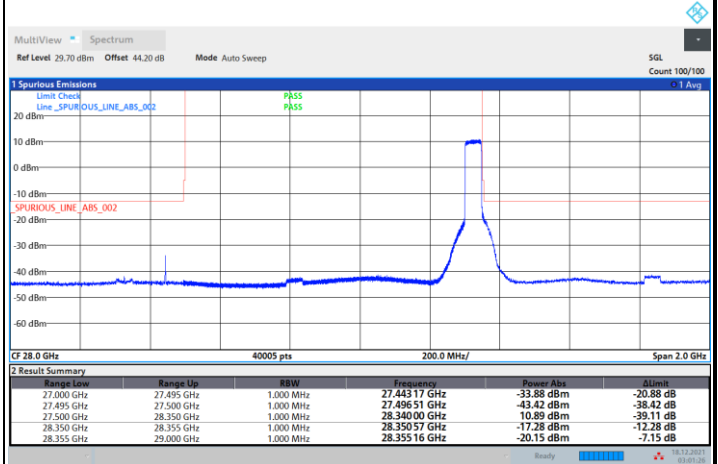
CP-OFDM Module 0

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

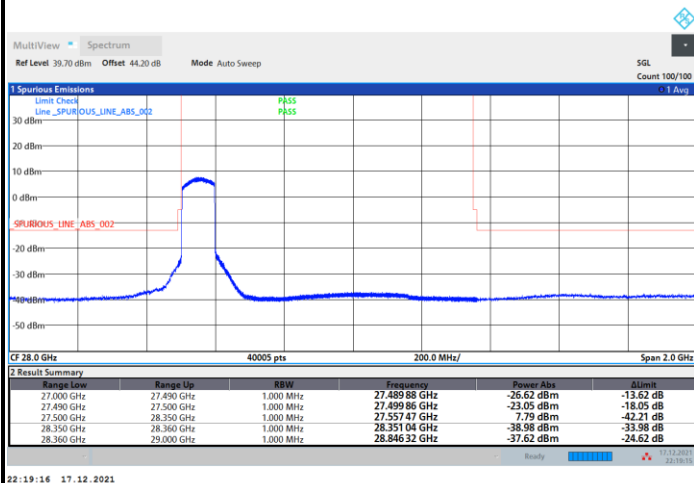


Highest Band Edge / Full RB

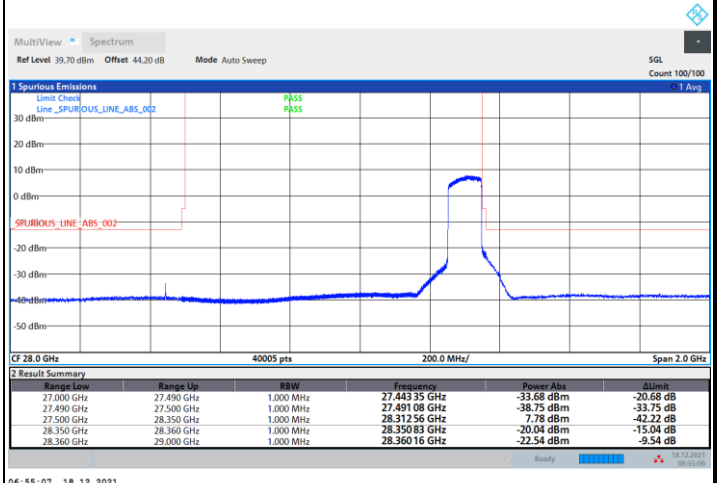


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



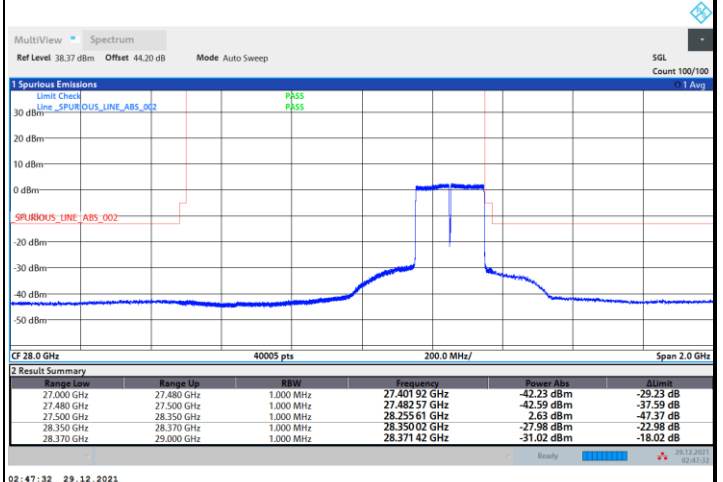
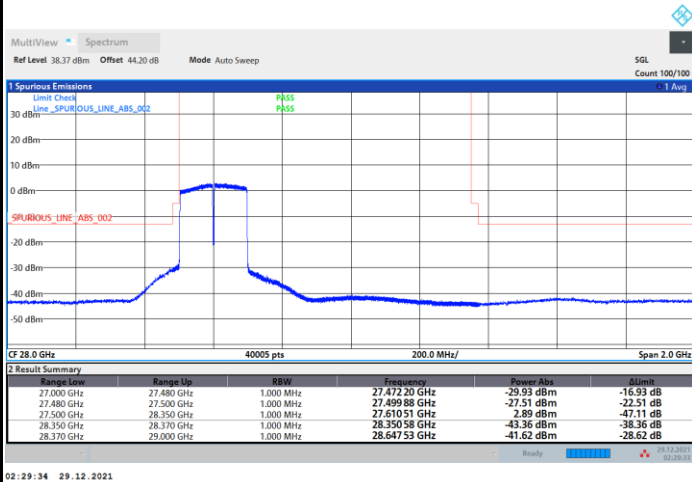


CP-OFDM Module 0

NR Band n261 / 200MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB





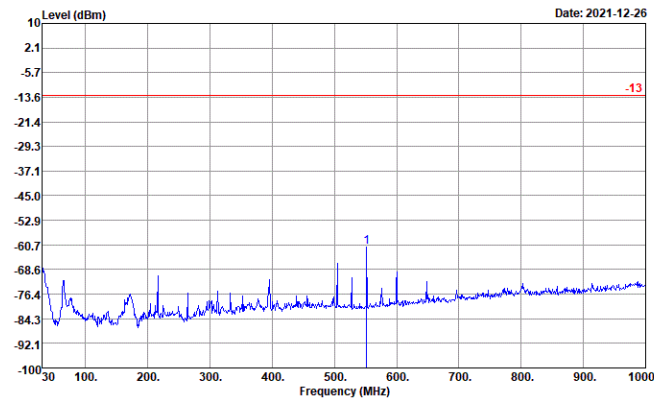
Spurious Emission

There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz.

Only the noise floor is reported.

NR Band n261 (30MHz-1GHz)

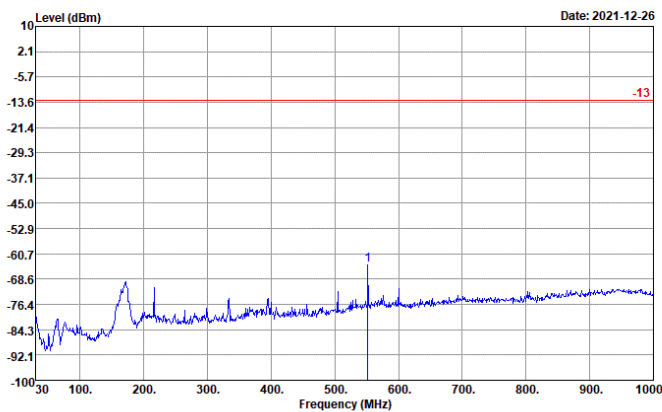
Horizontal



Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 HORIZONTAL
Project : 192340-02
: n261 MO

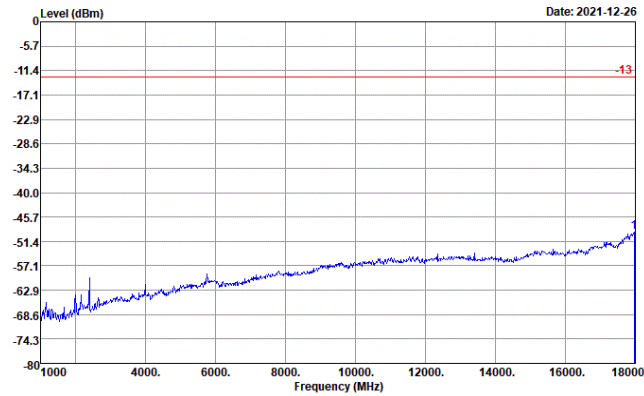
	Freq	Level	Over	Limit	Read	LISN	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1	551.86	-61.25	-48.25	-13.00	-61.49	34.84	0.00	34.60	---	---	Peak

Vertical



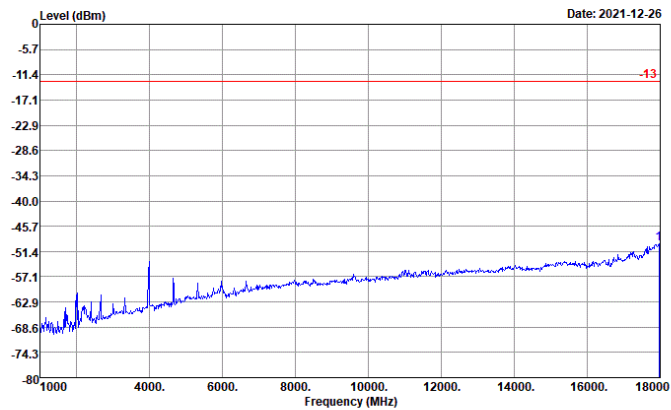
Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 VERTICAL
Project : 192340-02
: n261 MO

	Freq	Level	Over	Limit	Read	LISN	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1	551.86	-64.15	-51.15	-13.00	-68.18	38.63	0.00	34.60	---	---	Peak

**NR Band n261 (1GHz-18GHz)****Horizontal**

Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 HORIZONTAL
Project : 192340-02
: n261 MO

	Freq	Level	Over	Limit	Read	LISN	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1	17966.00	-49.29	-36.29	-13.00	-82.94	79.95	0.00	46.30	---	---	Peak

Vertical

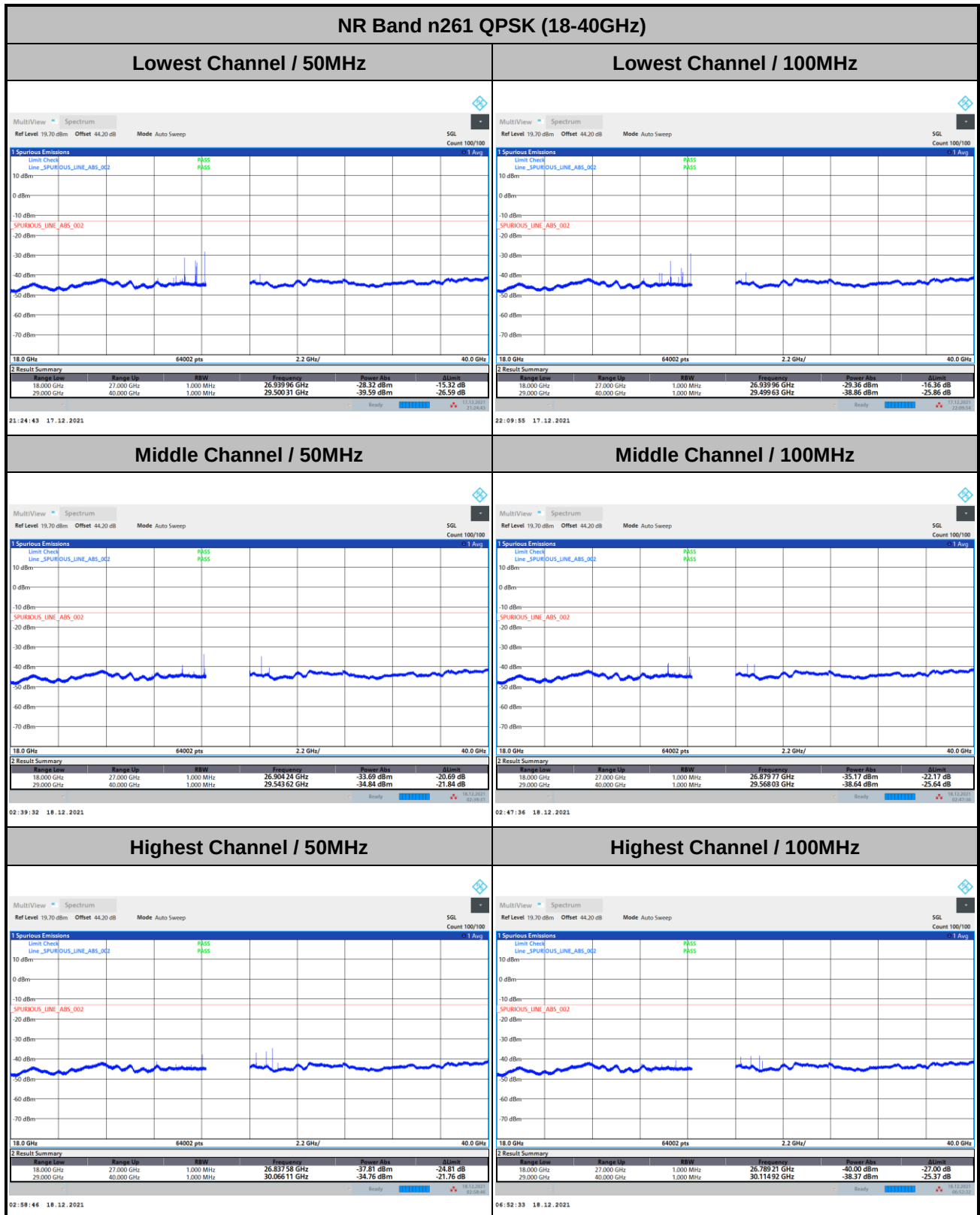
Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 VERTICAL
Project : 192340-02
: n261 MO

	Freq	Level	Over	Limit	Read	LISN	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1	17966.00	-49.66	-36.66	-13.00	-83.07	79.71	0.00	46.30	---	---	Peak



Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

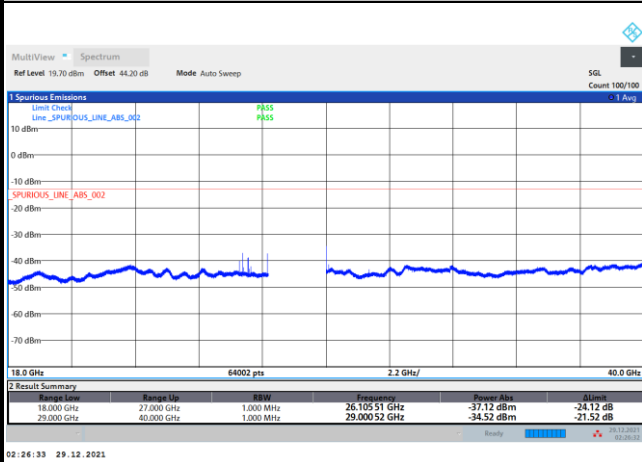
DFT-s-OFDM Module 0



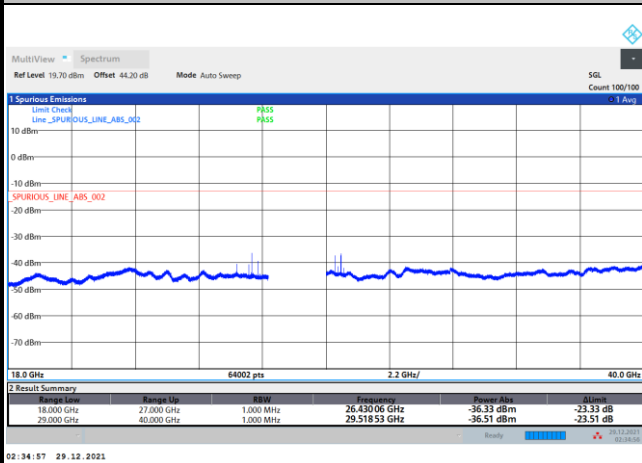


NR Band n261 QPSK (18-40GHz)

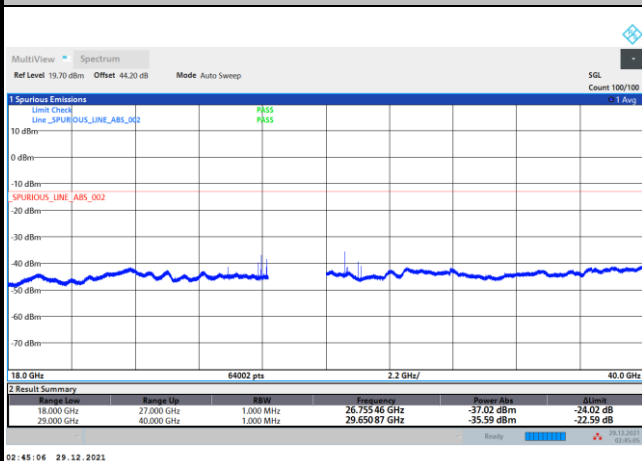
Lowest Channel / 200MHz



Middle Channel / 200MHz



Highest Channel / 200MHz



Remark: Above plots, the spurious emissions were measured from 18GHz to 27GHz and 29GHz to 40GHz. The test results within the omitted frequency 27GHz to 29GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 27GHz to 29GHz, and all spurious comply with limits.



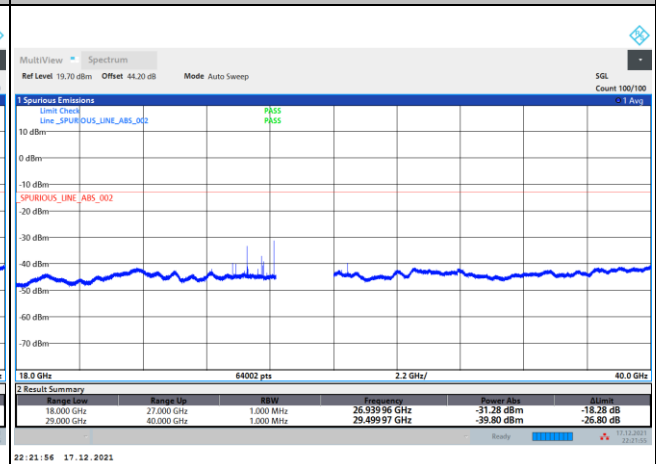
CP-OFDM Module 0

NR Band n261 QPSK (18-40GHz)

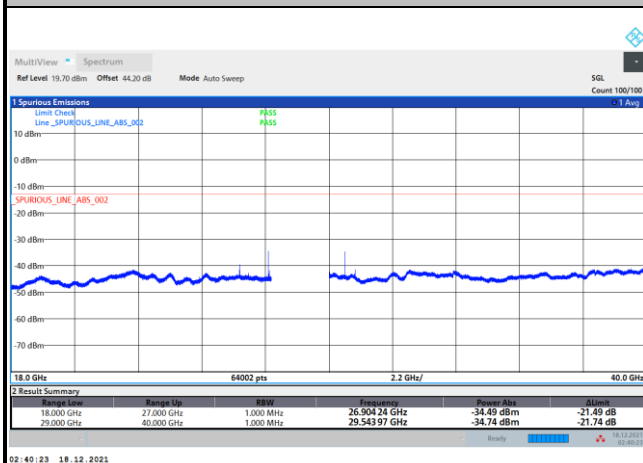
Lowest Channel / 50MHz



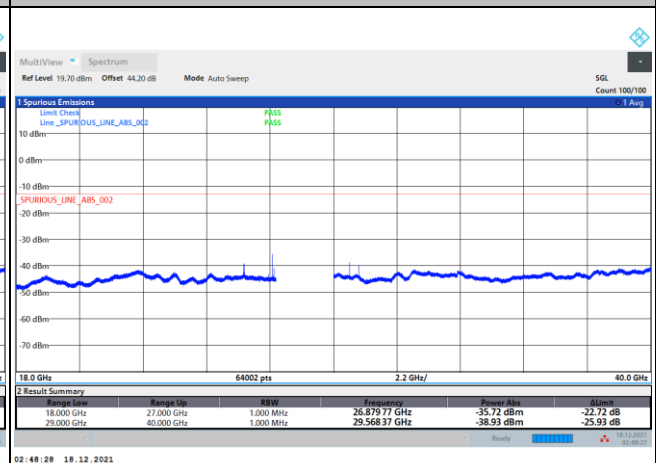
Lowest Channel / 100MHz



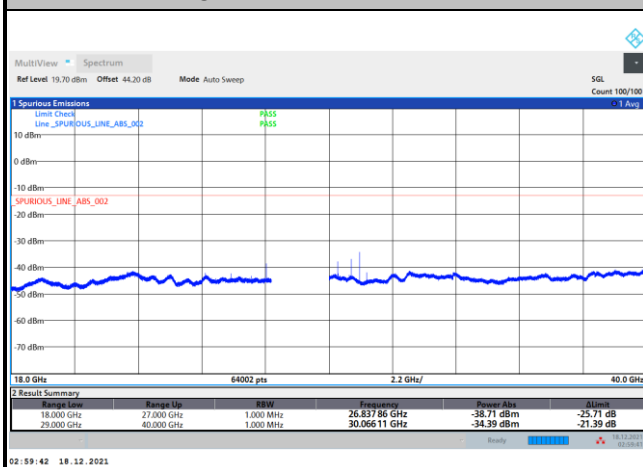
Middle Channel / 50MHz



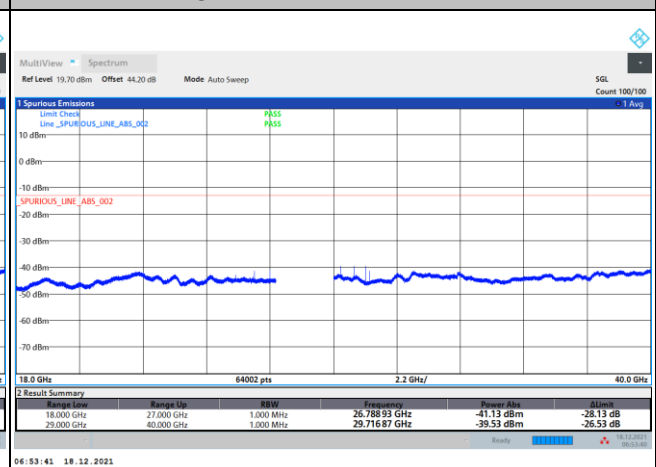
Middle Channel / 100MHz



Highest Channel / 50MHz



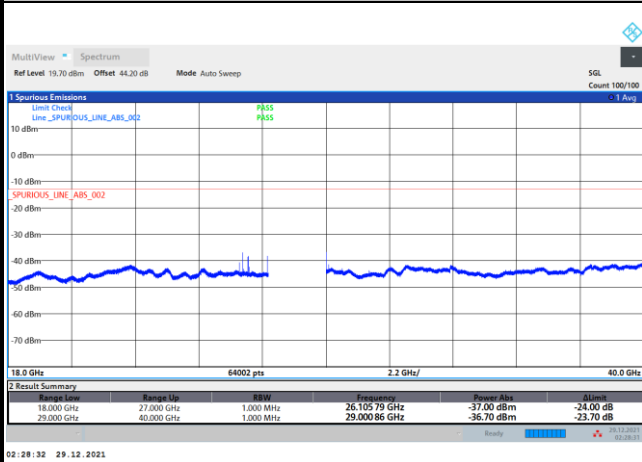
Highest Channel / 100MHz



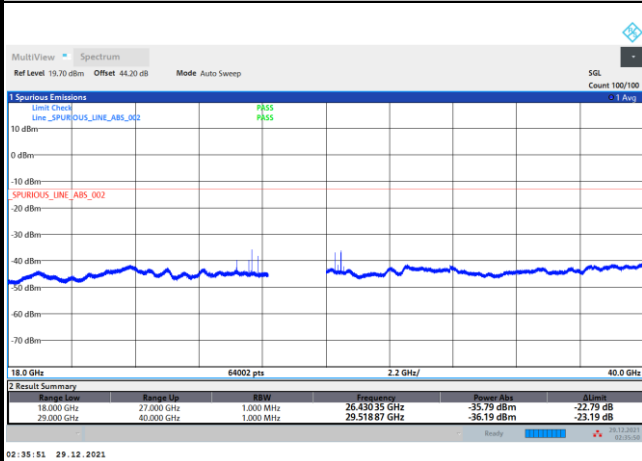


NR Band n261 QPSK (18-40GHz)

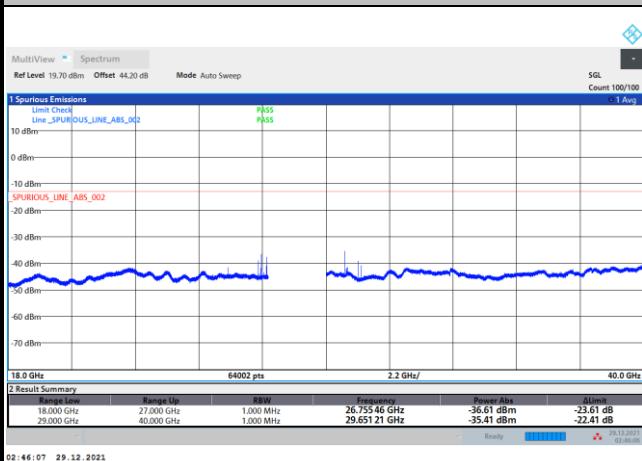
Lowest Channel / 200MHz



Middle Channel / 200MHz

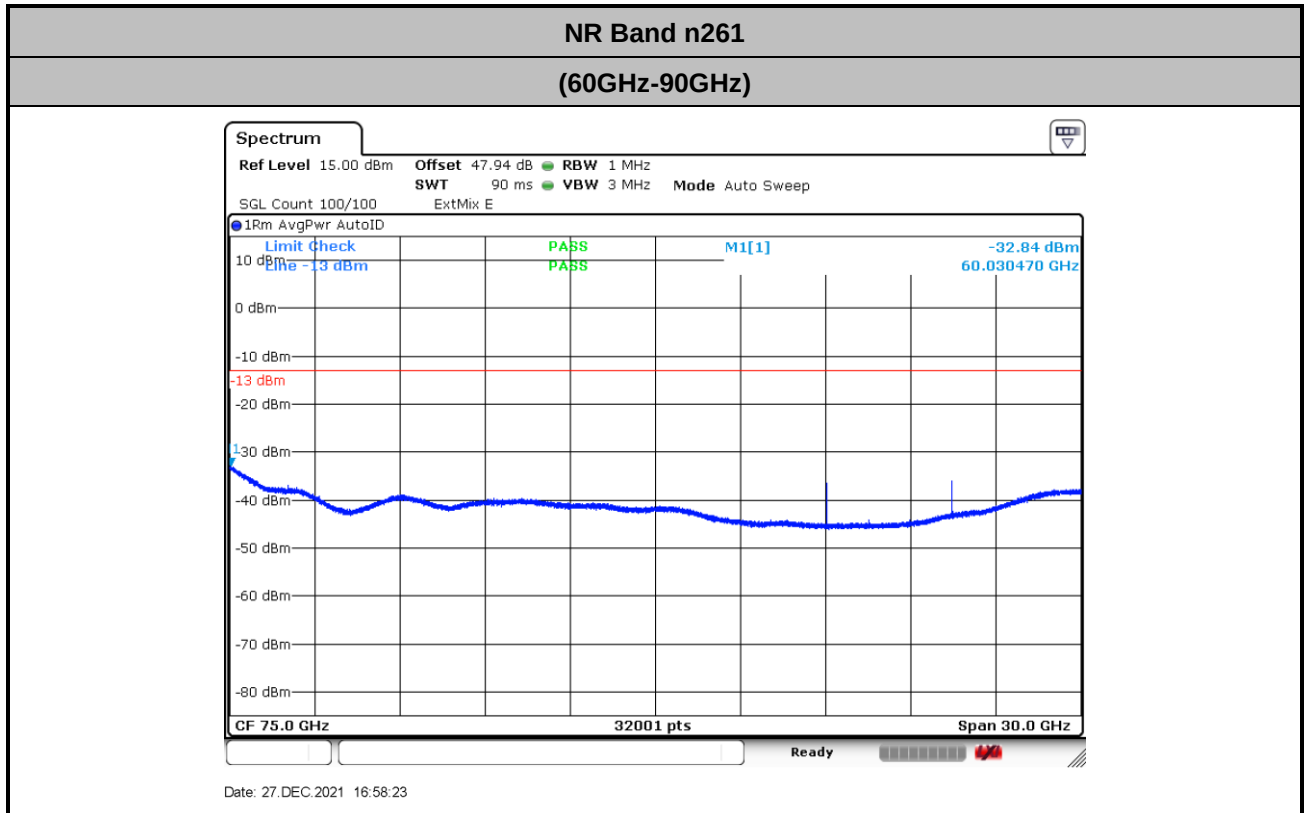


Highest Channel / 200MHz

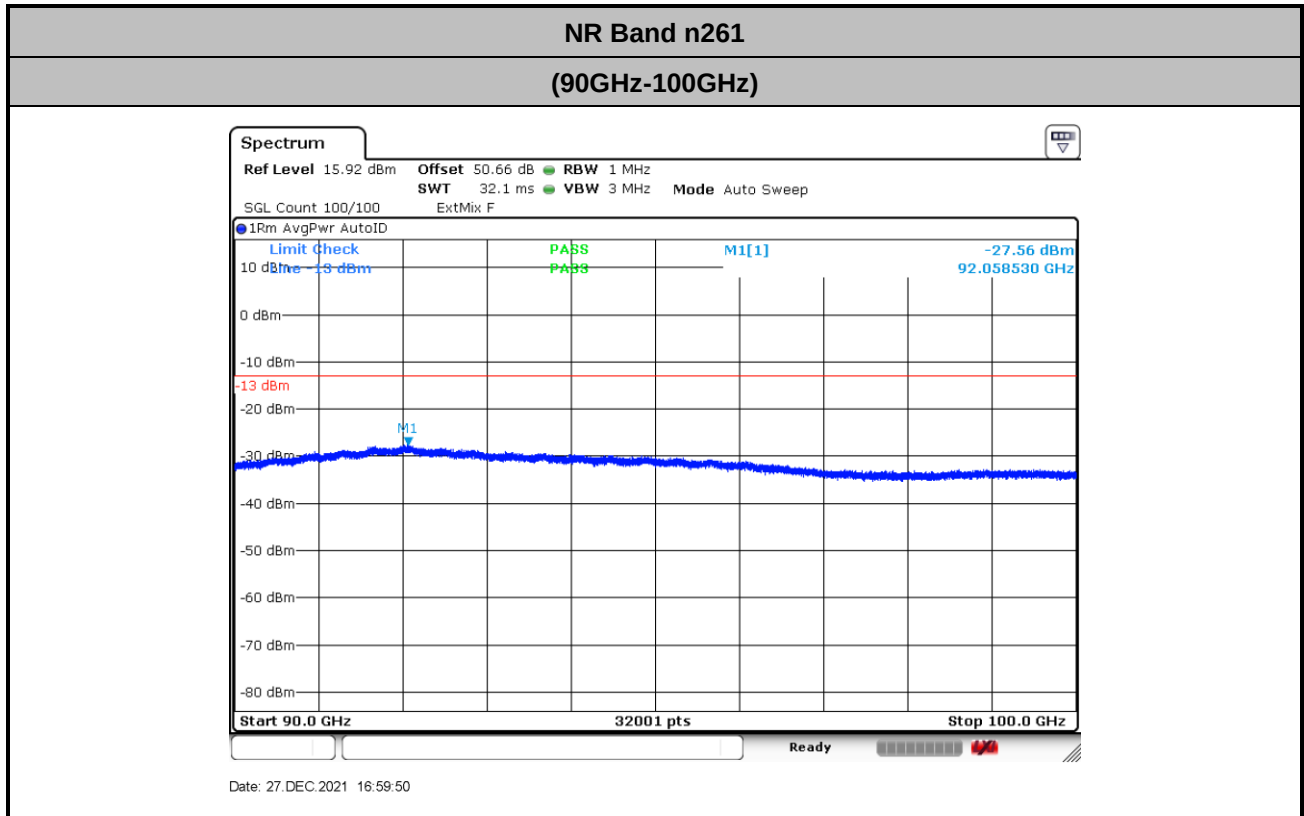


Remark: Above plots, the spurious emissions were measured from 18GHz to 27GHz and 29GHz to 40GHz. The test results within the omitted frequency 27GHz to 29GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 27GHz to 29GHz, and all spurious comply with limits.





$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 45.4 + 0.34 + 107 + 20\log(1) - 104.8 = 47.94 \text{ (dB)}\end{aligned}$$



$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 48.05 + 0.41 + 107 + 20\log(1) - 104.8 = 50.66 \text{ (dB)}\end{aligned}$$

Frequency Stability

Test Conditions		NR Band n261 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	27.9252118	-212.800	7.620	Pass
40	Normal Voltage	27.9251439	-144.900	5.189	
30	Normal Voltage	27.9250839	-84.900	3.040	
20(Ref.)	Normal Voltage	27.924999	0.000	0.000	
10	Normal Voltage	27.924962	37.000	1.325	
0	Normal Voltage	27.9249211	77.900	2.790	
-10	Normal Voltage	27.9248811	117.900	4.222	
-20	Normal Voltage	27.9248492	149.800	5.364	
-30	Normal Voltage	27.9247652	233.800	8.372	
20	Maximum Voltage	27.924988	11.000	0.394	
20	Normal Voltage	27.924994	5.000	0.179	
20	Battery End Point	27.924967	32.000	1.146	

Note: The frequency fundamental emissions stay within the operation band.

NR Band n260 Module 1 AG0

Occupied Bandwidth

Mode	DFT-s-OFDM Module 1 NR Band n260 : 99%OBW(MHz)					
BW	50MHz			100MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.95	45.78	45.70	91.36	91.08	91.39
Middle CH	45.99	46.04	45.78	91.33	91.35	91.42
Highest CH	45.76	45.94	45.84	91.38	91.37	91.37

Mode	DFT-s-OFDM Module 1 NR Band n260 : 99%OBW(MHz)					
BW	200MHz					
Mod.	QPSK	16QAM	64QAM			
Lowest CH	189.38	189.96	190.03			
Middle CH	190.20	190.02	189.84			
Highest CH	189.98	189.84	189.78			

Mode	CP-OFDM Module 1 NR Band n260 : 99%OBW(MHz)	
BW	50MHz	100MHz
Mod.	QPSK	QPSK
Lowest CH	46.07	94.40
Middle CH	46.17	94.44
Highest CH	46.06	94.33

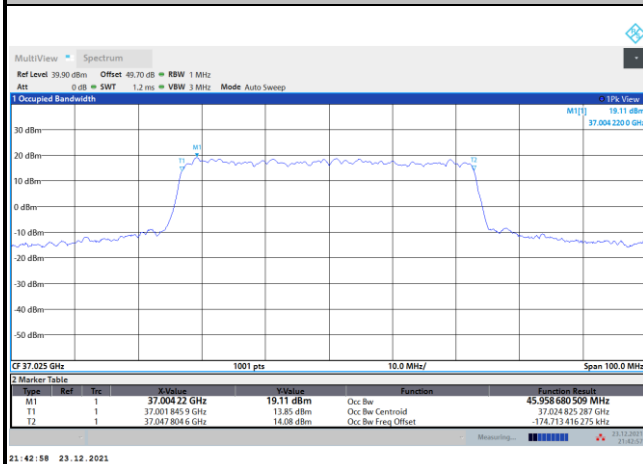
Mode	CP-OFDM Module 1 NR Band n260 : 99%OBW(MHz)	
BW	200MHz	
Mod.	QPSK	
Lowest CH	192.84	
Middle CH	192.56	
Highest CH	192.64	



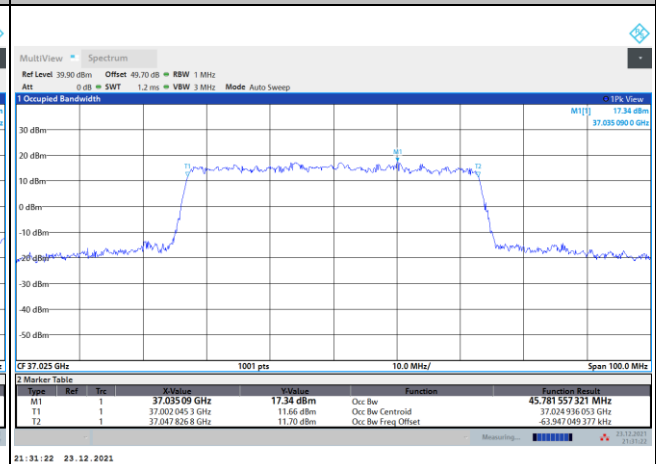
DFT-s-OFDM Module 1

NR Band n260

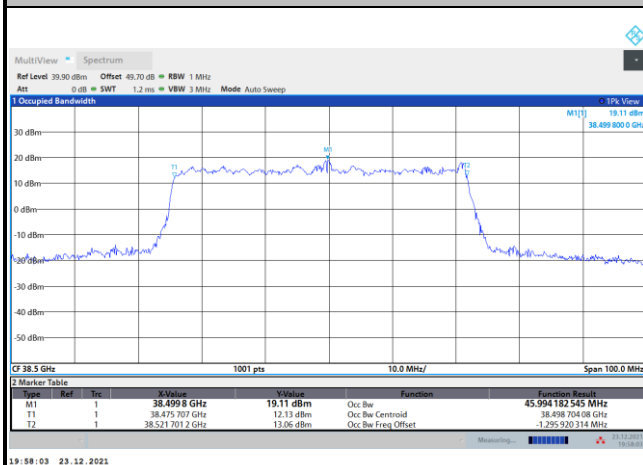
Lowest Channel / 50MHz / QPSK



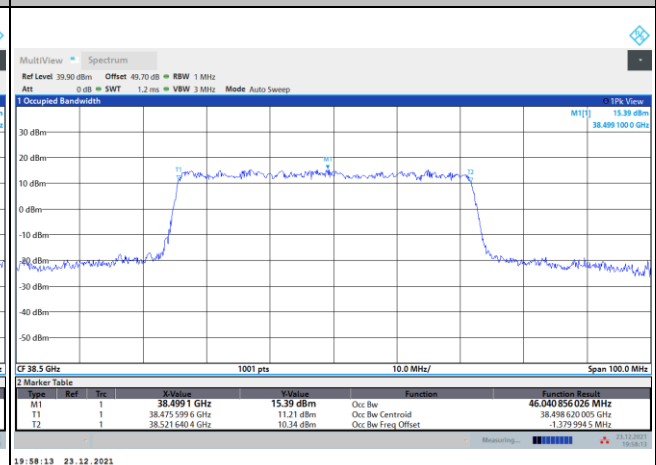
Lowest Channel / 50MHz / 16QAM



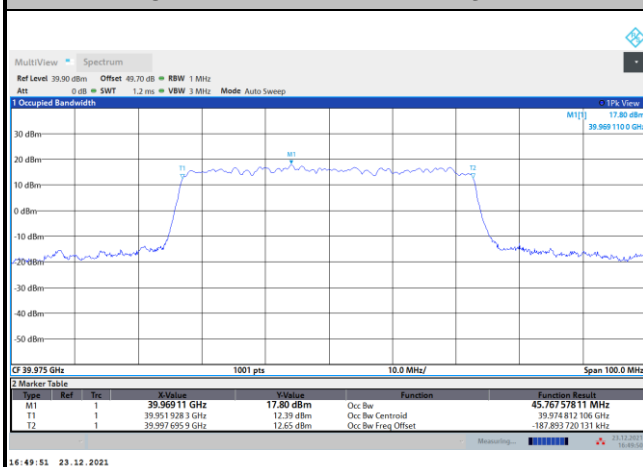
Middle Channel / 50MHz / QPSK



Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

