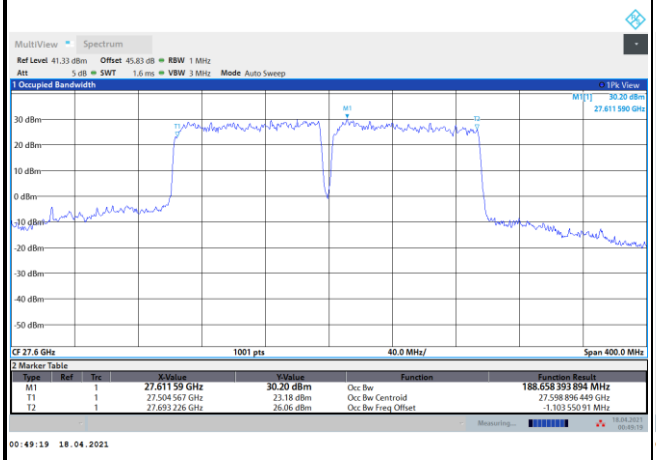
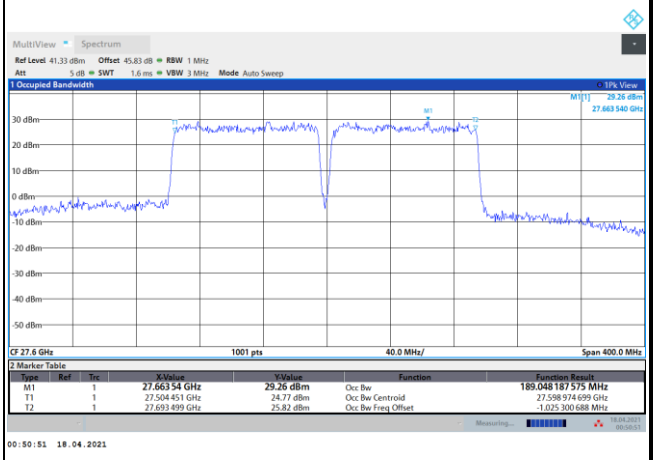
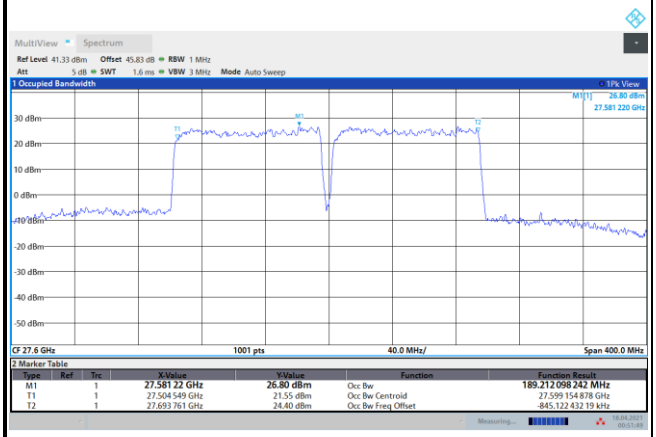
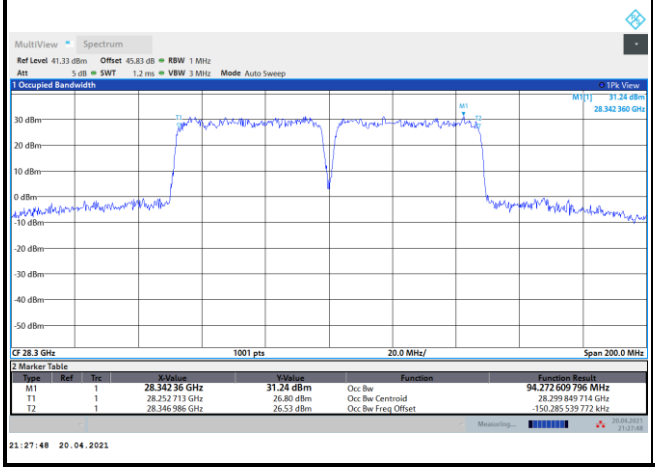
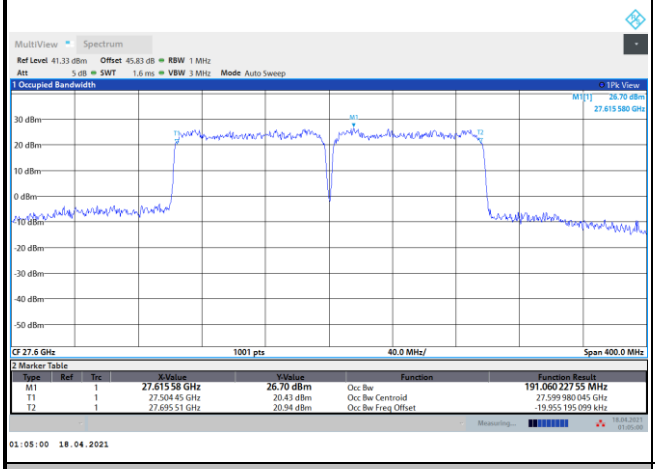
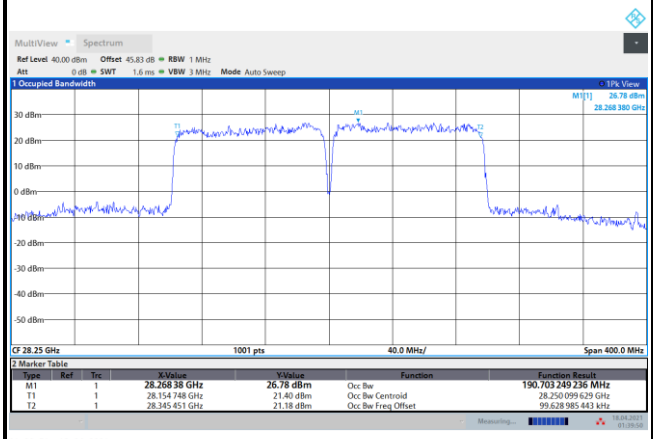
DFT-s-OFDM

NR Band n261	
Lowest Channel / 200MHz / BPSK	**Lowest Channel / 200MHz / 16QAM**
	
Lowest Channel / 200MHz / 64QAM	
	

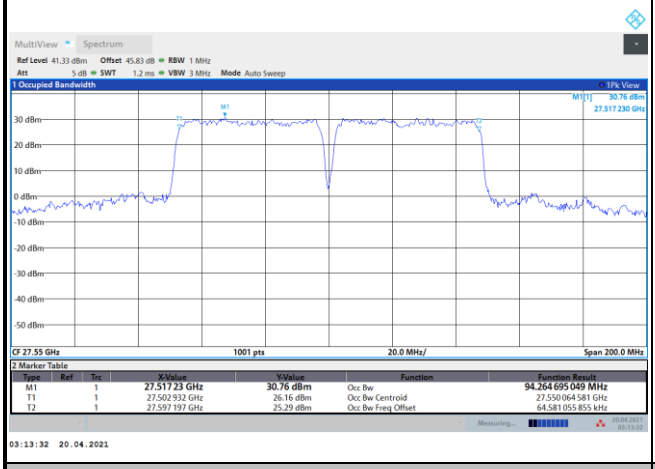
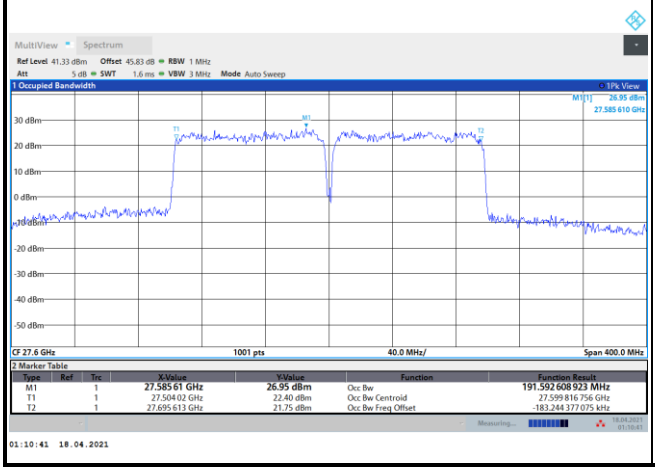
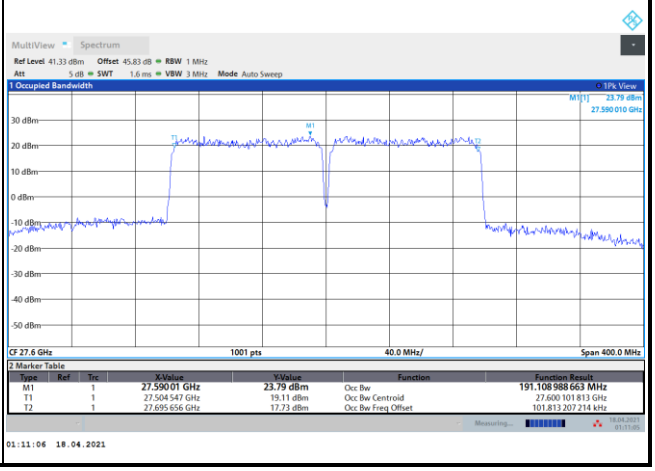
CP-OFDM

NR Band n261	
Lowest Channel / 100MHz / QPSK	**Middle Channel / 100MHz / QPSK**
	
Highest Channel / 100MHz / QPSK	
	

CP-OFDM

NR Band n261	
Lowest Channel / 200MHz / QPSK	**Middle Channel / 200MHz / QPSK**
	
Highest Channel / 200MHz / QPSK	
	

CP-OFDM

NR Band n261	
Lowest Channel / 100MHz / 16QAM	**Lowest Channel / 100MHz / 64QAM**
	
Lowest Channel / 200MHz / 16QAM	**Lowest Channel / 200MHz / 64QAM**
	

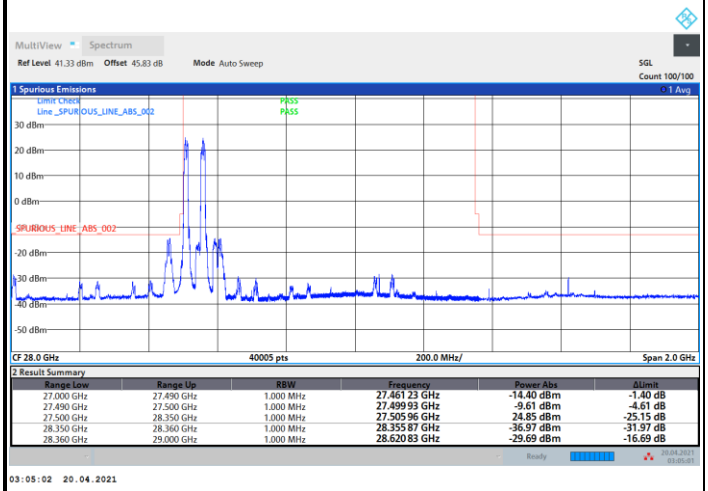
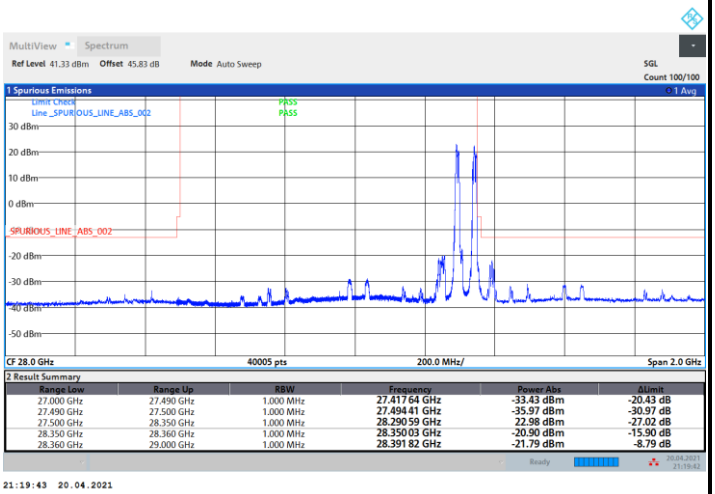
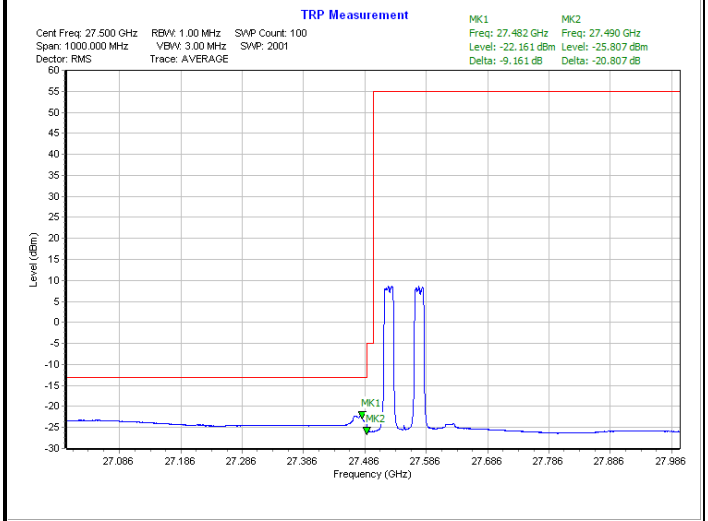
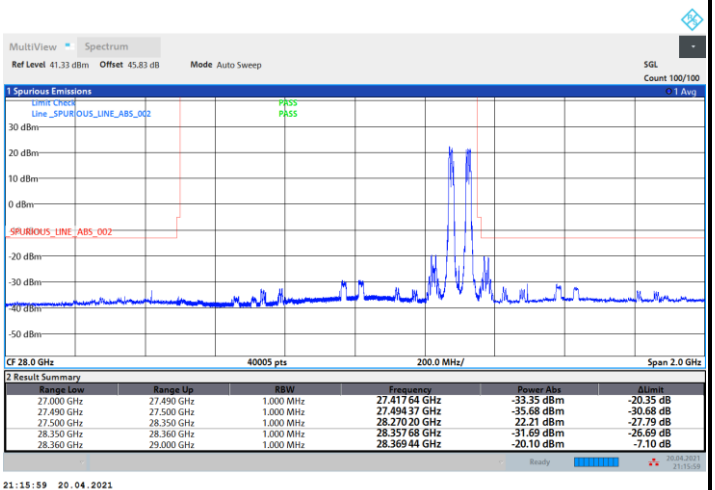
Radiated Out of Band Emissions

Test Result:

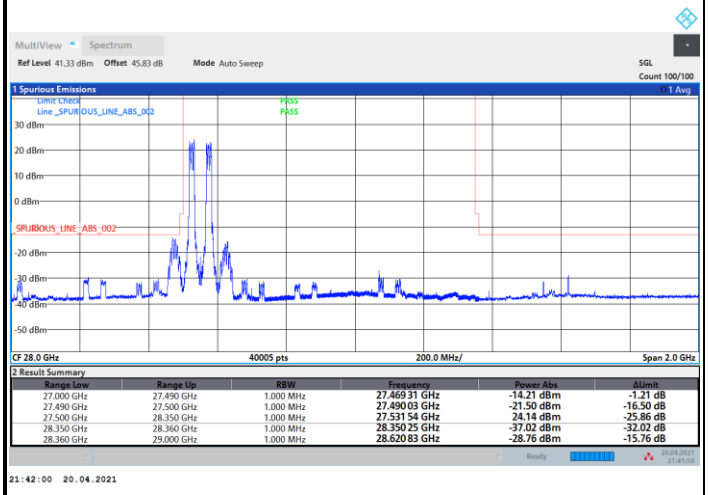
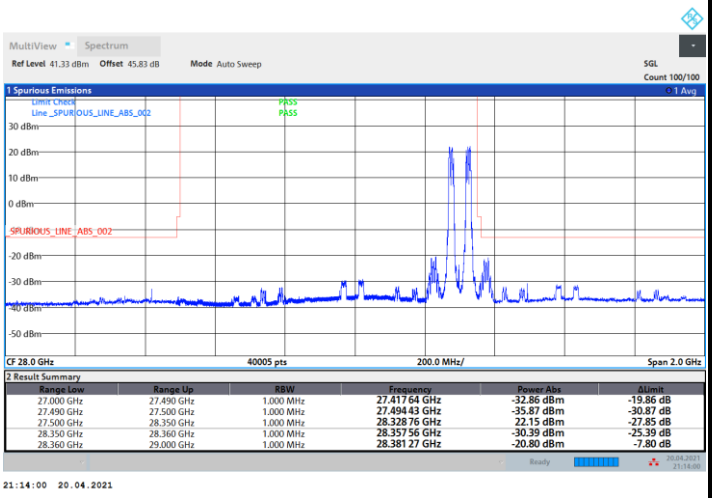
Mode		DFT-s-OFDM NR Band n261							
Channel	BW (MHz)	Modulation	RB Size/ allocation	0 ~ 10 %OB Limit (dBm/MHz)	0 ~ 10 %OB PSD (dBm/MHz)	Result	>10%OB Limit (dBm/MHz)	>10%OB PSD (dBm/MHz)	Result
Low	100	QPSK	32/0	-5	-24.03	Pass	-13	-22.47	Pass
Low	100	BPSK	32/0	-5	-23.40	Pass	-13	-22.25	Pass
Low	100	QPSK	8/0	-5	-9.61	Pass	-13	-14.4	Pass
Low	100	QPSK	10/11	-5	-21.5	Pass	-13	-14.21	Pass
Low	100	BPSK	10/11	-5	-25.80	Pass	-13	-22.161	Pass
High	100	QPSK	32/0	-5	-14.95	Pass	-13	-16.21	Pass
High	100	BPSK	32/0	-5	-13.09	Pass	-13	-15.56	Pass
High	100	QPSK	8/24	-5	-20.9	Pass	-13	-21.79	Pass
High	100	QPSK	10/11	-5	-30.39	Pass	-13	-20.8	Pass
High	100	BPSK	10/11	-5	-31.69	Pass	-13	-20.1	Pass
Low	200	QPSK	64/0	-5	-22.32	Pass	-13	-20.63	Pass
Low	200	BPSK	64/0	-5	-22.03	Pass	-13	-20.79	Pass
Low	200	QPSK	8/0	-5	-14.14	Pass	-13	-14.25	Pass
Low	200	QPSK	20/22	-5	-27.25	Pass	-13	-16.75	Pass
Low	200	BPSK	20/22	-5	-28.64	Pass	-13	-15.3	Pass
High	200	QPSK	64/0	-5	-12.89	Pass	-13	-13.82	Pass
High	200	BPSK	64/0	-5	-12.49	Pass	-13	-13.83	Pass
High	200	QPSK	8/58	-5	-14.93	Pass	-13	-17.46	Pass
High	200	QPSK	20/22	-5	-31.46	Pass	-13	-24.16	Pass
High	200	BPSK	20/22	-5	-30.68	Pass	-13	-25.24	Pass

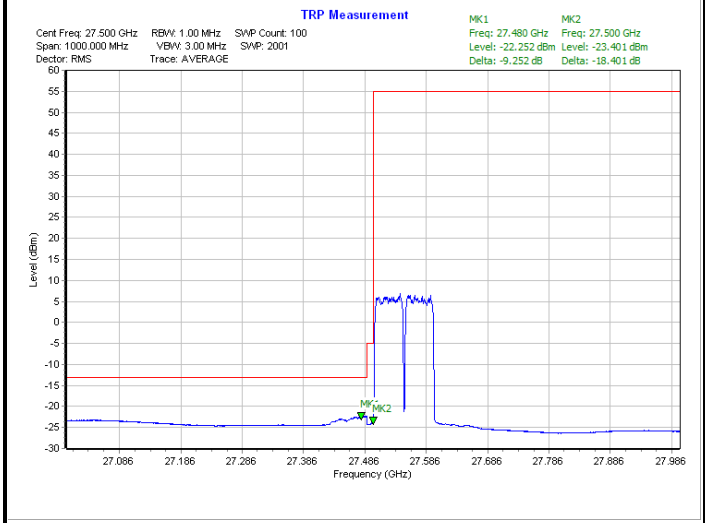
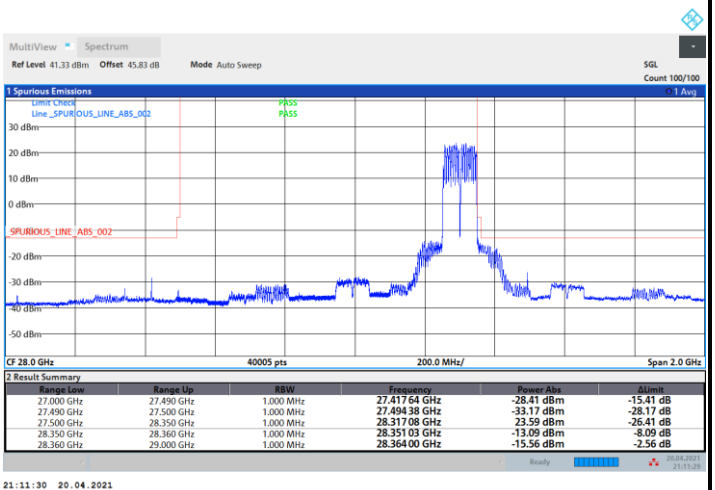
Note: Both DFT-s-ODFM and CP-OFDM waveforms are evaluated, and the DFT-s-ODFM is the worst case.

DFT-s-OFDM

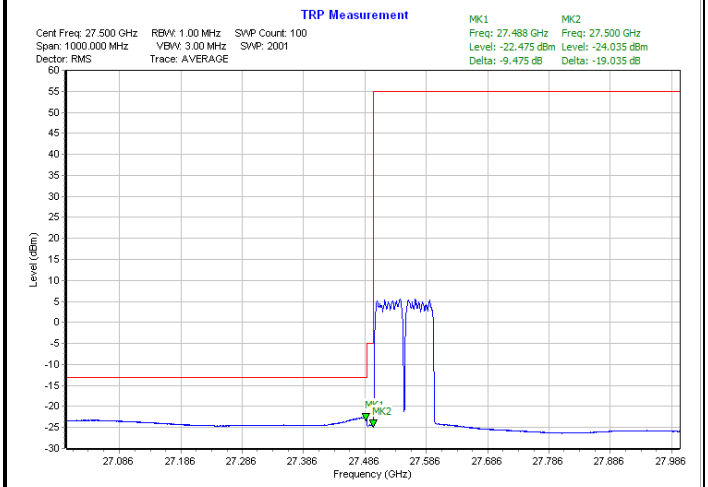
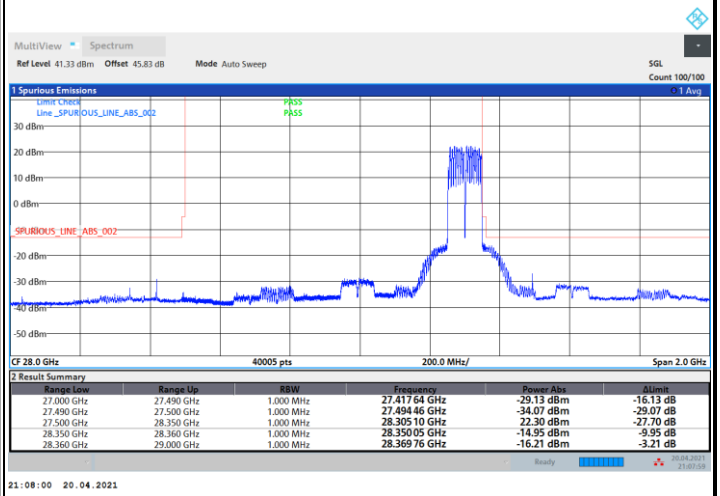
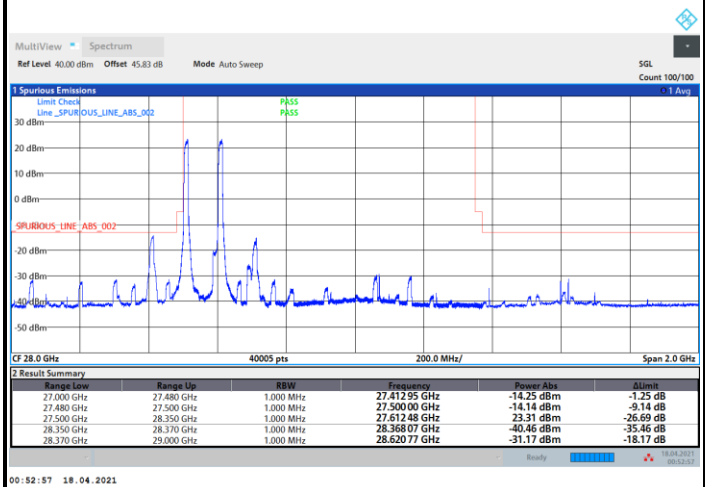
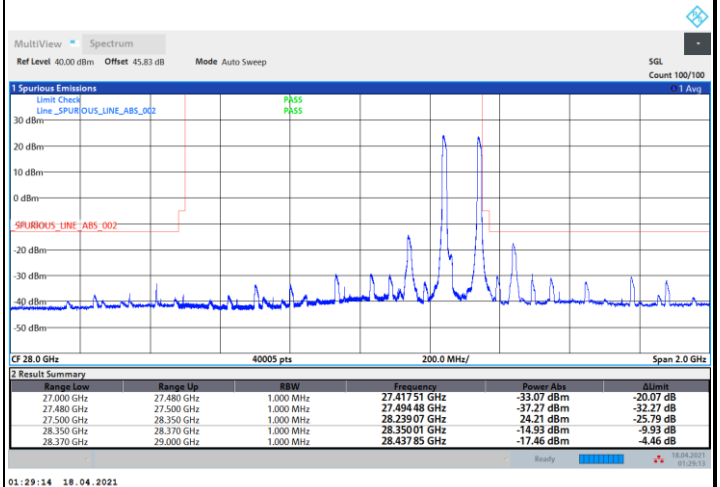
NR Band n261 / 100MHz / QPSK	
Lowest Band Edge / 8 RB (8/0)	Highest Band Edge / 8 RB (8/24)
	
NR Band n261 / 100MHz / BPSK	
Lowest Band Edge / Full RB (10/11)	Highest Band Edge / Full RB (10/11)
	

DFT-s-OFDM

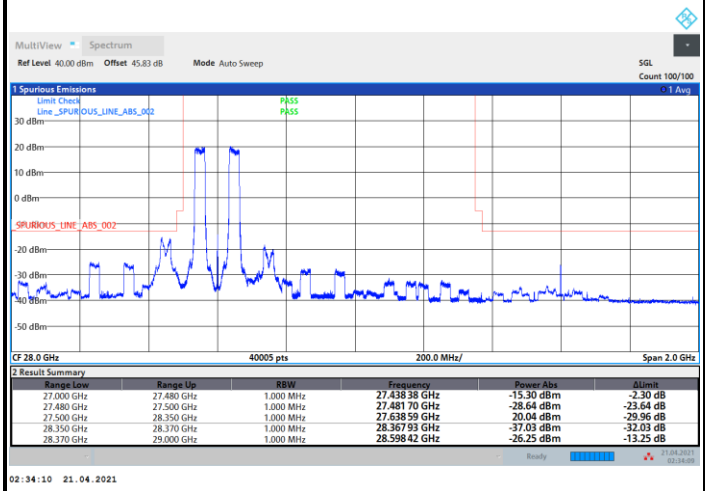
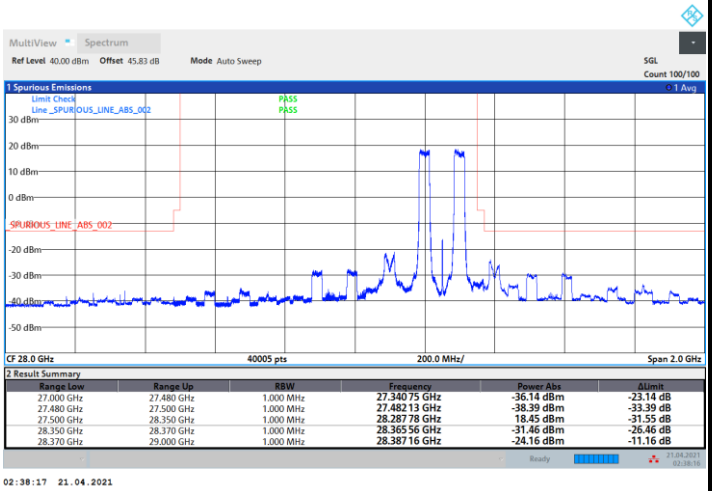
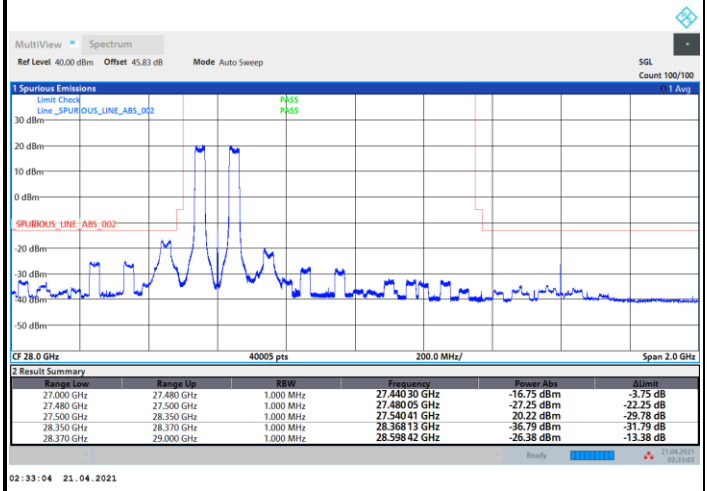
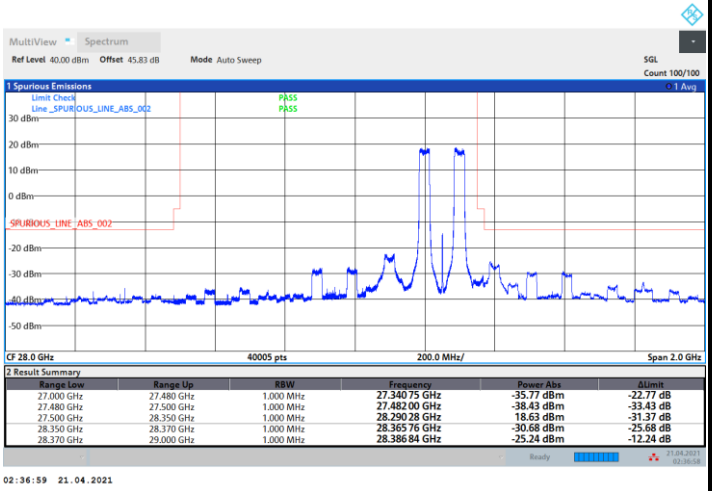
NR Band n261 / 100MHz / QPSK	
Lowest Band Edge / Full RB (10/11)	**Highest Band Edge / Full RB (10/11)**
	

NR Band n261 / 100MHz / BPSK	
Lowest Band Edge / Full RB (32/0)	**Highest Band Edge / Full RB (32/0)**
	

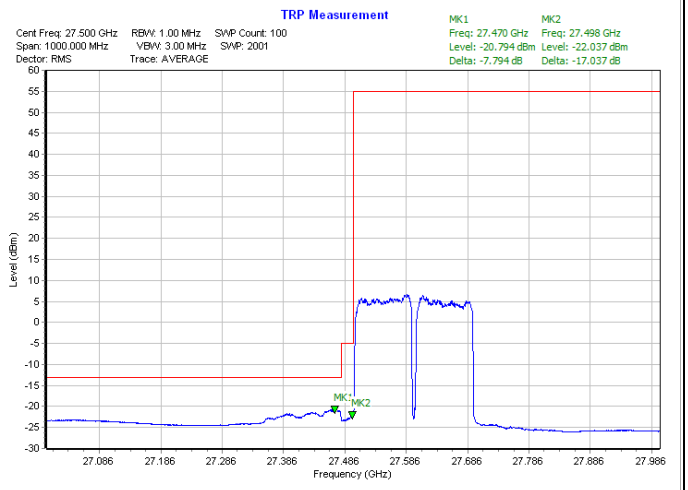
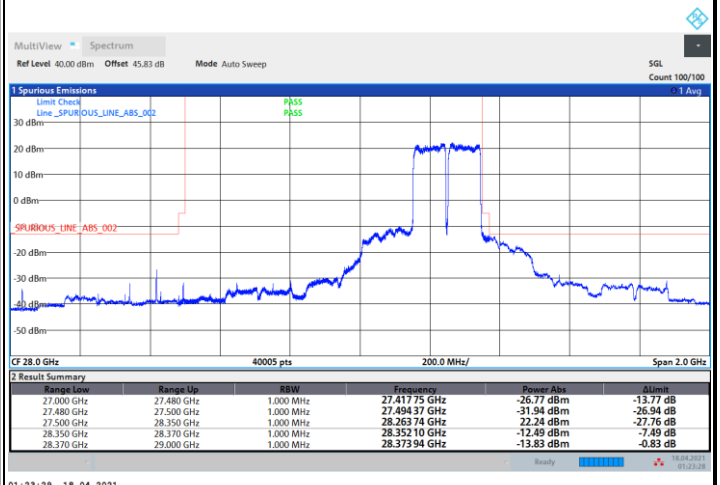
DFT-s-OFDM

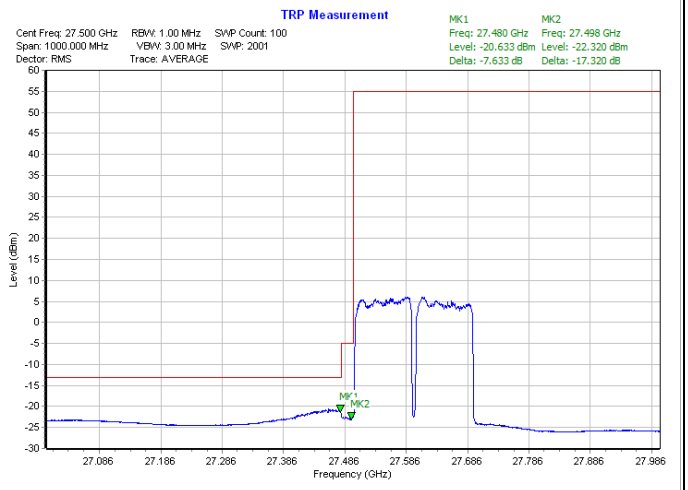
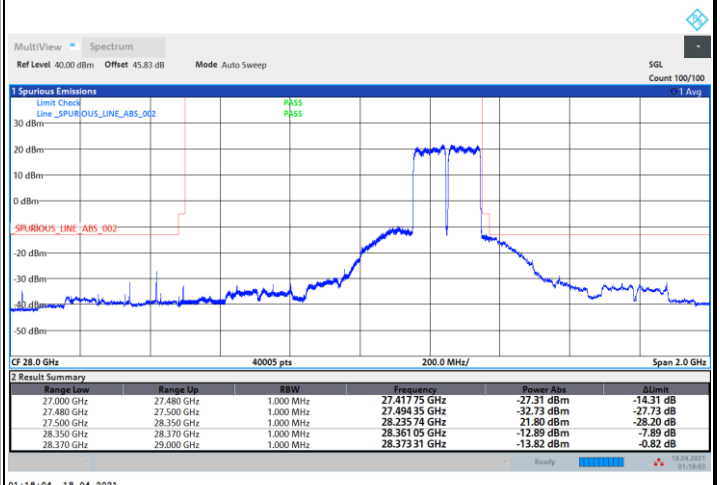
NR Band n261 / 100MHz / QPSK	
Lowest Band Edge / Full RB (32/0)	**Highest Band Edge / Full RB (32/0)**
	
NR Band n261 / 200MHz / QPSK	
Lowest Band Edge / 8 RB (8/0)	**Highest Band Edge / 8 RB (8/58)**
	

DFT-s-OFDM

NR Band n261 / 200MHz / BPSK	
Lowest Band Edge / Full RB (20/22)	**Highest Band Edge / Full RB (20/22)**
	
NR Band n261 / 200MHz / QPSK	
Lowest Band Edge / Full RB (20/22)	**Highest Band Edge / Full RB (20/22)**
	

DFT-s-OFDM

NR Band n261 / 200MHz / BPSK	
Lowest Band Edge / Full RB (64/0)	**Highest Band Edge / Full RB (64/0)**
	

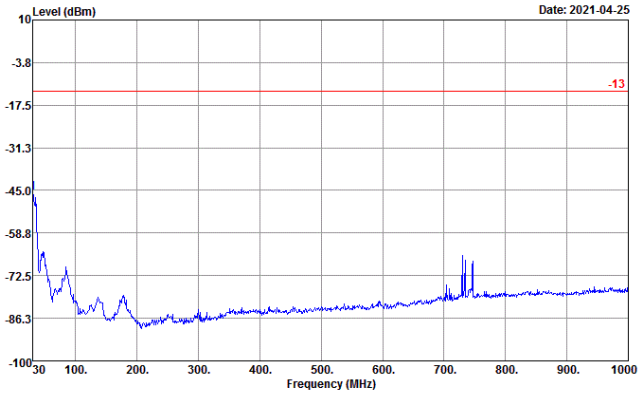
NR Band n261 / 200MHz / QPSK	
Lowest Band Edge / Full RB (64/0)	**Highest Band Edge / Full RB (64/0)**
	

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

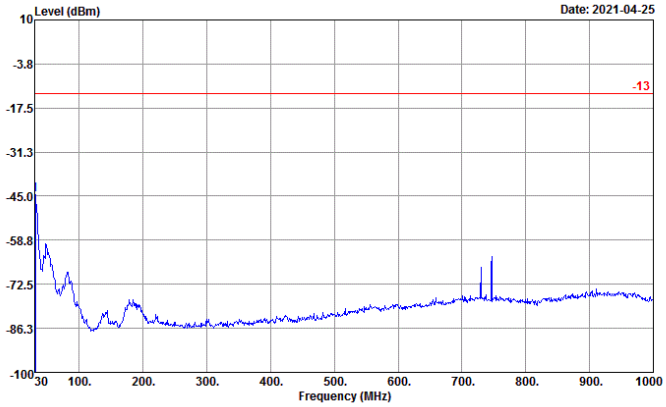


Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL

: n261 4 Module 2CC

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	30.00	-45.74	-32.74	-13.00

Vertical



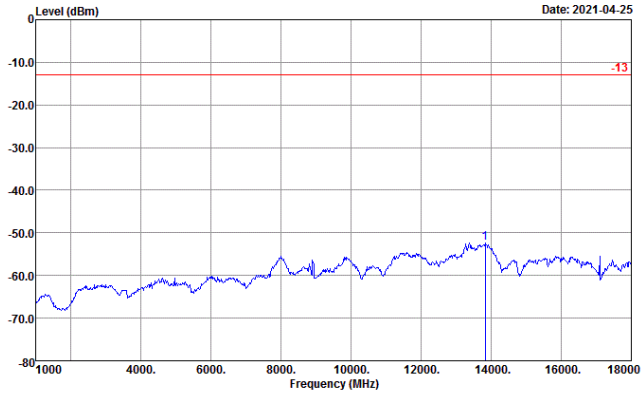
Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL

: n261 4 Module 2CC

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	30.97	-44.60	-31.60	-13.00

NR Band n261 (1GHz-18GHz)

Horizontal

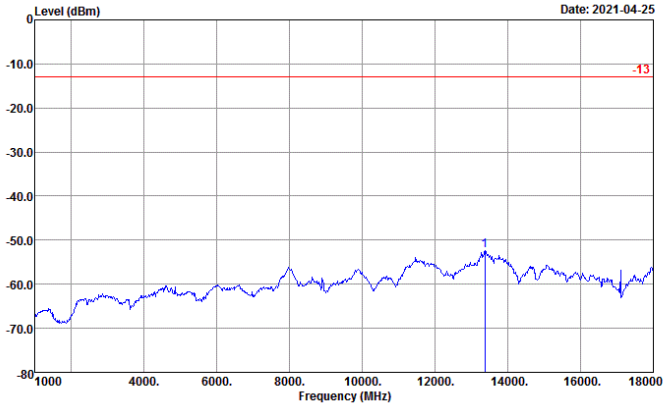


Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL

: n261 4 Module 2CC

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	13835.00	-52.33	-39.33	-13.00

Vertical



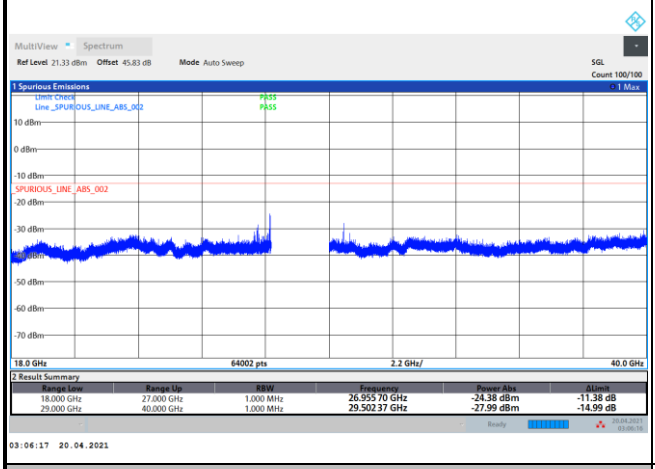
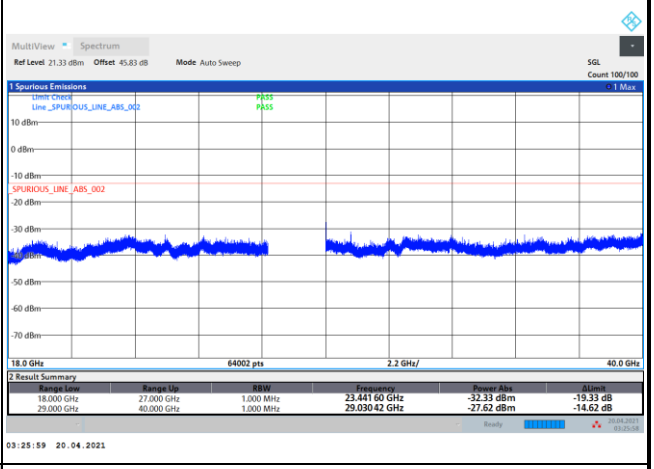
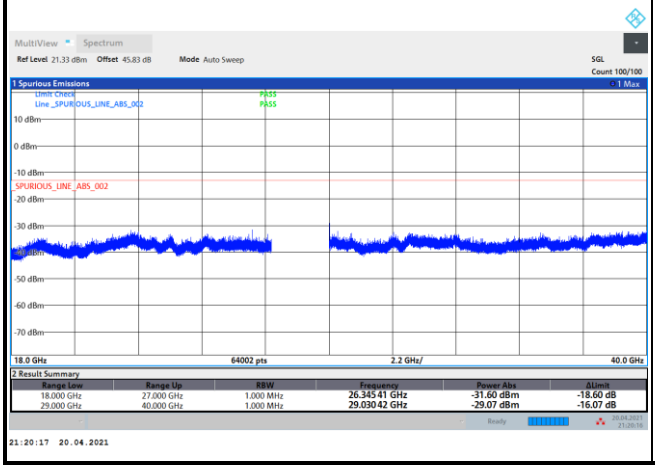
Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL

: n261 4 Module 2CC

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	13376.00	-52.34	-39.34	-13.00

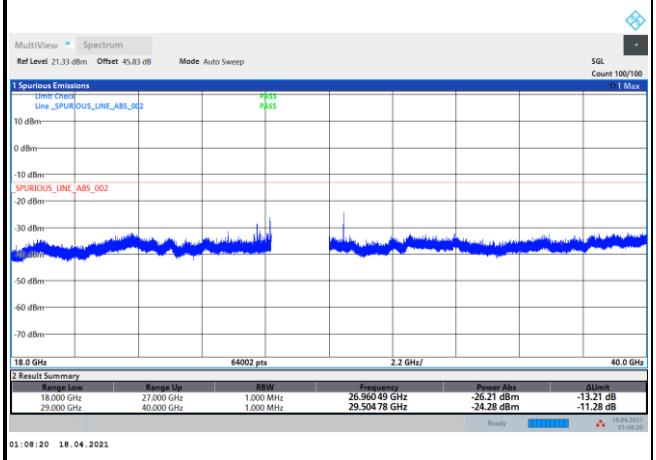
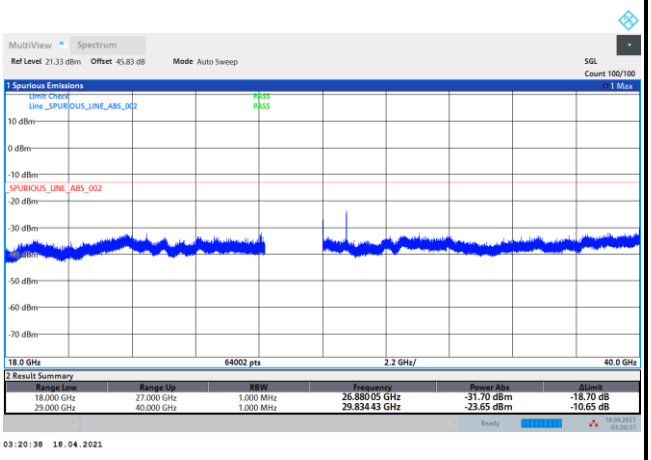
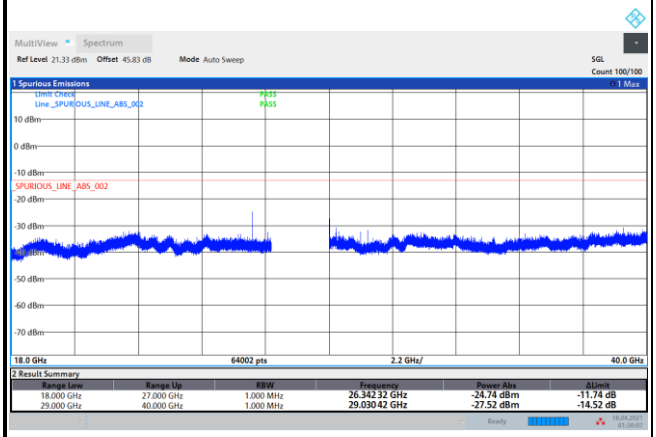
Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 100MHz	**Middle Channel / 100MHz**
	
Highest Channel / 100MHz	
	

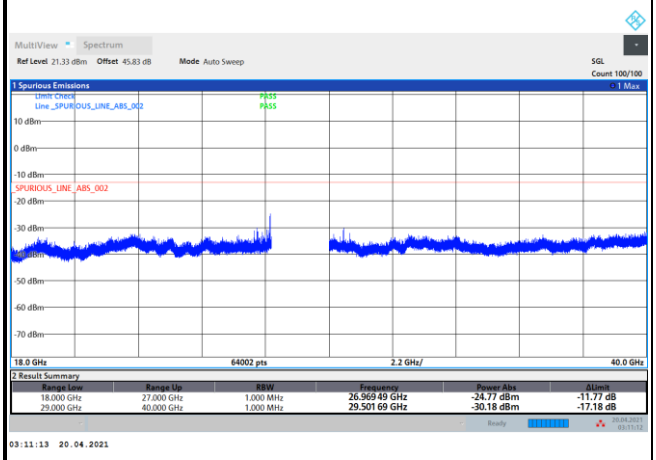
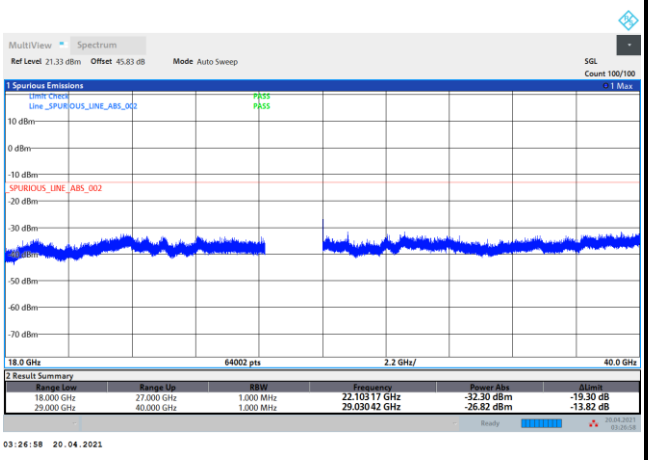
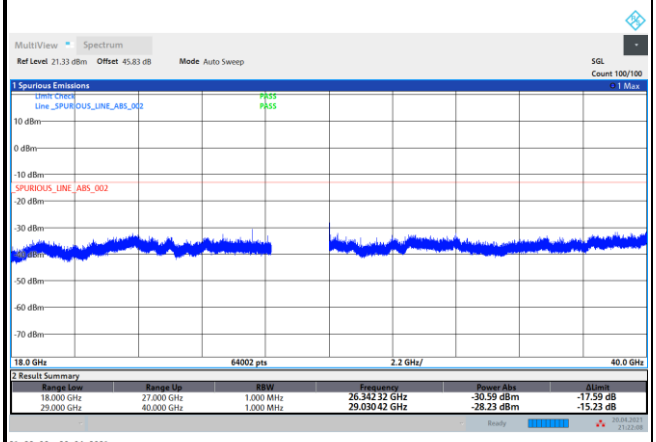
Remark: Above plots, the spurious emissions were measured from 18GHz to 27GHz and 29GHz to 40GHz. The test results within the omitted frequency 27GHz to 29GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 27GHz to 29GHz, and all spurious comply with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

DFT-s-OFDM

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 200MHz	**Middle Channel / 200MHz**
	
Highest Channel / 200MHz	
	

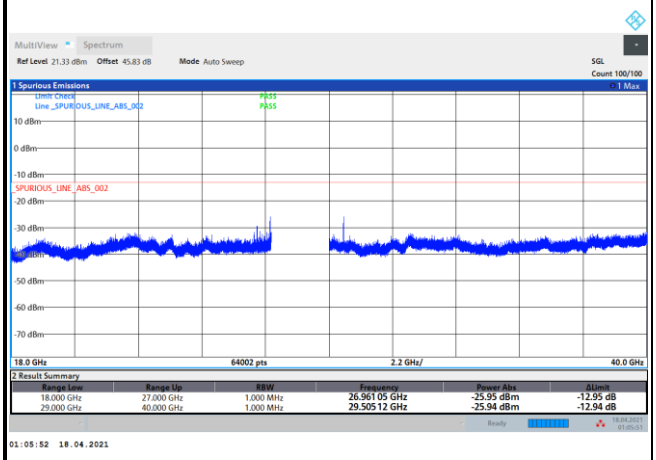
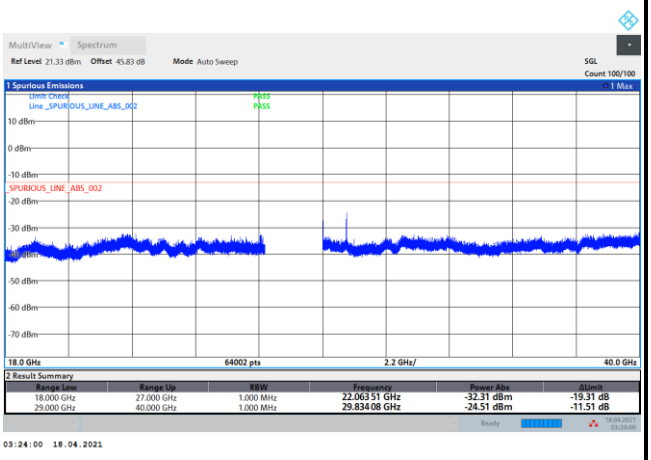
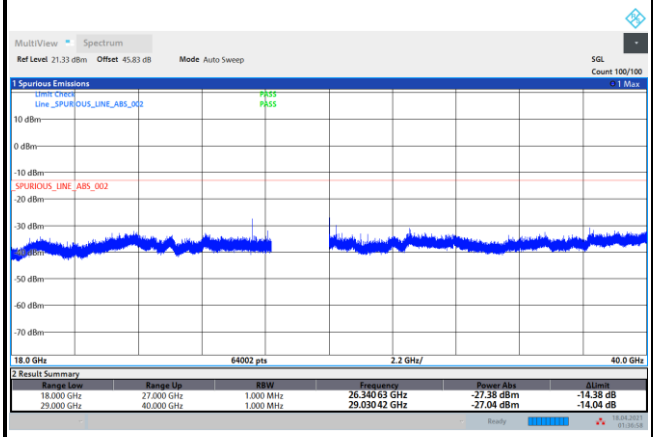
Remark: Above plots, the spurious emissions were measured from 18GHz to 27GHz and 29GHz to 40GHz. The test results within the omitted frequency 27GHz to 29GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 27GHz to 29GHz, and all spurious comply with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

CP-OFDM

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 100MHz	**Middle Channel / 100MHz**
	
Highest Channel / 100MHz	
	

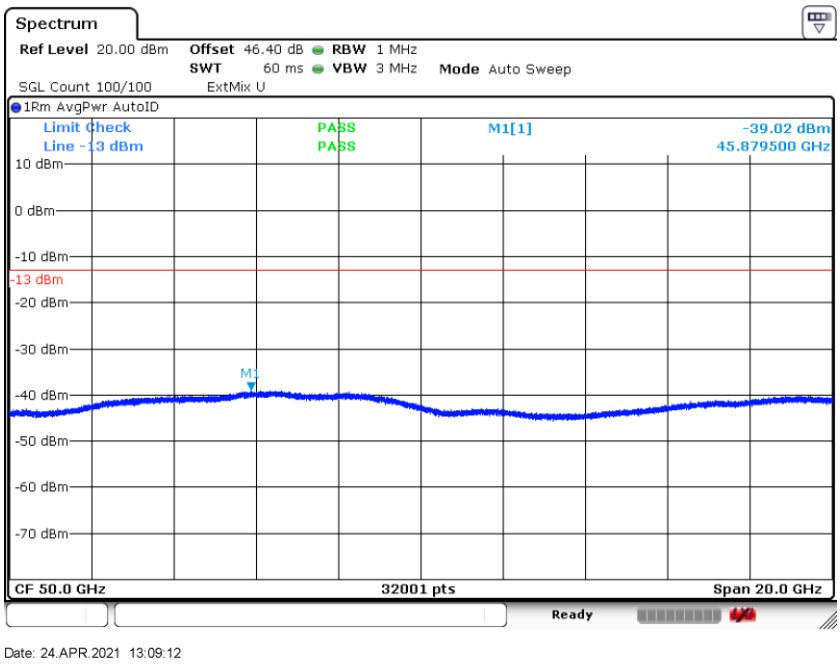
Remark: Above plots, the spurious emissions were measured from 18GHz to 27GHz and 29GHz to 40GHz. The test results within the omitted frequency 27GHz to 29GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 27GHz to 29GHz, and all spurious comply with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

CP-OFDM

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.

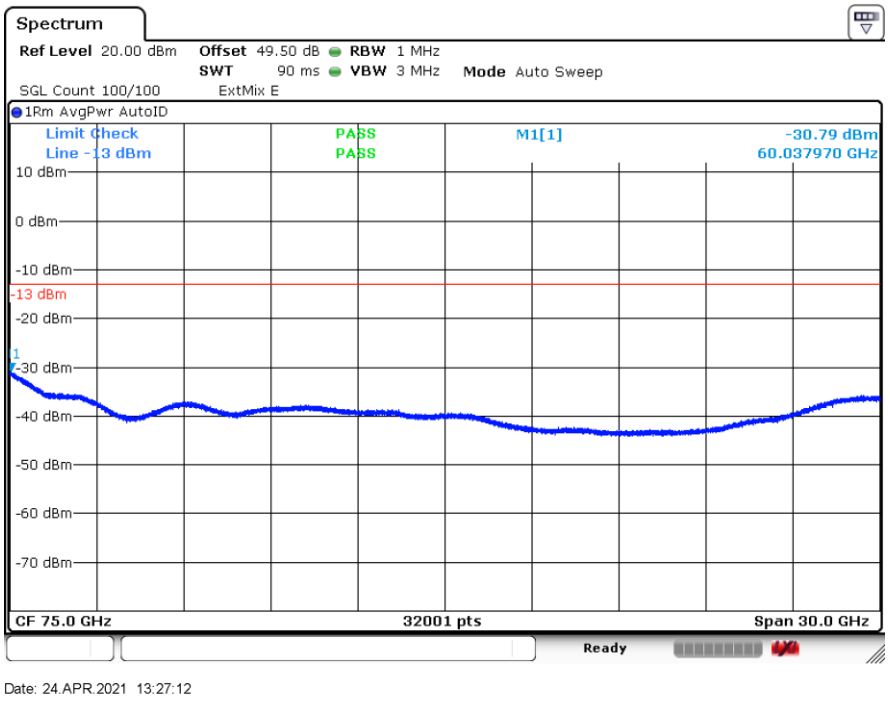
NR Band n261
(40GHz-60GHz)



Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 42.3 + 0.34 + 107 + 20log(1.2) – 104.8 = 46.4 (dB)

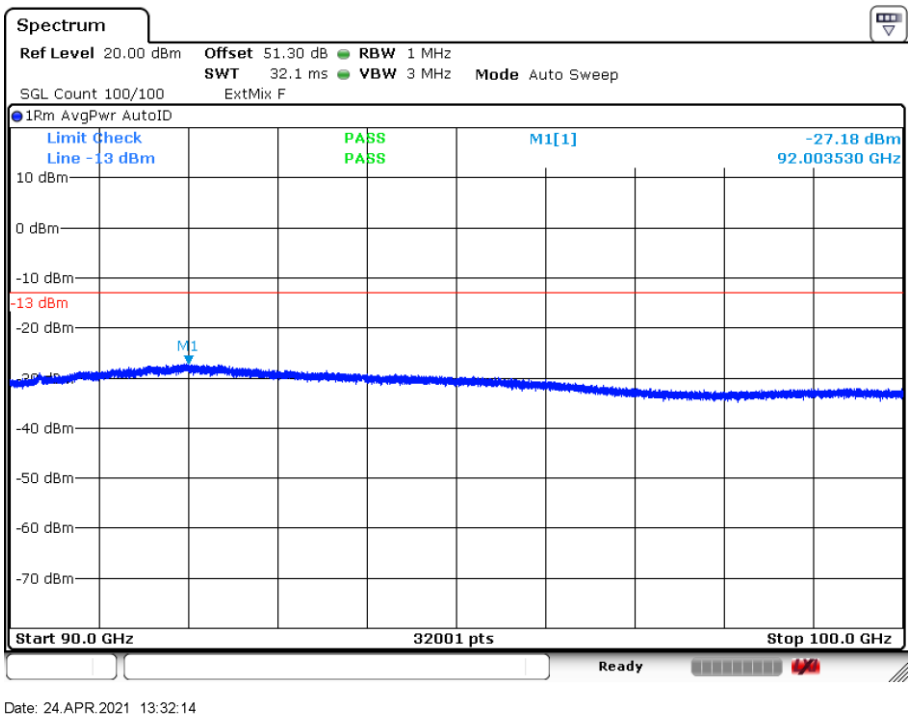
NR Band n261
(60GHz-90GHz)



Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 45.4 + 0.34 + 107 + 20log(1.2) – 104.8 = 49.5 (dB)

NR Band n261
(90GHz-100GHz)



Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 47.2 + 0.34 + 107 + 20log(1.2) – 104.8 = 51.3 (dB)

Frequency Stability

Test Conditions		NR Band n261 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	120	27.8747572	242.800	8.710	PASS
40	120	27.8747592	240.800	8.639	
30	120	27.875058	-58.000	2.081	
20(Ref.)	120	27.875	0.000	0.000	
10	120	27.875037	-37.000	1.327	
0	120	27.8750839	-83.900	3.010	
-10	120	27.8751119	-111.900	4.014	
-20	120	27.8751119	-111.900	4.014	
-30	120	27.8750589	-58.900	2.113	
20	102	27.874984	16.000	0.574	
20	120	27.875	0.000	0.000	
20	138	27.87499	10.000	0.359	

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

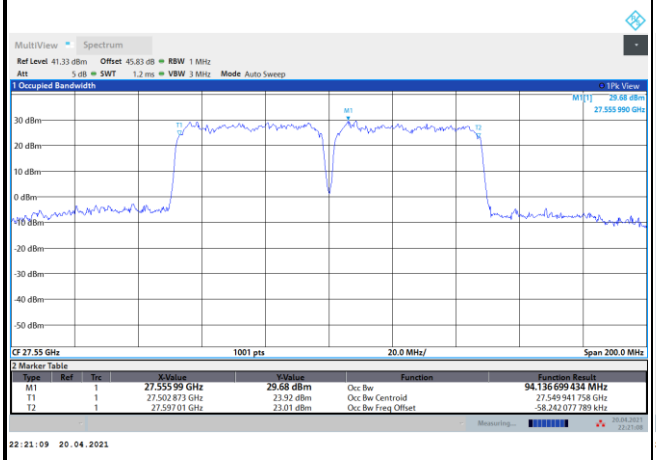
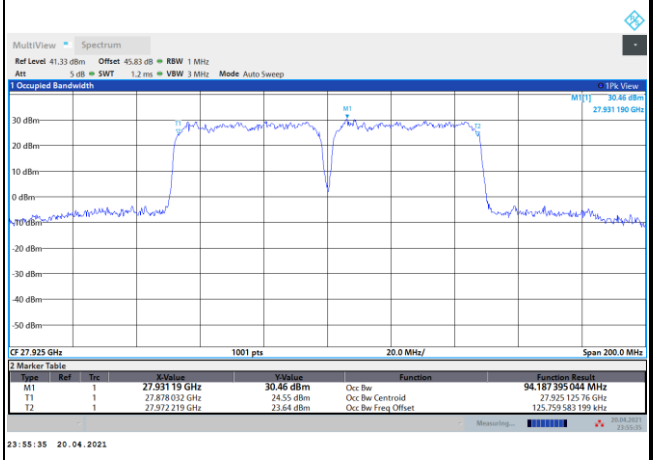
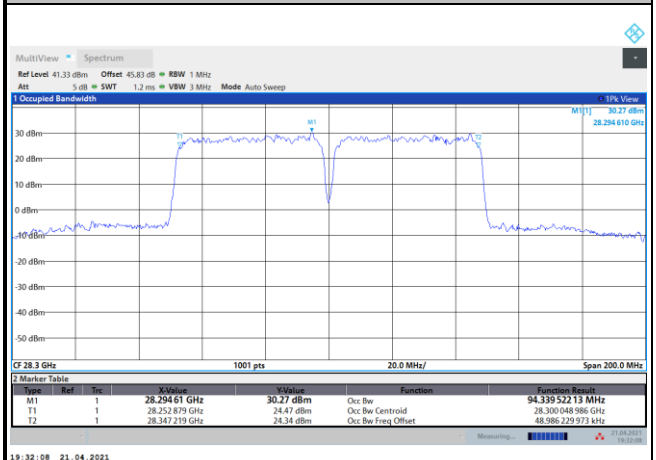
Appendix B.5 Radiated Test: NR Band n261 (Beam ID: 63)

Occupied Bandwidth

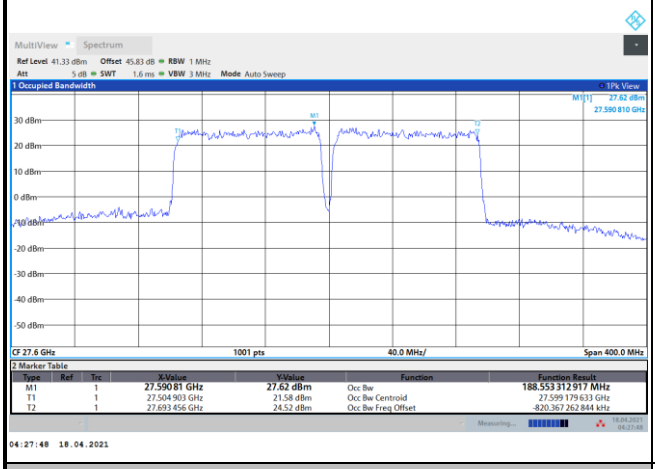
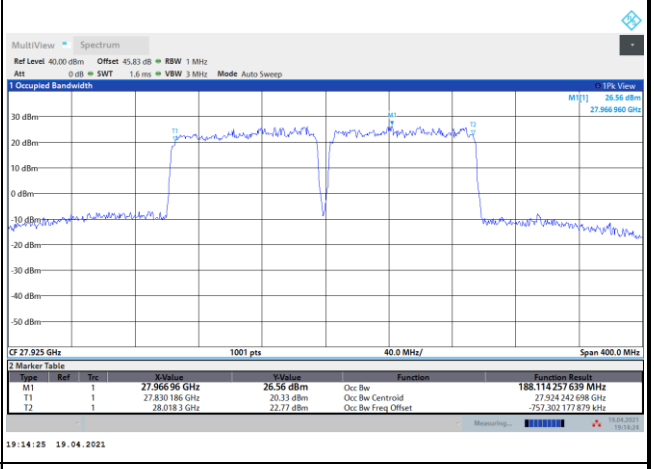
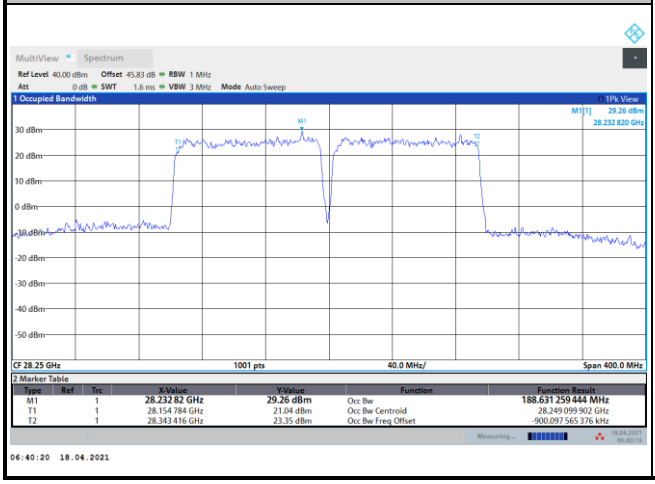
Mode	DFT-s-OFDM NR Band n261 : 99%OBW(MHz)	
BW	100MHz	200MHz
Mod.	QPSK	QPSK
Lowest CH	94.13	188.55
Middle CH	94.18	188.11
Highest CH	94.33	188.63

Mode	CP-OFDM NR Band n261 : 99%OBW(MHz)	
BW	100MHz	200MHz
Mod.	QPSK	QPSK
Lowest CH	94.03	191.07
Middle CH	94.22	188.50
Highest CH	94.13	188.42

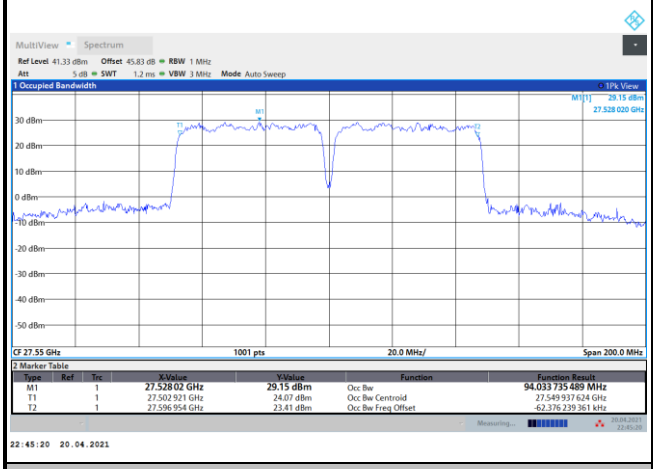
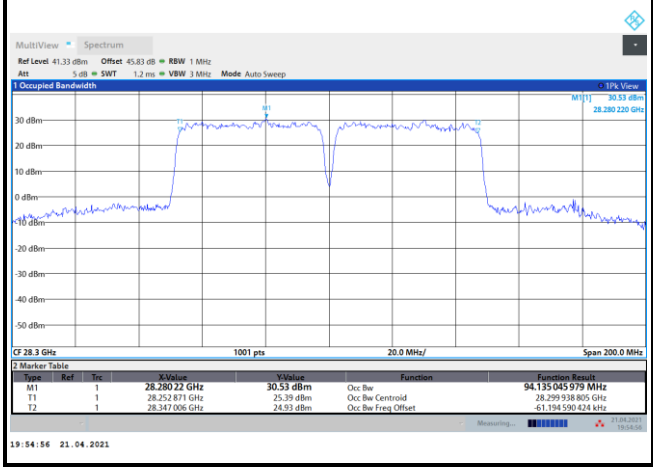
DFT-s-OFDM

NR Band n261	
Lowest Channel / 100MHz / QPSK	**Middle Channel / 100MHz / QPSK**
	
Highest Channel / 100MHz / QPSK	
	

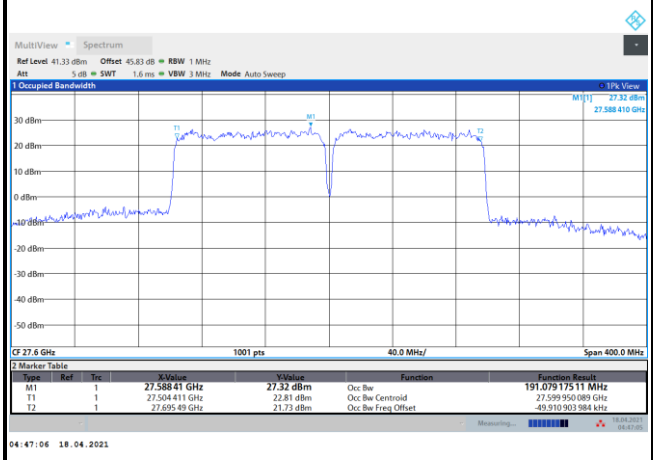
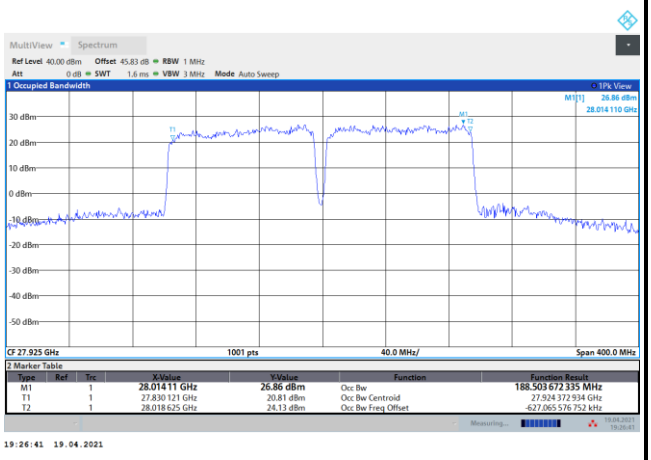
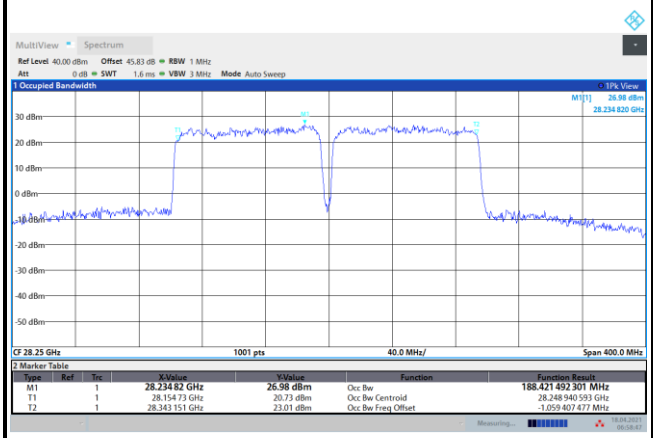
DFT-s-OFDM

NR Band n261	
Lowest Channel / 200MHz / QPSK	**Middle Channel / 200MHz / QPSK**
	
Highest Channel / 200MHz / QPSK	
	

CP-OFDM

NR Band n261	
Lowest Channel / 100MHz / QPSK	**Middle Channel / 100MHz / QPSK**
	
Highest Channel / 100MHz / QPSK	
	

CP-OFDM

NR Band n261	
Lowest Channel / 200MHz / QPSK	**Middle Channel / 200MHz / QPSK**
	
Highest Channel / 200MHz / QPSK	
	

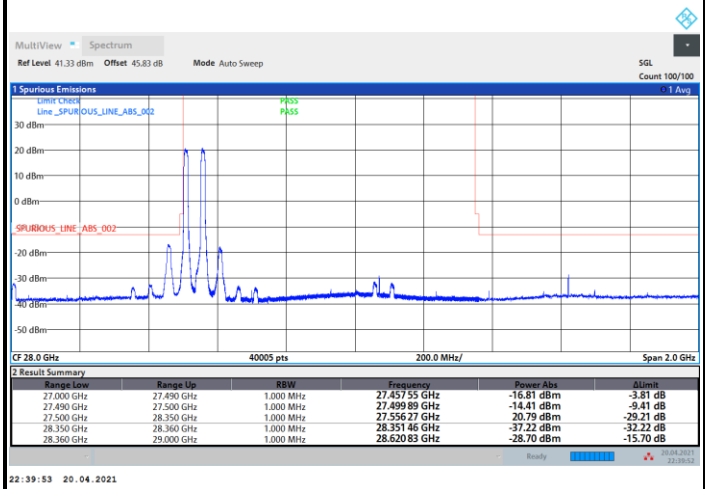
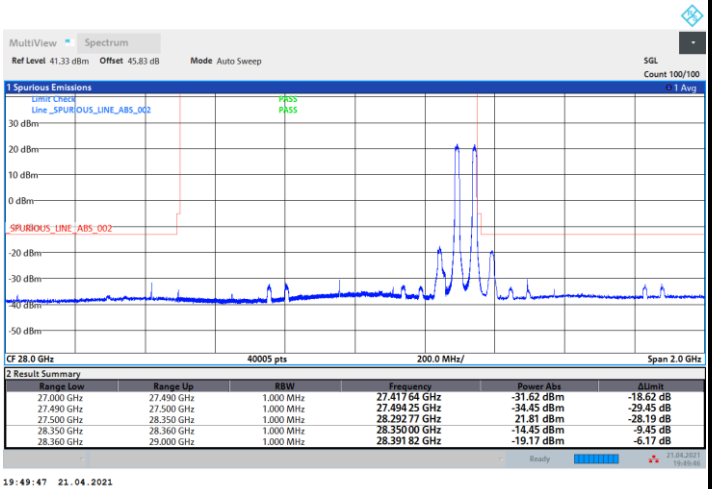
Radiated Out of Band Emissions

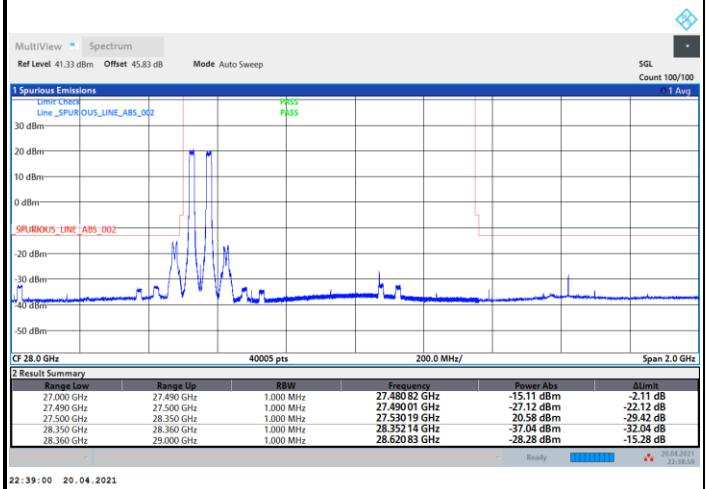
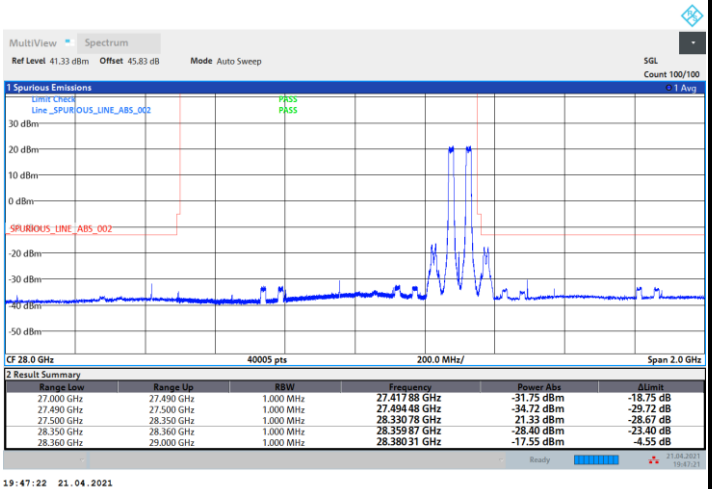
Test Result:

Mode		DFT-s-OFDM NR Band n261							
Channel	BW (MHz)	Modulation	RB Size/ allocation	0 ~ 10 %OB Limit (dBm/MHz)	0 ~ 10 %OB PSD (dBm/MHz)	Result	>10%OB Limit (dBm/MHz)	>10%OB PSD (dBm/MHz)	Result
Low	100	QPSK	32/0	-5	-24.53	Pass	-13	-22.78	Pass
Low	100	BPSK	32/0	-5	-24.61	Pass	-13	-22.85	Pass
Low	100	QPSK	8/0	-5	-14.41	Pass	-13	-16.81	Pass
Low	100	QPSK	10/11	-5	-26.23	Pass	-13	-15.75	Pass
Low	100	BPSK	10/11	-5	-27.12	Pass	-13	-15.11	Pass
High	100	QPSK	32/0	-5	-13.11	Pass	-13	-14.45	Pass
High	100	BPSK	32/0	-5	-11.26	Pass	-13	-15.09	Pass
High	100	QPSK	8/24	-5	-14.45	Pass	-13	-19.17	Pass
High	100	QPSK	10/11	-5	-27.57	Pass	-13	-18.57	Pass
High	100	BPSK	10/11	-5	-28.4	Pass	-13	-17.55	Pass
Low	200	QPSK	64/0	-5	-13.29	Pass	-13	-13.97	Pass
Low	200	BPSK	64/0	-5	-13.22	Pass	-13	-14	Pass
Low	200	QPSK	8/0	-5	-17	Pass	-13	-19.28	Pass
Low	200	QPSK	20/22	-5	-29.07	Pass	-13	-18.21	Pass
Low	200	BPSK	20/22	-5	-29.94	Pass	-13	-17.35	Pass
High	200	QPSK	64/0	-5	-17.41	Pass	-13	-17.95	Pass
High	200	BPSK	64/0	-5	-17.19	Pass	-13	-18.65	Pass
High	200	QPSK	8/58	-5	-18.4	Pass	-13	-21.17	Pass
High	200	QPSK	20/22	-5	-30.42	Pass	-13	-21.11	Pass
High	200	BPSK	20/22	-5	-30.08	Pass	-13	-20.45	Pass

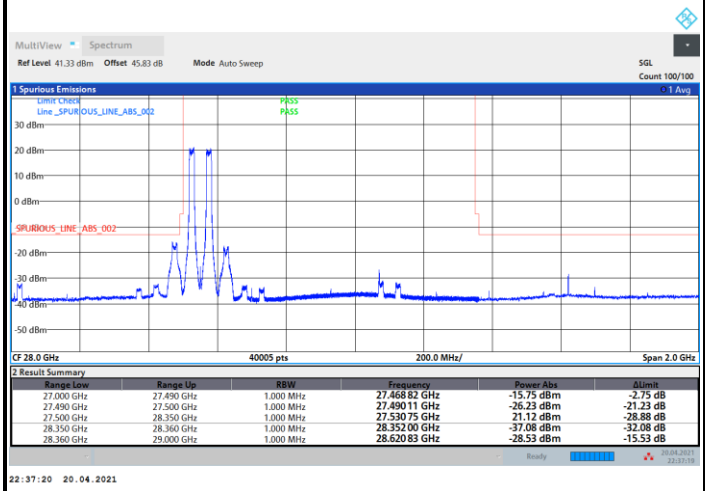
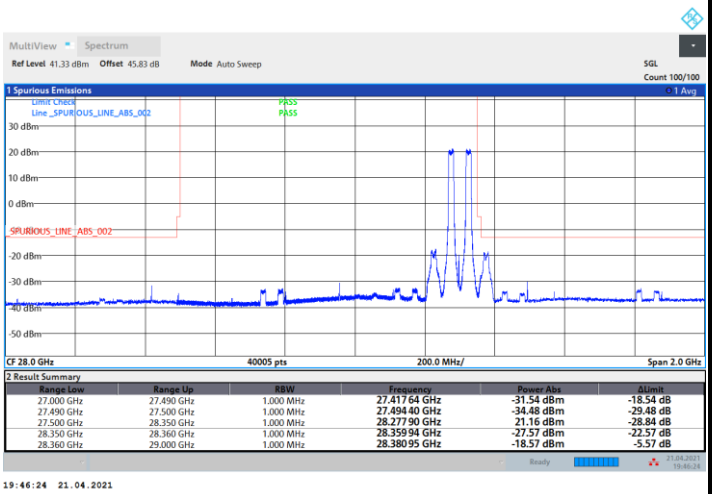
Note: Both DFT-s-ODFM and CP-OFDM waveforms are evaluated, and the DFT-s-ODFM is the worst case.

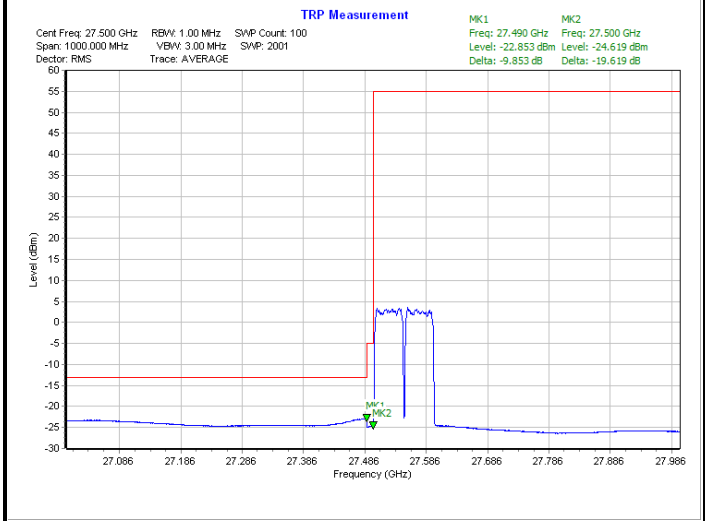
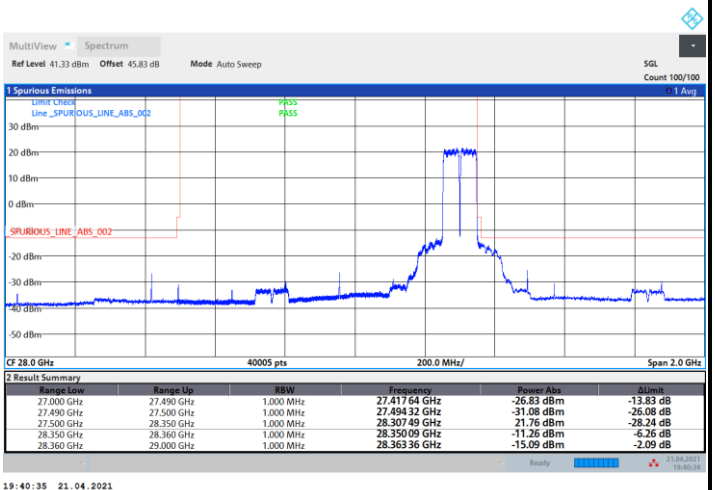
DFT-s-OFDM

NR Band n261 / 100MHz / QPSK	
Lowest Band Edge / 8 RB (8/0)	**Highest Band Edge / 8 RB (8/24)**
	

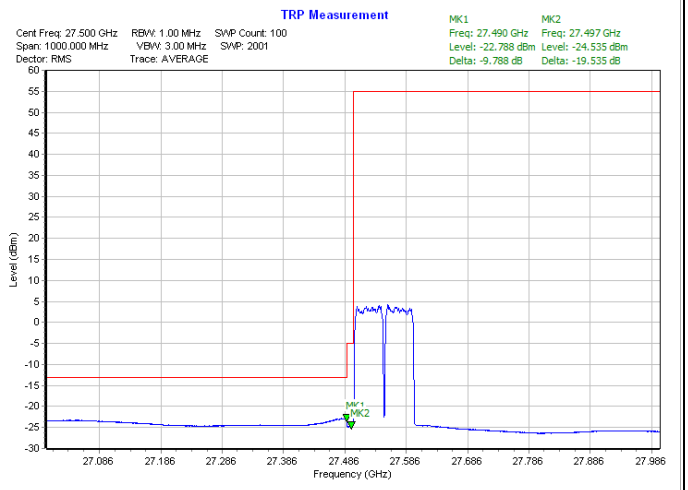
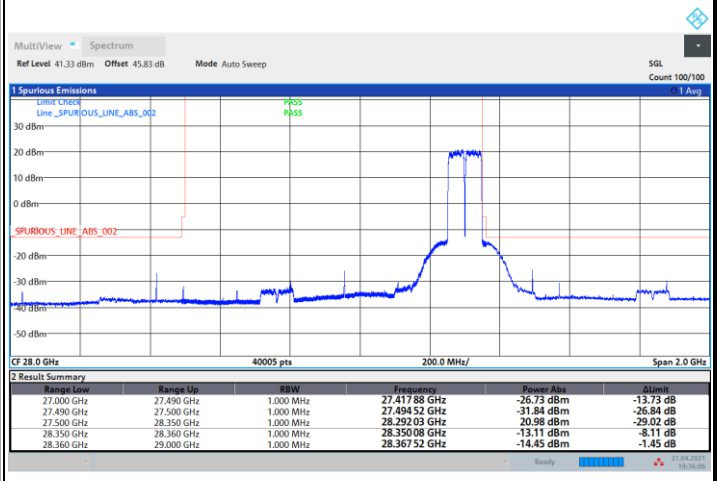
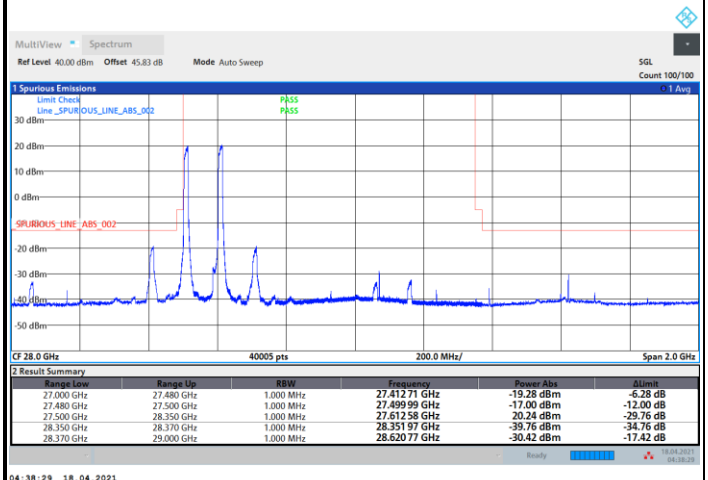
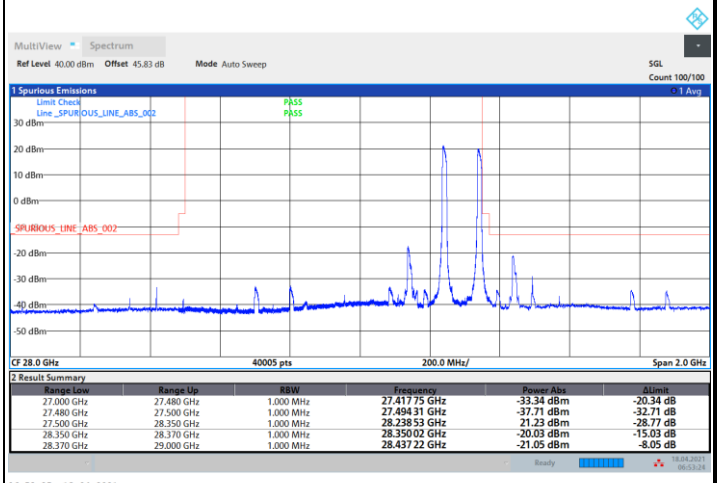
NR Band n261 / 100MHz / BPSK	
Lowest Band Edge / Full RB (10/11)	**Highest Band Edge / Full RB (10/11)**
	

DFT-s-OFDM

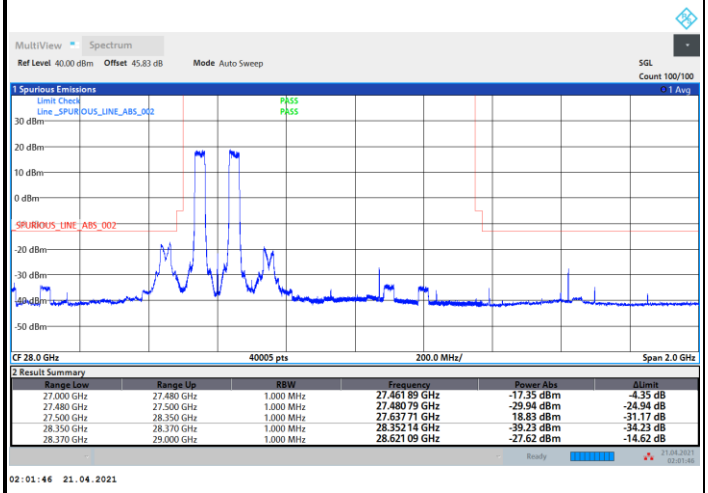
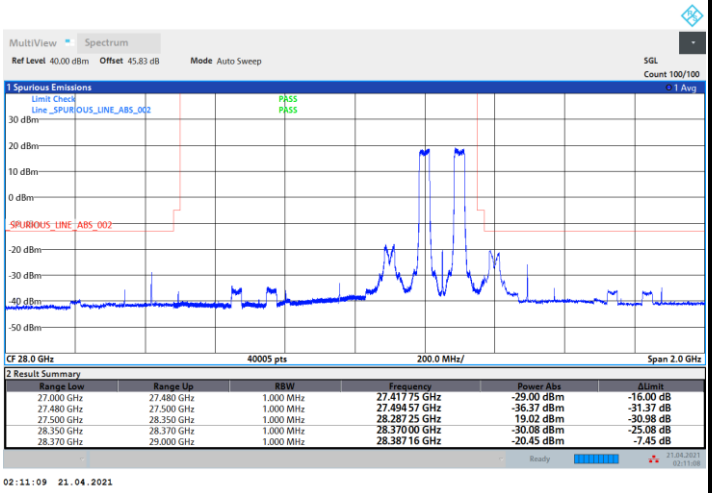
NR Band n261 / 100MHz / QPSK	
Lowest Band Edge / Full RB (10/11)	**Highest Band Edge / Full RB (32/0)**
	
22:37:20 20.04.2021	19:46:24 21.04.2021

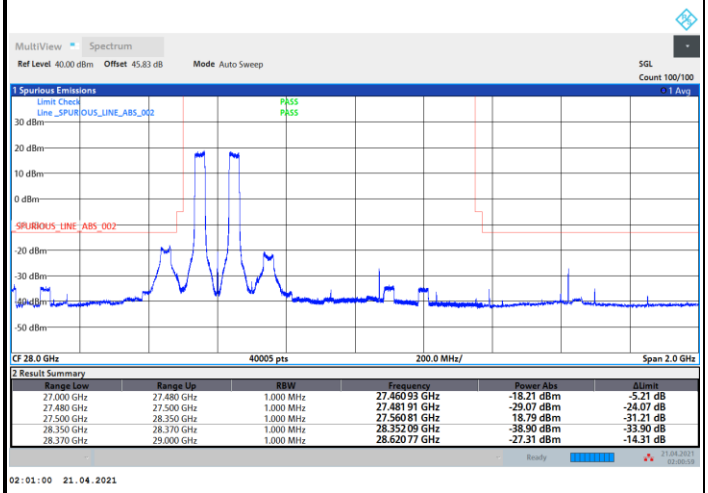
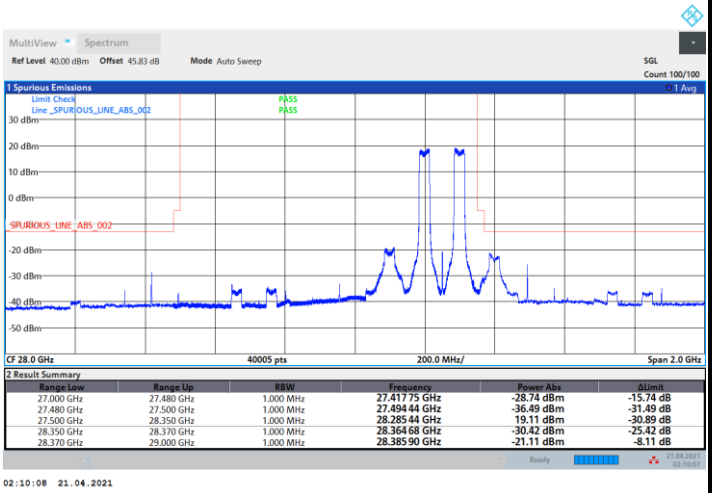
NR Band n261 / 100MHz / BPSK	
Lowest Band Edge / Full RB (32/0)	**Highest Band Edge / Full RB (32/0)**
	
	19:40:35 21.04.2021

DFT-s-OFDM

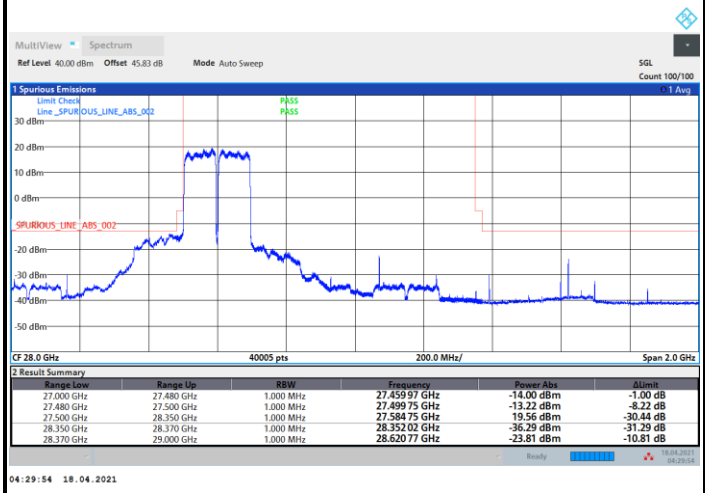
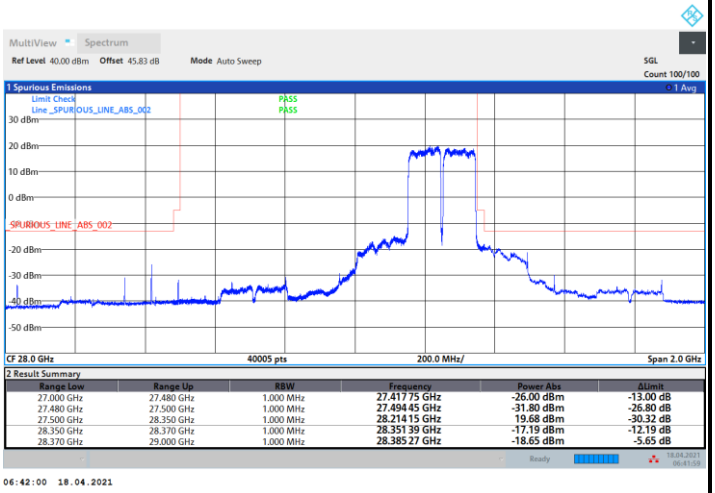
NR Band n261 / 100MHz / QPSK	
Lowest Band Edge / Full RB (32/0)	**Highest Band Edge / Full RB (32/0)**
	
NR Band n261 / 200MHz / QPSK	
Lowest Band Edge / 8 RB (8/0)	**Highest Band Edge / 8 RB (8/58)**
	

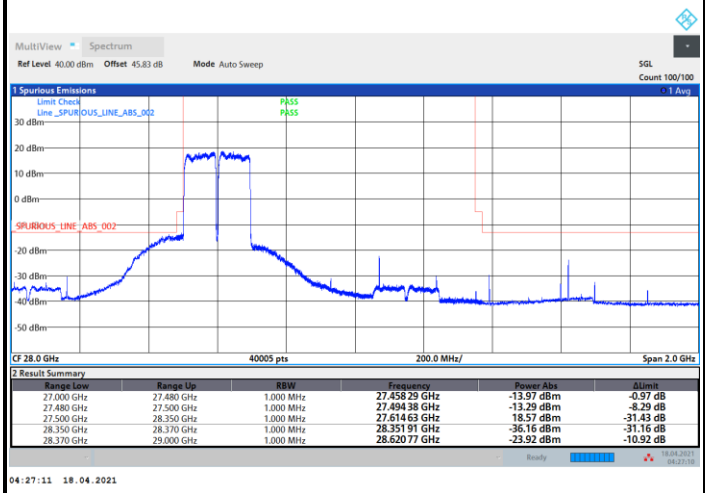
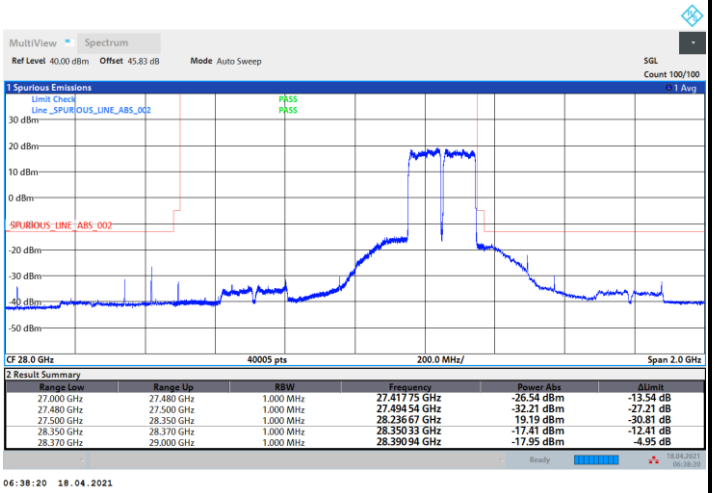
DFT-s-OFDM

NR Band n261 / 200MHz / BPSK	
Lowest Band Edge / Full RB (20/22)	**Highest Band Edge / Full RB (20/22)**
	
02:01:46 21.04.2021	02:11:09 21.04.2021

NR Band n261 / 200MHz / QPSK	
Lowest Band Edge / Full RB (20/22)	**Highest Band Edge / Full RB (20/22)**
	
02:01:00 21.04.2021	02:10:08 21.04.2021

DFT-s-OFDM

NR Band n261 / 200MHz / BPSK	
Lowest Band Edge / Full RB (64/0)	**Highest Band Edge / Full RB (64/0)**
	
04:29:54 18.04.2021	06:42:00 18.04.2021

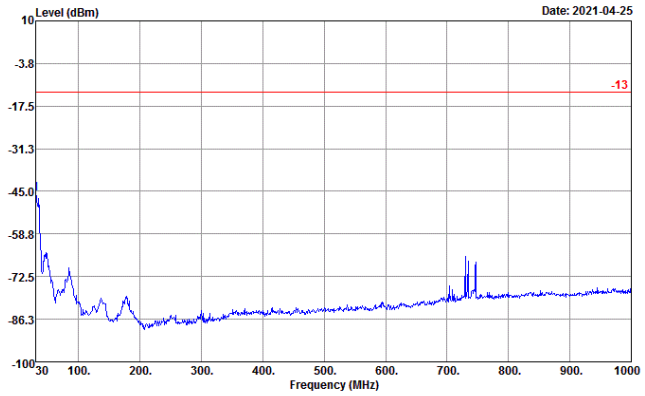
NR Band n261 / 200MHz / QPSK	
Lowest Band Edge / Full RB (64/0)	**Highest Band Edge / Full RB (64/0)**
	
04:27:11 18.04.2021	06:38:20 18.04.2021

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

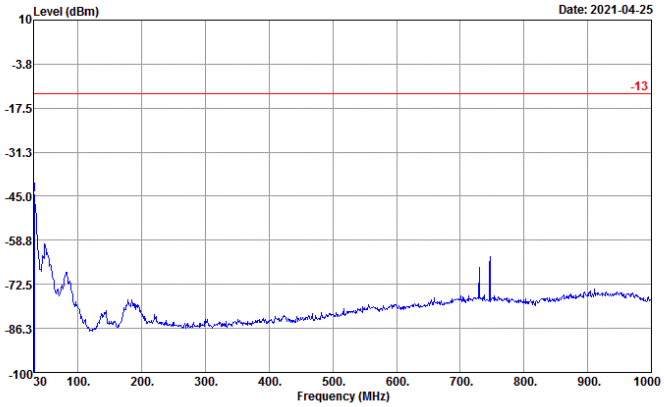


Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL

: n261 4 Module 2CC

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	30.00	-45.74	-32.74	-13.00

Vertical



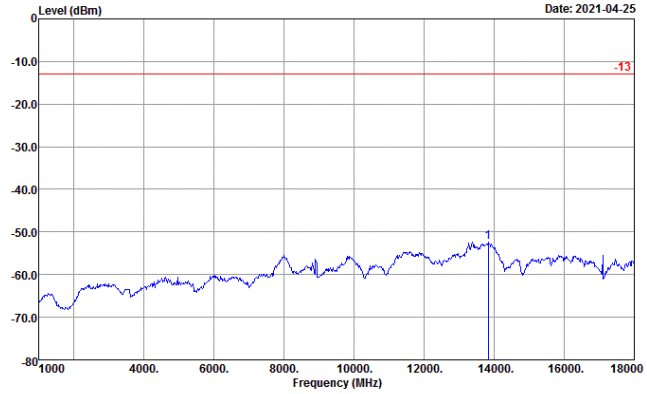
Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL

: n261 4 Module 2CC

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	30.97	-44.60	-31.60	-13.00

NR Band n261 (1GHz-18GHz)

Horizontal

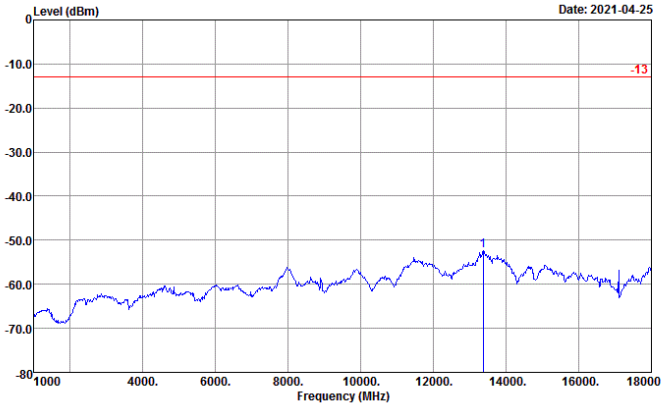


Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL

: n261 4 Module 2CC

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	13835.00	-52.33	-39.33	-13.00

Vertical



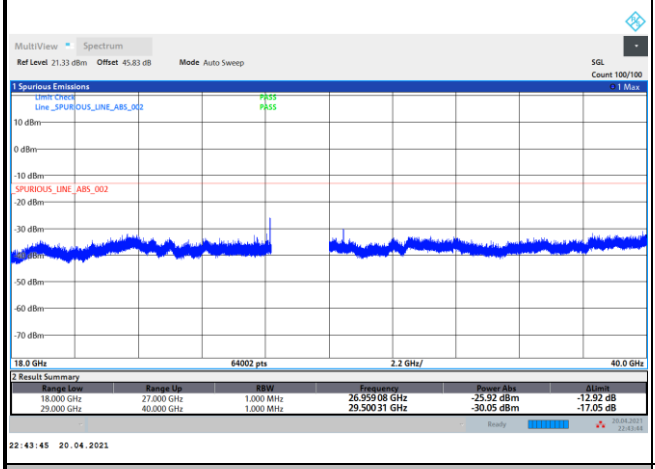
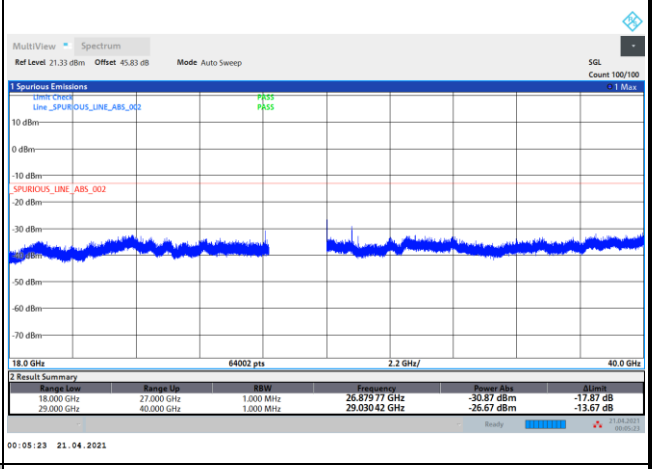
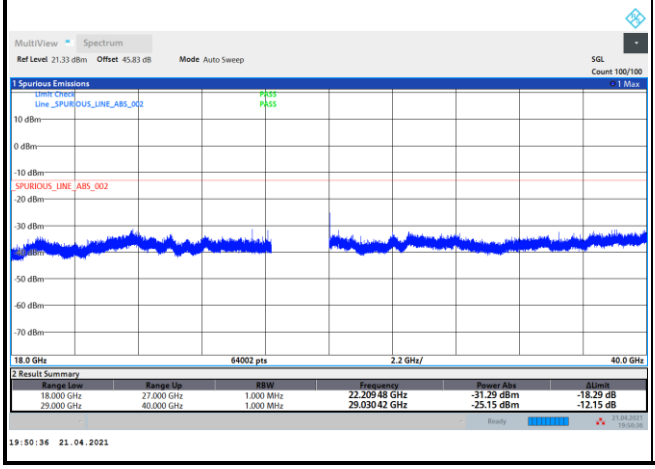
Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL

: n261 4 Module 2CC

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	13376.00	-52.34	-39.34	-13.00

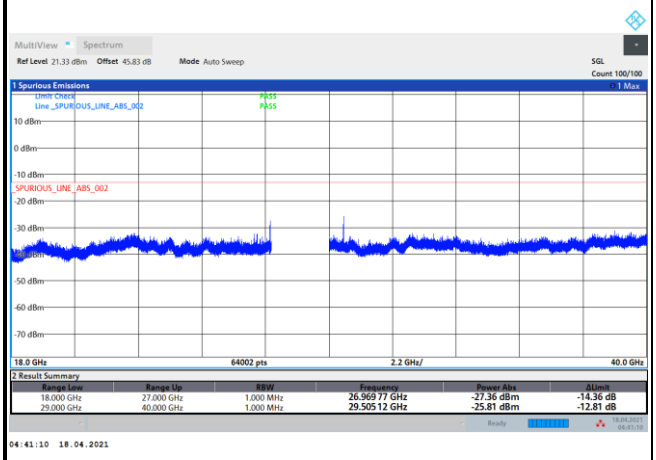
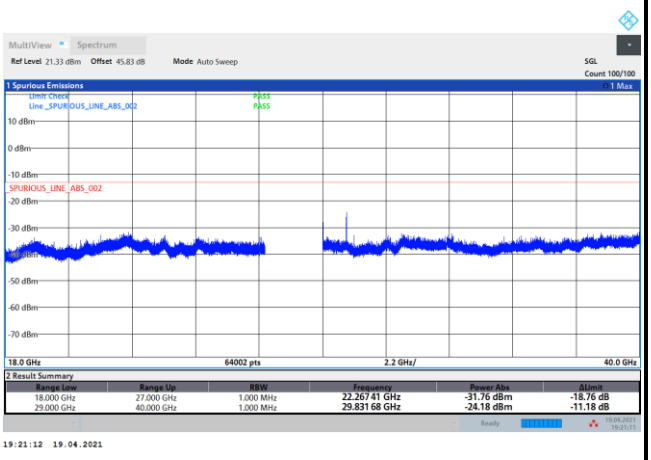
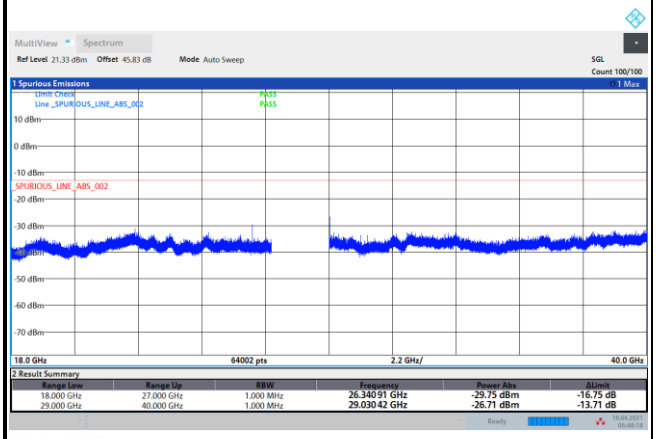
Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 100MHz	**Middle Channel / 100MHz**
	
Highest Channel / 100MHz	
	

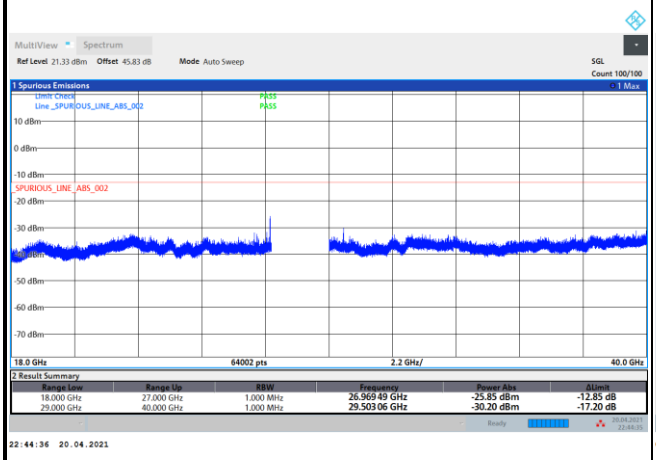
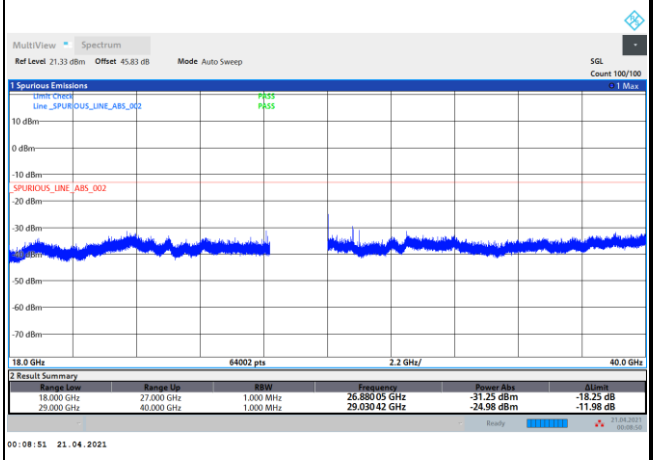
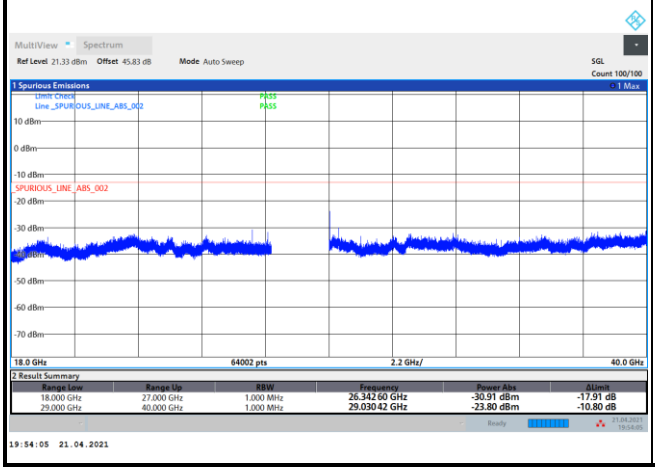
Remark: Above plots, the spurious emissions were measured from 18GHz to 27GHz and 29GHz to 40GHz. The test results within the omitted frequency 27GHz to 29GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 27GHz to 29GHz, and all spurious comply with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

DFT-s-OFDM

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 200MHz	**Middle Channel / 200MHz**
	
Highest Channel / 200MHz	
	

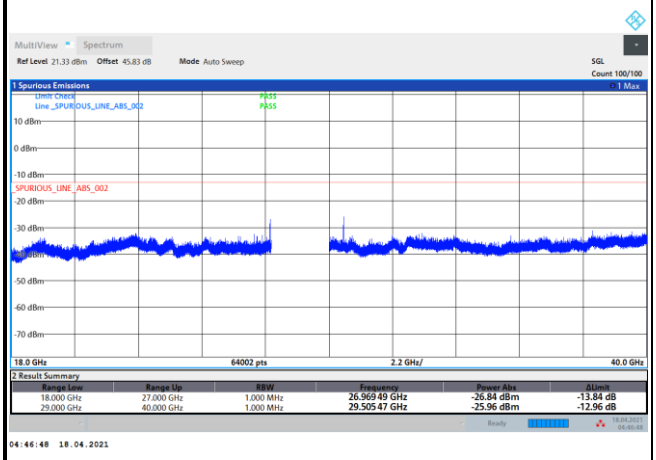
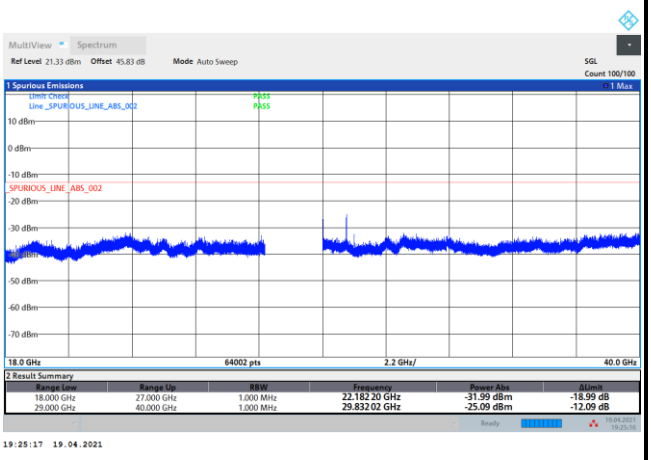
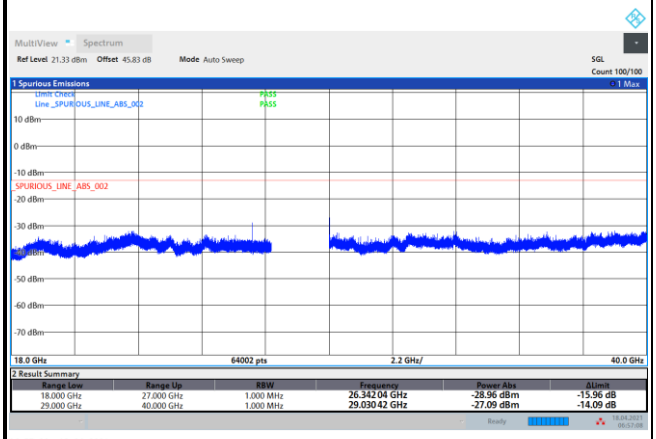
Remark: Above plots, the spurious emissions were measured from 18GHz to 27GHz and 29GHz to 40GHz. The test results within the omitted frequency 27GHz to 29GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 27GHz to 29GHz, and all spurious comply with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

CP-OFDM

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 100MHz	**Middle Channel / 100MHz**
	
Highest Channel / 100MHz	
	

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

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 200MH	**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.