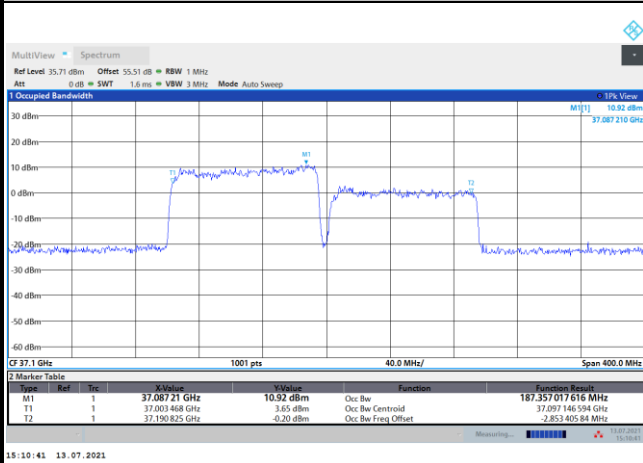




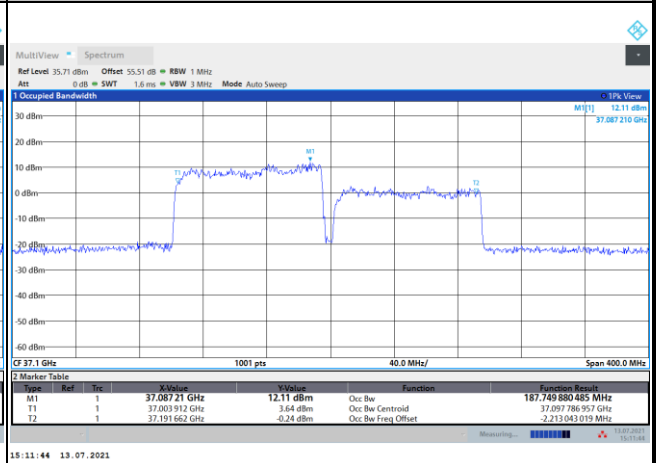
DFT-s-OFDM Module 1

NR Band n260

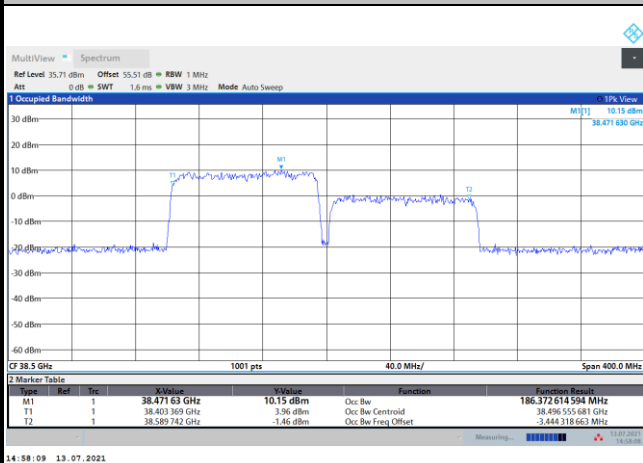
Lowest Channel / 200MHz / BPSK



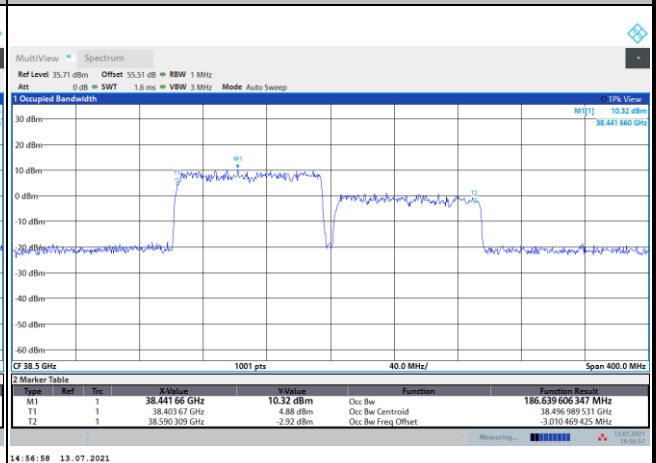
Lowest Channel / 200MHz / QPSK



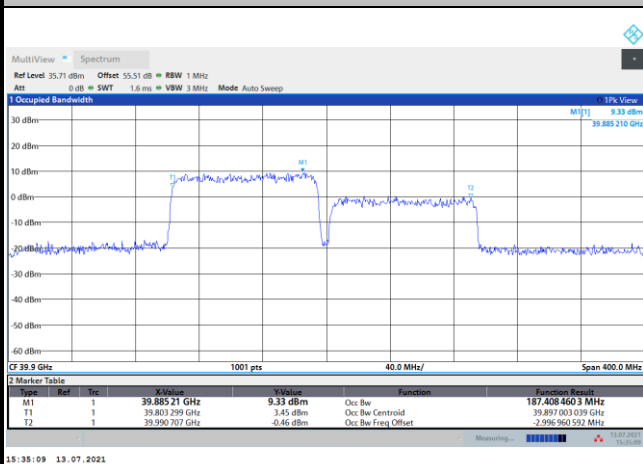
Middle Channel / 200MHz / BPSK



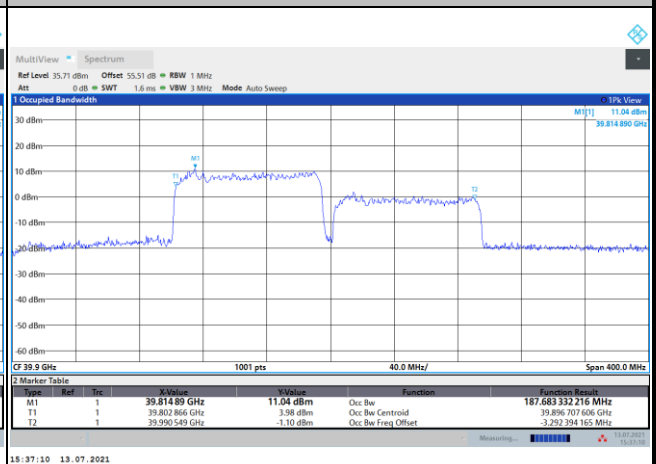
Middle Channel / 200MHz / QPSK



Highest Channel / 200MHz / BPSK



Highest Channel / 200MHz / QPSK

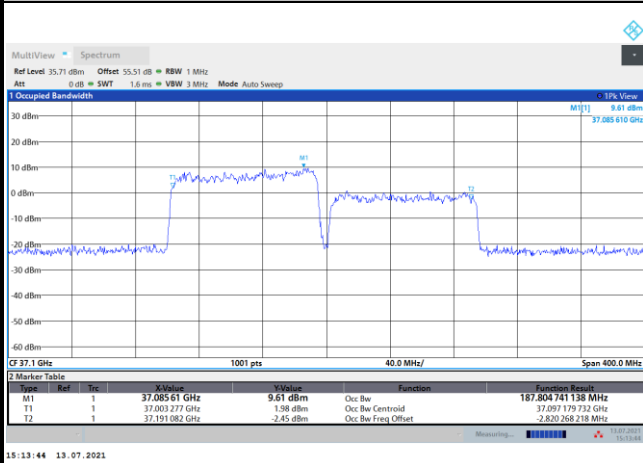




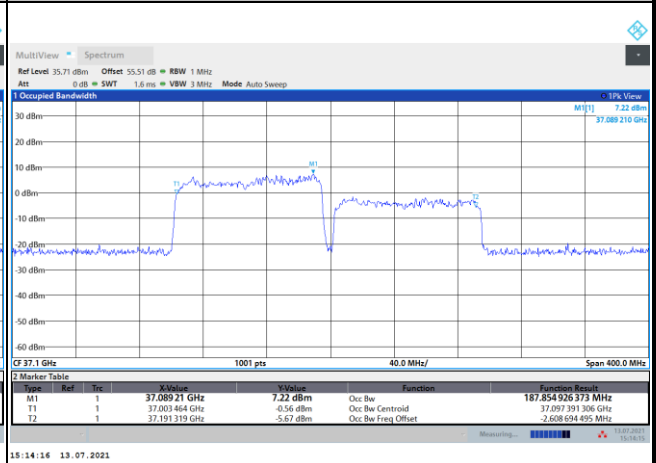
DFT-s-OFDM Module 1

NR Band n260

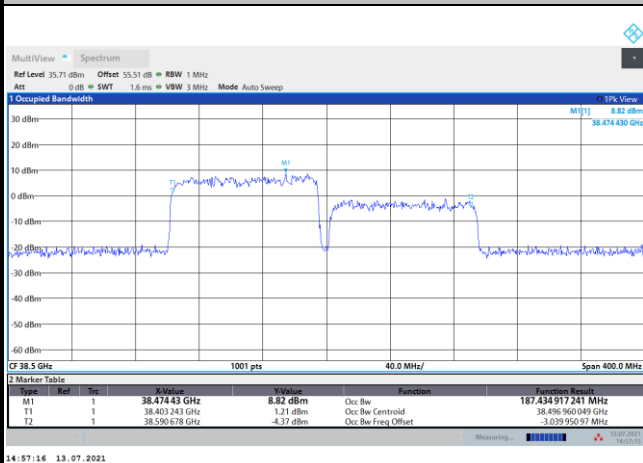
Lowest Channel / 200MHz / 16QAM



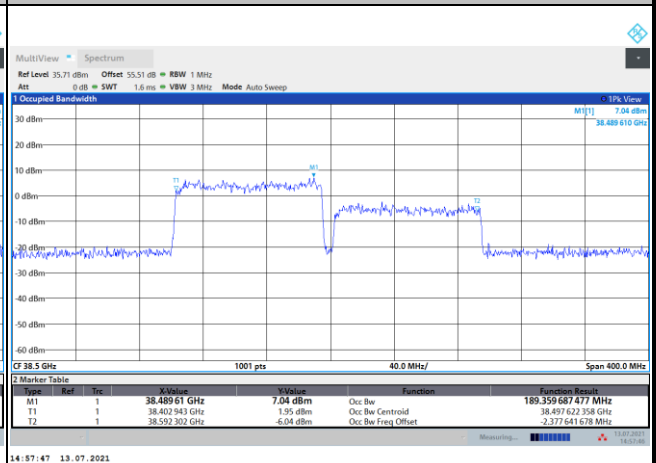
Lowest Channel / 200MHz / 64QAM



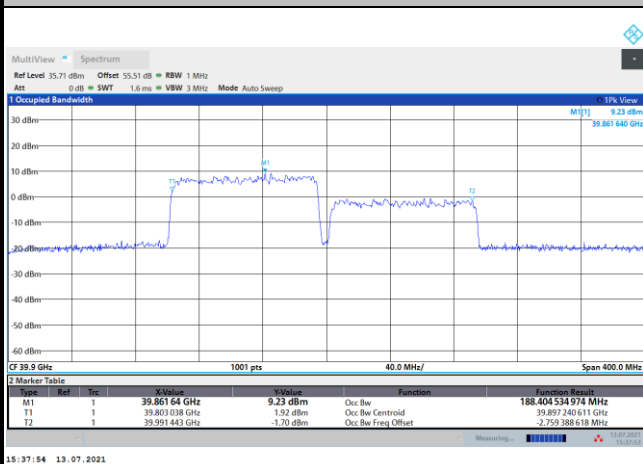
Middle Channel / 200MHz / 16QAM



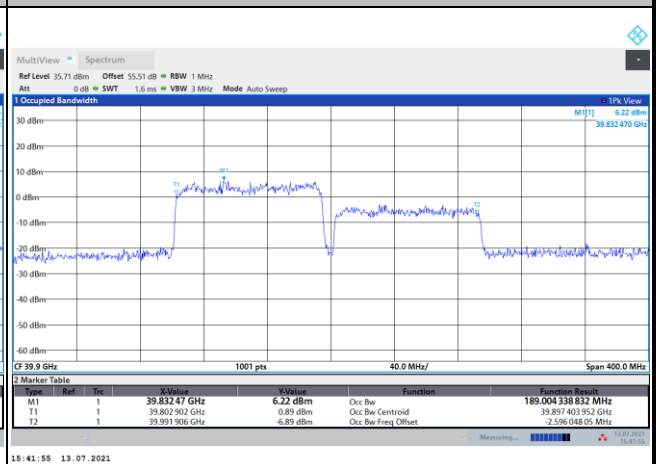
Middle Channel / 200MHz / 64QAM



Highest Channel / 200MHz / 16QAM



Highest Channel / 200MHz / 64QAM





Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module 1 NR Band n260 : BE (dBm) 1 RB											
BW			50MHz				100MHz				200MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≅ -5	-15.3	-13.41	-16.67	-17.69	-15.22	-14.14	-17.15	-18.59	-17.52	-17.08	-19.42	-17.32
	>10%OB	≅ -13	-27.96	-28.15	-28.88	-29.61	-27.29	-27.36	-27.81	-27.61	-25.86	-25.95	-25.24	-26.17
High CH	0~10%OB	≅ -5	-18.55	-19.23	-20.83	-21.48	-18.97	-18.67	-19.67	-21.43	-28.33	-28.39	-28.39	-27.45
	>10%OB	≅ -13	-25.7	-25.88	-27.17	-27.6	-26.42	-26.23	-26.14	-26.46	-27.29	-27.39	-27.65	-27.24
Result			Compliance											

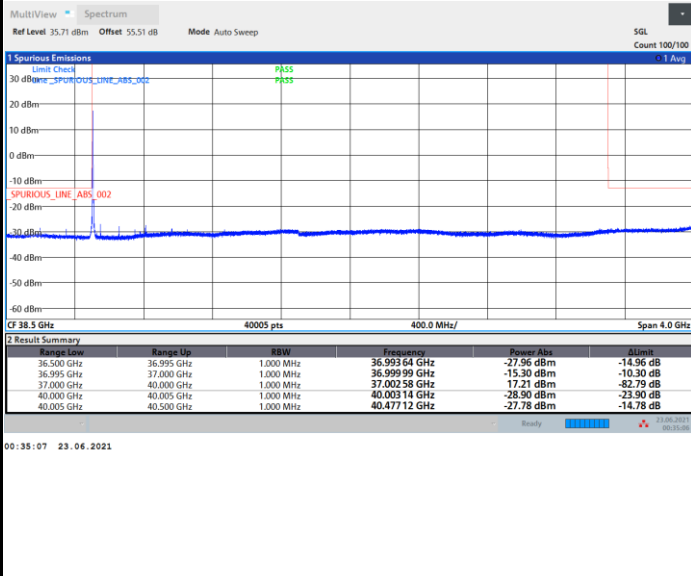
Mode			DFT-s-OFDM Module 1 NR Band n260 : BE (dBm) Full RB											
BW			50MHz				100MHz				200MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≅ -5	-24.37	-23.77	-27.57	-29.52	-26.23	-25.91	-27.65	-28.5	-28.08	-28.26	-29.71	-30.15
	>10%OB	≅ -13	-27.85	-25.14	-29.88	-30.45	-28.3	-27.44	-28.02	-28.07	-29.93	-29.35	-29.92	-30.51
High CH	0~10%OB	≅ -5	-23.9	-23.9	-26.27	-27.82	-24.17	-22.9	-25.18	-26.55	-28.05	-27.34	-27.86	-28.54
	>10%OB	≅ -13	-24.71	-24.49	-27.05	-27.75	-25.96	-23.64	-26.05	-26.43	-27.34	-27.65	-27.64	-27.69
Result			Compliance											



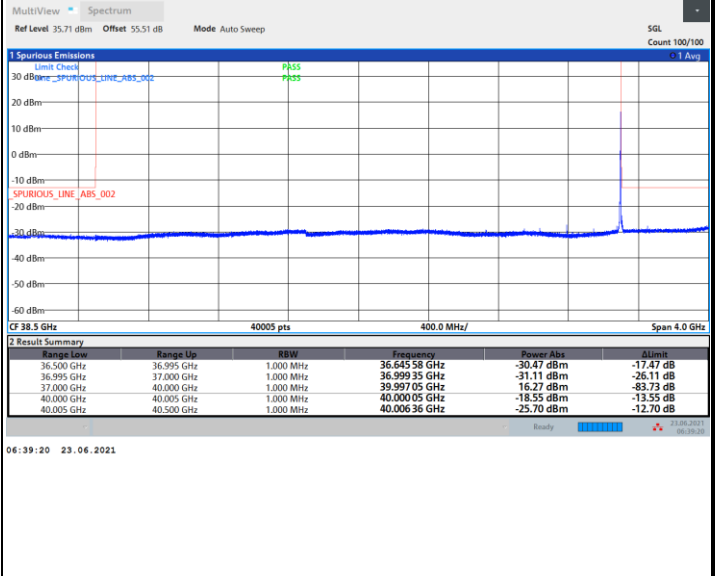
DFT-s-OFDM Module 1

NR Band n260 / 50MHz / BPSK

Lowest Band Edge / 1 RB

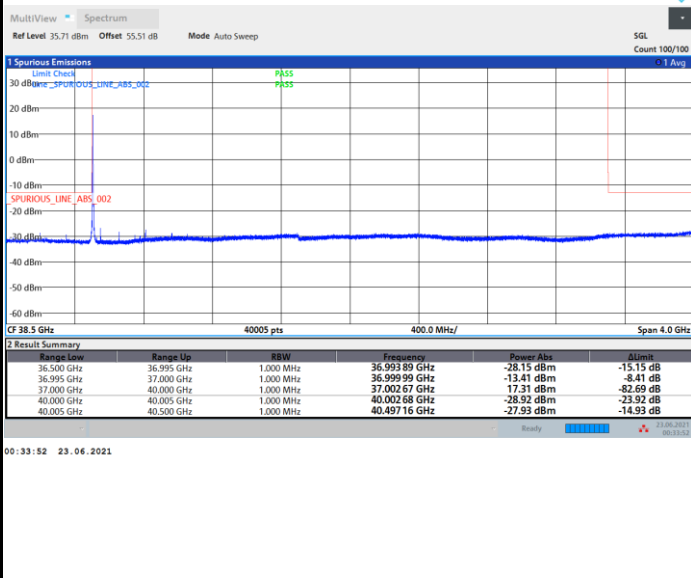


Highest Band Edge / 1 RB

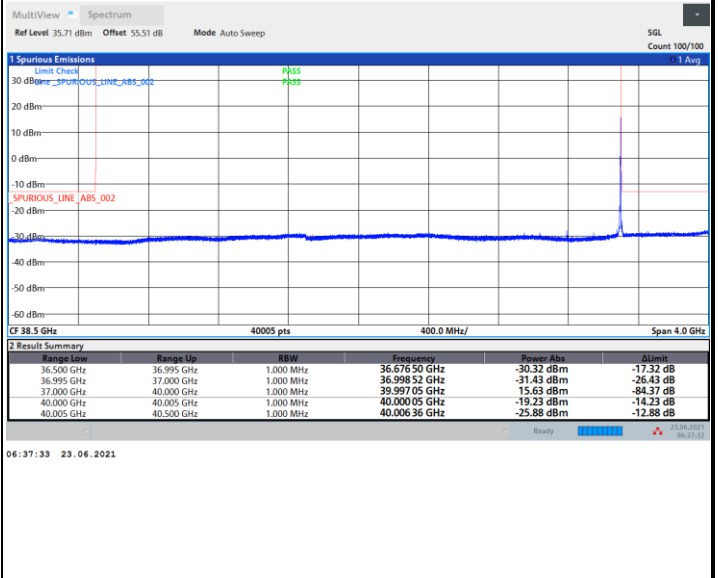


NR Band n260 / 50MHz / QPSK

Lowest Band Edge / 1 RB



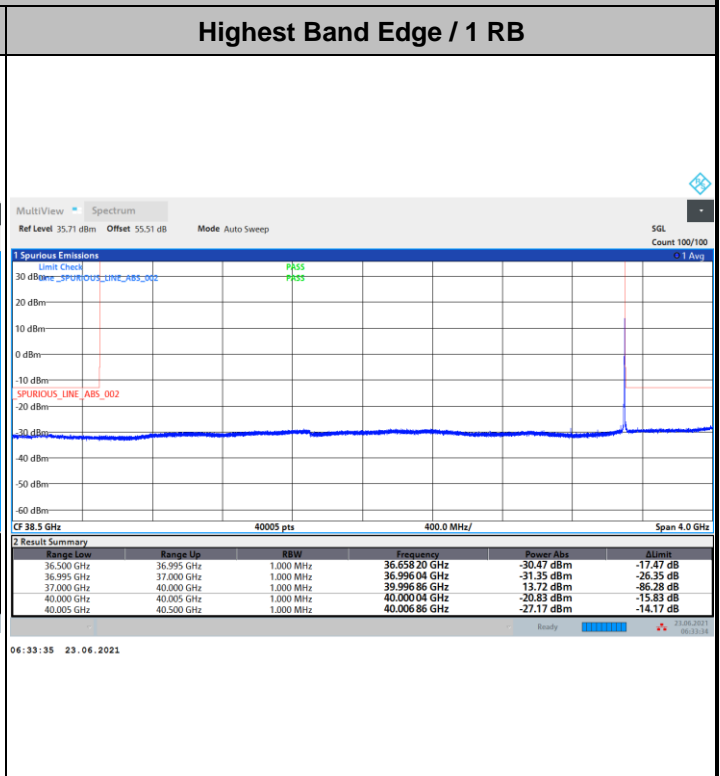
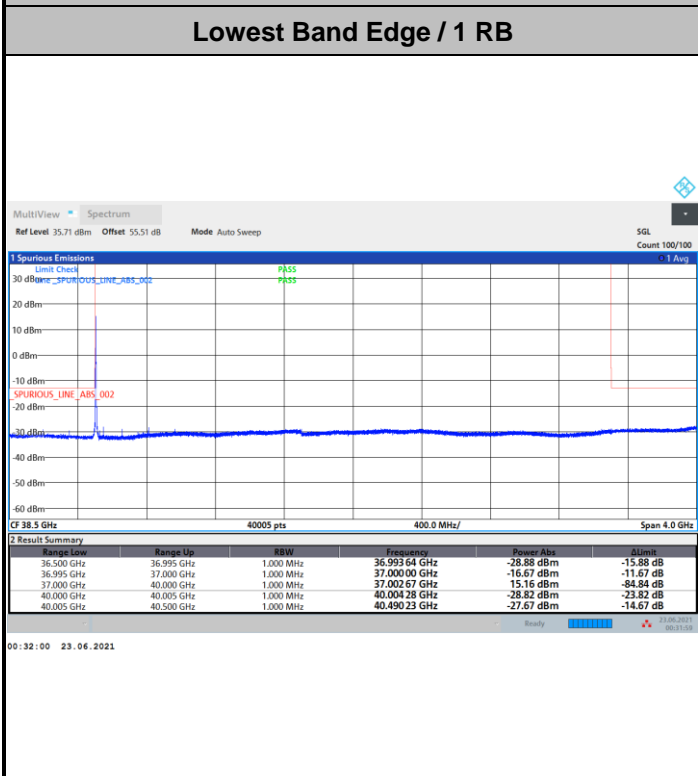
Highest Band Edge / 1 RB



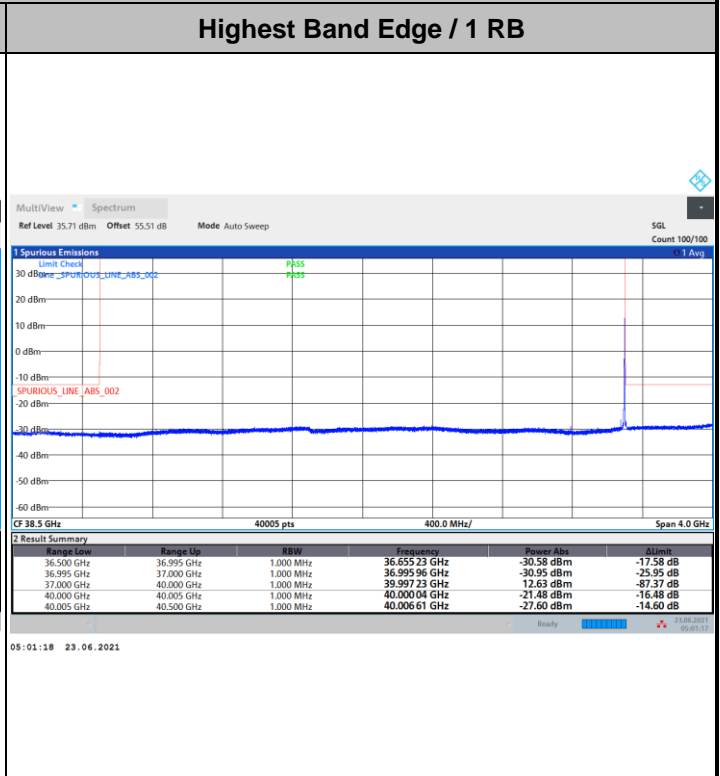
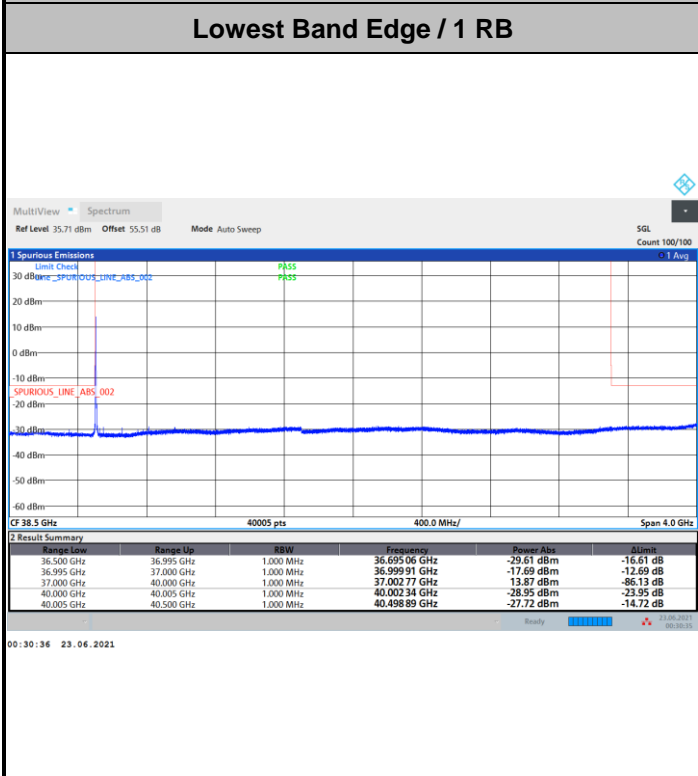


DFT-s-OFDM Module 1

NR Band n260 / 50MHz / 16QAM



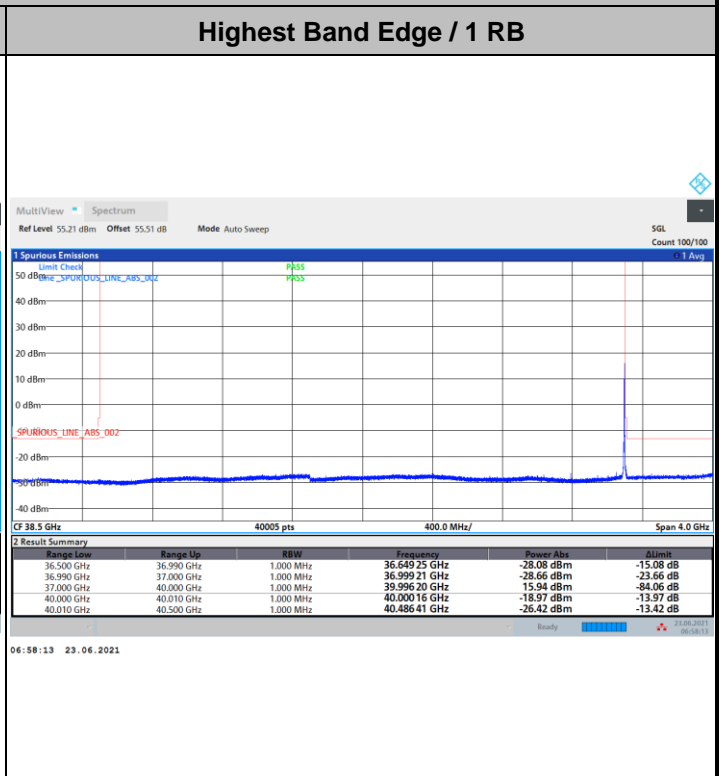
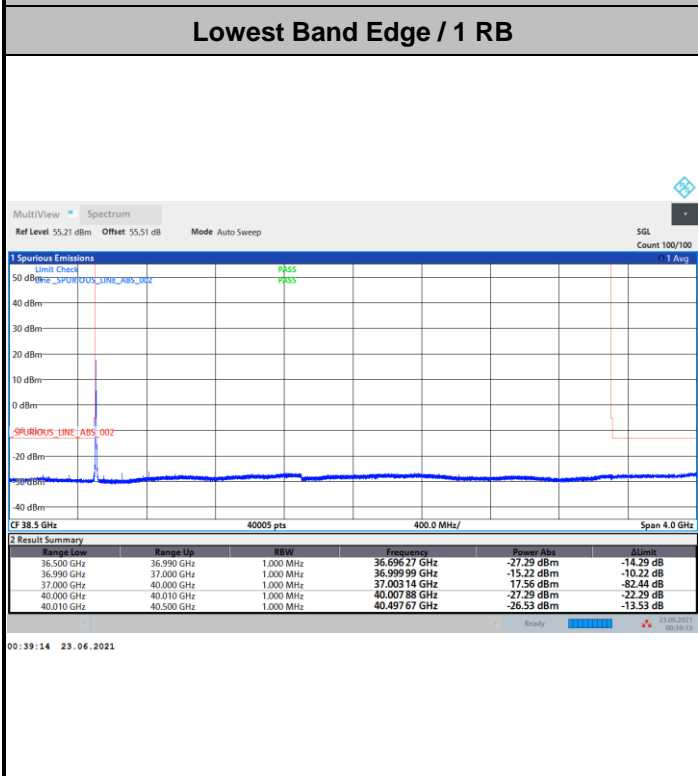
NR Band n260 / 50MHz / 64QAM



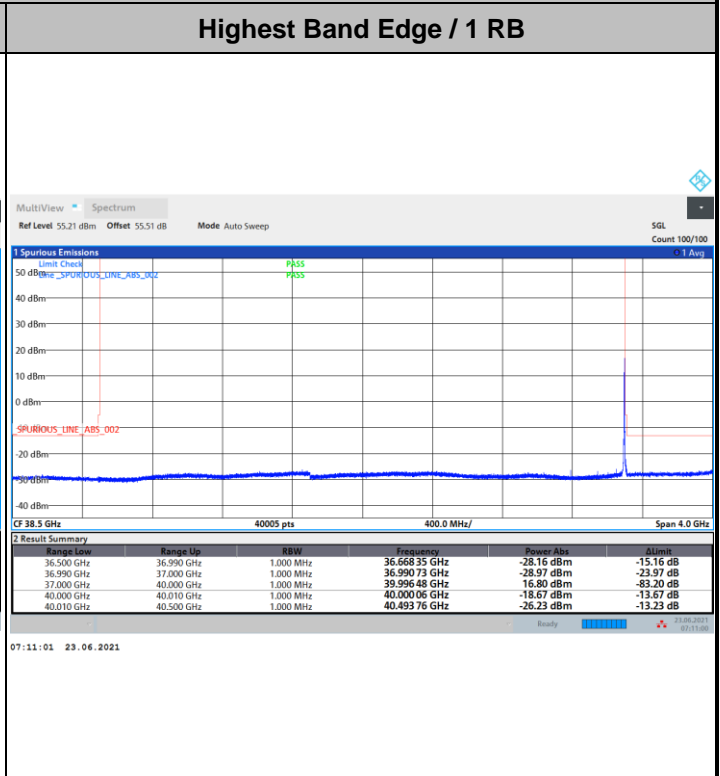
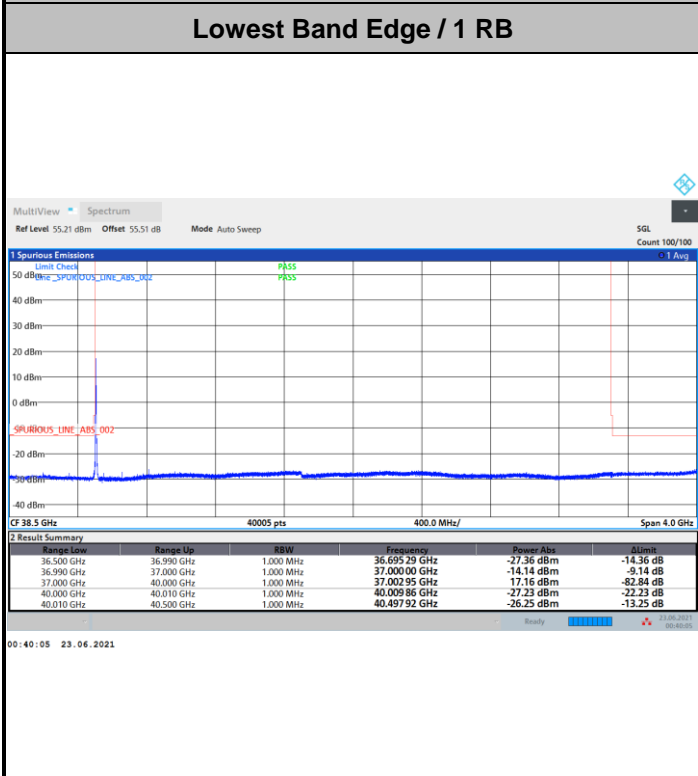


DFT-s-OFDM Module 1

NR Band n260 / 100MHz / BPSK

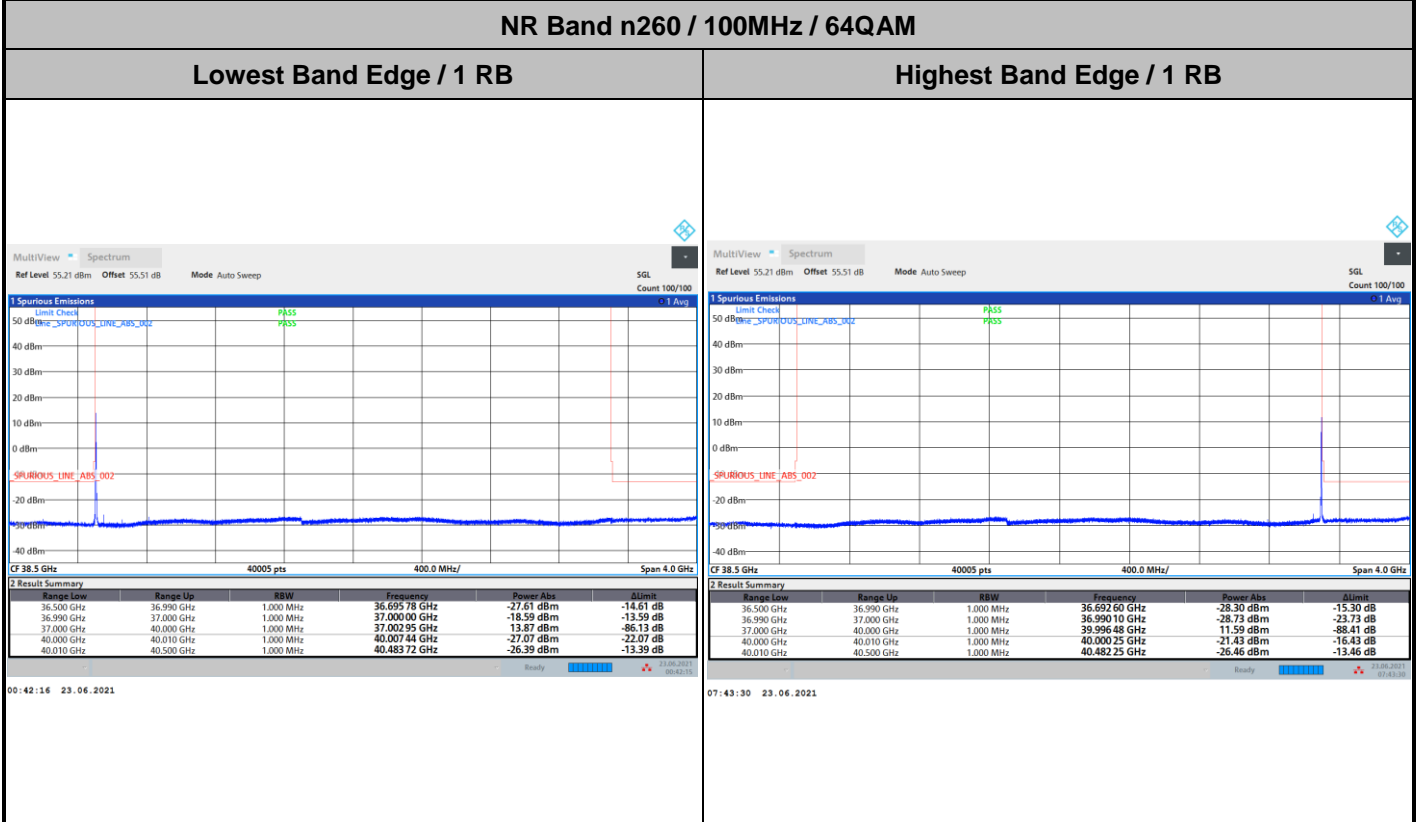
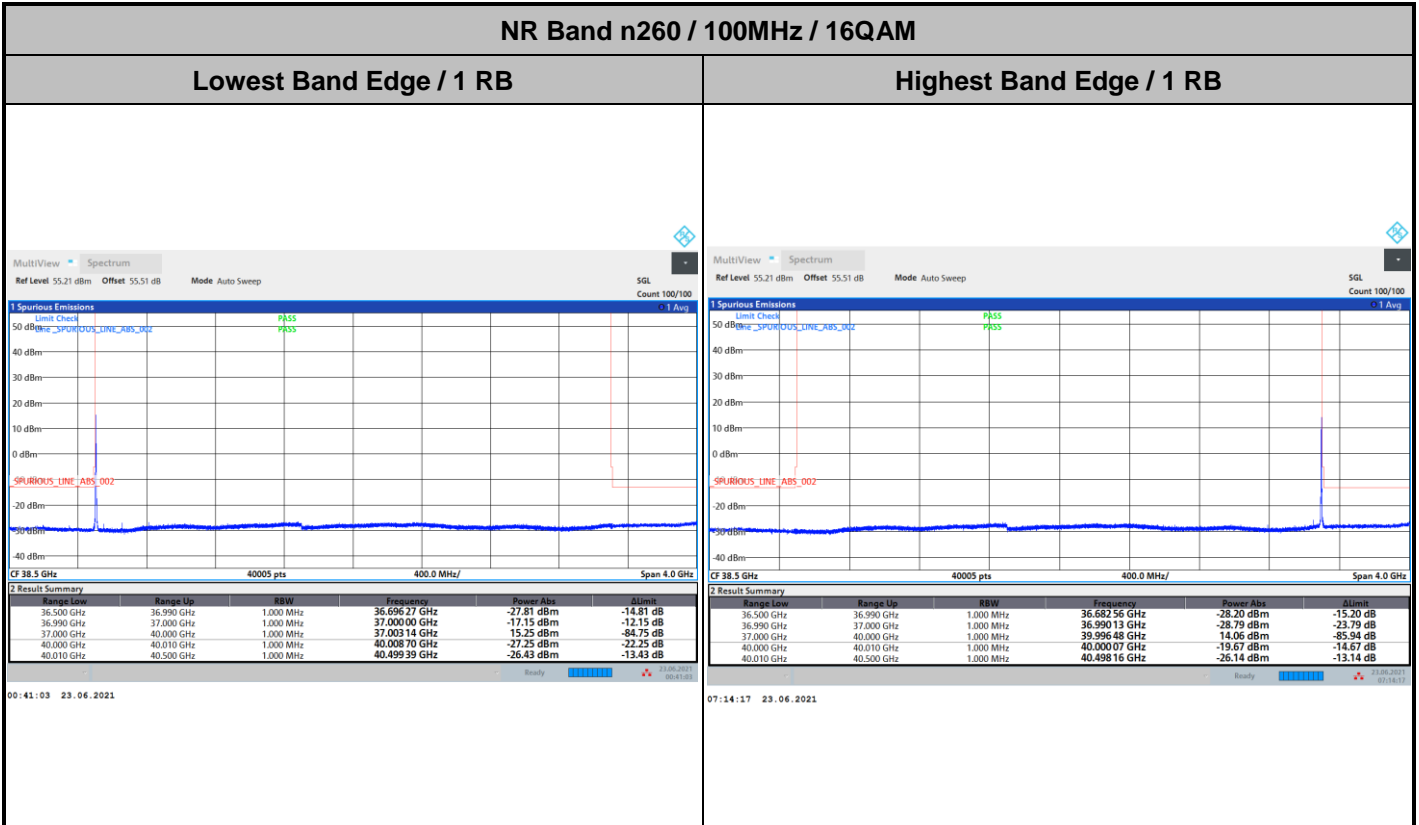


NR Band n260 / 100MHz / QPSK





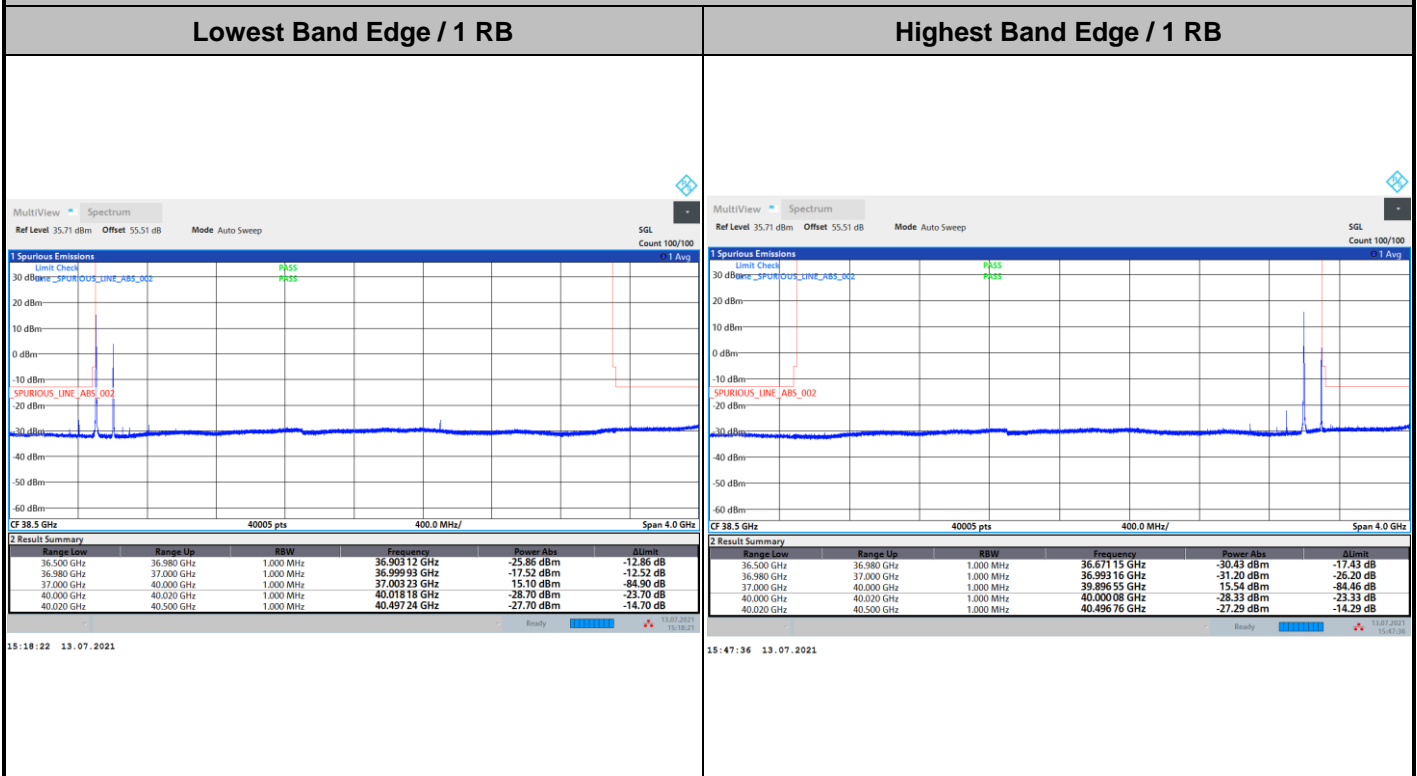
DFT-s-OFDM Module 1



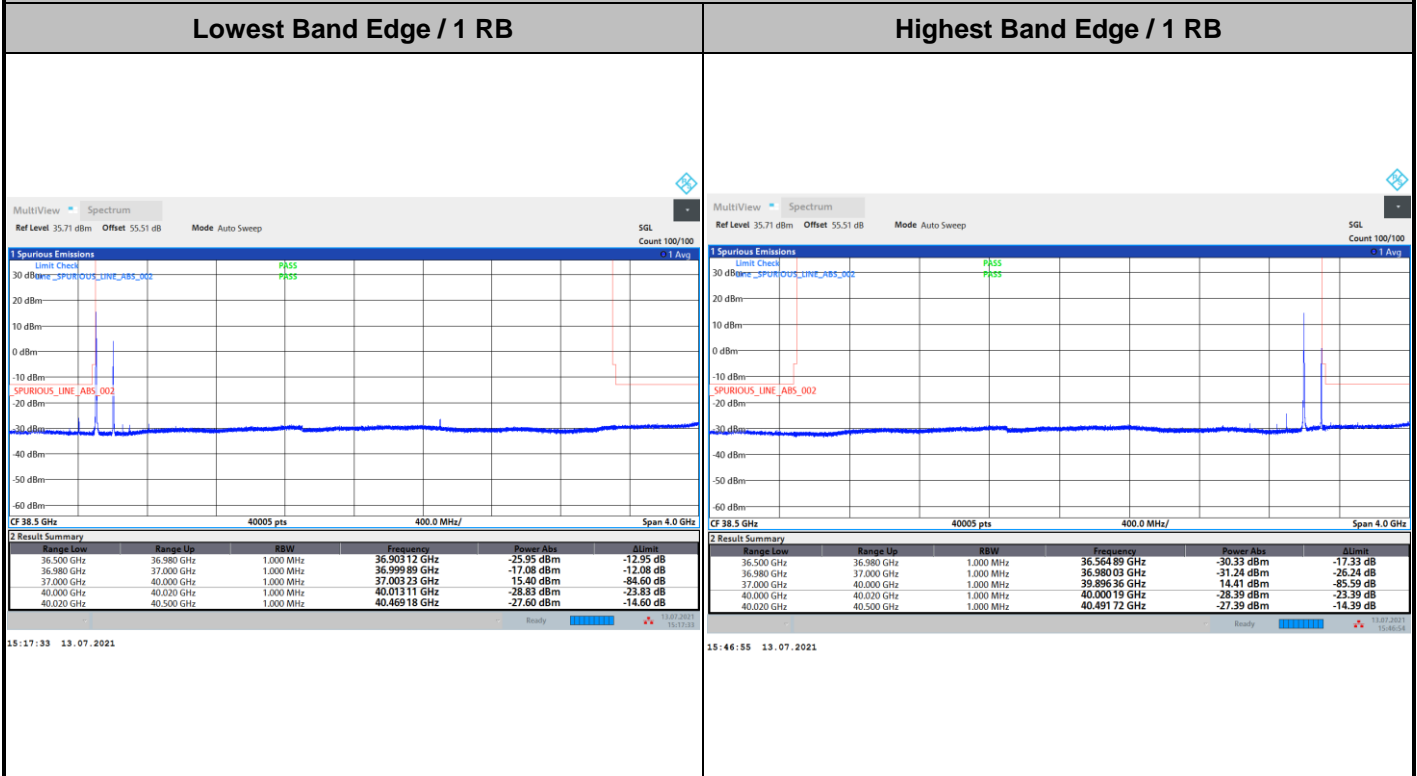


DFT-s-OFDM Module 1

NR Band n260 / 200MHz / BPSK



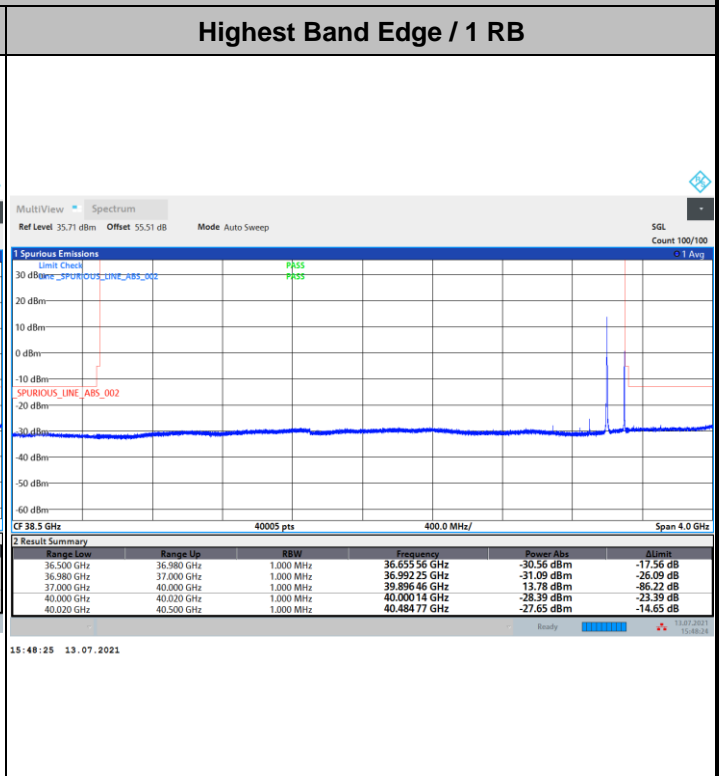
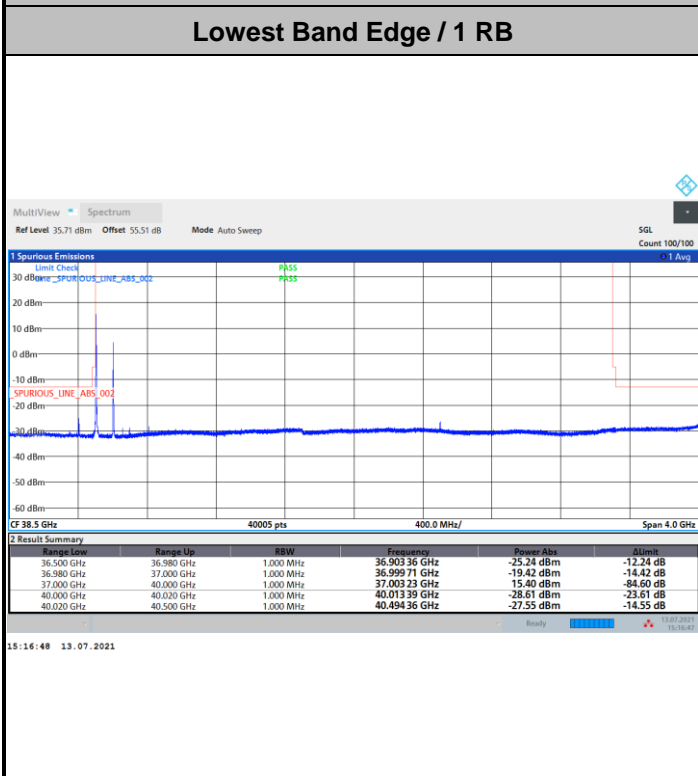
NR Band n260 / 200MHz / QPSK



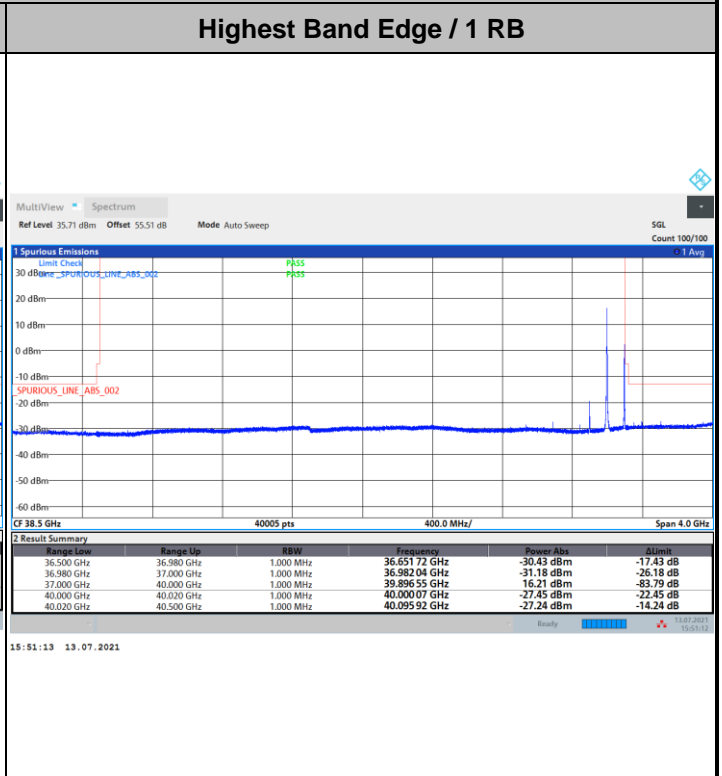
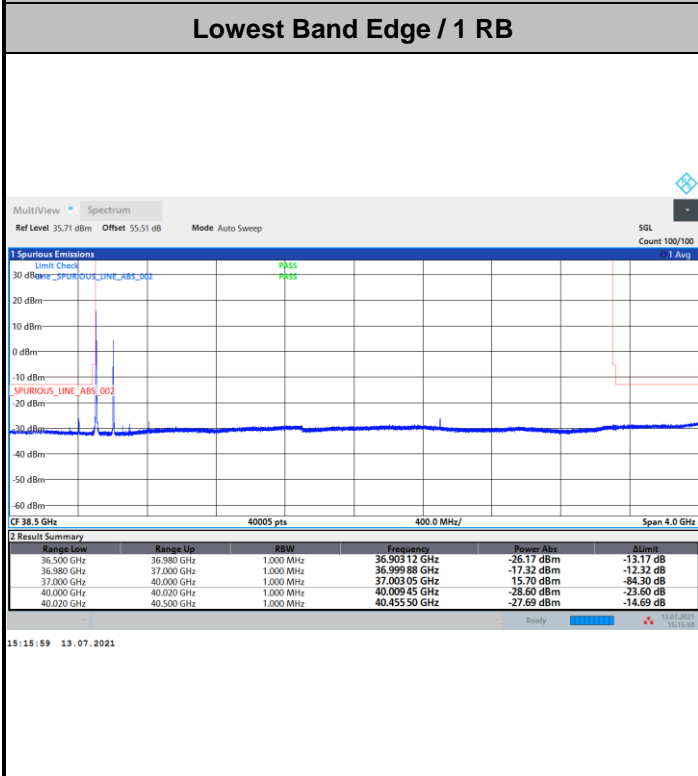


DFT-s-OFDM Module 1

NR Band n260 / 200MHz / 16QAM



NR Band n260 / 200MHz / 64QAM

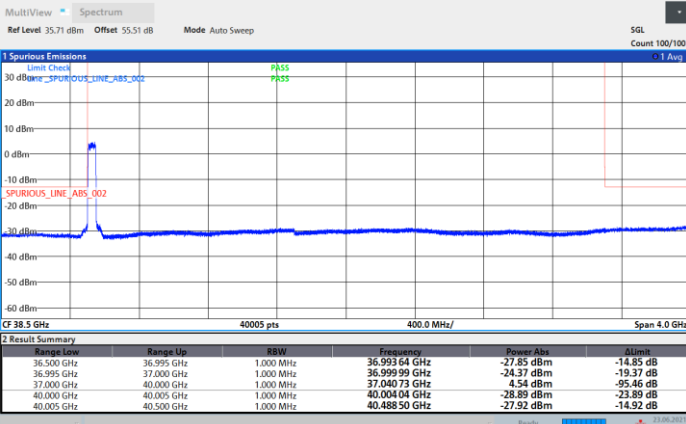




DFT-s-OFDM Module 1

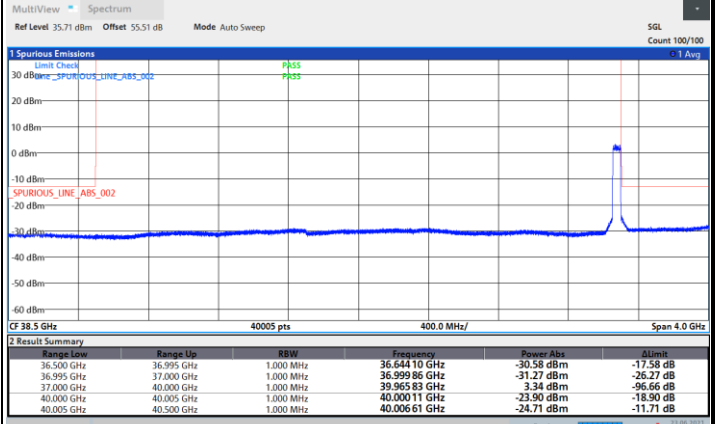
NR Band n260 / 50MHz / BPSK

Lowest Band Edge / Full RB



00:25:44 23.06.2021

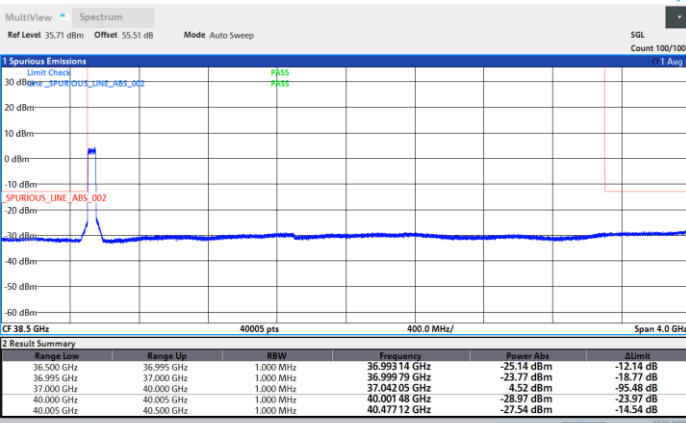
Highest Band Edge / Full RB



04:50:45 23.06.2021

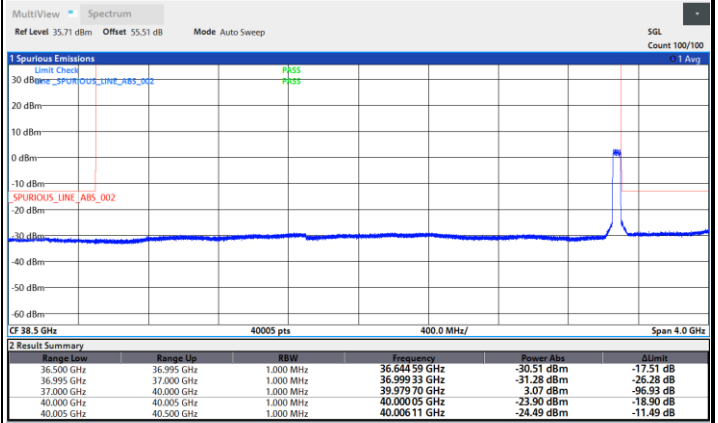
NR Band n260 / 50MHz / QPSK

Lowest Band Edge / Full RB



00:23:57 23.06.2021

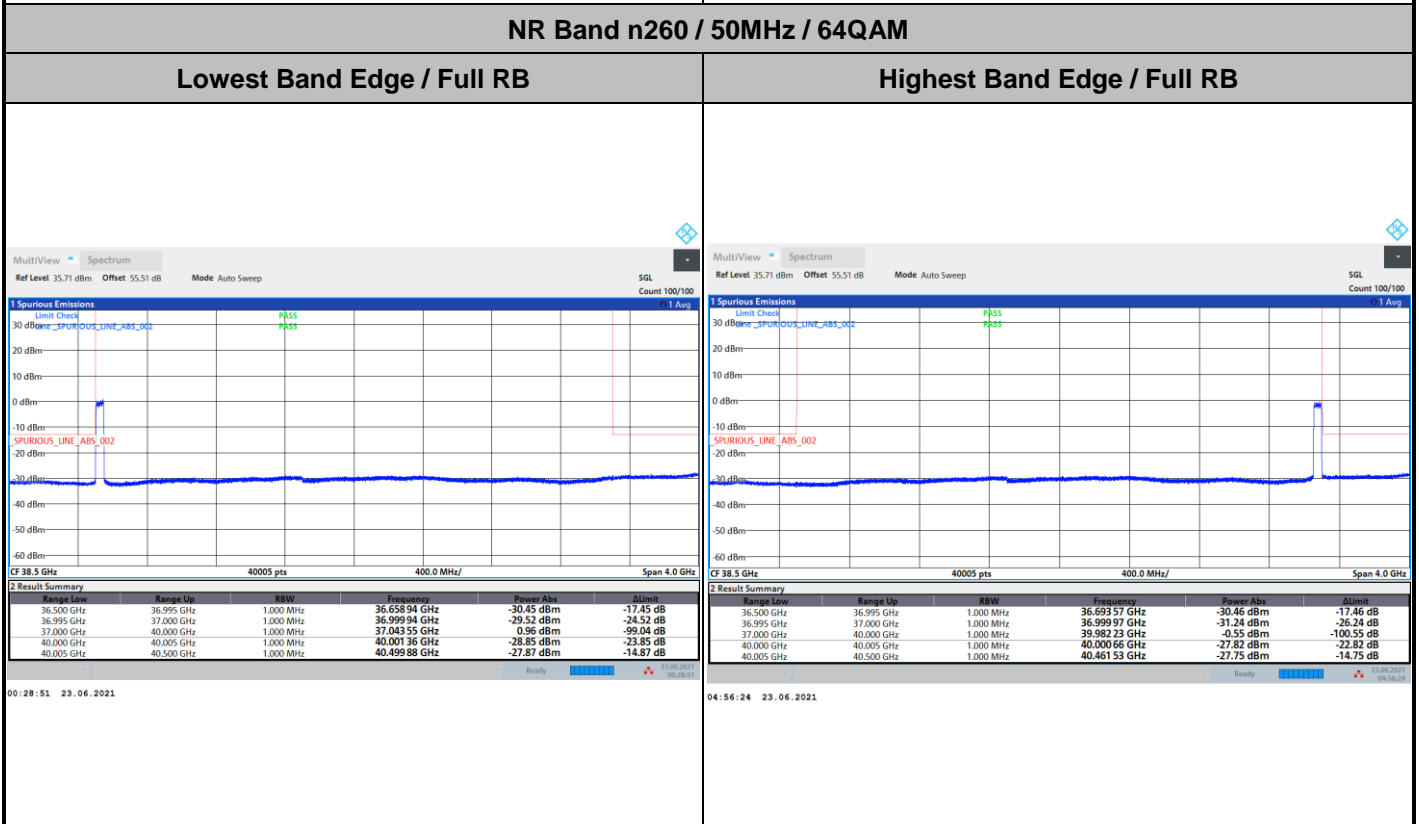
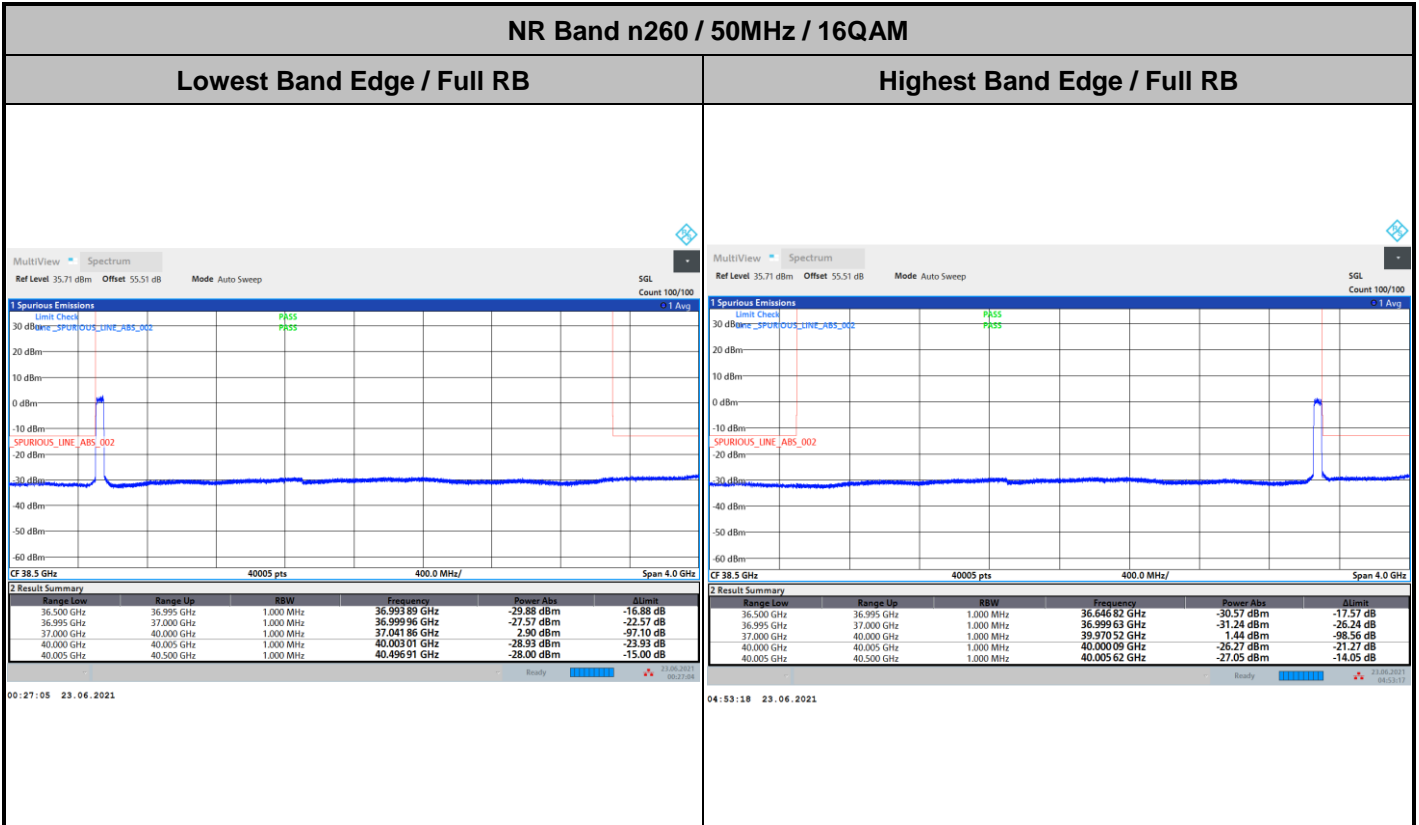
Highest Band Edge / Full RB



04:49:43 23.06.2021

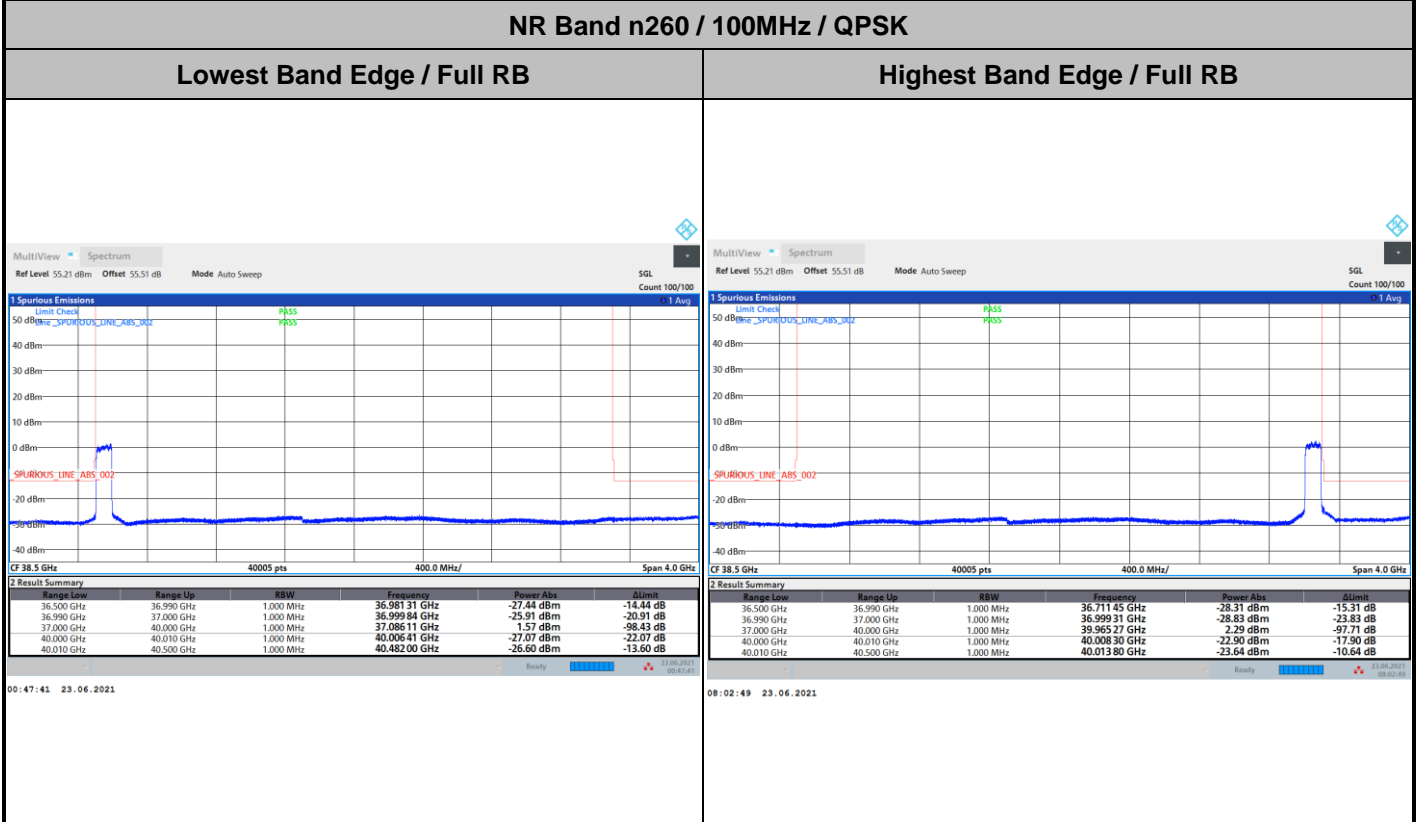
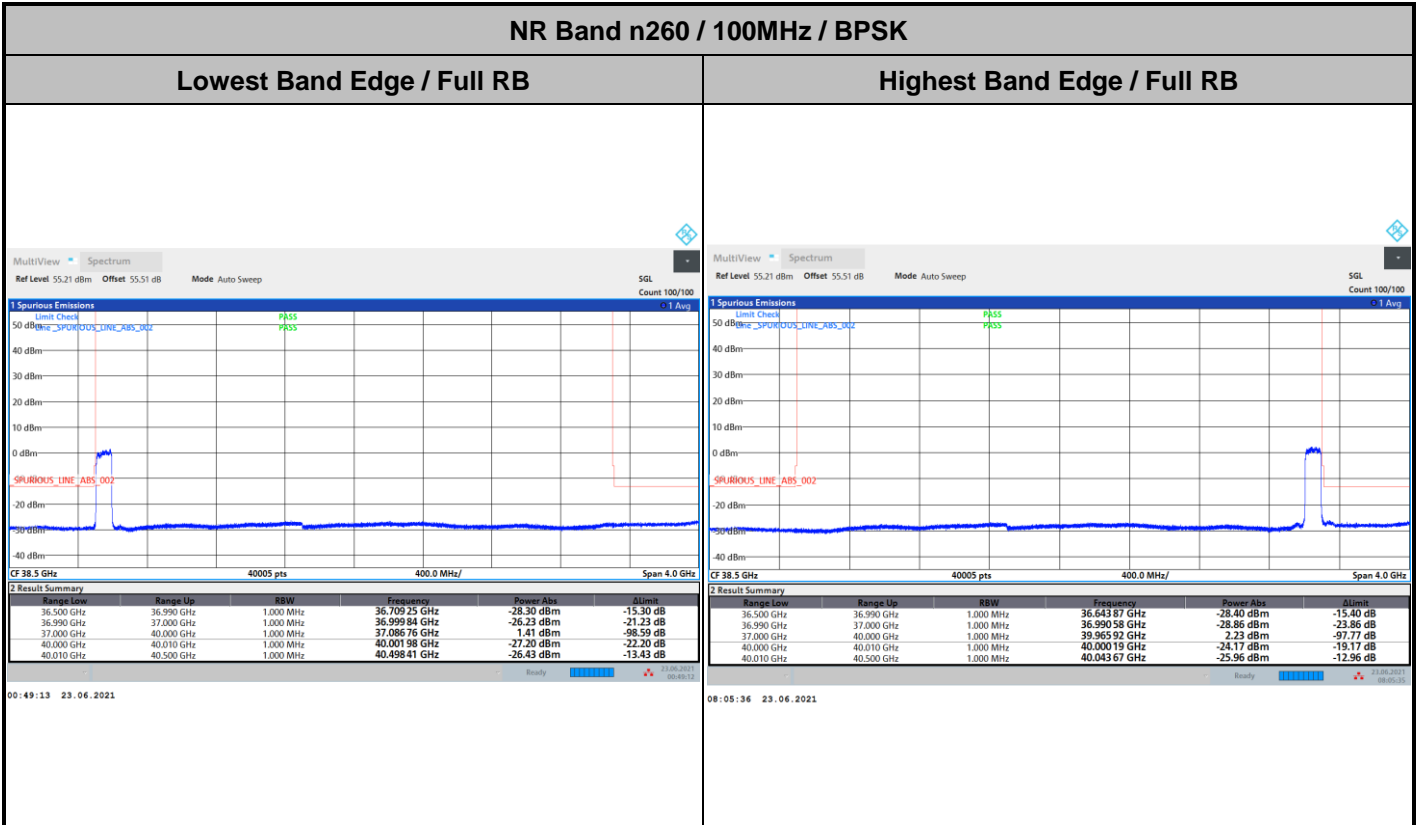


DFT-s-OFDM Module 1



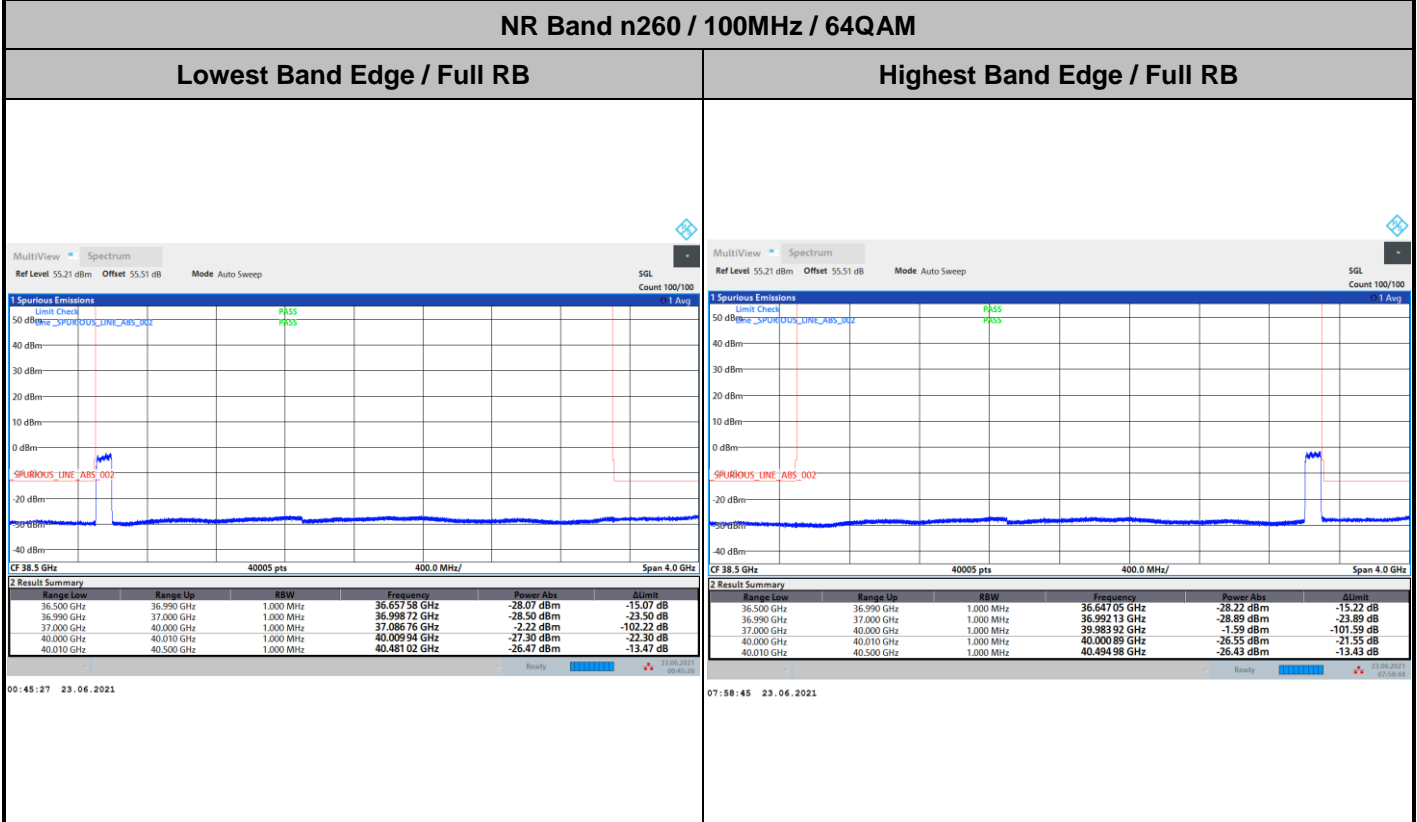
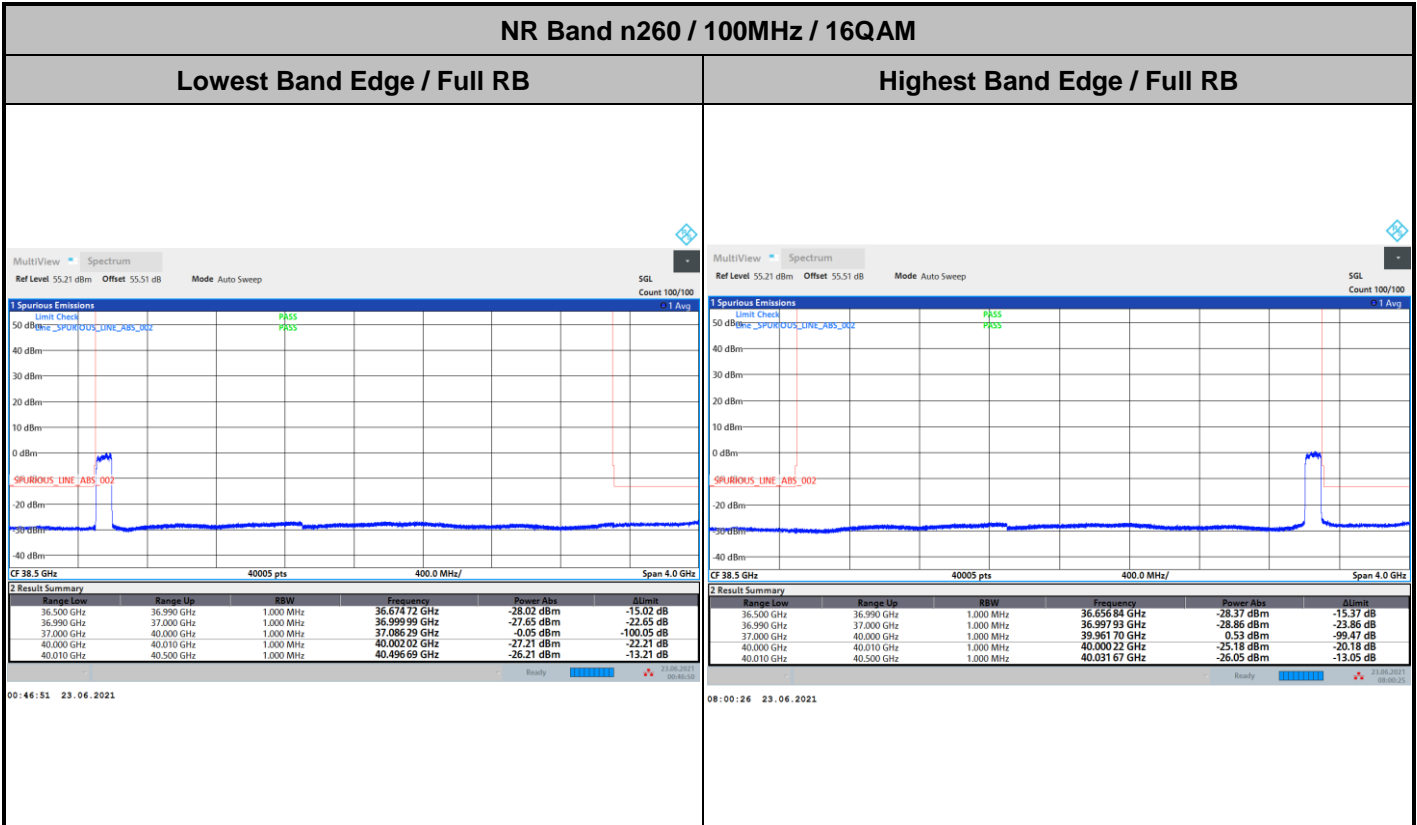


DFT-s-OFDM Module 1





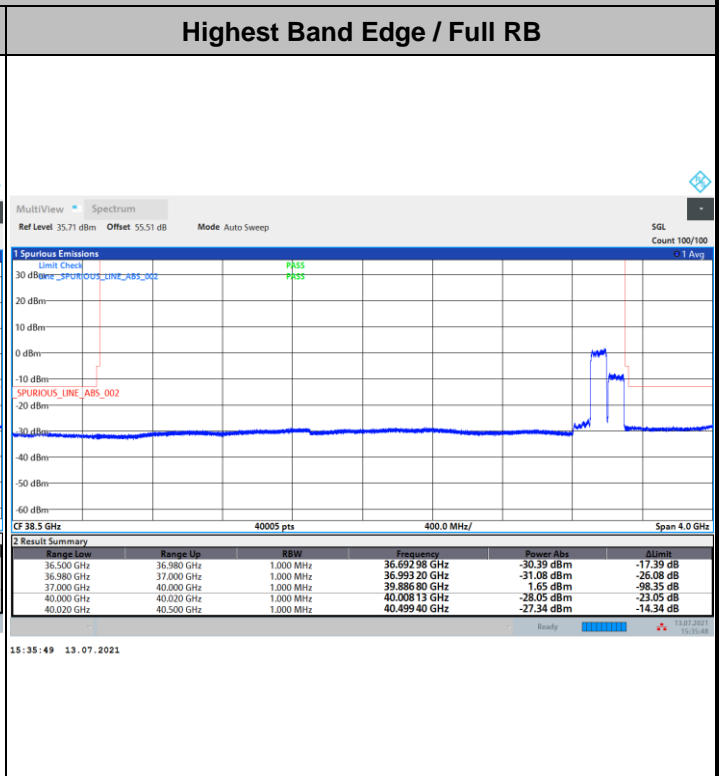
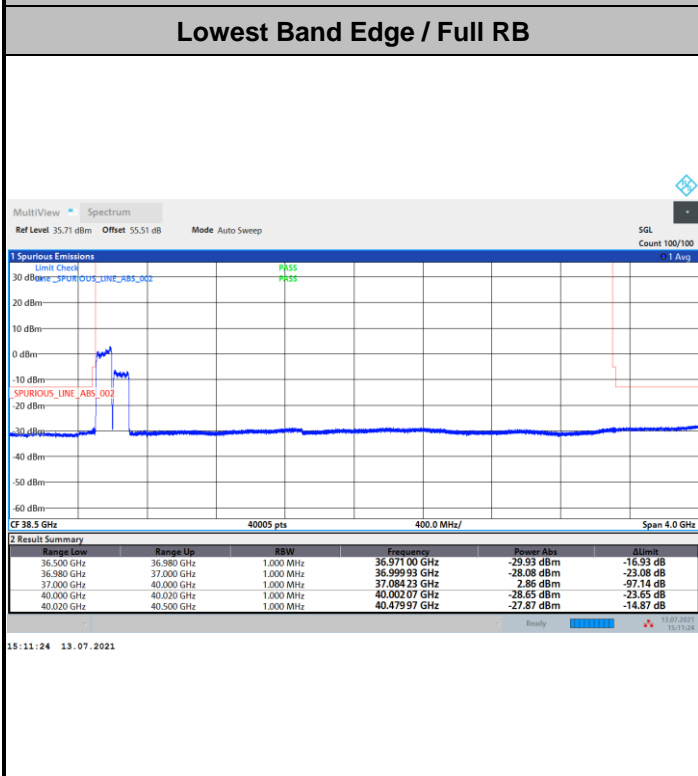
DFT-s-OFDM Module 1



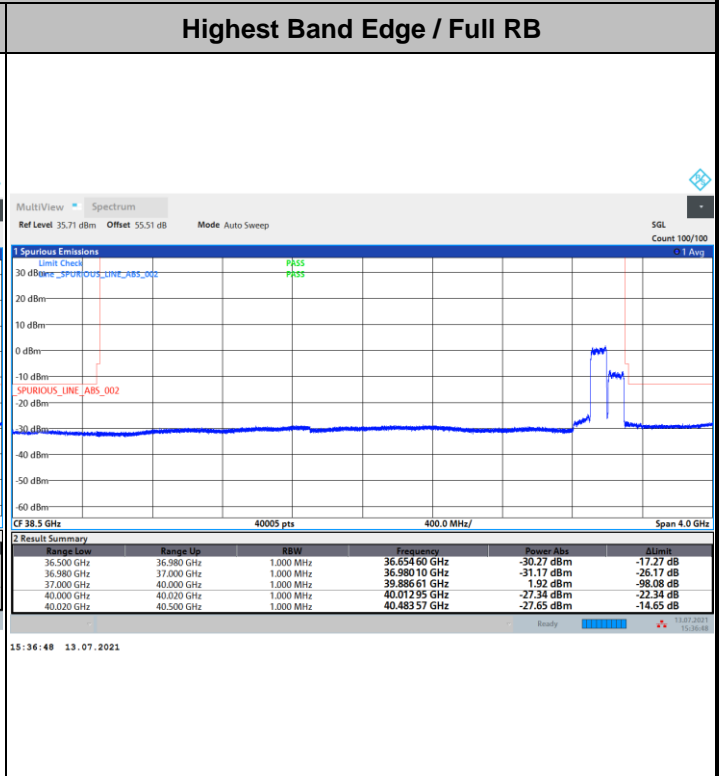
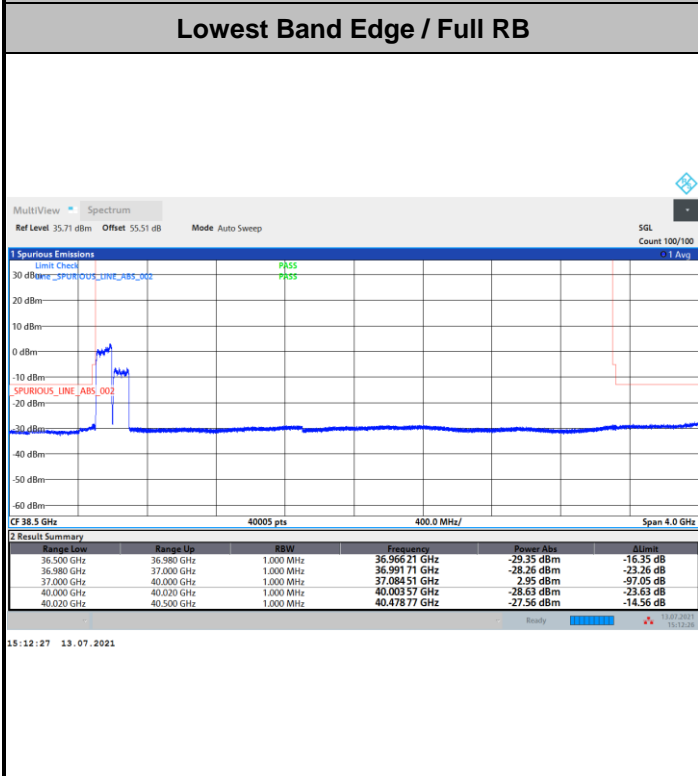


DFT-s-OFDM Module 1

NR Band n260 / 200MHz / BPSK

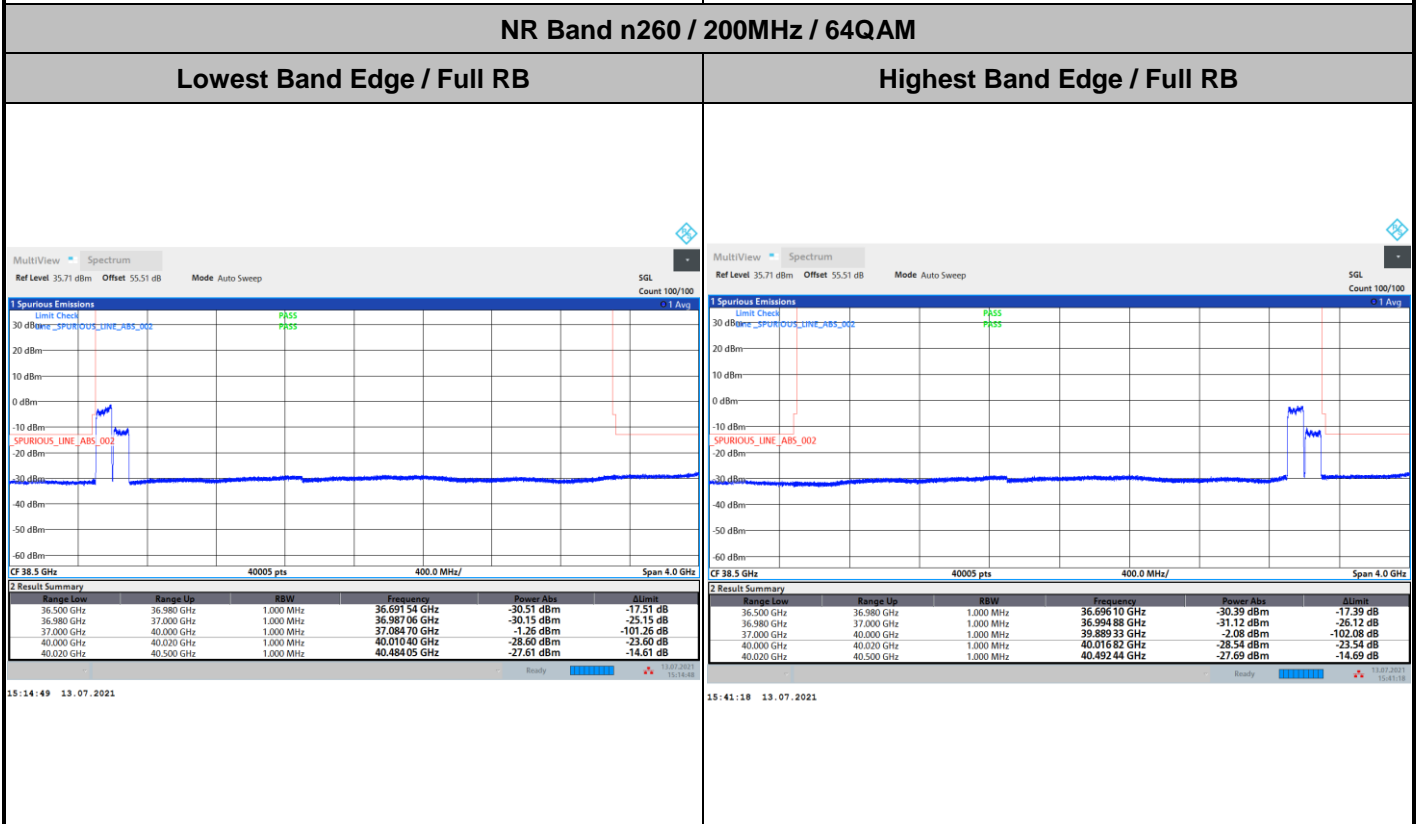
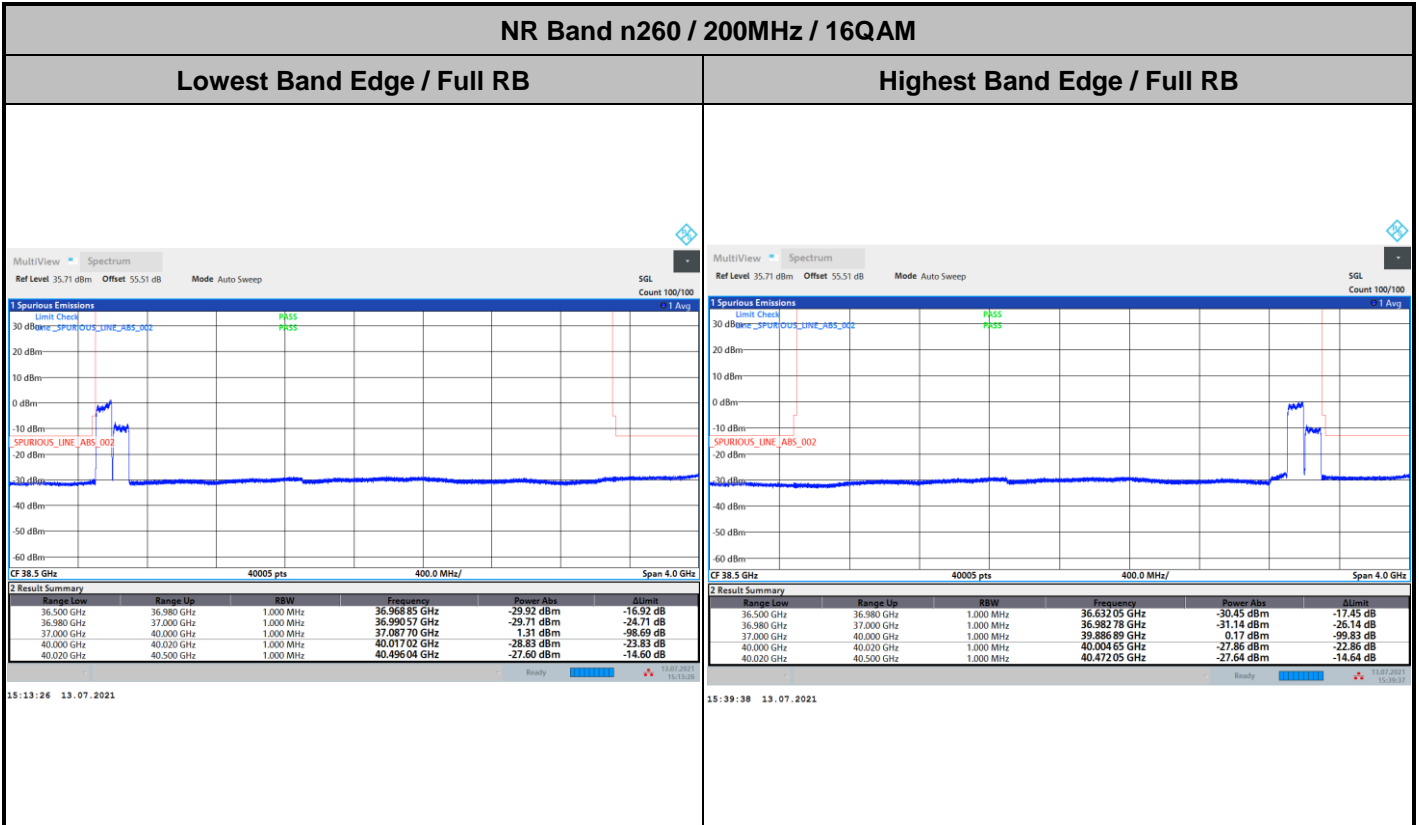


NR Band n260 / 200MHz / QPSK





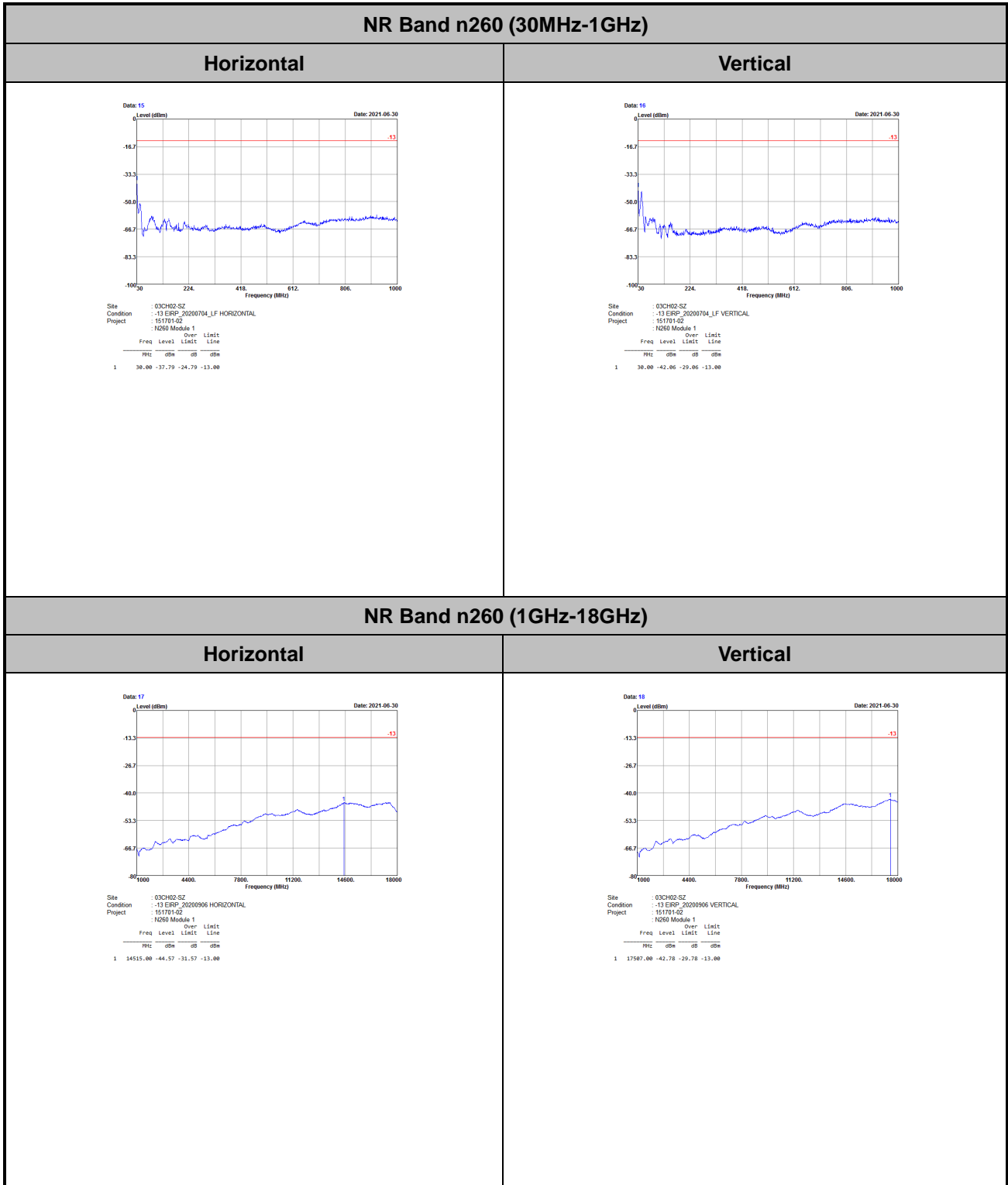
DFT-s-OFDM Module 1





Spurious Emission

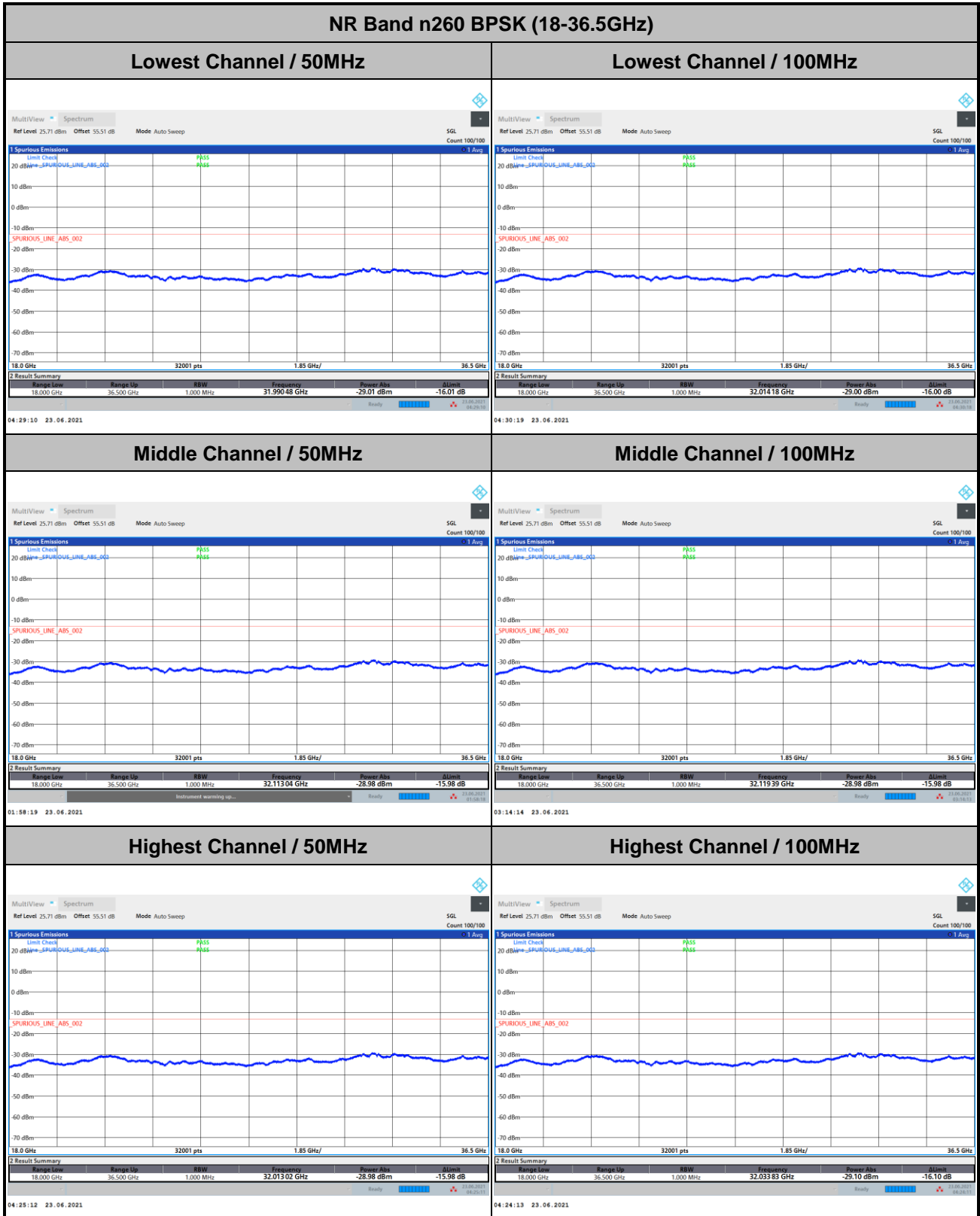
There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz. Only the noise floor is reported.





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

DFT-s-OFDM Module 1



Remark: In band and out of band frequencies are omitted.



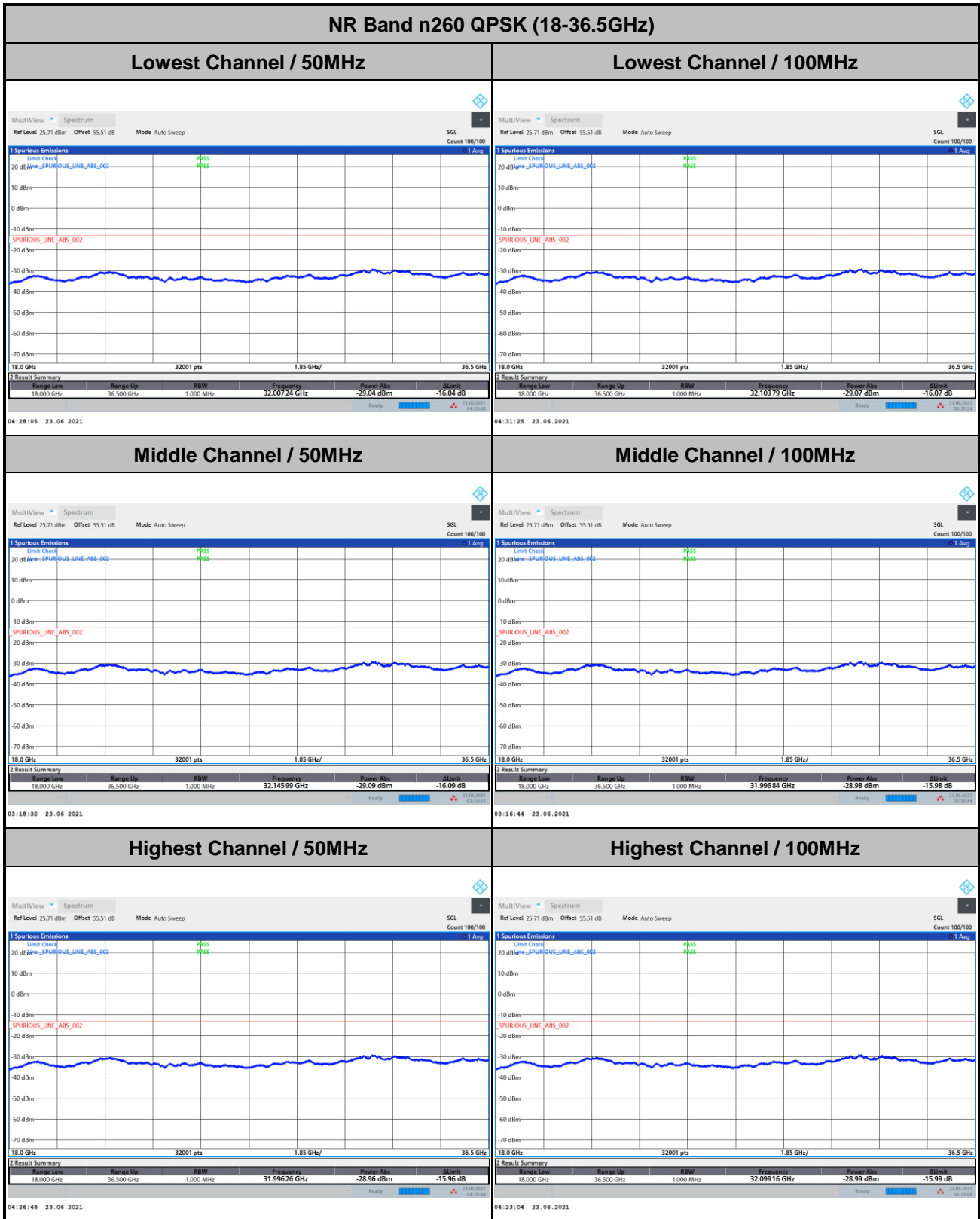
DFT-s-OFDM Module 1

NR Band n260 BPSK (18-36.5GHz)	
<p>Lowest Channel / 200MHz</p>	intentionally blank
<p>Middle Channel / 200MHz</p>	intentionally blank
<p>Highest Channel / 200MHz</p>	intentionally blank

Remark: In band and out of band frequencies are omitted.



DFT-s-OFDM Module 1



Remark: In band and out of band frequencies are omitted.



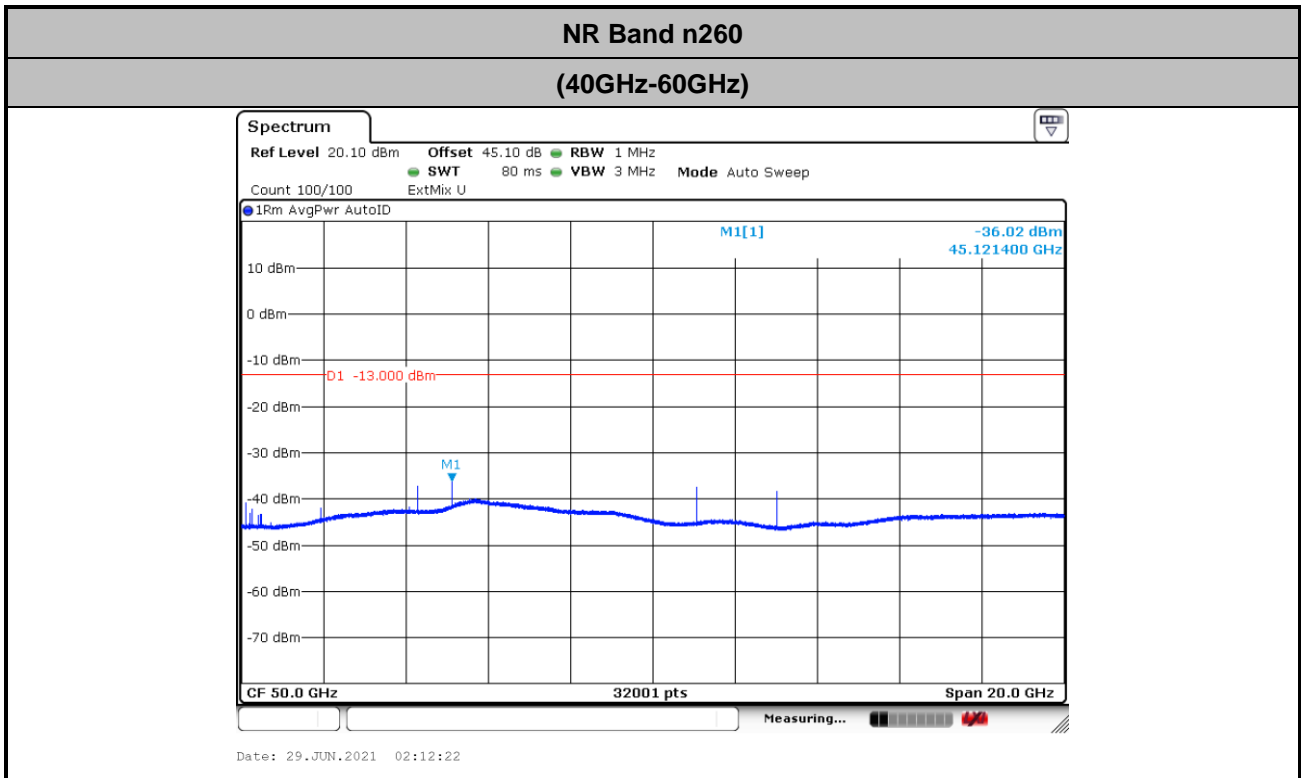
DFT-s-OFDM Module 1

NR Band n260 QPSK (18-36.5GHz)	
<p>Lowest Channel / 200MHz</p>	intentionally blank
<p>Middle Channel / 200MHz</p>	intentionally blank
<p>Highest Channel / 200MHz</p>	intentionally blank

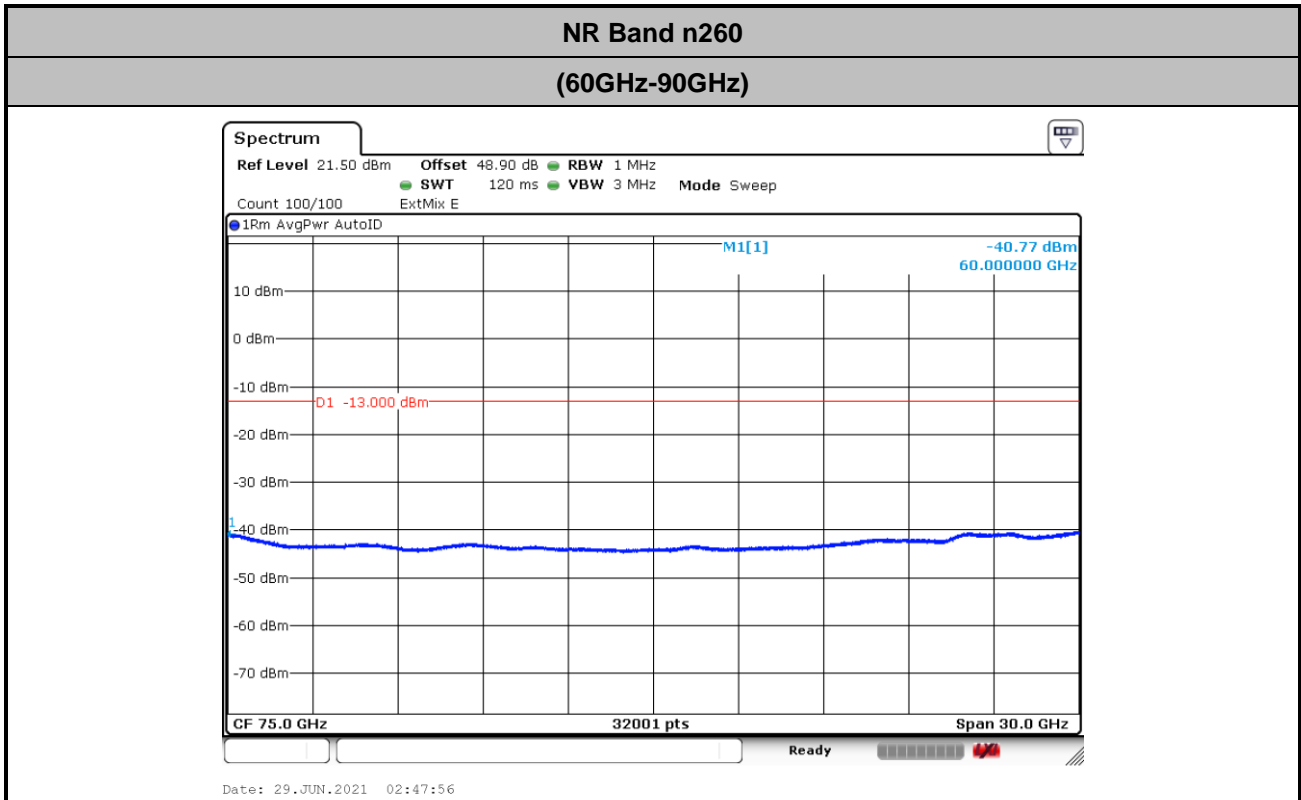
Remark: In band and out of band frequencies are omitted.



There is no significant spurious emission signal found for frequency started from 40GHz up to 200GHz. Only the noise floor is reported.

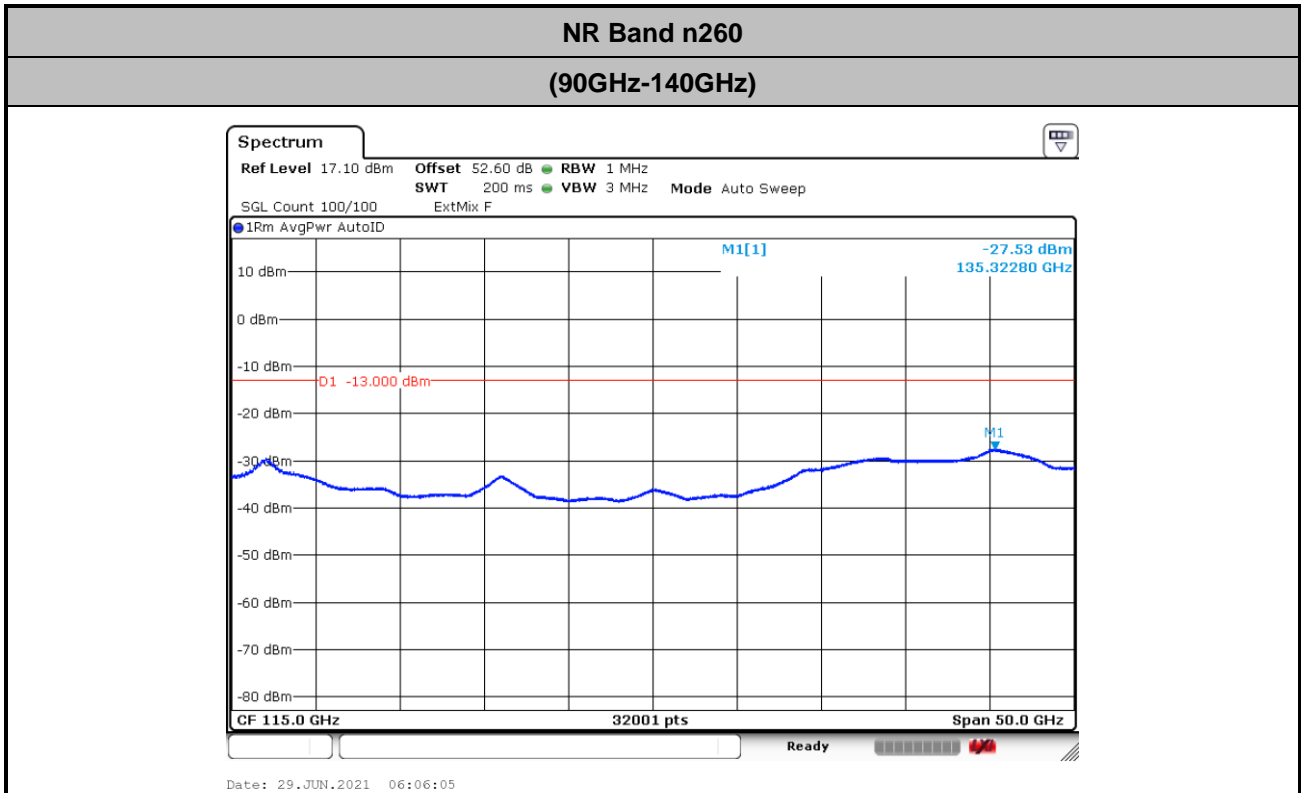


$$\begin{aligned}
 \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\
 &= 42.5 + 0.4 + 107 + 20\log(1) - 104.8 = 45.1 \text{ (dB)}
 \end{aligned}$$

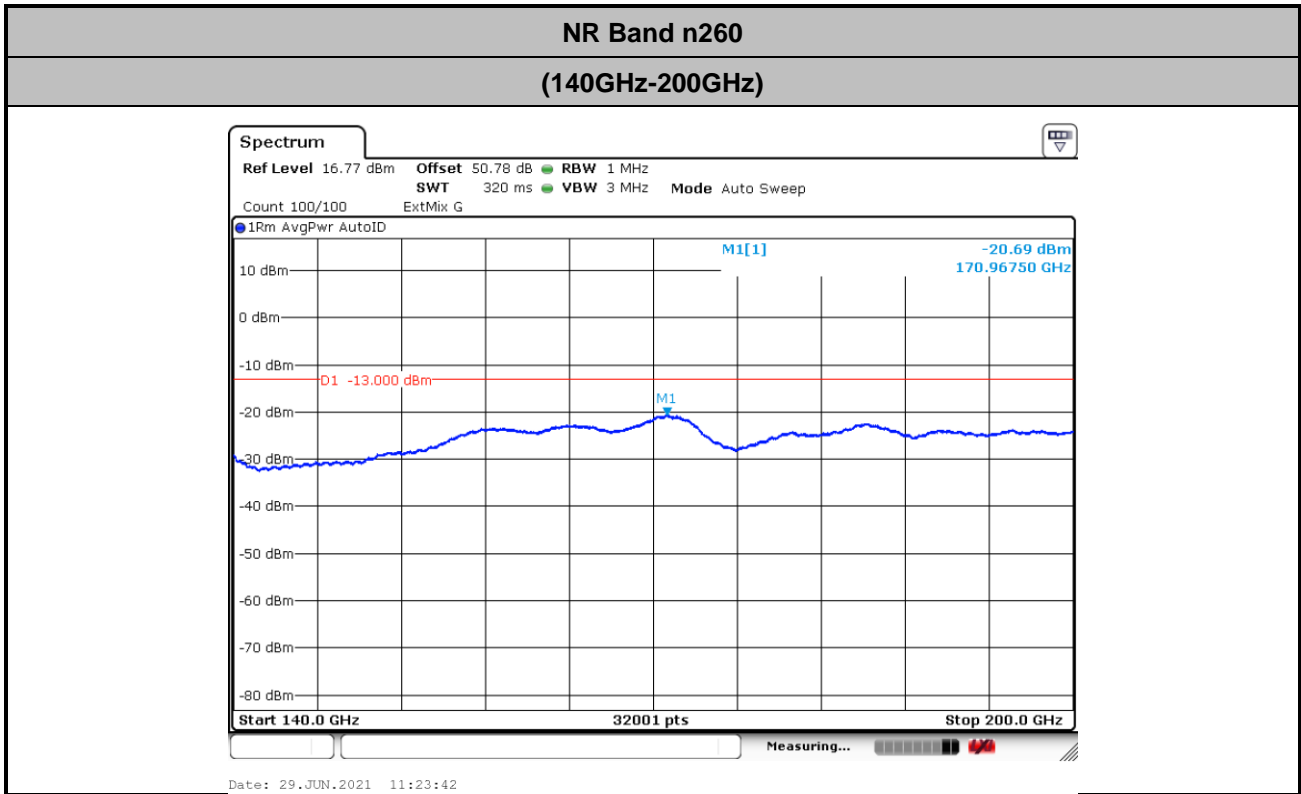


$$Offset = Antenna\ Factor\ (dB/m) + Cable\ Loss\ (dB) + 107 + 20\log(D) - 104.8$$

$$= 46.3 + 0.4 + 107 + 20\log(1) - 104.8 = 48.9\ (dB)$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 50 + 0.4 + 107 + 20\log(1) - 104.8 = 52.6 \text{ (dB)} \end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 54.2 + 2 + 107 + 20\log(0.5) - 104.8 = 50.78 \text{ (dB)} \end{aligned}$$

Remark: The spurious emissions were measured from 18GHz to 36.5GHz and 40GHz to 200GHz. 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 40GHz, and all spurious comply with limits.



Frequency Stability

Test Conditions		NR Band n260 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	38.4999051	94.900	2.465	PASS
40	Normal Voltage	38.499934	66.000	1.714	
30	Normal Voltage	38.4999803	19.700	0.512	
20(Ref.)	Normal Voltage	38.5	0.000	0.000	
10	Normal Voltage	38.50010651	-106.510	2.766	
0	Normal Voltage	38.5002003	-200.300	5.203	
-10	Normal Voltage	38.5002825	-282.500	7.338	
-20	Normal Voltage	38.5003114	-311.400	8.088	
-30	Normal Voltage	38.5003172	-317.200	8.239	
20	Maximum Voltage	38.50000072	-0.720	0.019	
20	Normal Voltage	38.5	0.000	0.000	
20	Battery End Point	38.49999493	5.070	0.132	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the operation band.



NR Band n260 Module 1

AG0+1

Occupied Bandwidth

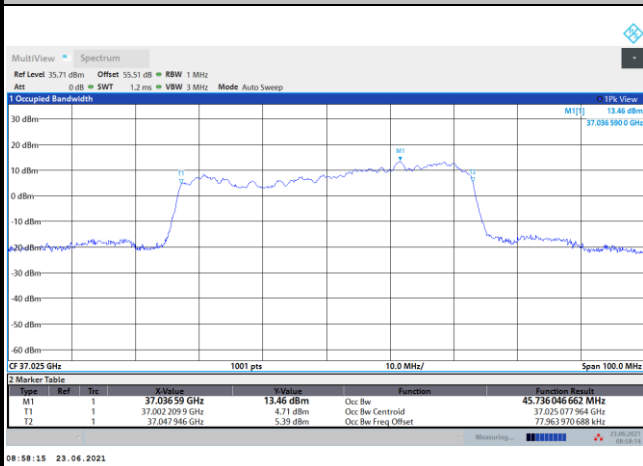
Mode	DFT-s-OFDM Module 1 NR Band n260 : 99%OBW(MHz)											
BW	50MHz				100MHz				200MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	45.73	45.61	45.57	45.41	90.89	90.48	90.27	90.69	185.14	185.71	186.12	186.48
Middle CH	45.00	45.03	44.92	44.53	90.78	90.82	90.72	90.67	182.01	182.74	182.96	183.95
Highest CH	44.56	44.47	44.36	44.36	90.99	91.00	88.78	90.32	184.72	184.54	185.11	186.04



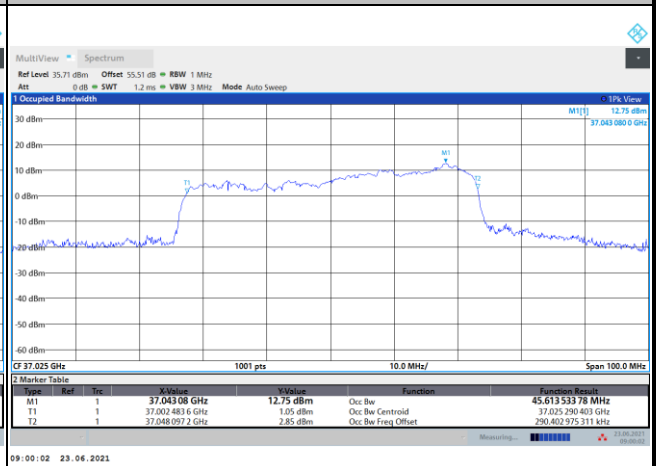
DFT-s-OFDM Module 1

NR Band n260

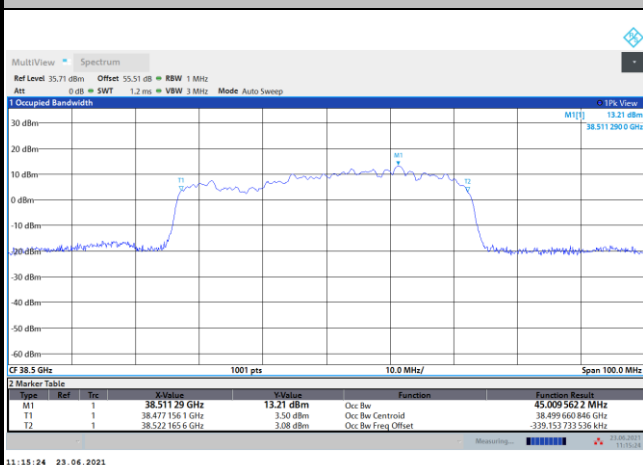
Lowest Channel / 50MHz / BPSK



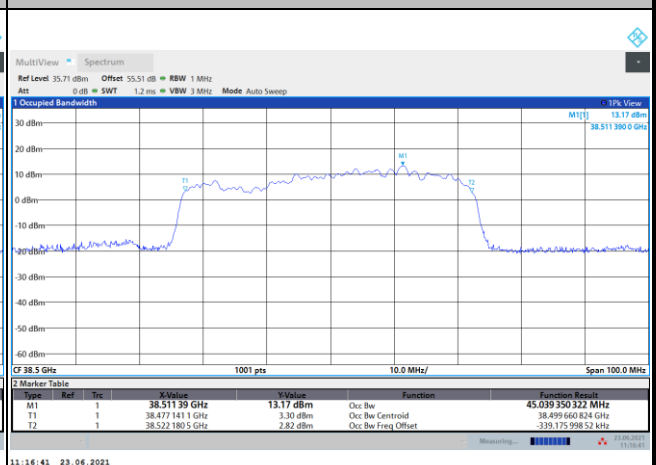
Lowest Channel / 50MHz / QPSK



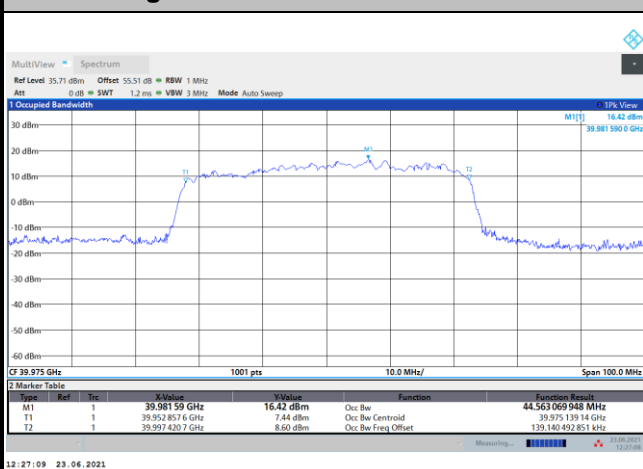
Middle Channel / 50MHz / BPSK



Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

