

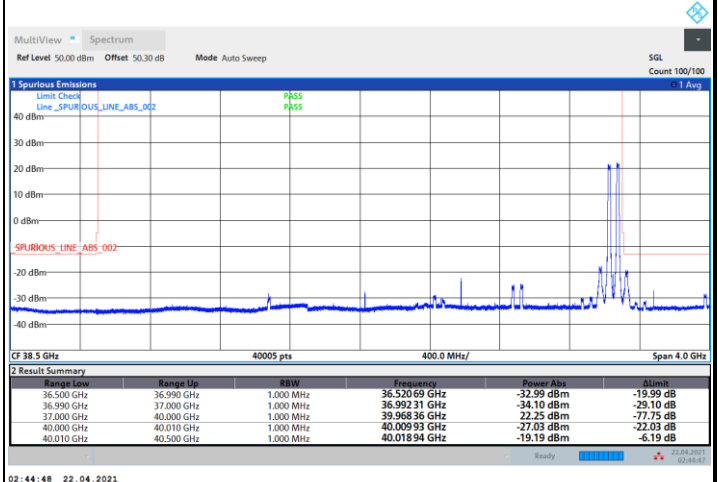
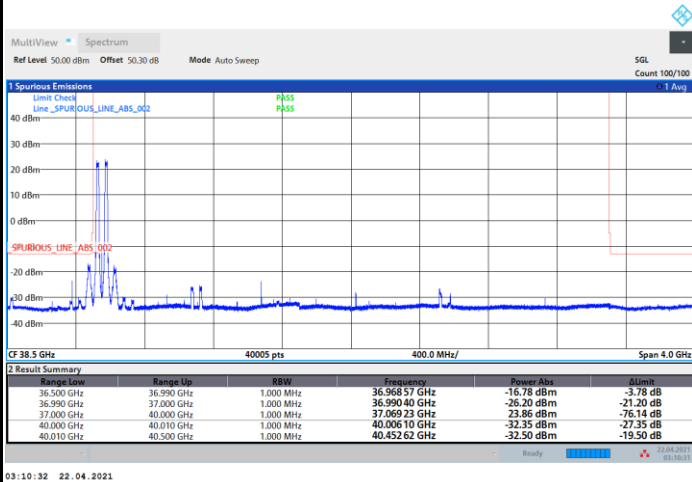


DFT-s-OFDM

NR Band n260 / 100MHz / QPSK

Lowest Band Edge / Full RB (10/11)

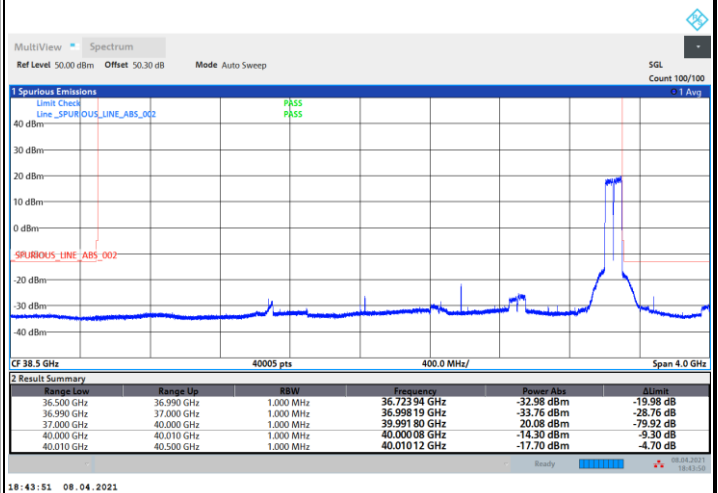
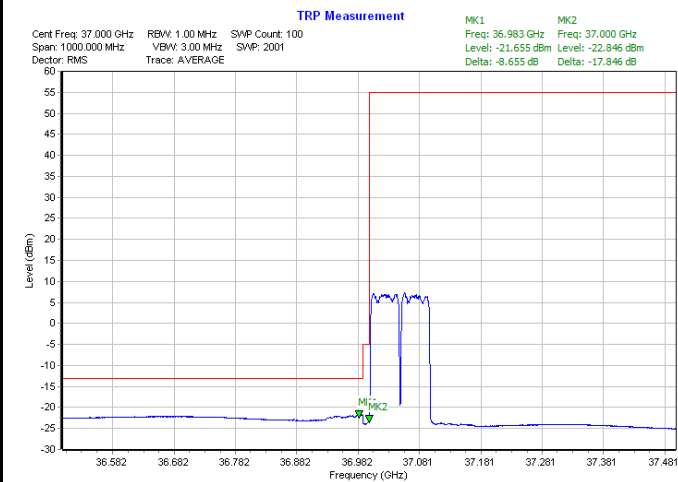
Highest Band Edge / Full RB (10/11)



NR Band n260 / 100MHz / BPSK

Lowest Band Edge / Full RB (32/0)

Highest Band Edge / Full RB (32/0)



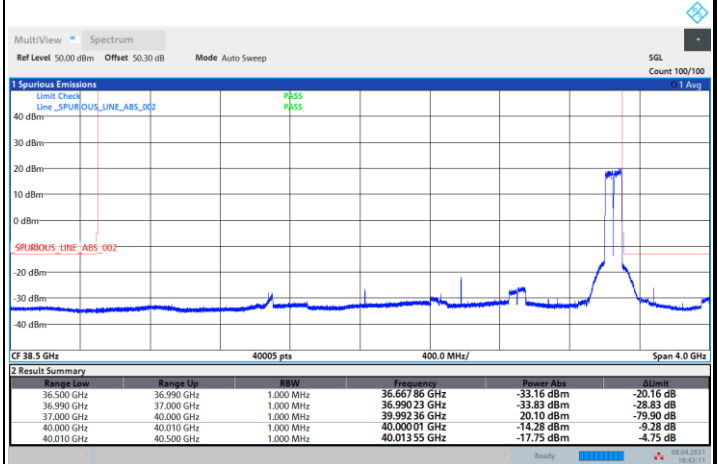
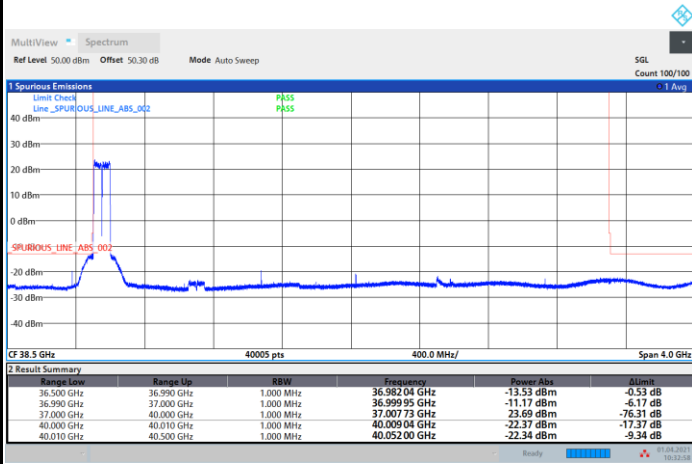


DFT-s-OFDM

NR Band n260 / 100MHz / QPSK

Lowest Band Edge / Full RB (32/0)

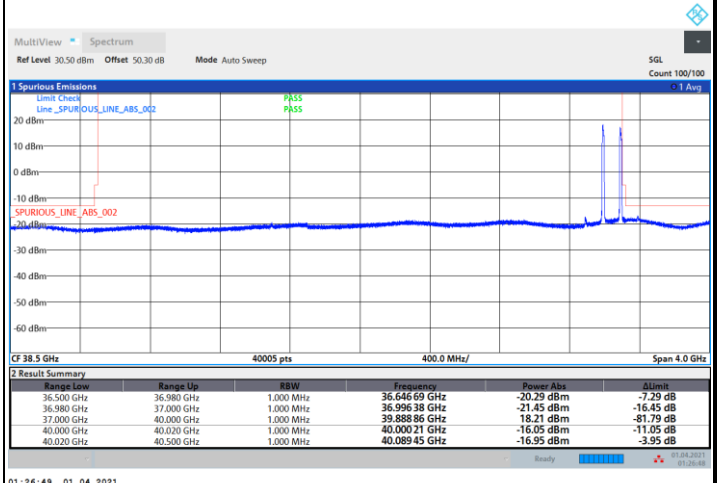
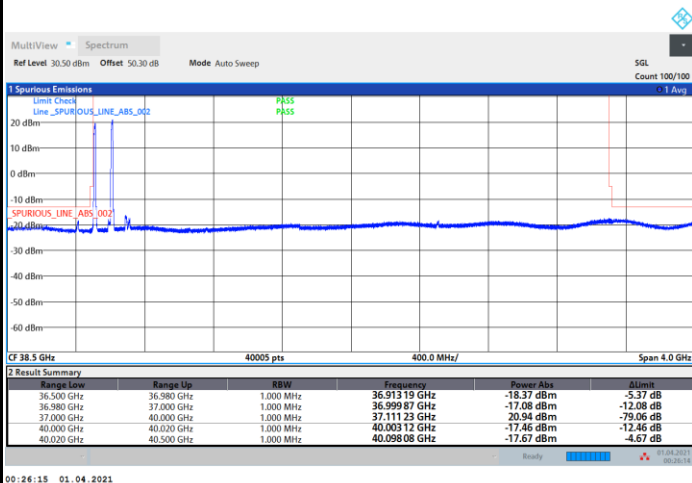
Highest Band Edge / Full RB (32/0)



NR Band n260 / 200MHz / QPSK

Lowest Band Edge / 8 RB (8/0)

Highest Band Edge / 8 RB (8/58)



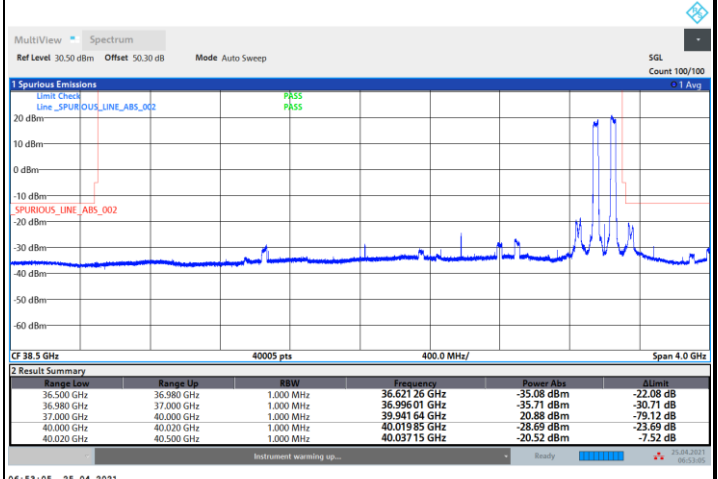
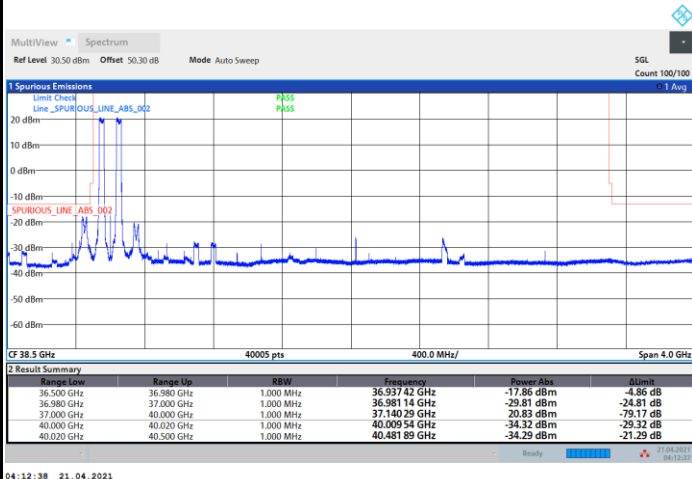


DFT-s-OFDM

NR Band n260 / 200MHz / BPSK

Lowest Band Edge / Full RB (20/22)

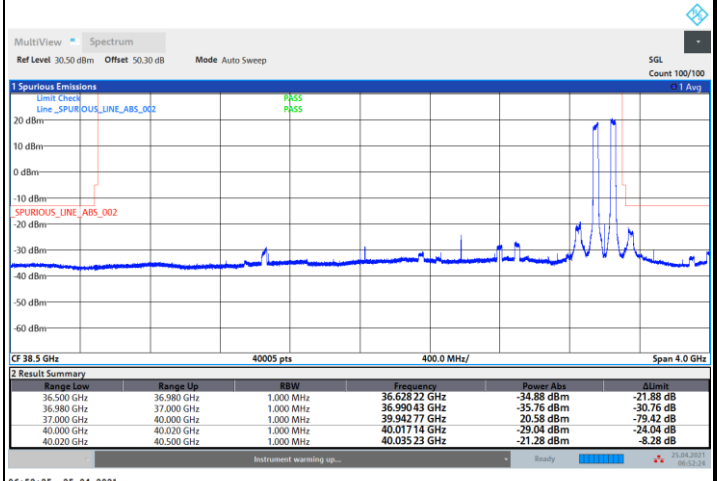
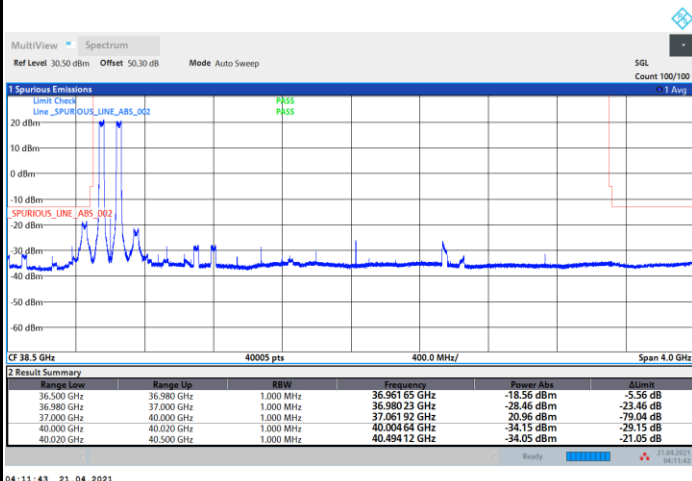
Highest Band Edge / Full RB (20/22)



NR Band n260 / 200MHz / QPSK

Lowest Band Edge / Full RB (20/22)

Highest Band Edge / Full RB (20/22)



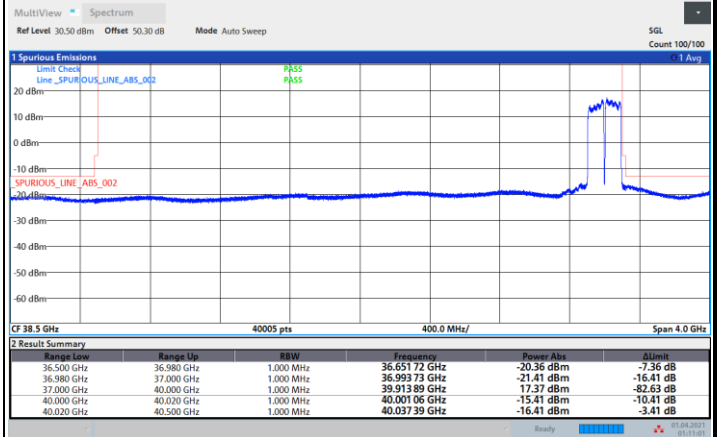
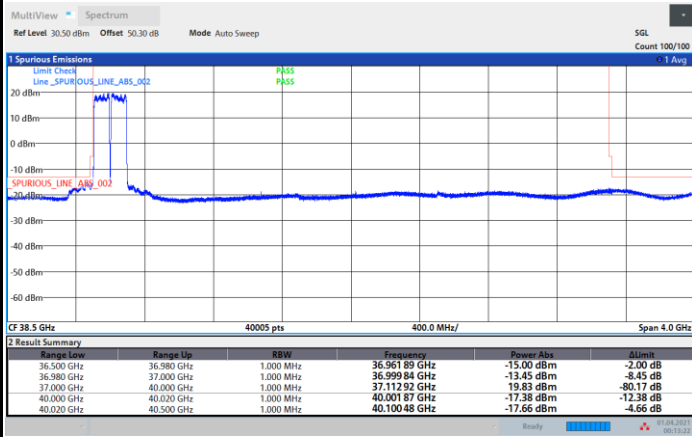


DFT-s-OFDM

NR Band n260 / 200MHz / BPSK

Lowest Band Edge / Full RB (64/0)

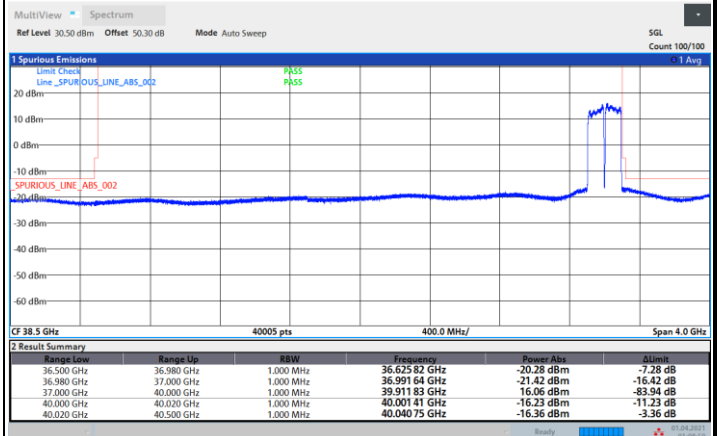
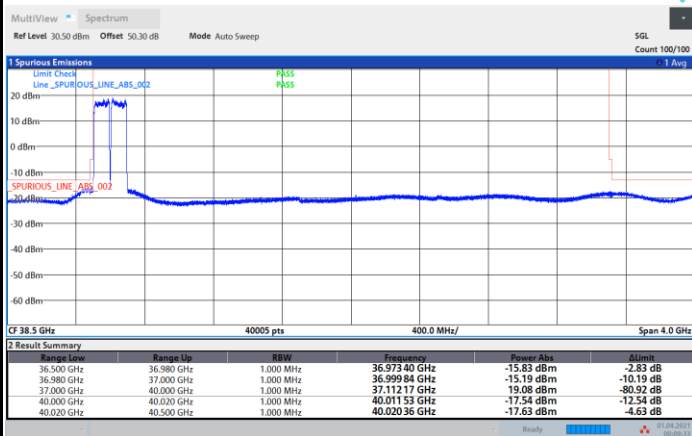
Highest Band Edge / Full RB (64/0)



NR Band n260 / 200MHz / QPSK

Lowest Band Edge / Full RB (64/0)

Highest Band Edge / Full RB (64/0)



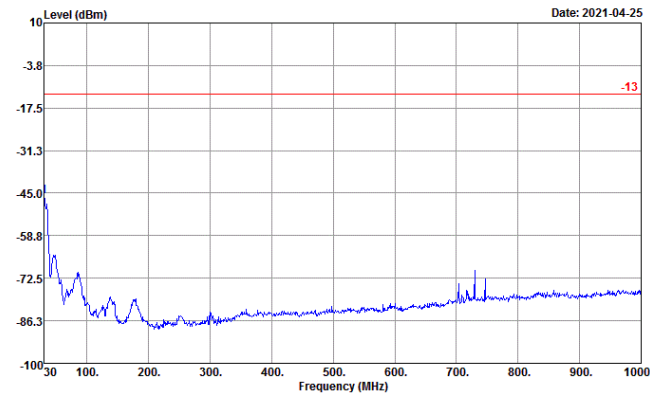
Spurious Emission

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

Only the noise floor is reported.

NR Band n260 (30MHz-1GHz)

Horizontal

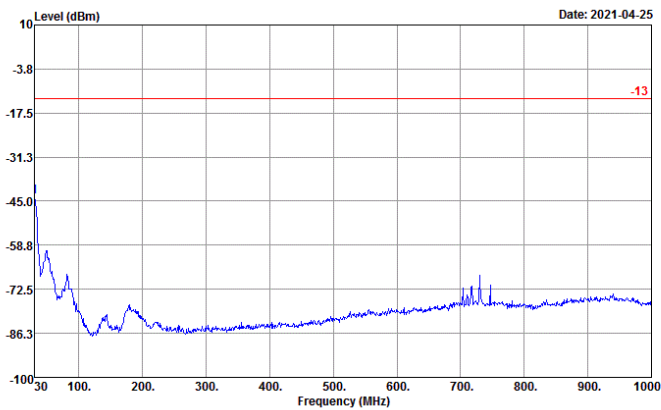


Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL

: n260 4 Module 2CC

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1	30.00 -45.99	-32.99	-13.00

Vertical



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

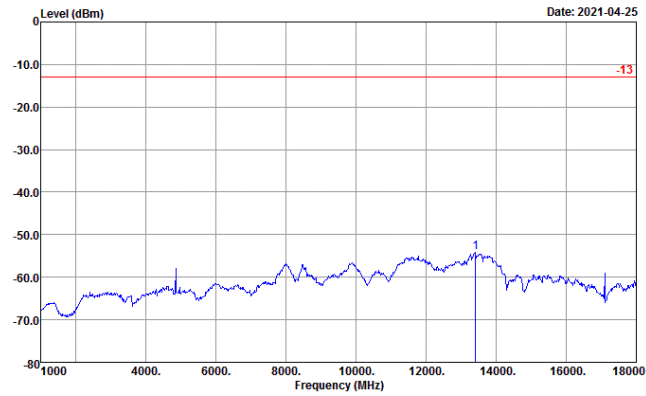
: n260 4 Module 2CC

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1	30.00 -43.58	-30.58	-13.00



NR Band n260 (1GHz-18GHz)

Horizontal

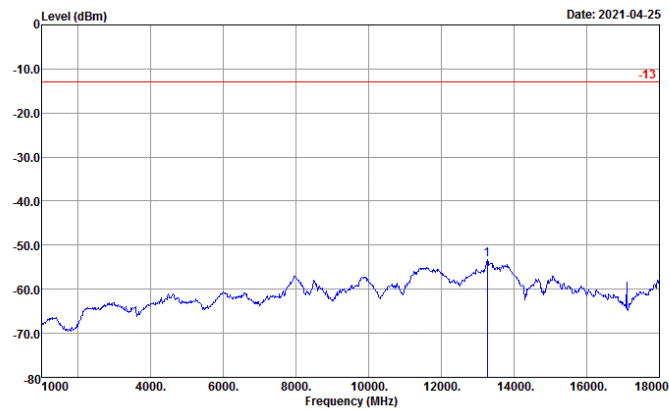


Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL

: n260 4 Module 2CC

Freq	Level	Over	Limit
			Line
MHz	dBm	dB	dBm
1 13410.00	-54.18	-41.18	-13.00

Vertical



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

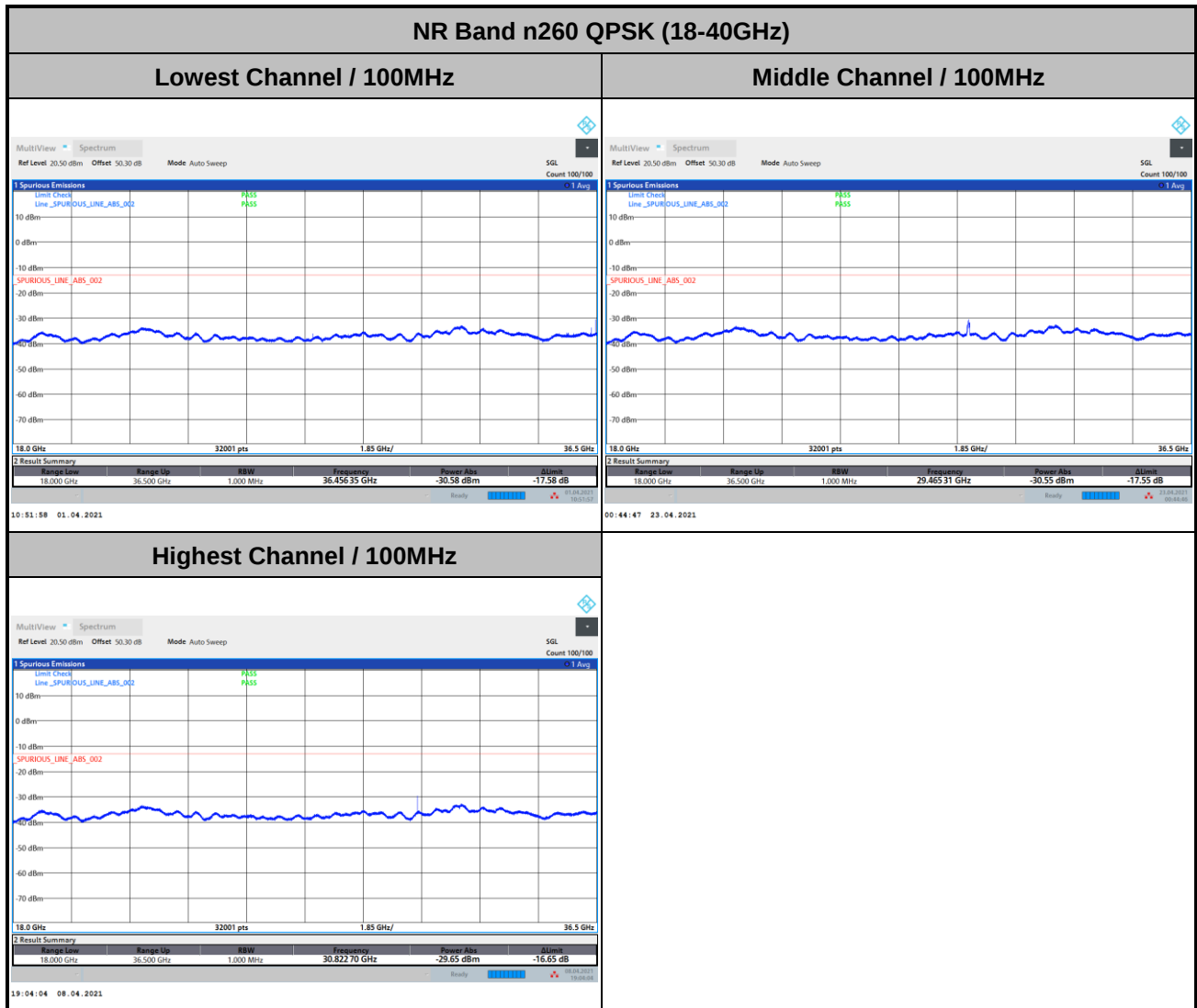
: n260 4 Module 2CC

Freq	Level	Over	Limit
			Line
MHz	dBm	dB	dBm
1 13257.00	-53.34	-40.34	-13.00



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

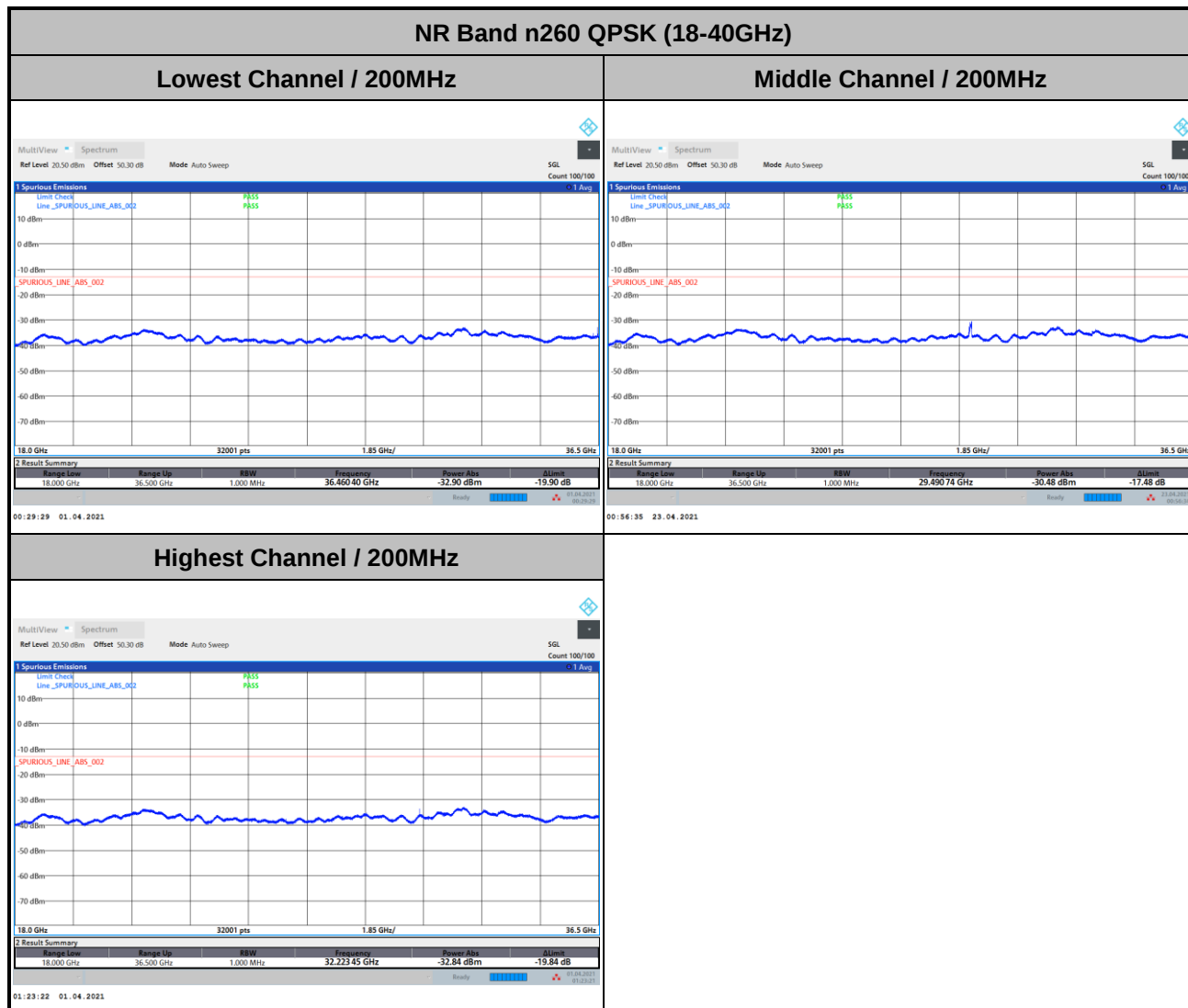
DFT-s-OFDM



Remark: Above plots, the spurious emissions were measured from 18GHz to 36.5GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40.5GHz and all spurious comply with limits.



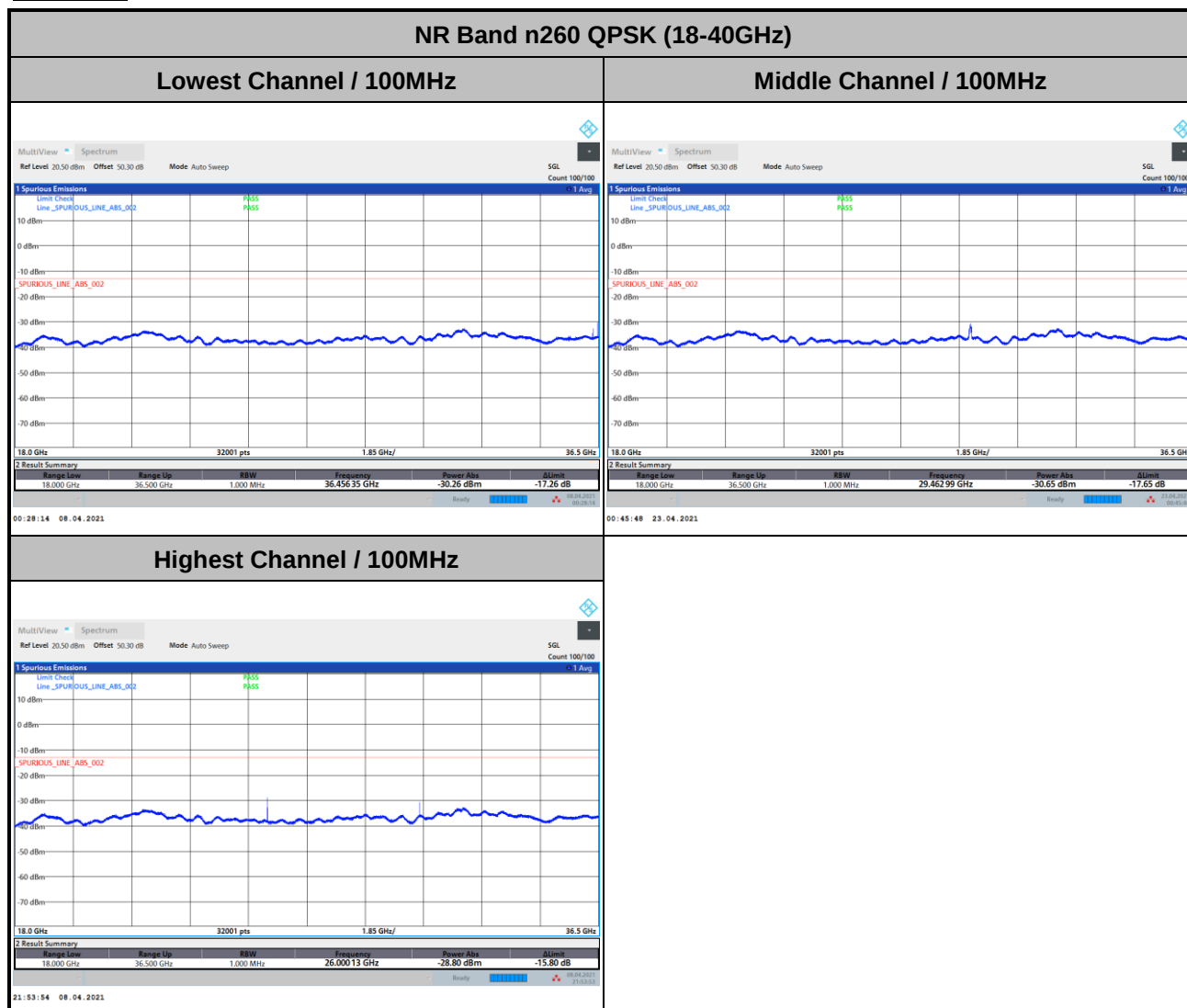
DFT-s-OFDM



Remark: Above plots, the spurious emissions were measured from 18GHz to 36.5GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40.5GHz and all spurious comply with limits.



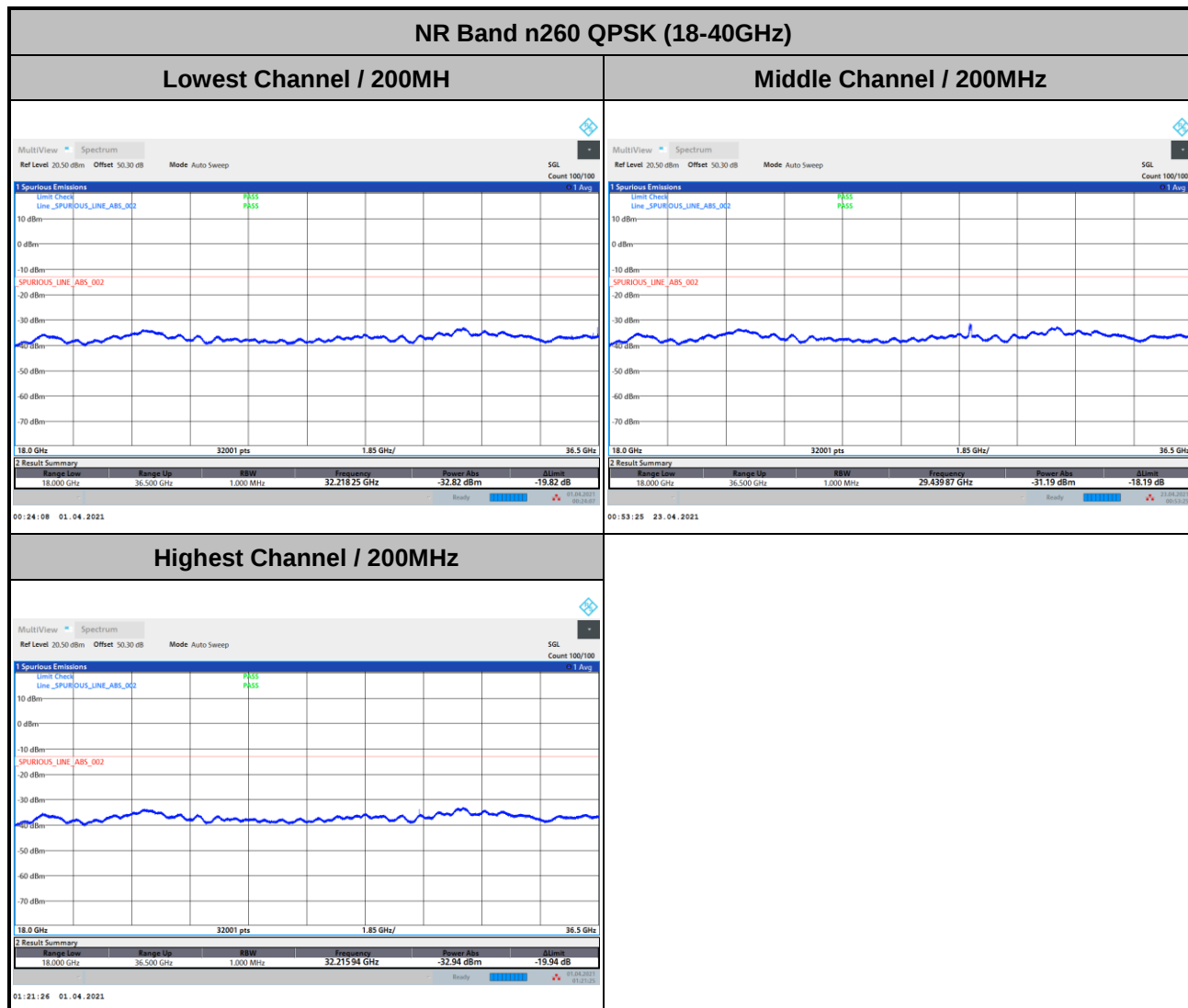
CP-OFDM



Remark: Above plots, the spurious emissions were measured from 18GHz to 36.5GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40.5GHz and all spurious comply with limits.



CP-OFDM

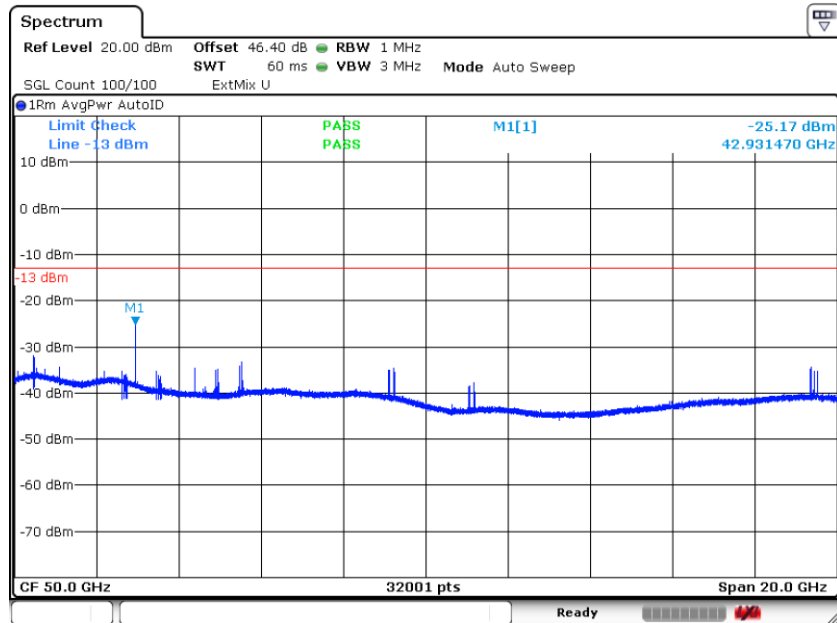


Remark: Above plots, the spurious emissions were measured from 18GHz to 36.5GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40.5GHz and all spurious comply with limits.



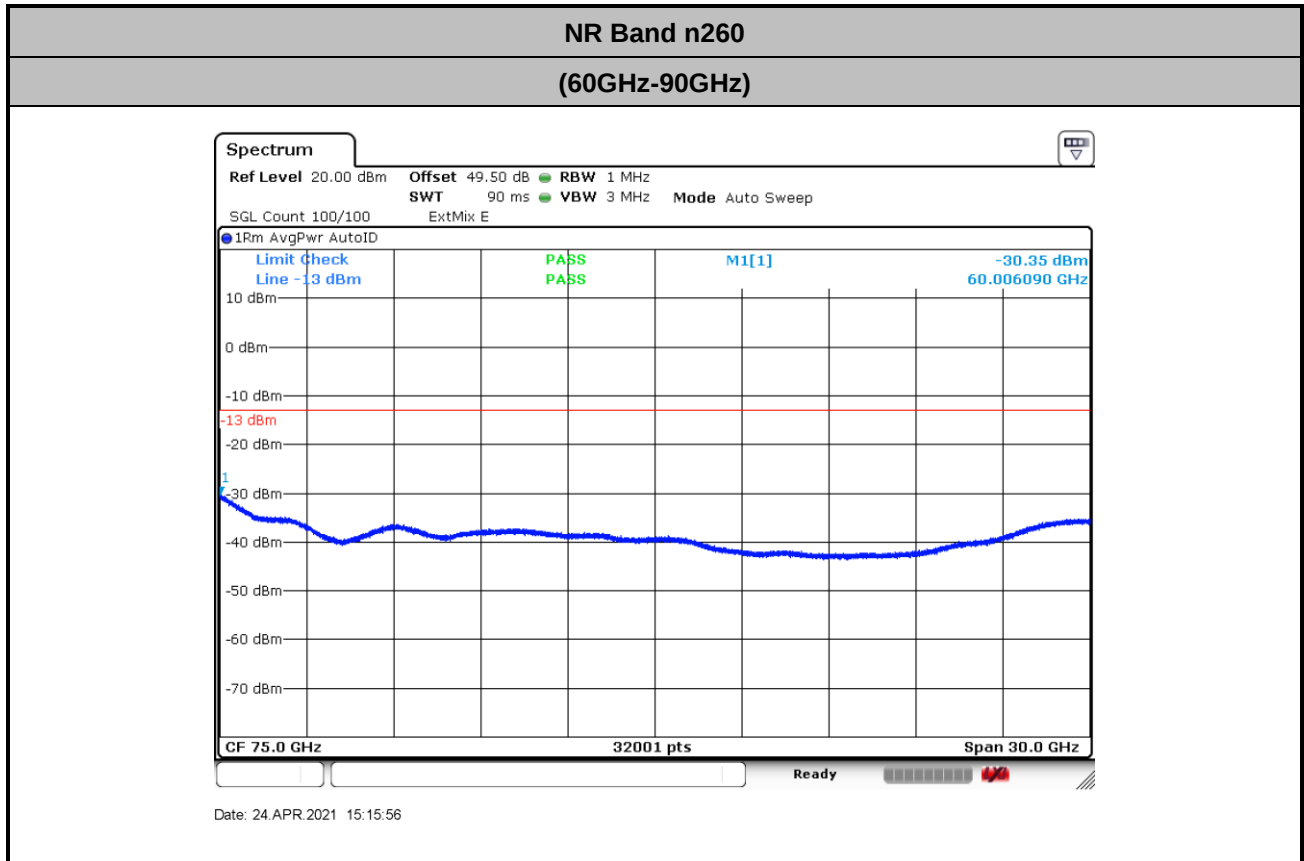
NR Band n260

(40GHz-60GHz)

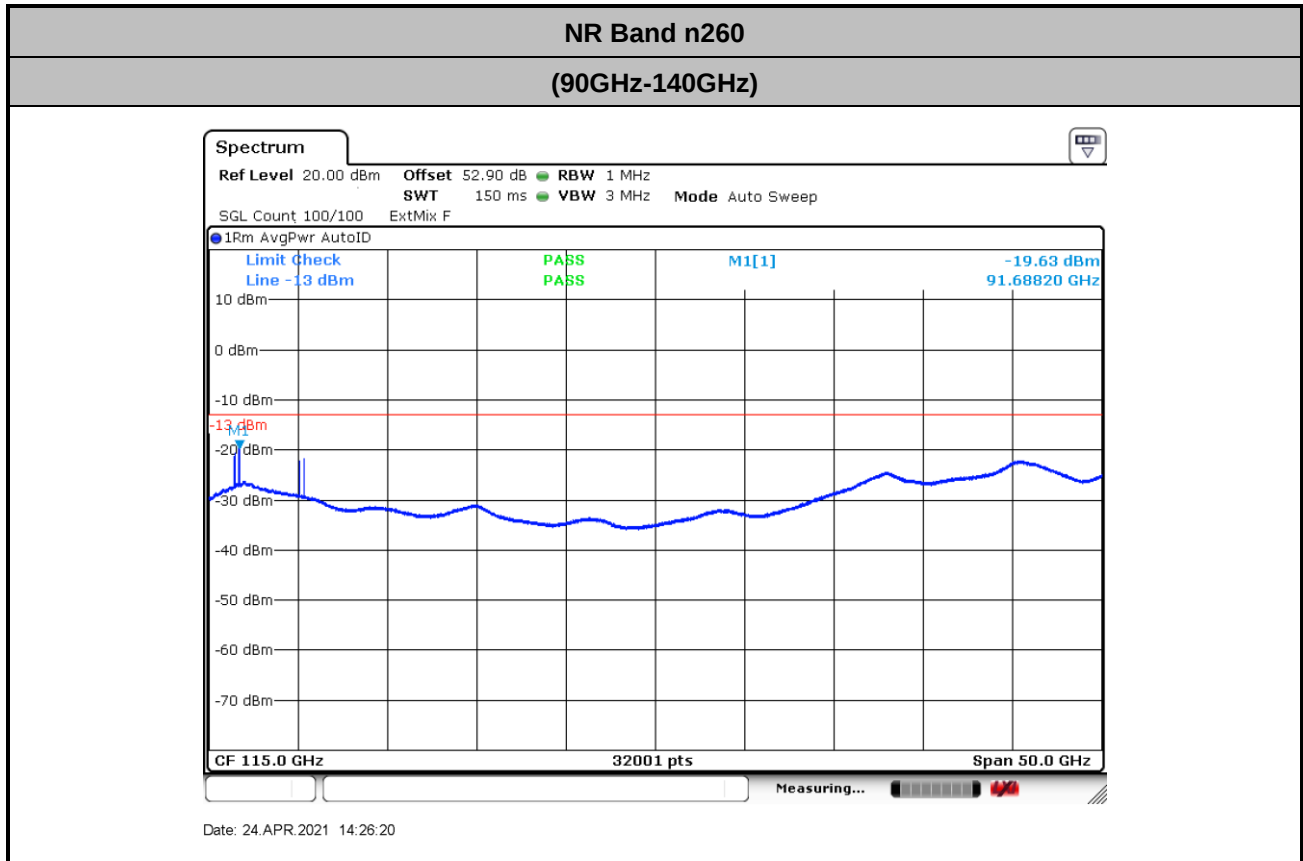


Date: 24.APR.2021 15:58:27

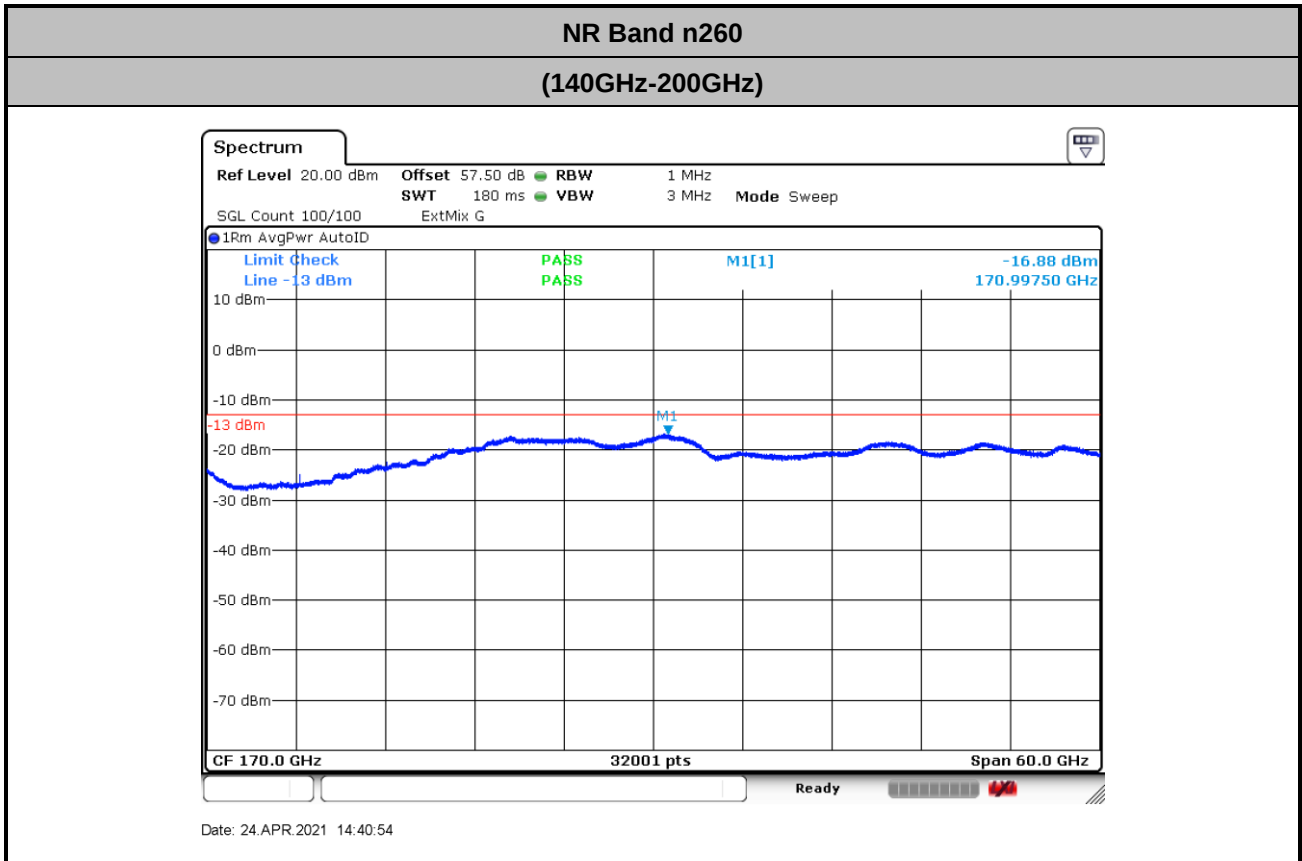
$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.3 + 0.34 + 107 + 20\log(1.2) - 104.8 = 46.4 \text{ (dB)}\end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 45.4 + 0.34 + 107 + 20\log(1.2) - 104.8 = 49.5 \text{ (dB)} \end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 48.8 + 0.34 + 107 + 20\log(1.2) - 104.8 = 52.9 \text{ (dB)} \end{aligned}$$



$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 53.4 + 0.34 + 107 + 20\log(1.2) - 104.8 = 57.5 \text{ (dB)}\end{aligned}$$

**Frequency Stability**

Test Conditions		NR Band n260 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	120	38.450045	-45.000	1.169	PASS
40	120	38.450022	-22.000	0.571	
30	120	38.450011	-11.000	0.286	
20(Ref.)	120	38.45	0.000	0.000	
10	120	38.449987	13.000	0.338	
0	120	38.4502937	-293.700	7.629	
-10	120	38.4503137	-313.700	8.148	
-20	120	38.4503187	-318.700	8.278	
-30	120	38.4503027	-302.700	7.862	
20	102	38.450022	-22.000	0.571	
20	120	38.449999	1.000	0.026	
20	138	38.450002	-2.000	0.052	

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

Appendix B.3 Radiated Test: NR Band n260 (Beam ID: 319)

Occupied Bandwidth

Mode	DFT-s-OFDM NR Band n260 : 99%OBW(MHz)	
BW	100MHz	200MHz
Mod.	QPSK	QPSK
Lowest CH	94.09	189.25
Middle CH	93.98	188.65
Highest CH	94.24	188.95

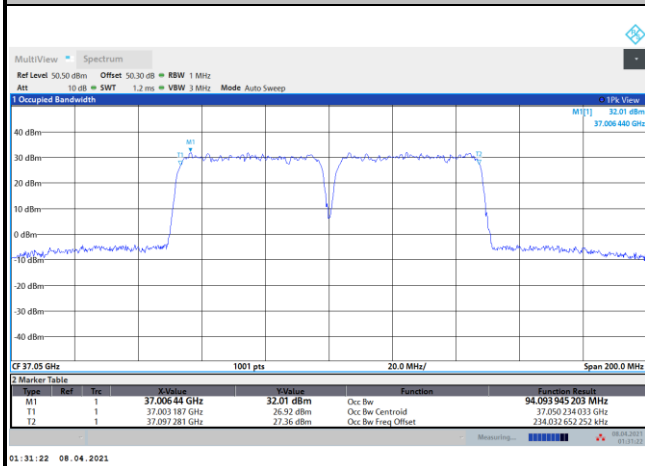
Mode	CP-OFDM NR Band n260 : 99%OBW(MHz)	
BW	100MHz	200MHz
Mod.	QPSK	QPSK
Lowest CH	94.32	191.76
Middle CH	94.01	188.46
Highest CH	94.18	191.13



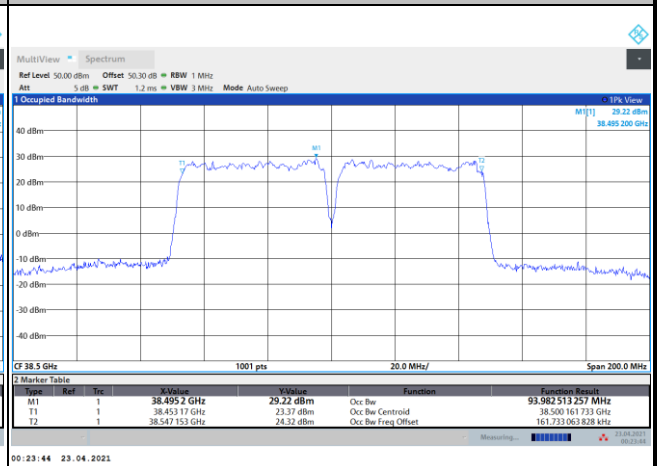
DFT-s-OFDM

NR Band n260

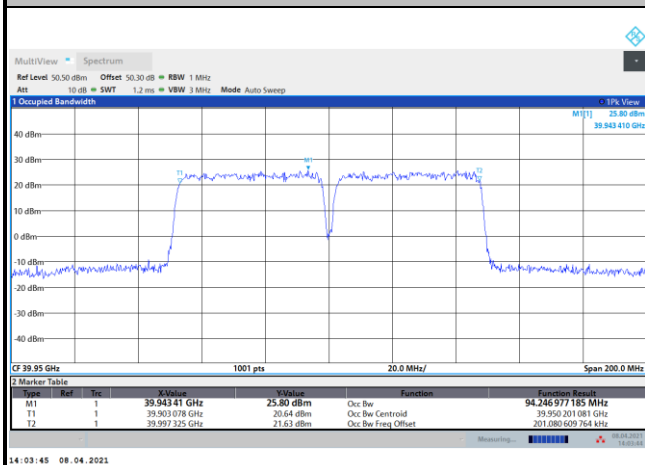
Lowest Channel / 100MHz / QPSK



Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / QPSK

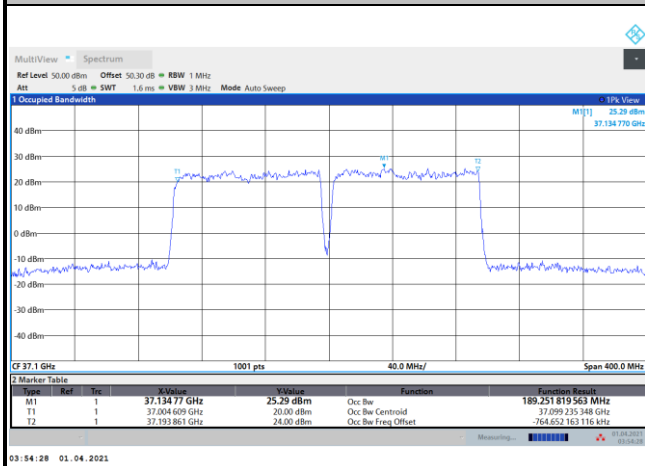




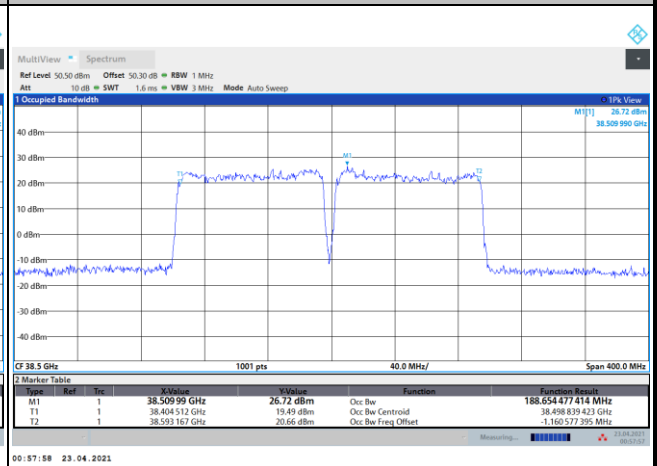
DFT-s-OFDM

NR Band n260

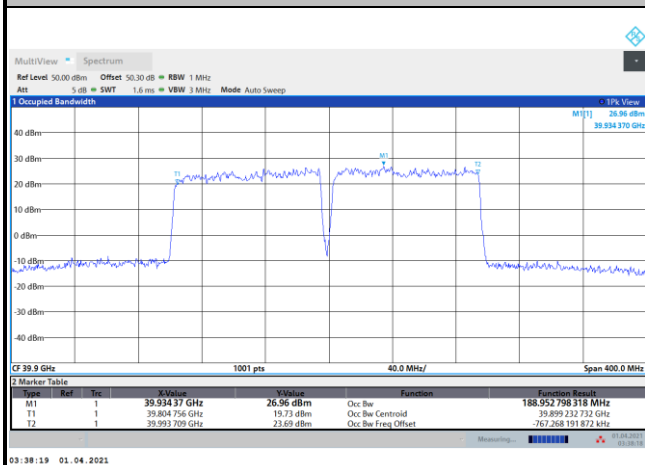
Lowest Channel / 200MHz / QPSK



Middle Channel / 200MHz / QPSK



Highest Channel / 200MHz / QPSK

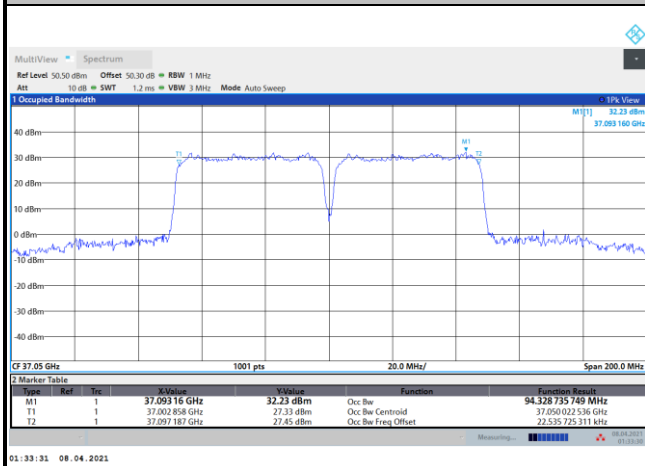




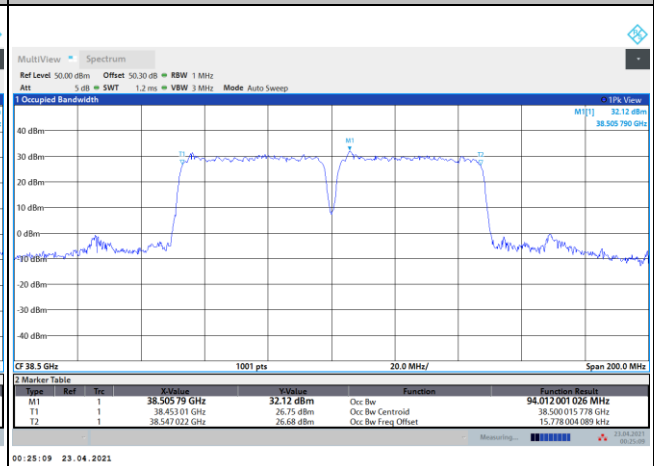
CP-OFDM

NR Band n260

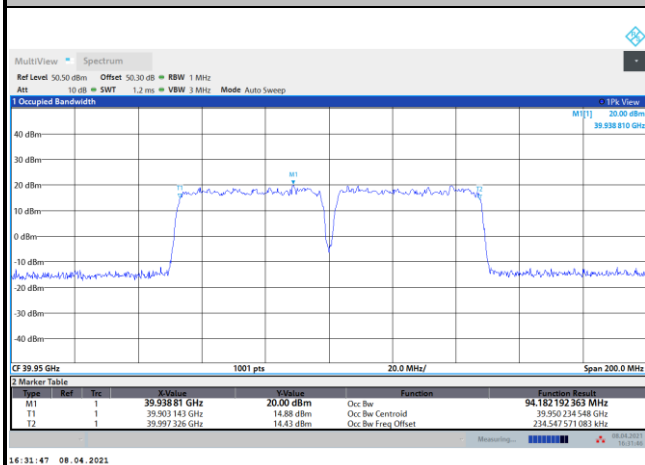
Lowest Channel / 100MHz / QPSK



Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / QPSK

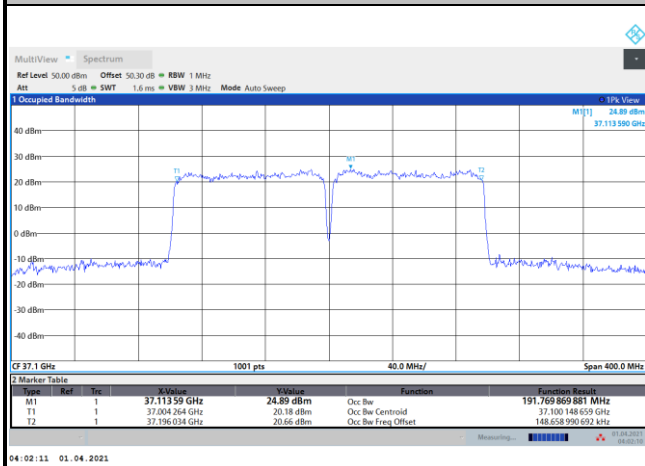




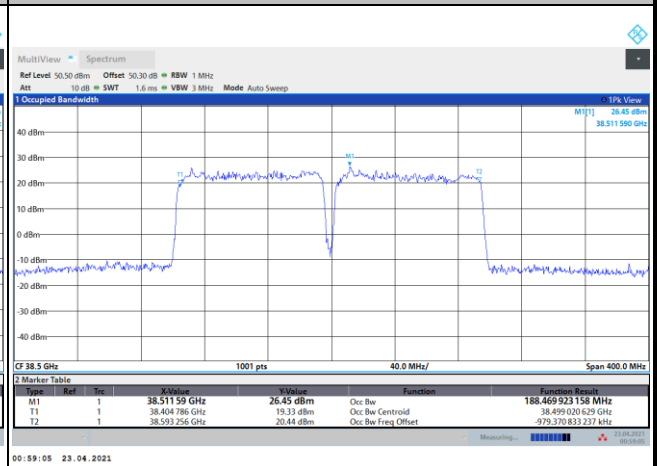
CP-OFDM

NR Band n260

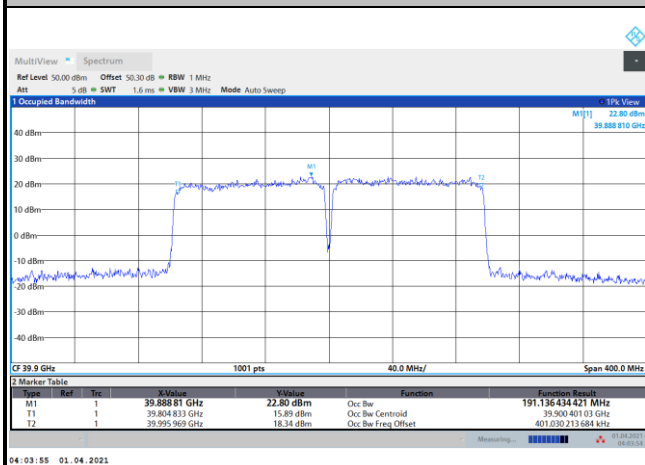
Lowest Channel / 200MHz / QPSK



Middle Channel / 200MHz / QPSK



Highest Channel / 200MHz / QPSK



**Radiated Out of Band Emissions****Test Result:**

Mode		DFT-s-OFDM NR Band n260							
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	-13.44	Pass	-13	-16.74	Pass
Low	100	BPSK	32/0	-5	-11.95	Pass	-13	-15.47	Pass
Low	100	QPSK	8/0	-5	-14.9	Pass	-13	-22.01	Pass
Low	100	QPSK	10/11	-5	-25.4	Pass	-13	-16.09	Pass
Low	100	BPSK	10/11	-5	-25.99	Pass	-13	-15.15	Pass
High	100	QPSK	32/0	-5	-16.71	Pass	-13	-22.35	Pass
High	100	BPSK	32/0	-5	-14.74	Pass	-13	-21.27	Pass
High	100	QPSK	8/24	-5	-16.57	Pass	-13	-23.86	Pass
High	100	QPSK	10/11	-5	-28.01	Pass	-13	-21.47	Pass
High	100	BPSK	10/11	-5	-29.05	Pass	-13	-20.77	Pass
Low	200	QPSK	64/0	-5	-16.07	Pass	-13	-18.25	Pass
Low	200	BPSK	64/0	-5	-14.9	Pass	-13	-17.06	Pass
Low	200	QPSK	8/0	-5	-17.72	Pass	-13	-20.35	Pass
Low	200	QPSK	20/22	-5	-29.2	Pass	-13	-19.74	Pass
Low	200	BPSK	20/22	-5	-30.34	Pass	-13	-18.77	Pass
High	200	QPSK	64/0	-5	-15.71	Pass	-13	-15.66	Pass
High	200	BPSK	64/0	-5	-14.4	Pass	-13	-15.91	Pass
High	200	QPSK	8/58	-5	-14.93	Pass	-13	-16.73	Pass
High	200	QPSK	20/22	-5	-28.87	Pass	-13	-23.03	Pass
High	200	BPSK	20/22	-5	-29.43	Pass	-13	-22.23	Pass

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

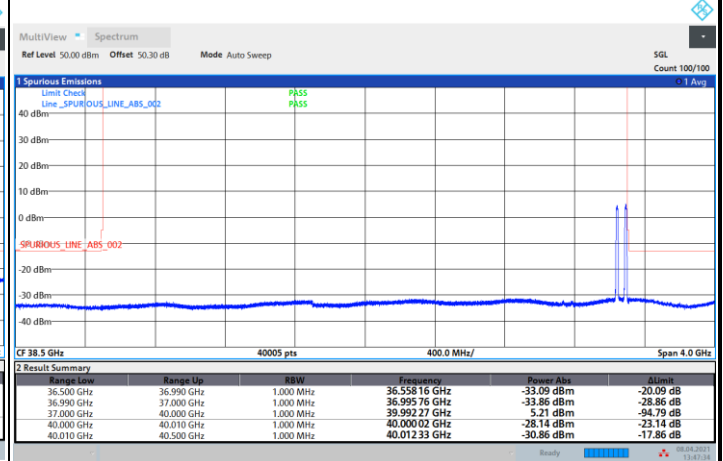
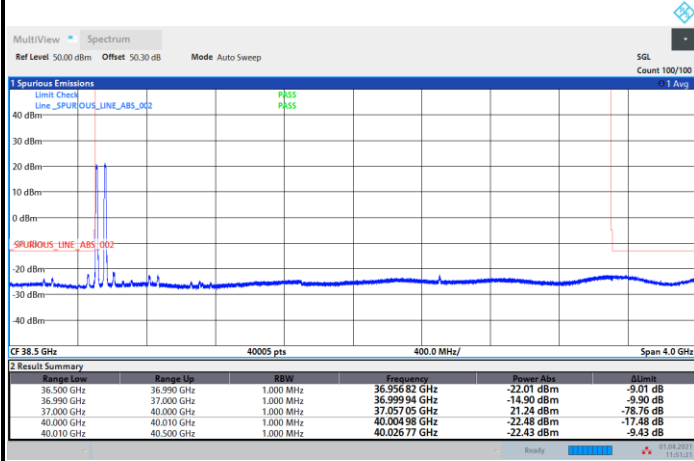


DFT-s-OFDM

NR Band n260 / 100MHz / QPSK

Lowest Band Edge / 8 RB (8/0)

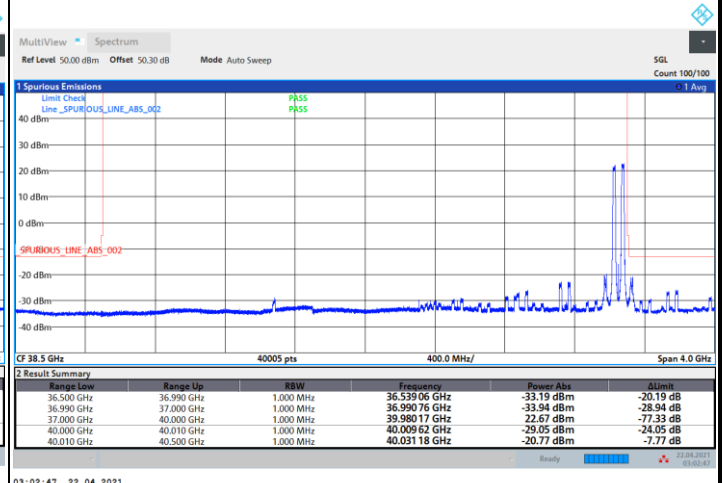
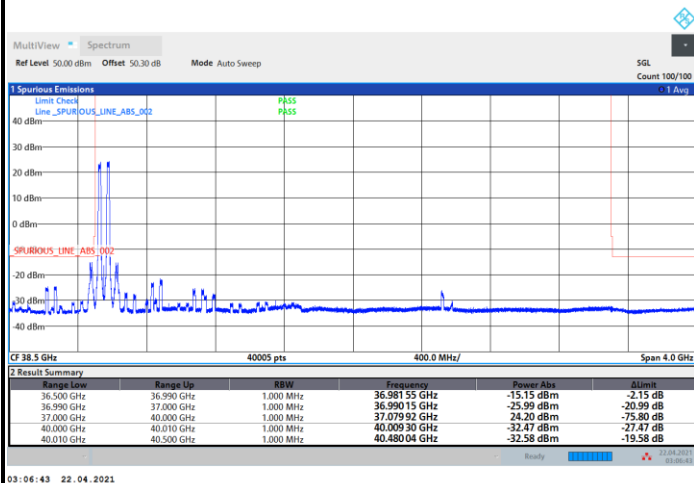
Highest Band Edge / 8 RB (8/24)



NR Band n260 / 100MHz / BPSK

Lowest Band Edge / Full RB (10/11)

Highest Band Edge / Full RB (10/11)



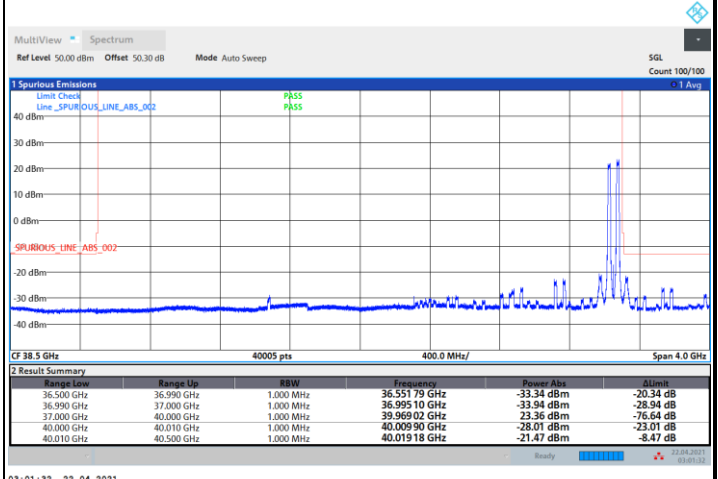
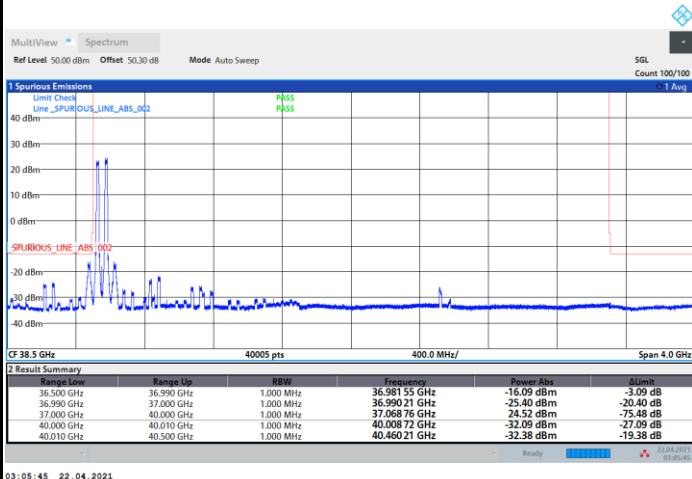


DFT-s-OFDM

NR Band n260 / 100MHz / QPSK

Lowest Band Edge / Full RB (10/11)

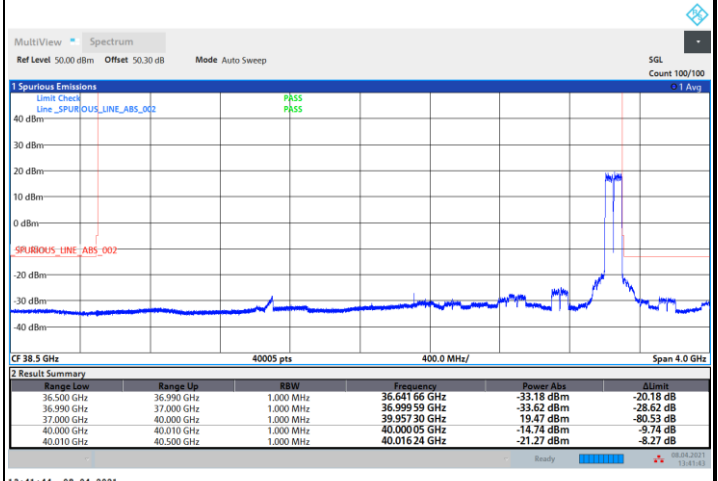
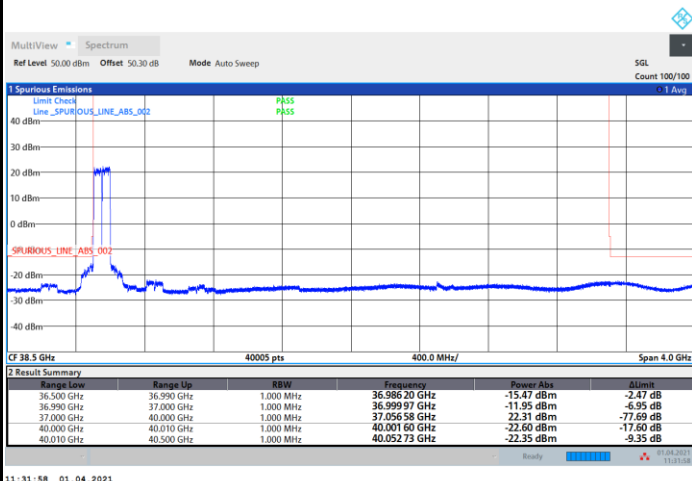
Highest Band Edge / Full RB (10/11)



NR Band n260 / 100MHz / BPSK

Lowest Band Edge / Full RB (32/0)

Highest Band Edge / Full RB (32/0)



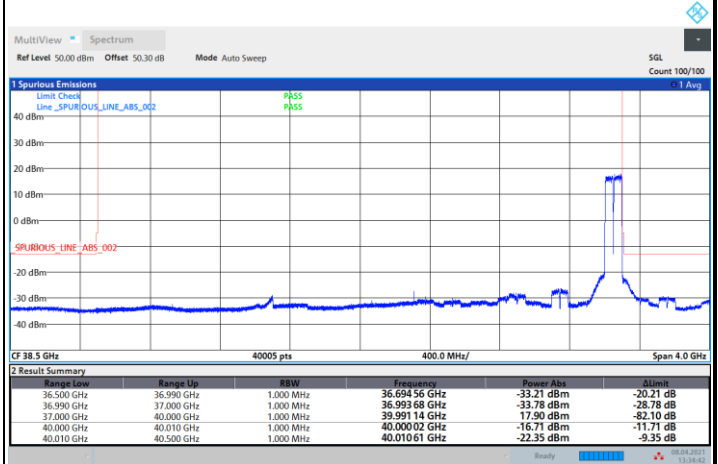
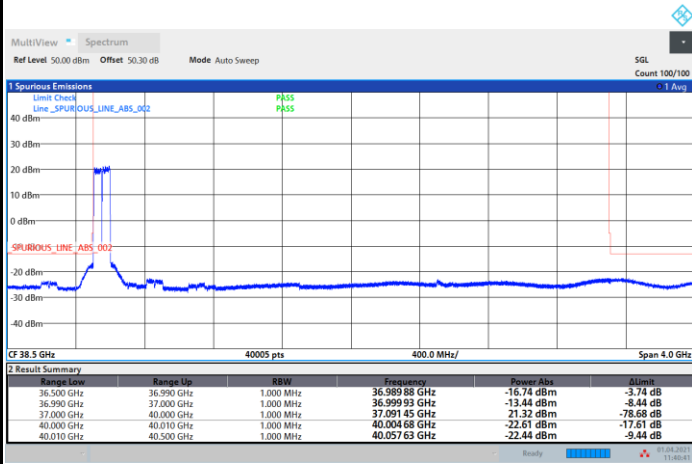


DFT-s-OFDM

NR Band n260 / 100MHz / QPSK

Lowest Band Edge / Full RB (32/0)

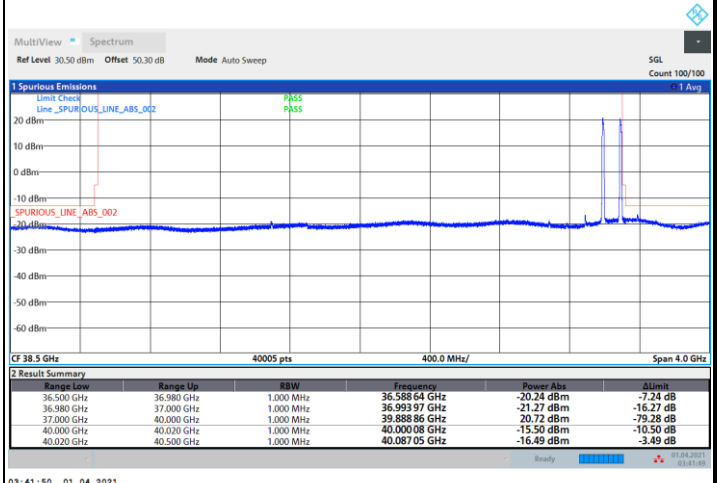
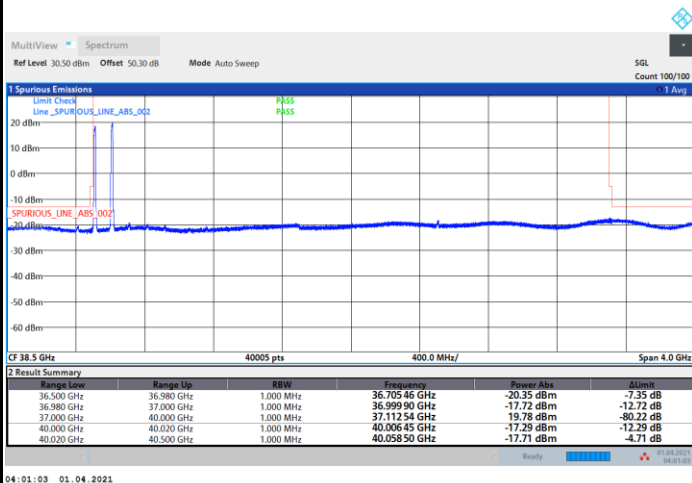
Highest Band Edge / Full RB (32/0)



NR Band n260 / 200MHz / QPSK

Lowest Band Edge / 8 RB (8/0)

Highest Band Edge / 8 RB (8/58)



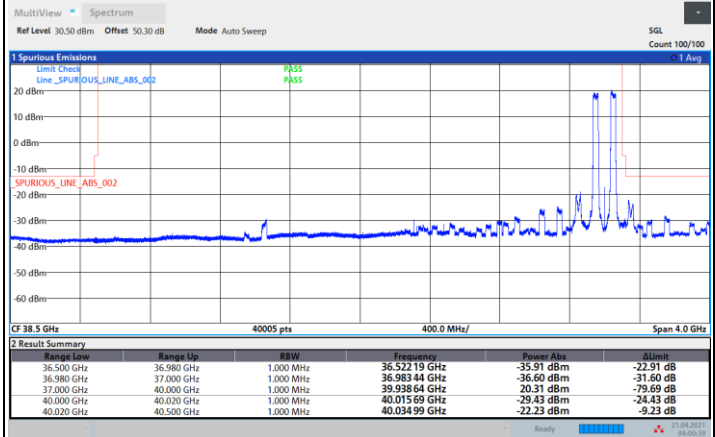
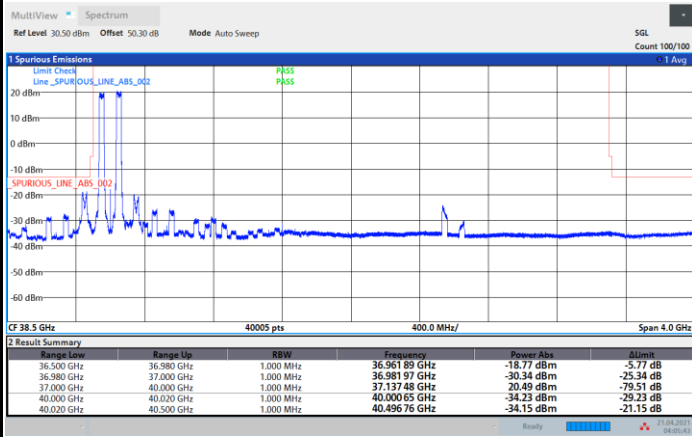


DFT-s-OFDM

NR Band n260 / 200MHz / BPSK

Lowest Band Edge / Full RB (20/22)

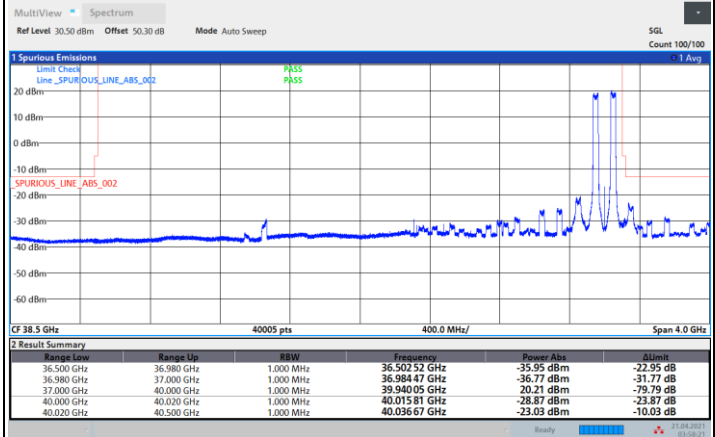
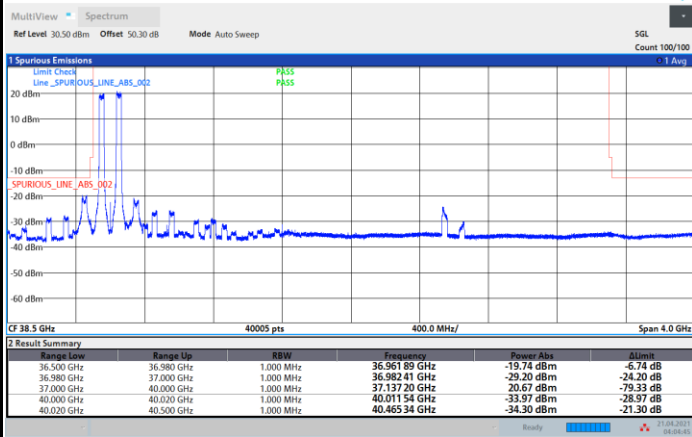
Highest Band Edge / Full RB (20/22)



NR Band n260 / 200MHz / QPSK

Lowest Band Edge / Full RB (20/22)

Highest Band Edge / Full RB (20/22)



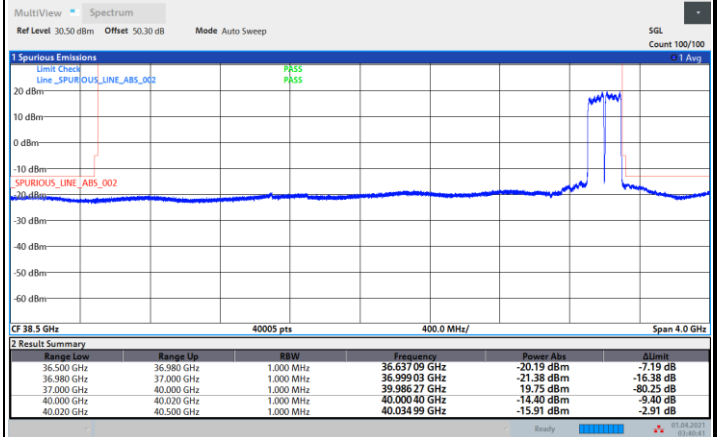


DFT-s-OFDM

NR Band n260 / 200MHz / BPSK

Lowest Band Edge / Full RB (64/0)

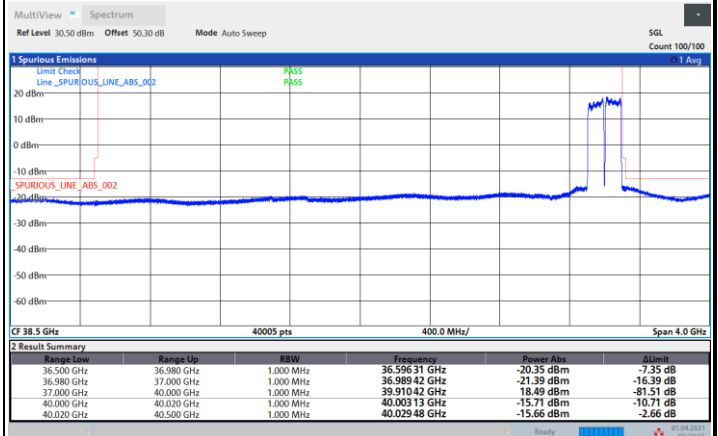
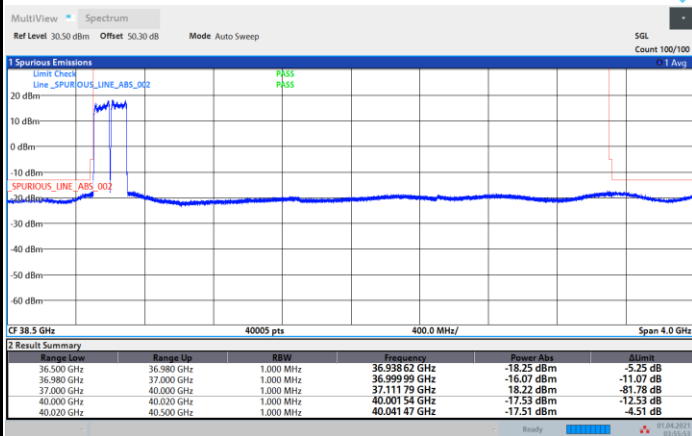
Highest Band Edge / Full RB (64/0)



NR Band n260 / 200MHz / QPSK

Lowest Band Edge / Full RB (64/0)

Highest Band Edge / Full RB (64/0)





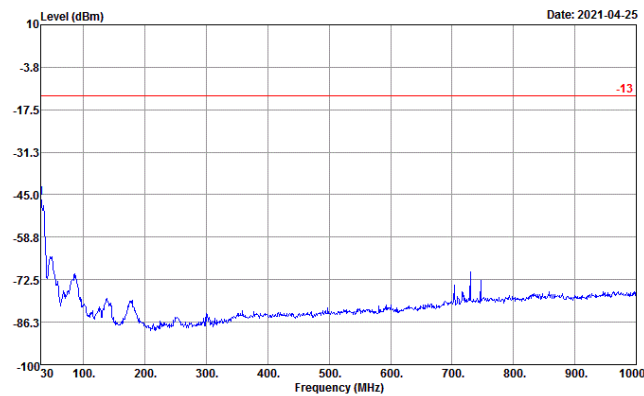
Spurious Emission

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

Only the noise floor is reported.

NR Band n260 (30MHz-1GHz)

Horizontal

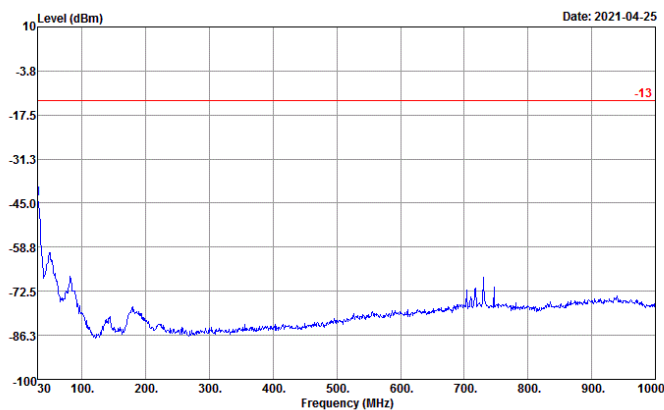


Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL

: n260 4 Module 2CC

Freq	Level	Over Limit	
		Limit	Line
MHz	dBm	dB	dBm
1	30.00 -45.99	-32.99	-13.00

Vertical



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

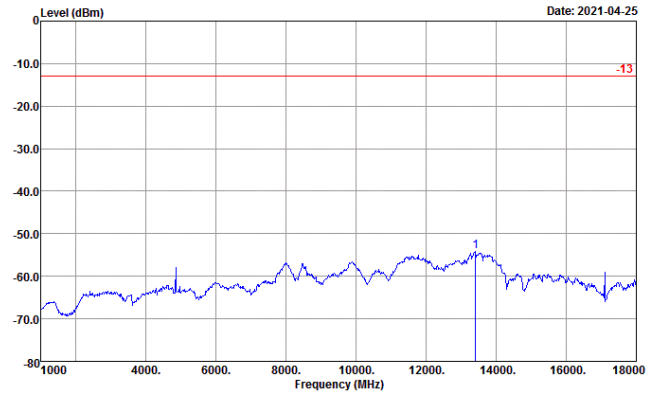
: n260 4 Module 2CC

Freq	Level	Over Limit	
		Limit	Line
MHz	dBm	dB	dBm
1	30.00 -43.58	-30.58	-13.00



NR Band n260 (1GHz-18GHz)

Horizontal

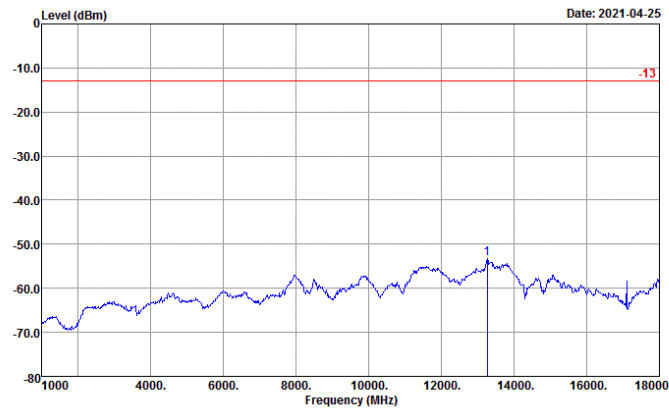


Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL

: n260 4 Module 2CC

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1 13410.00	-54.18	-41.18	-13.00

Vertical



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

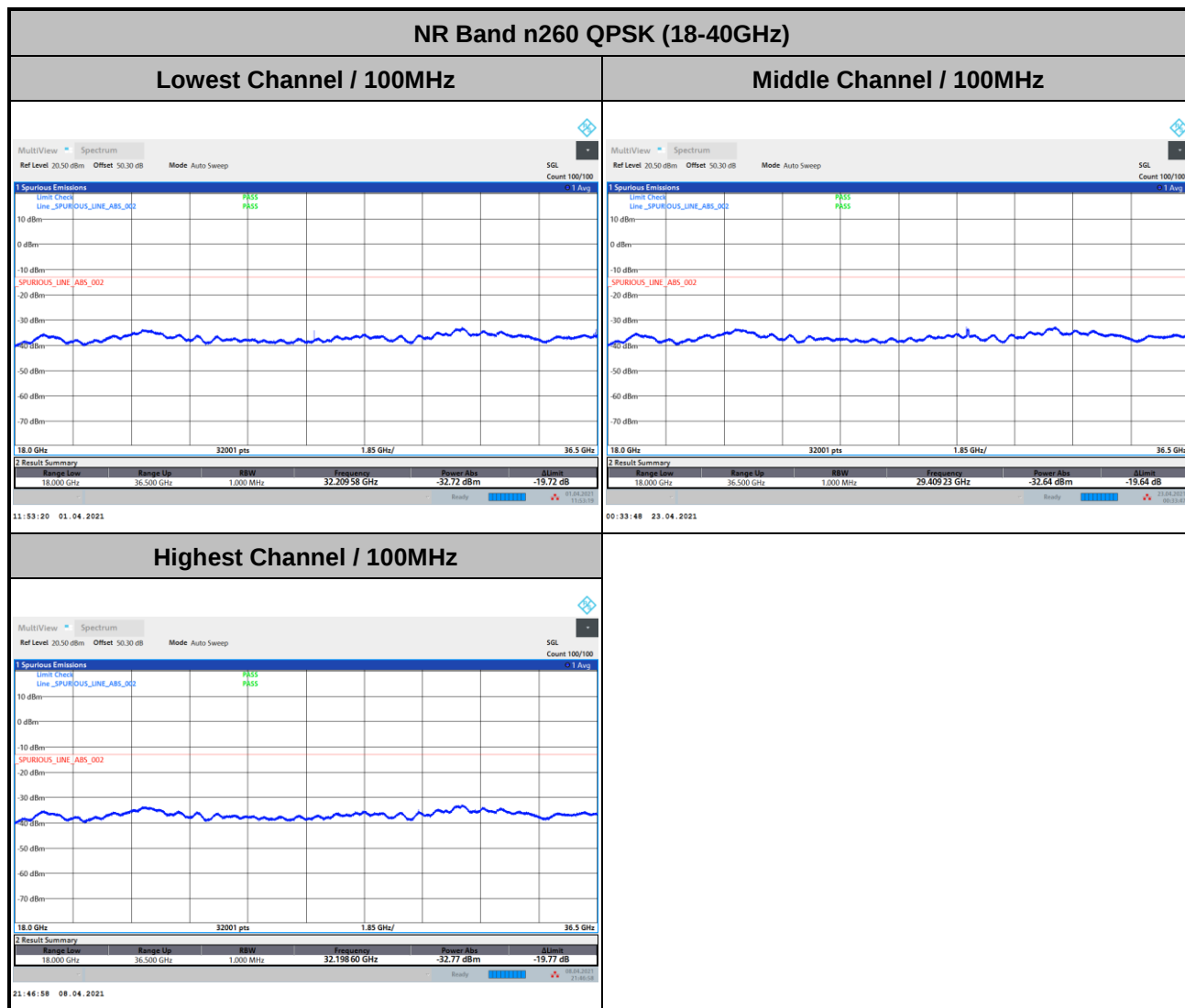
: n260 4 Module 2CC

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1 13257.00	-53.34	-40.34	-13.00



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

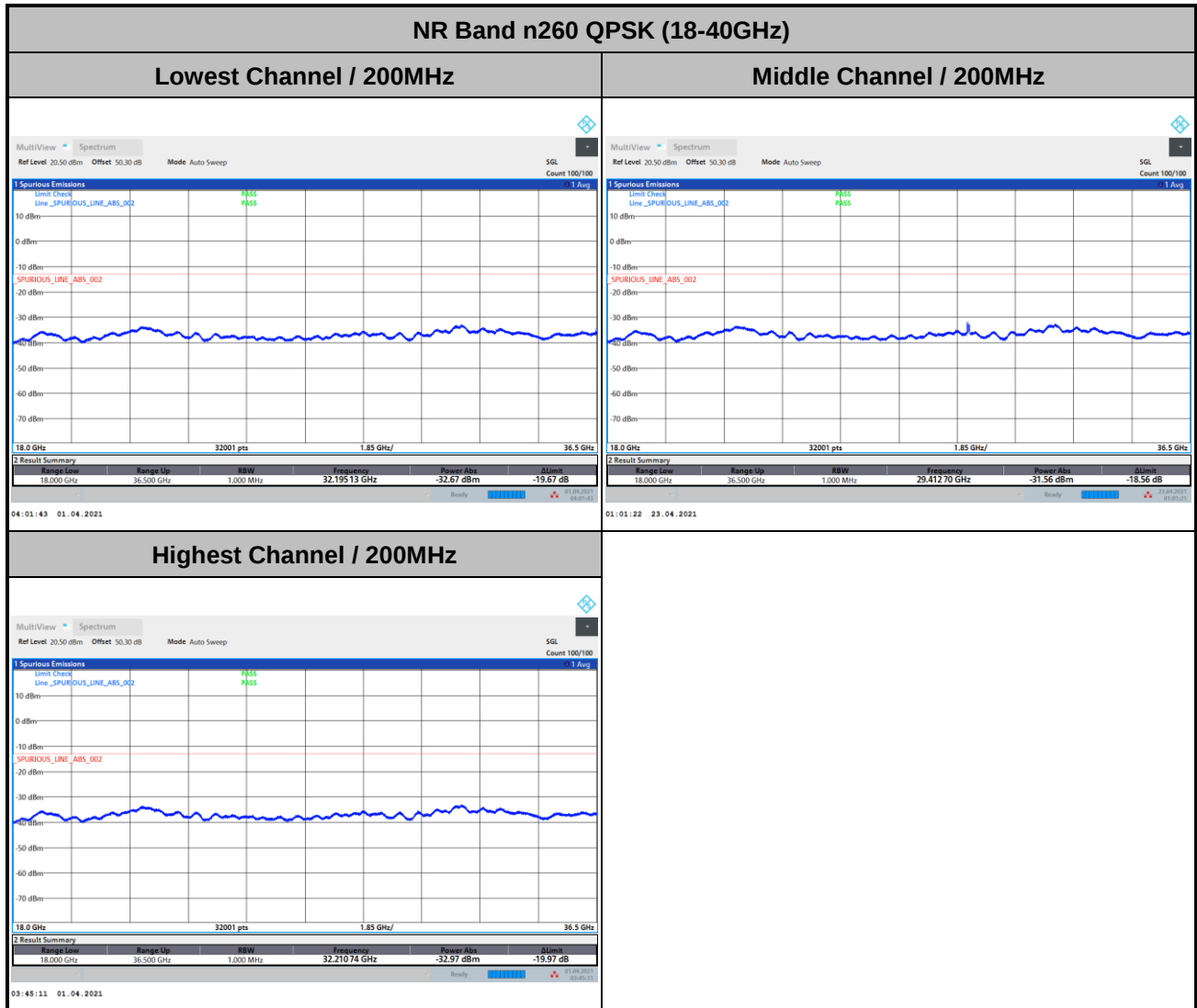
DFT-s-OFDM



Remark: Above plots, the spurious emissions were measured from 18GHz to 36.5GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40.5GHz and all spurious comply with limits.



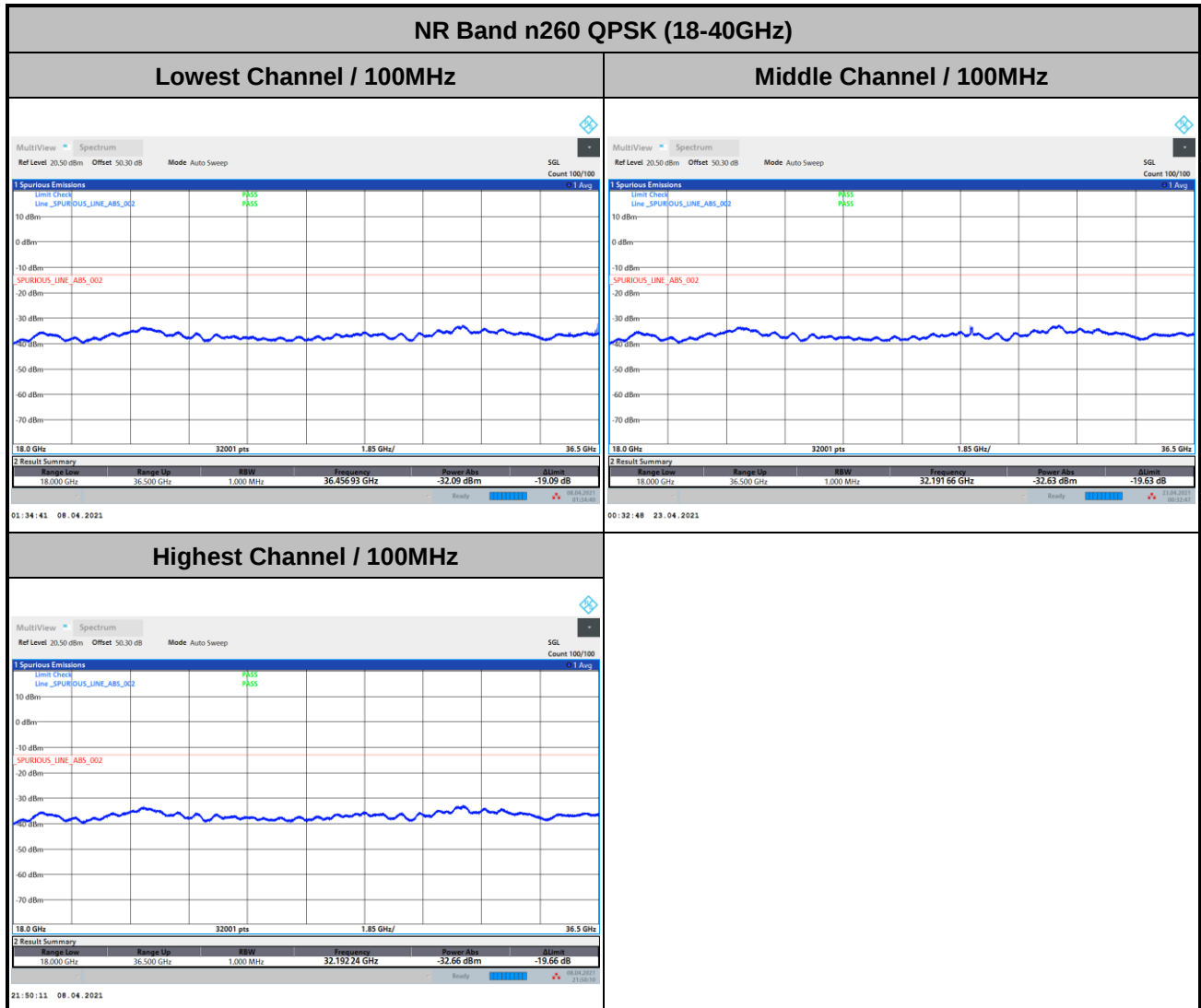
DFT-s-OFDM



Remark: Above plots, the spurious emissions were measured from 18GHz to 36.5GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40.5GHz and all spurious comply with limits.



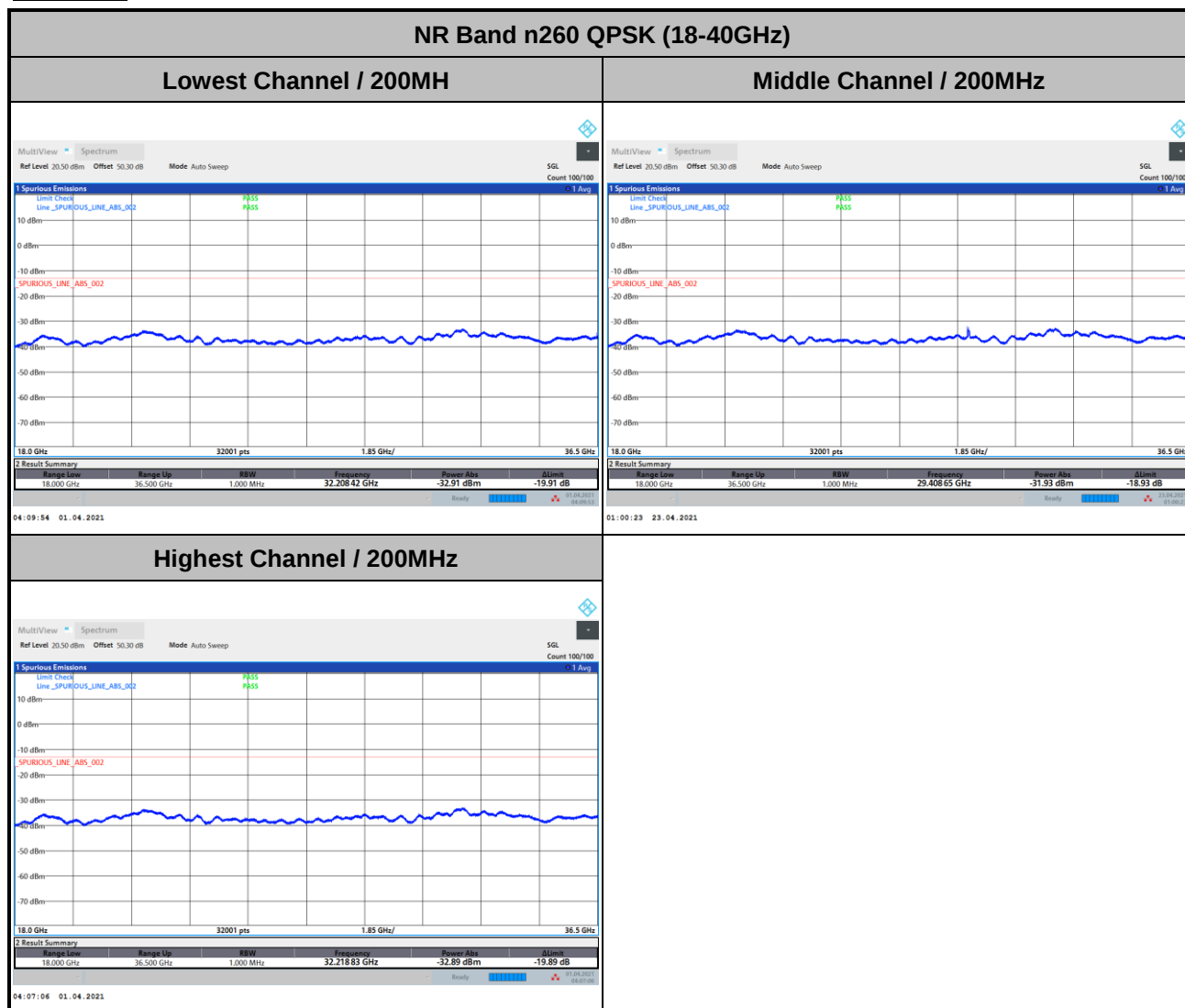
CP-OFDM



Remark: Above plots, the spurious emissions were measured from 18GHz to 36.5GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40.5GHz and all spurious comply with limits.



CP-OFDM

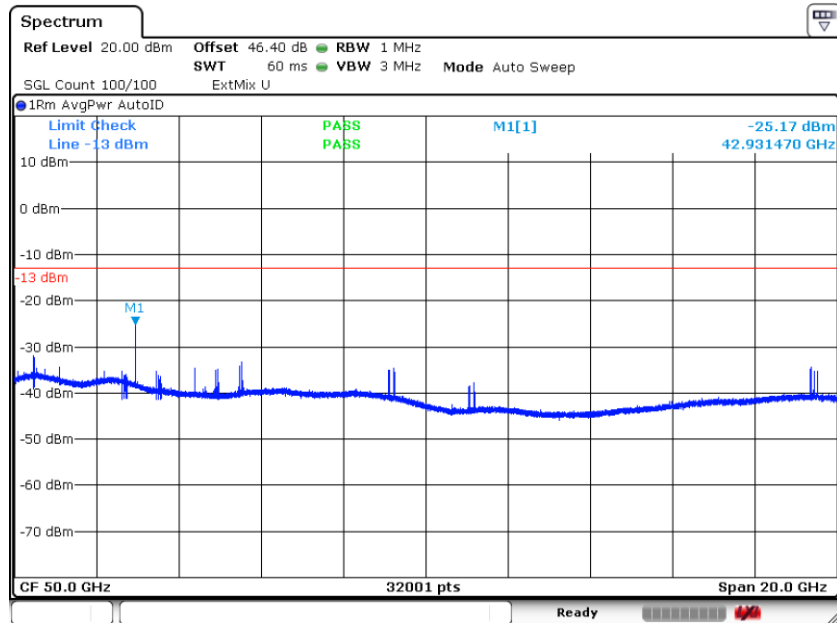


Remark: Above plots, the spurious emissions were measured from 18GHz to 36.5GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40.5GHz and all spurious comply with limits.



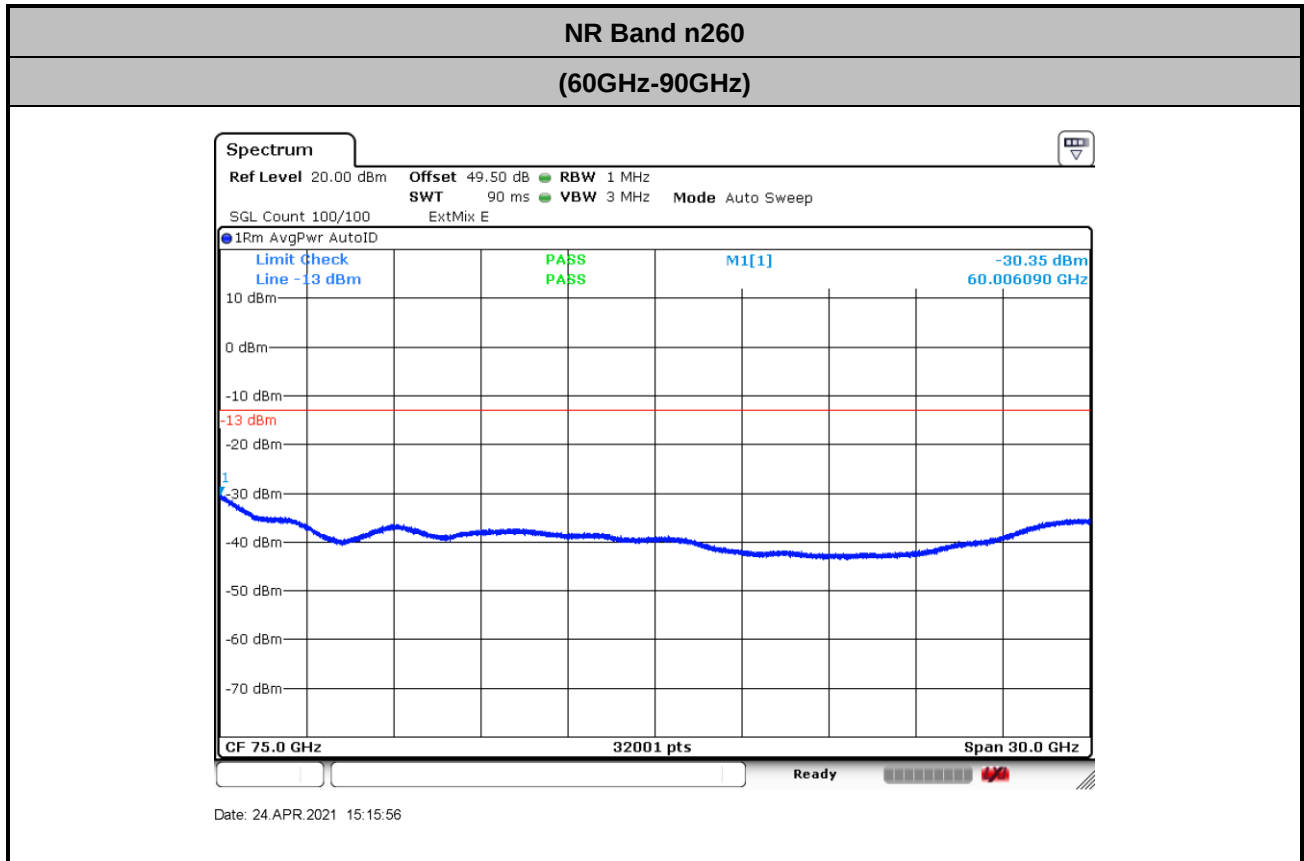
NR Band n260

(40GHz-60GHz)

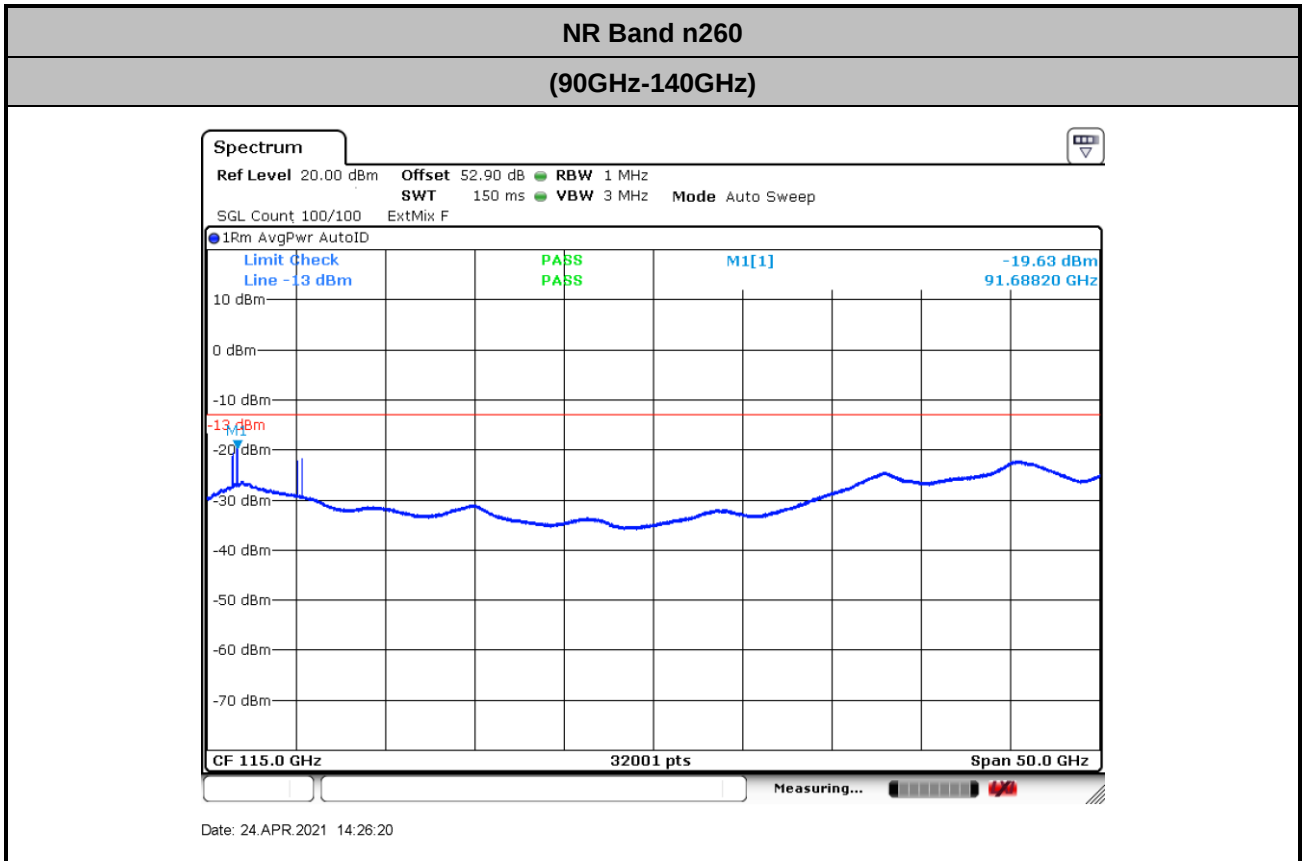


Date: 24.APR.2021 15:58:27

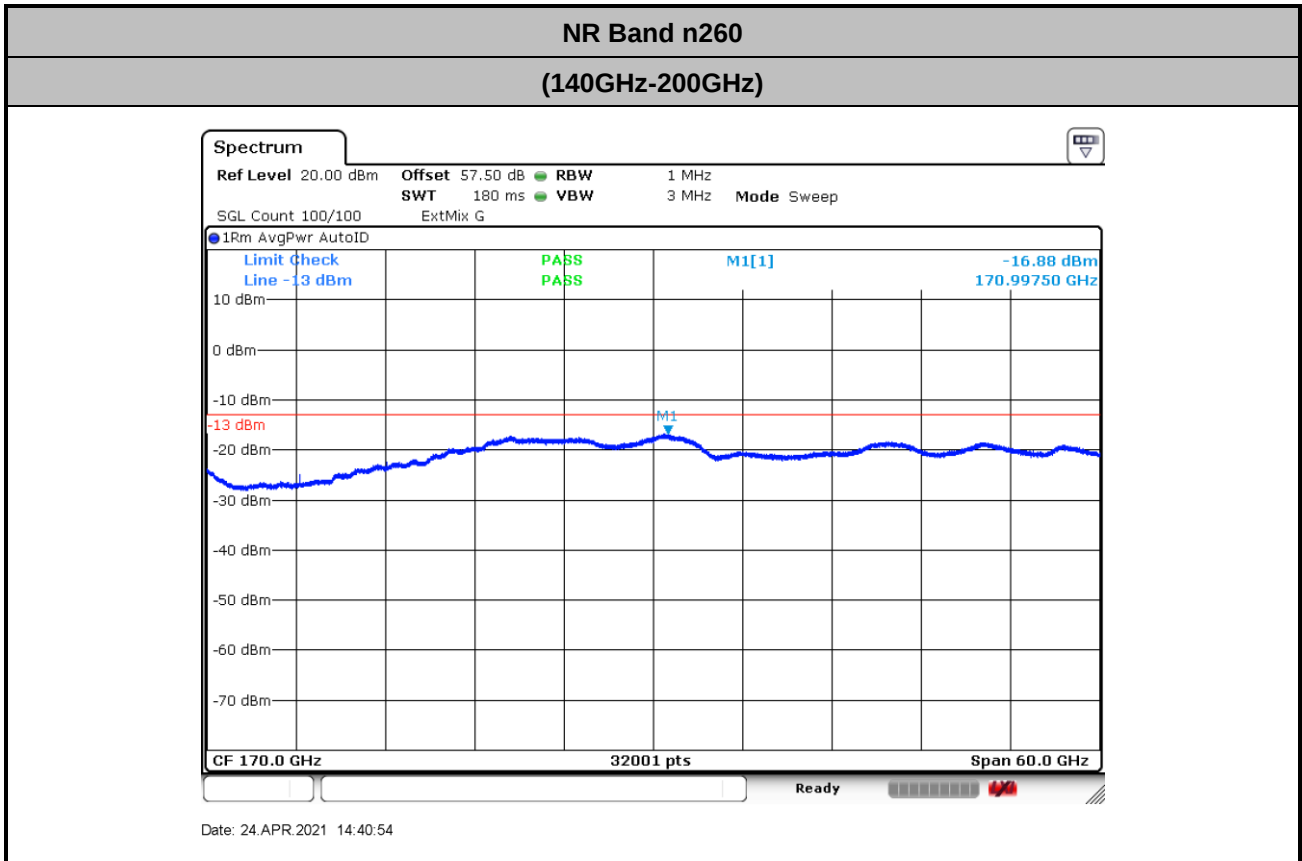
$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.3 + 0.34 + 107 + 20\log(1.2) - 104.8 = 46.4 \text{ (dB)}\end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 45.4 + 0.34 + 107 + 20\log(1.2) - 104.8 = 49.5 \text{ (dB)} \end{aligned}$$



$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 48.8 + 0.34 + 107 + 20\log(1.2) - 104.8 = 52.9 \text{ (dB)}\end{aligned}$$



$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 53.4 + 0.34 + 107 + 20\log(1.2) - 104.8 = 57.5 \text{ (dB)}\end{aligned}$$

**Frequency Stability**

Test Conditions		NR Band n260 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	120	38.450045	-45.000	1.169	PASS
40	120	38.450022	-22.000	0.571	
30	120	38.450011	-11.000	0.286	
20(Ref.)	120	38.45	0.000	0.000	
10	120	38.449987	13.000	0.338	
0	120	38.4502937	-293.700	7.629	
-10	120	38.4503137	-313.700	8.148	
-20	120	38.4503187	-318.700	8.278	
-30	120	38.4503027	-302.700	7.862	
20	102	38.450022	-22.000	0.571	
20	120	38.449999	1.000	0.026	
20	138	38.450002	-2.000	0.052	

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

Appendix B.4 Radiated Test: NR Band n261 (Beam ID: 63+319)

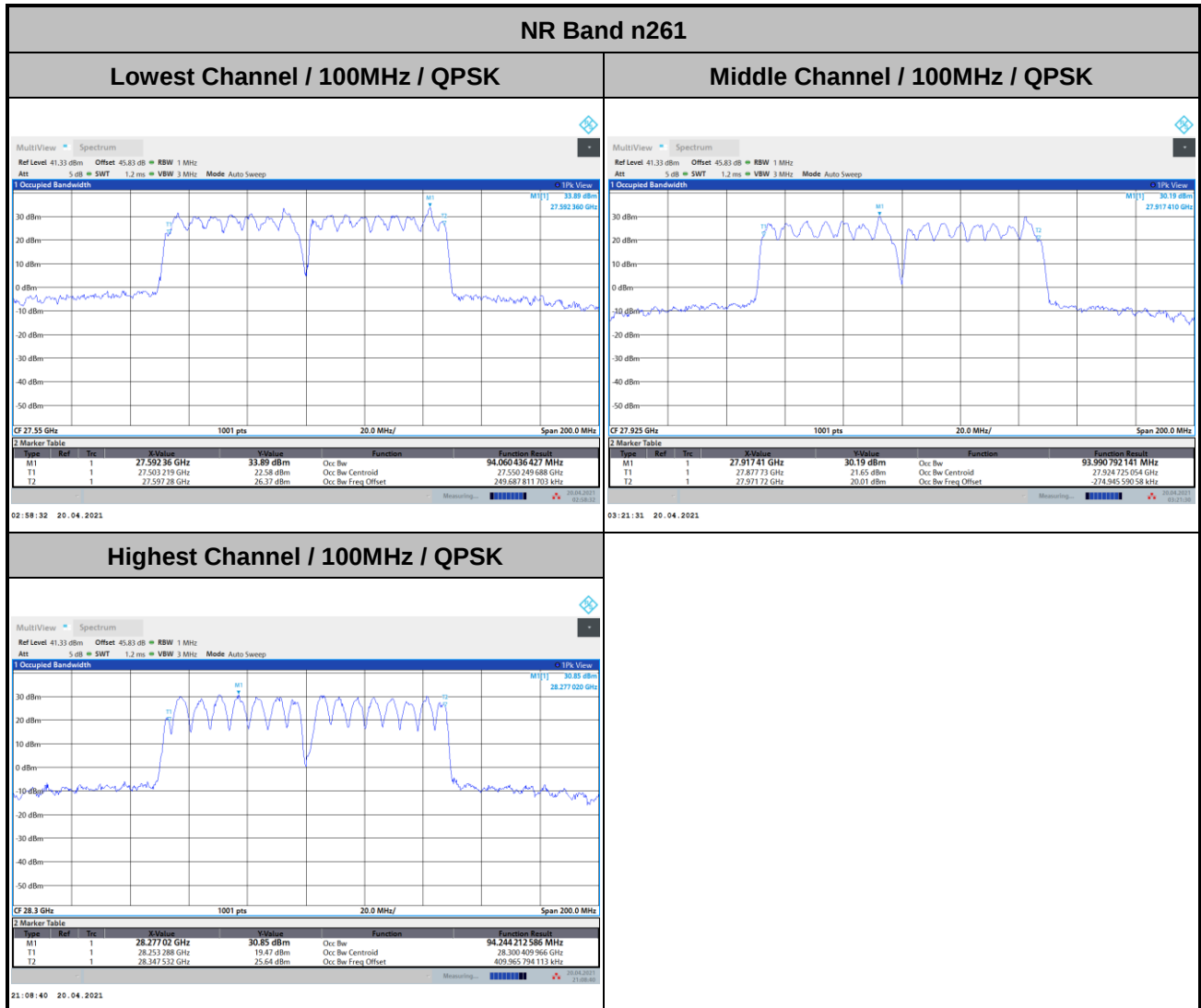
Occupied Bandwidth

Mode	DFT-s-OFDM NR Band n261 : 99%OBW(MHz)							
BW	100MHz				200MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	94.24	94.06	93.54	94.21	188.65	189.03	189.04	189.21
Middle CH	-	93.99	-	-	-	188.19	-	-
Highest CH	-	94.24	-	-	-	188.76	-	-

Mode	CP-OFDM NR Band n261 : 99%OBW(MHz)					
BW	100MHz			200MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	94.39	94.26	94.32	191.06	191.59	191.10
Middle CH	94.41	-	-	190.85	-	-
Highest CH	94.27	-	-	190.70	-	-

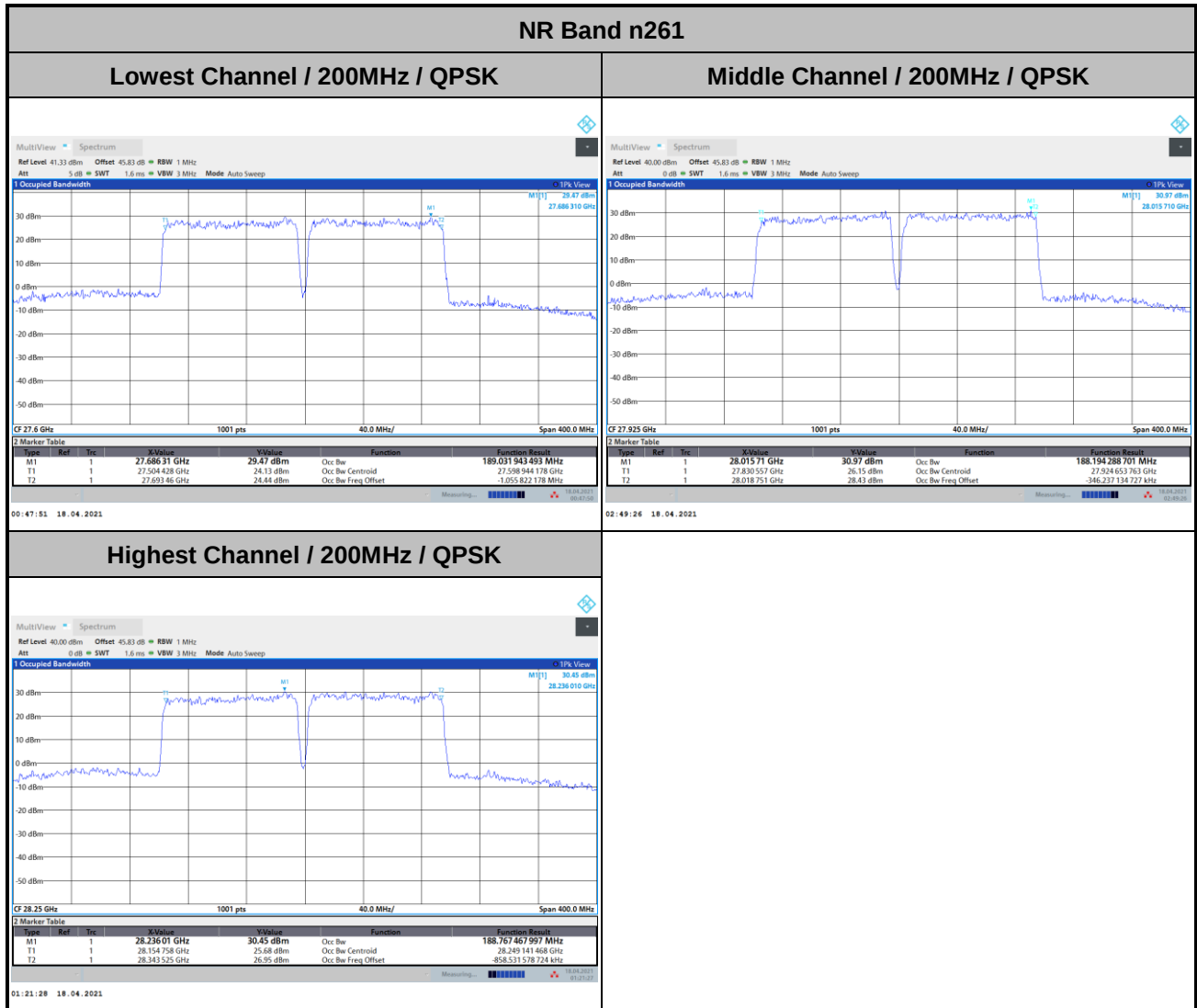


DFT-s-OFDM





DFT-s-OFDM





DFT-s-OFDM

