

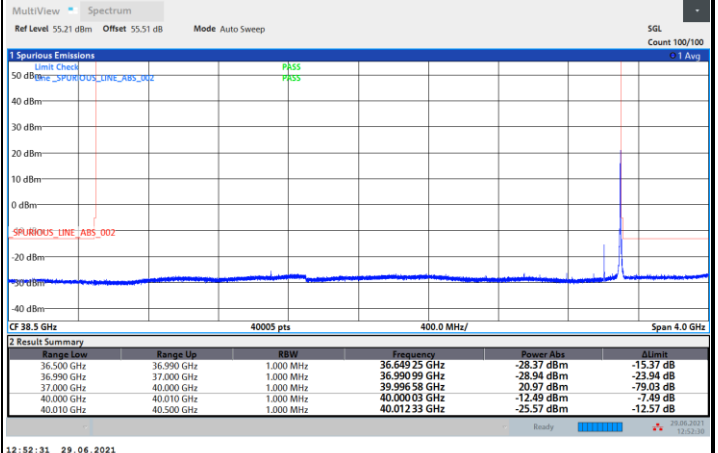
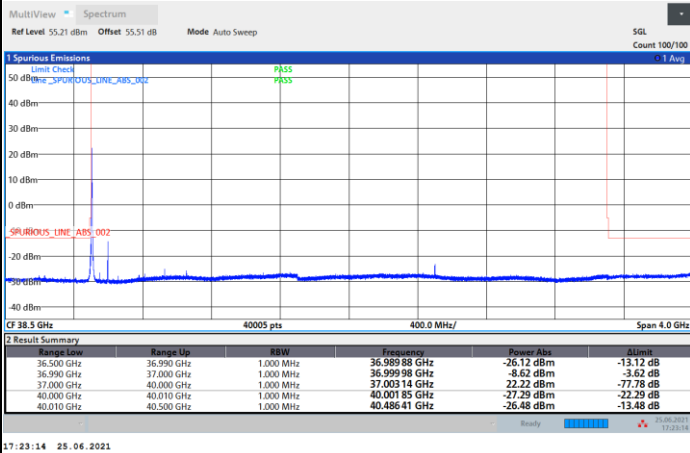


DFT-s-OFDM Module 0

NR Band n260 / 100MHz / 16QAM

Lowest Band Edge / 1 RB

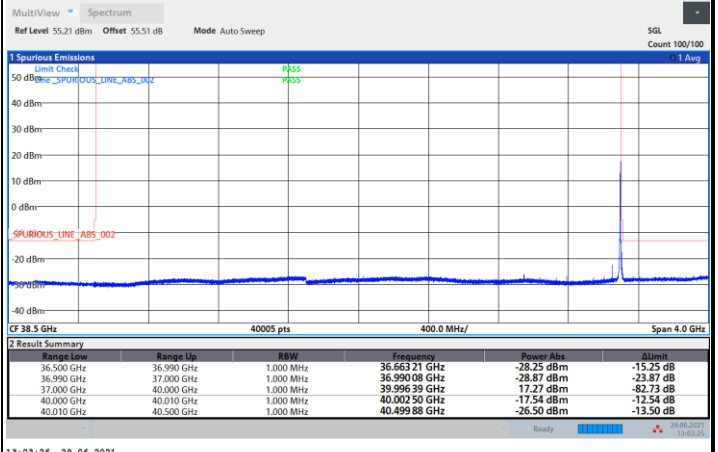
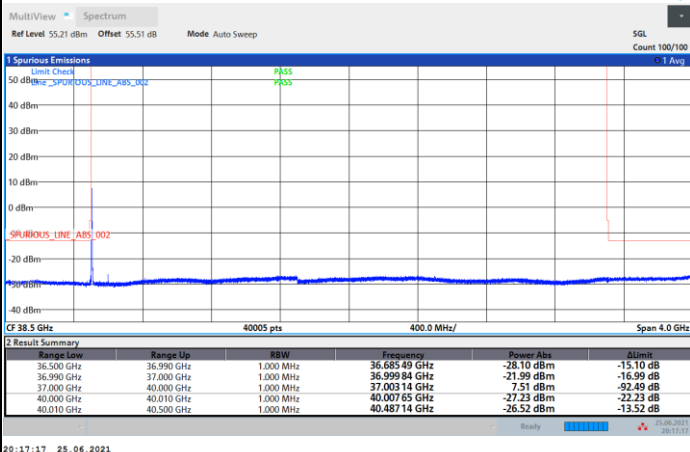
Highest Band Edge / 1 RB



NR Band n260 / 100MHz / 64QAM

Lowest Band Edge / 1 RB

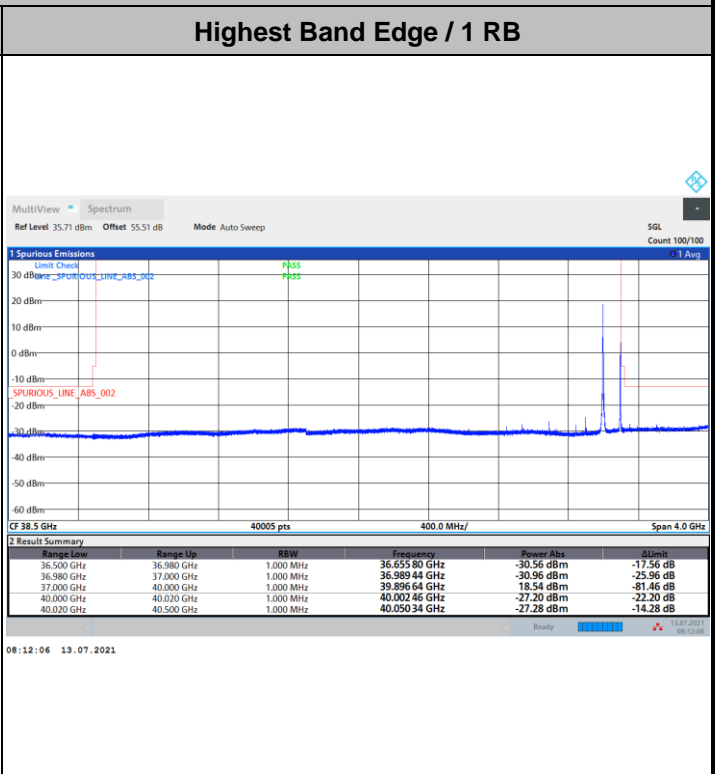
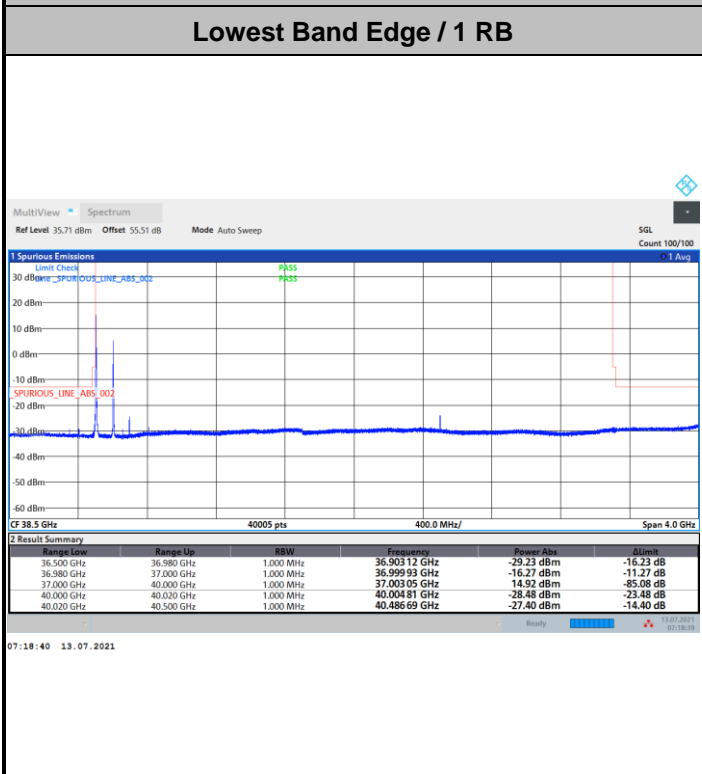
Highest Band Edge / 1 RB



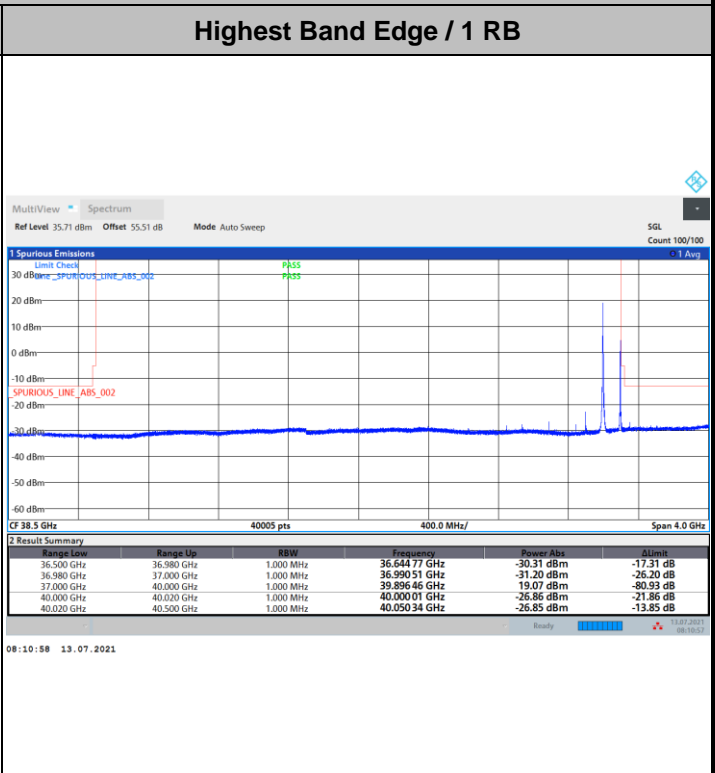
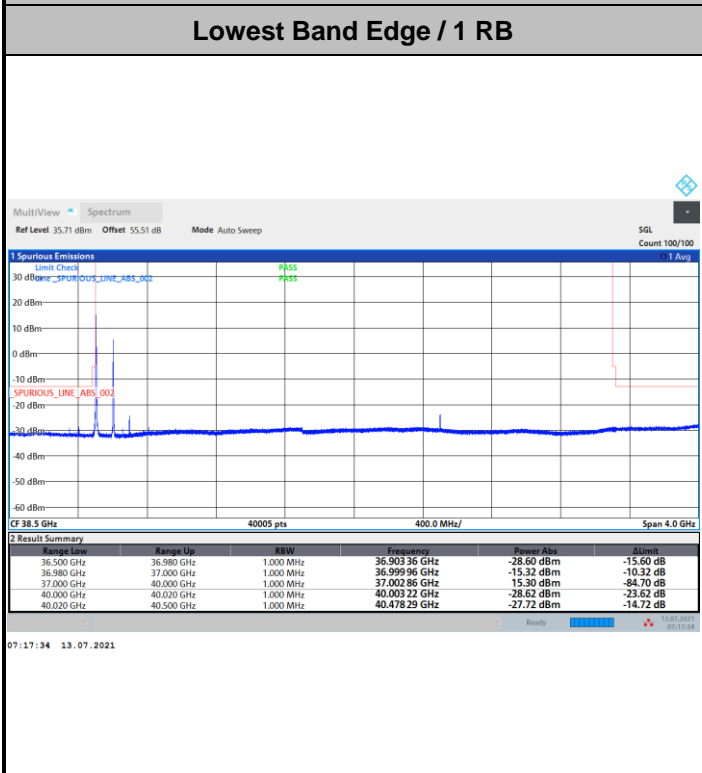


DFT-s-OFDM Module 0

NR Band n260 / 200MHz / BPSK

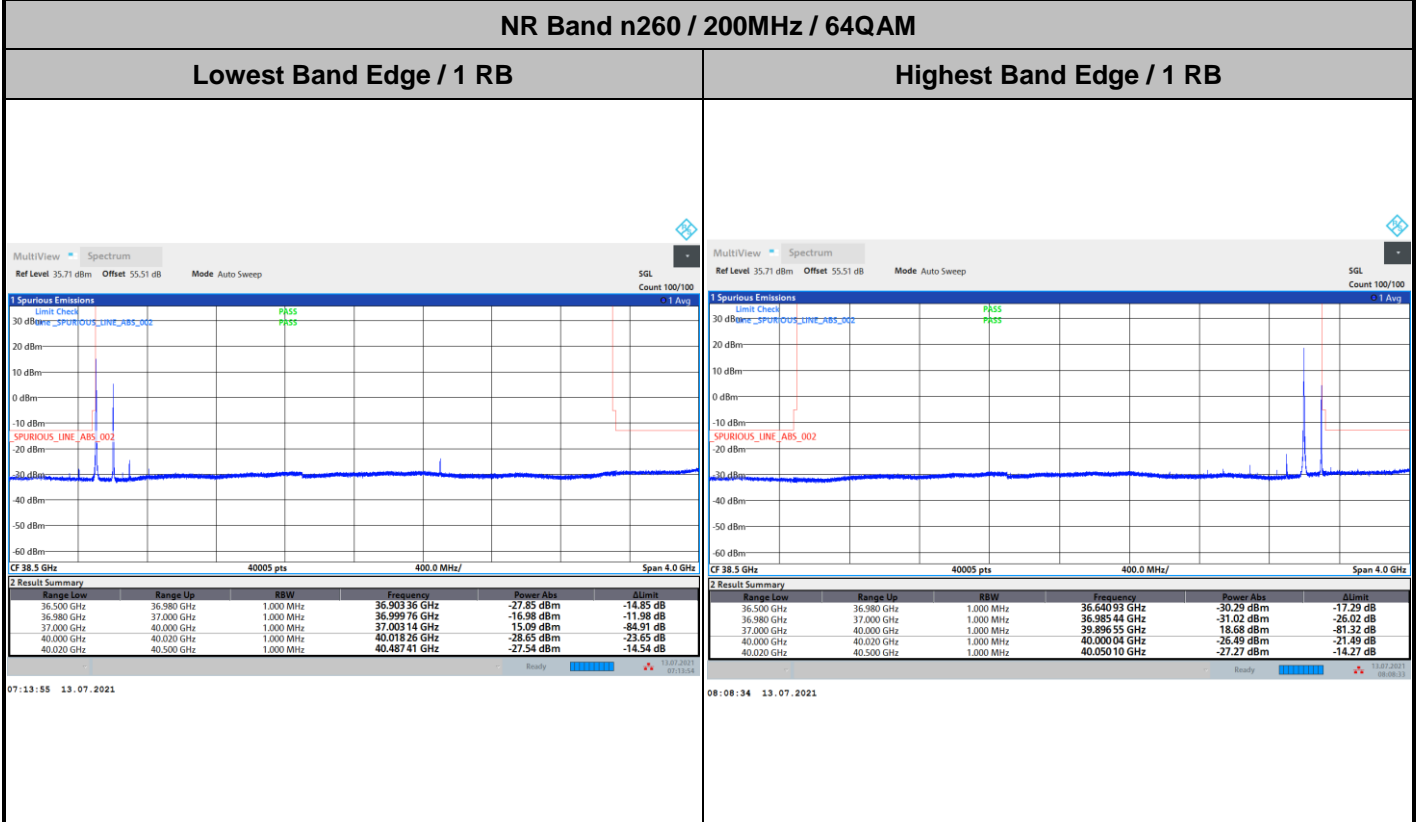
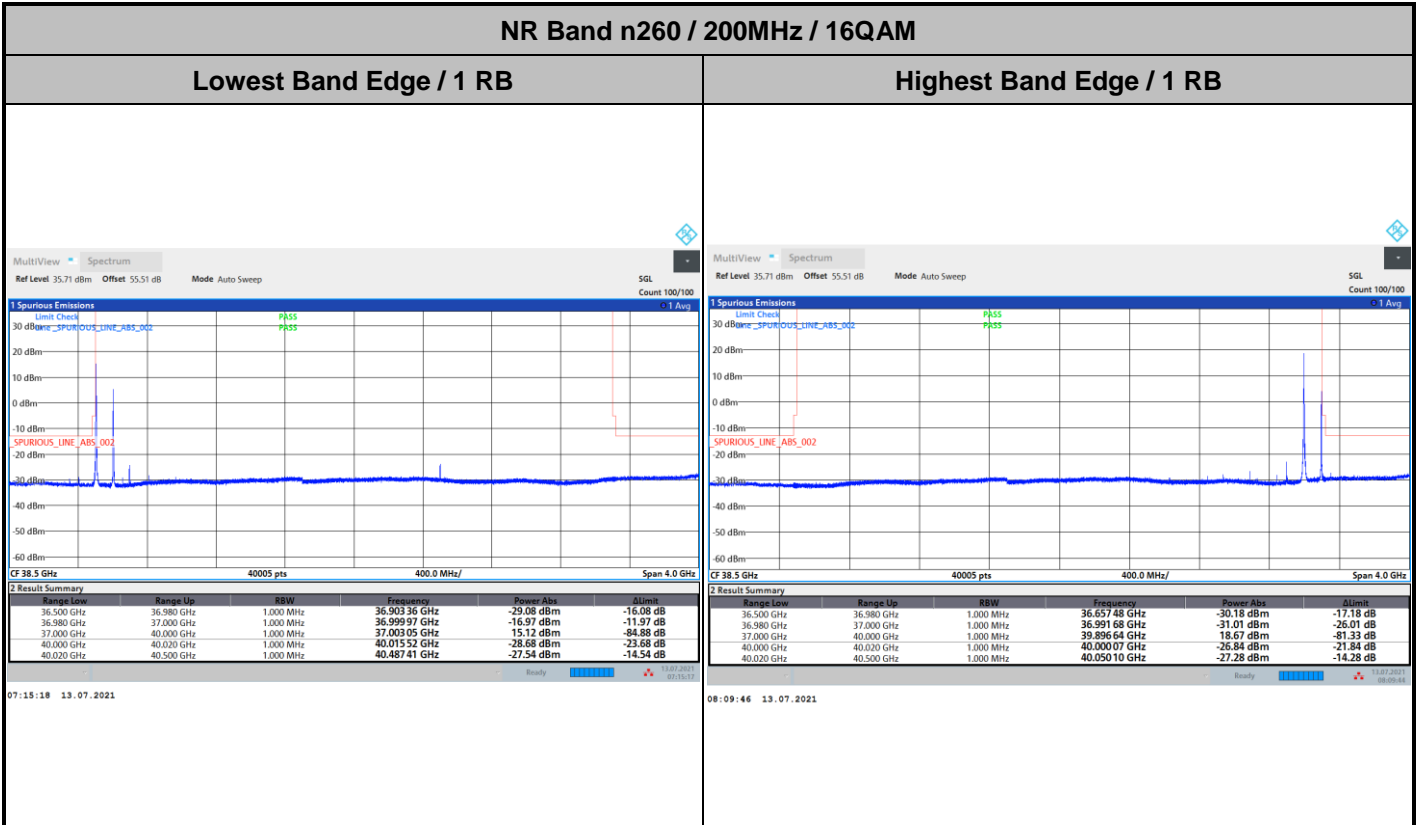


NR Band n260 / 200MHz / QPSK





DFT-s-OFDM Module 0

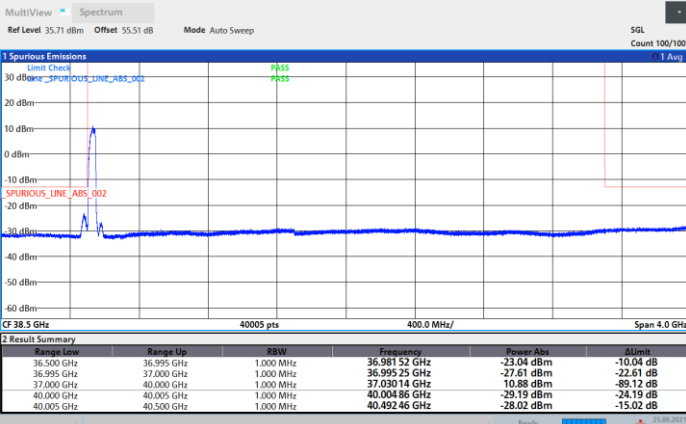




DFT-s-OFDM Module 0

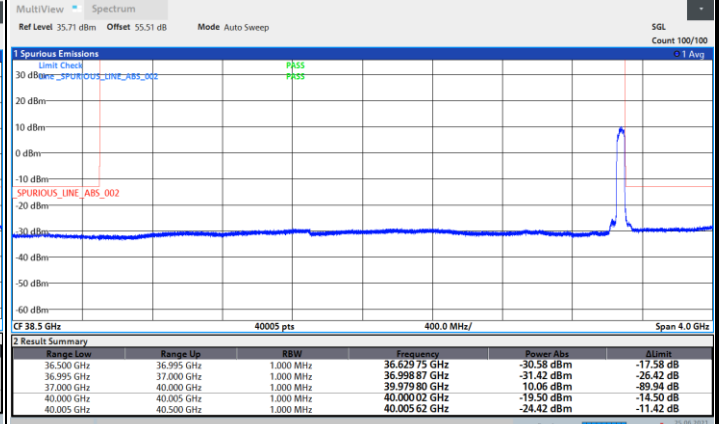
NR Band n260 / 50MHz / BPSK

Lowest Band Edge / Full RB



15:26:30 25.06.2021

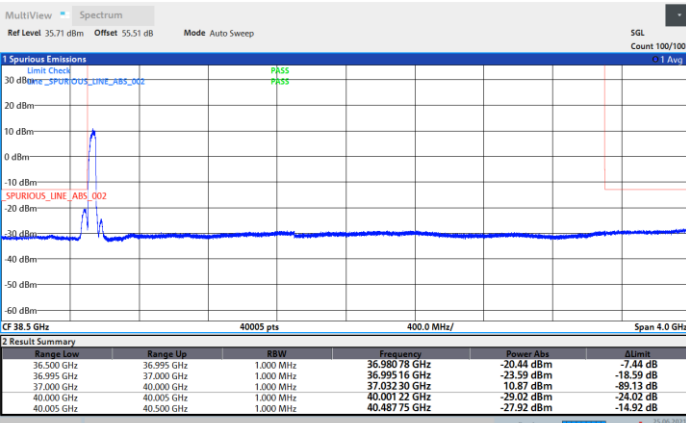
Highest Band Edge / Full RB



18:11:55 25.06.2021

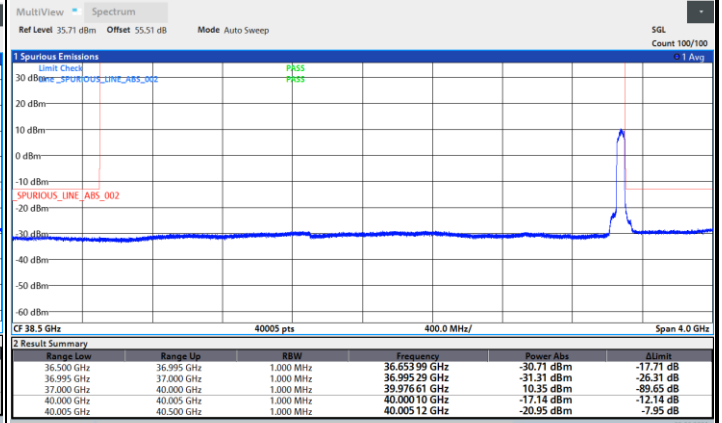
NR Band n260 / 50MHz / QPSK

Lowest Band Edge / Full RB



15:25:29 25.06.2021

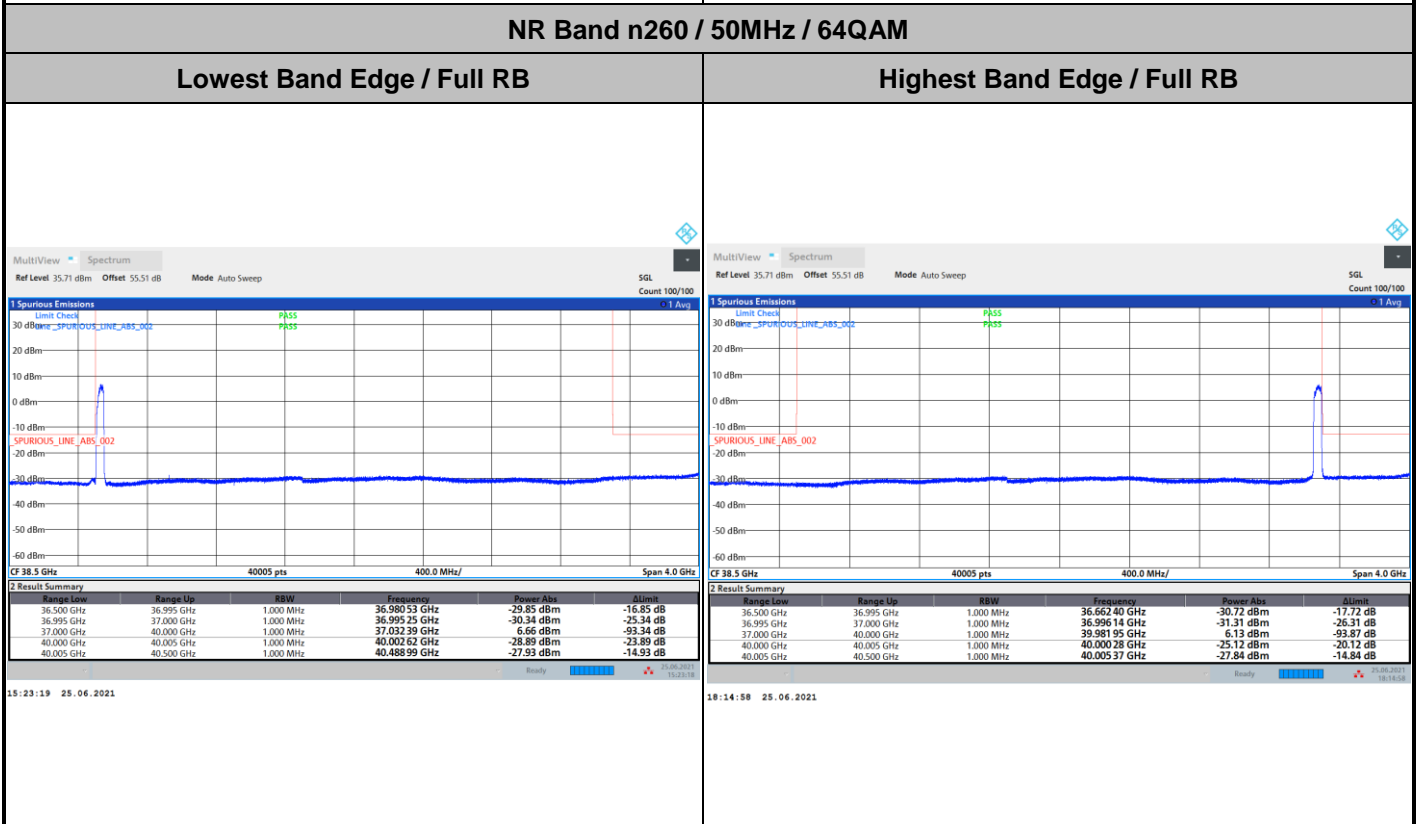
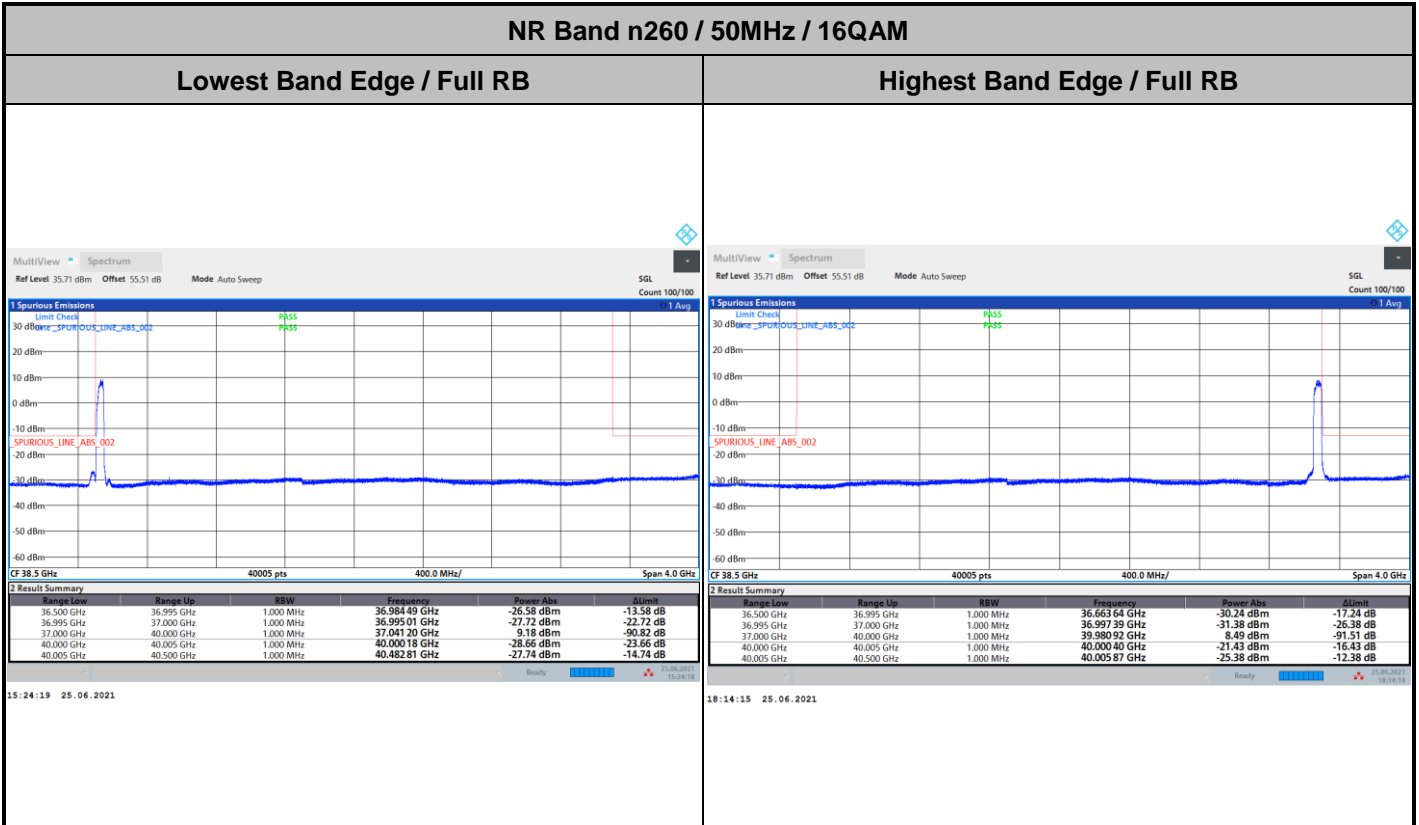
Highest Band Edge / Full RB



18:12:57 25.06.2021

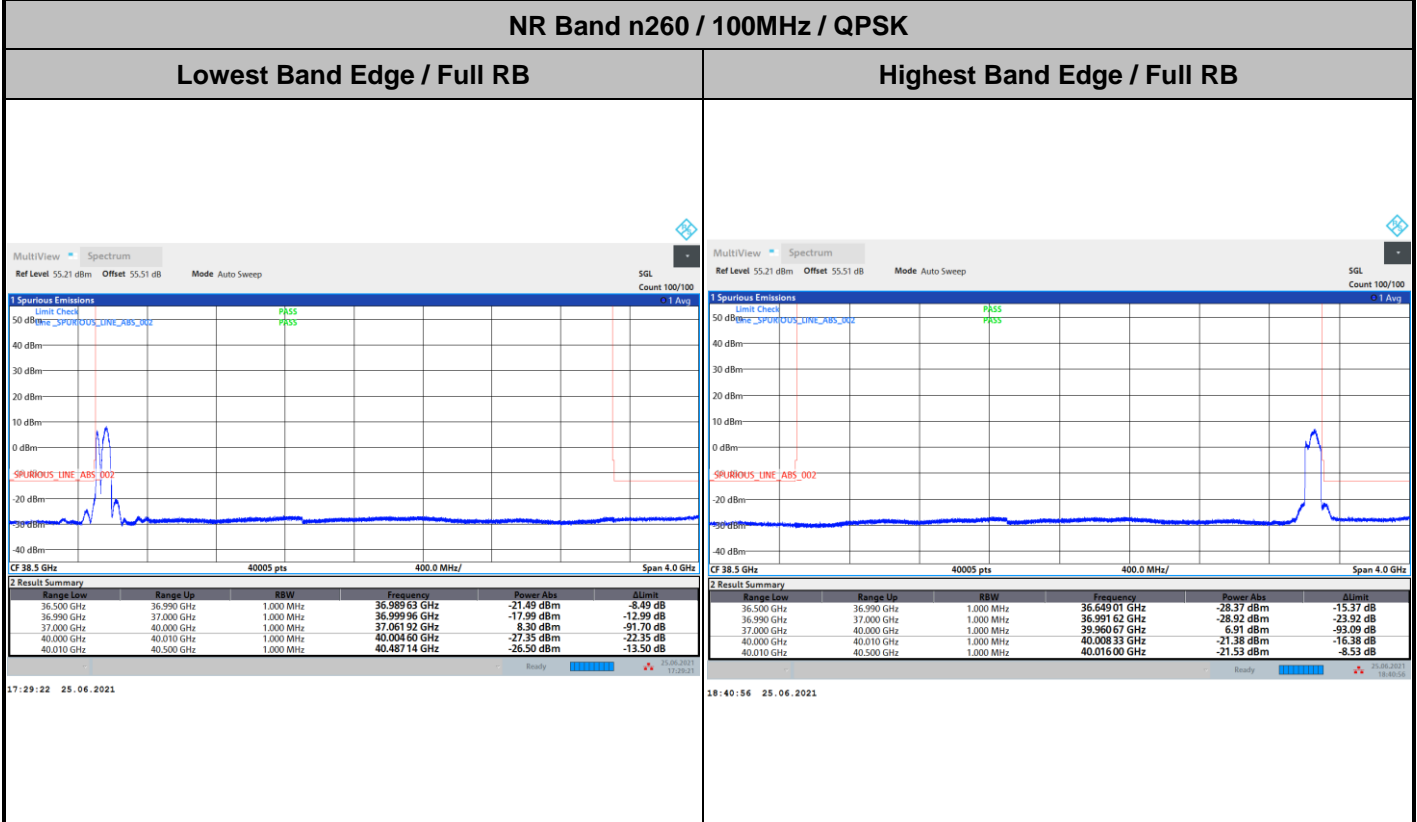
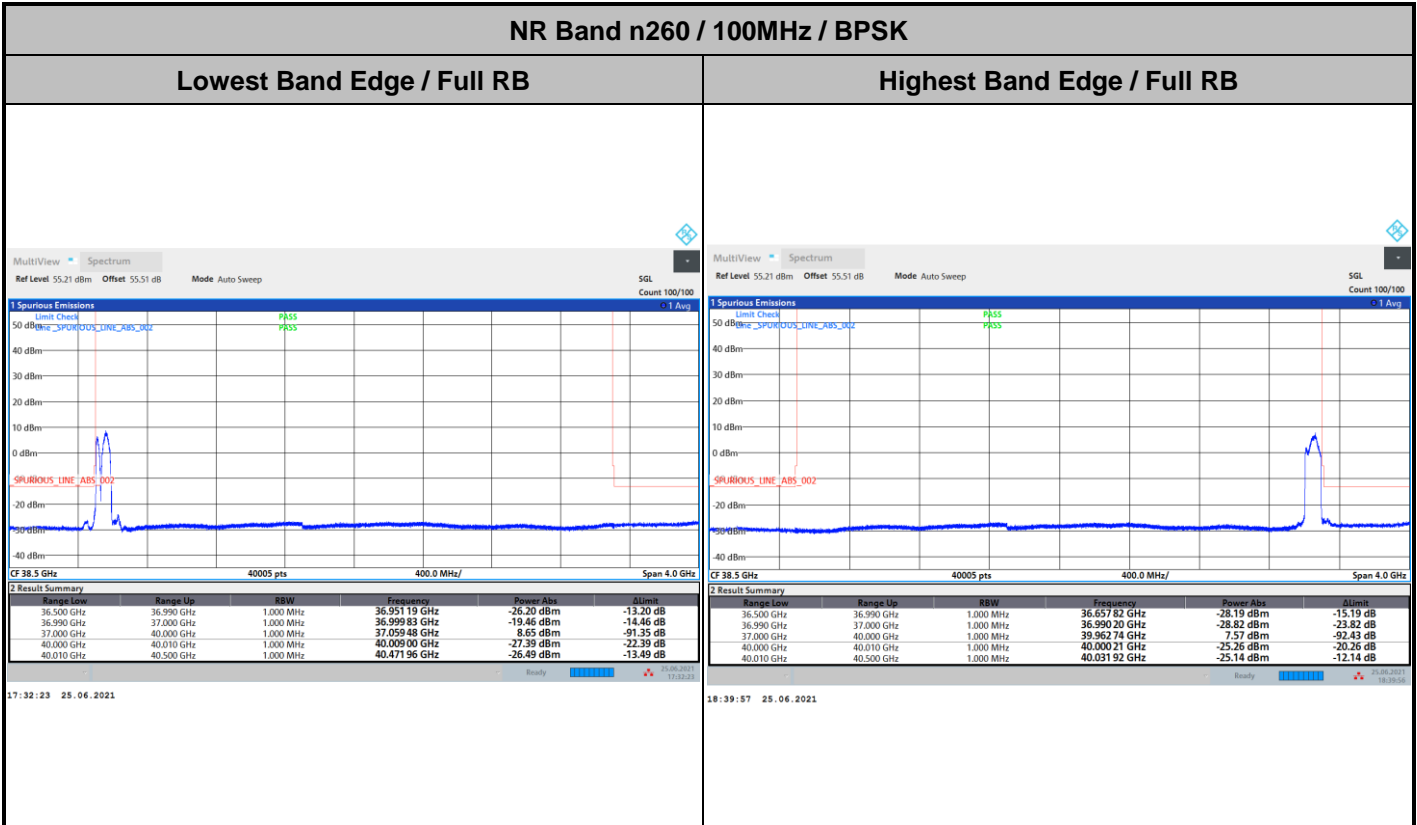


DFT-s-OFDM Module 0





DFT-s-OFDM Module 0





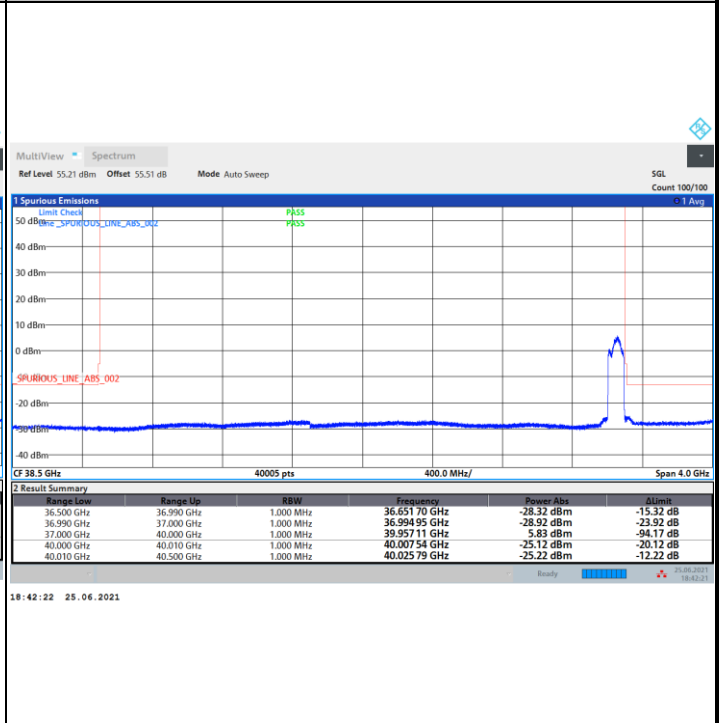
DFT-s-OFDM Module 0

NR Band n260 / 100MHz / 16QAM

Lowest Band Edge / Full RB

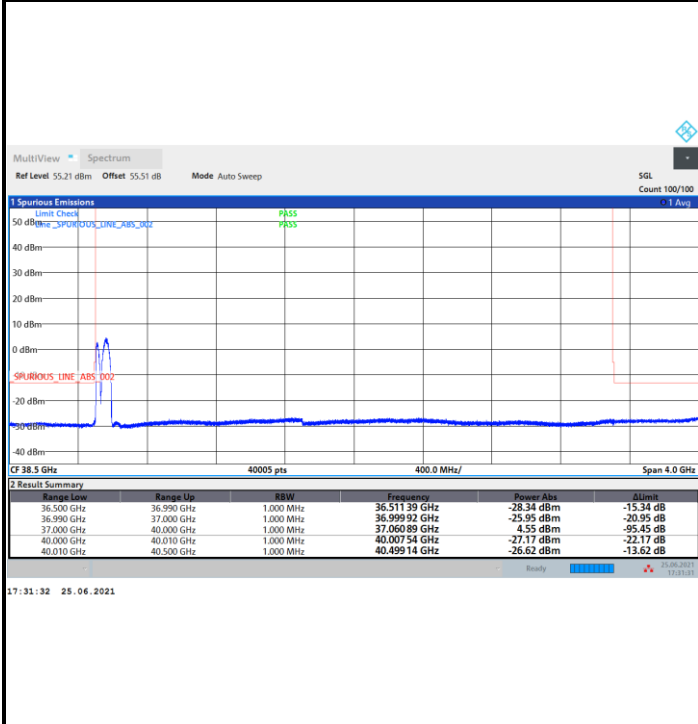


Highest Band Edge / Full RB

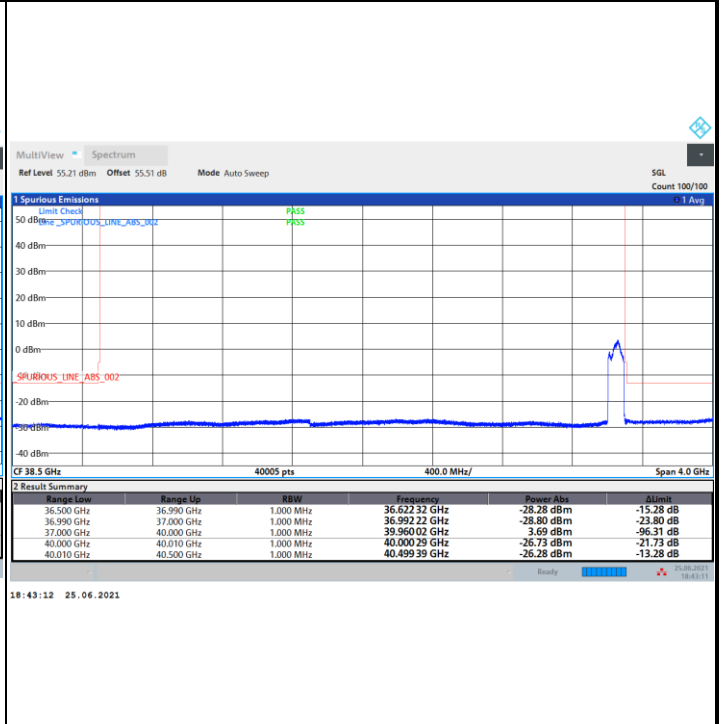


NR Band n260 / 100MHz / 64QAM

Lowest Band Edge / Full RB

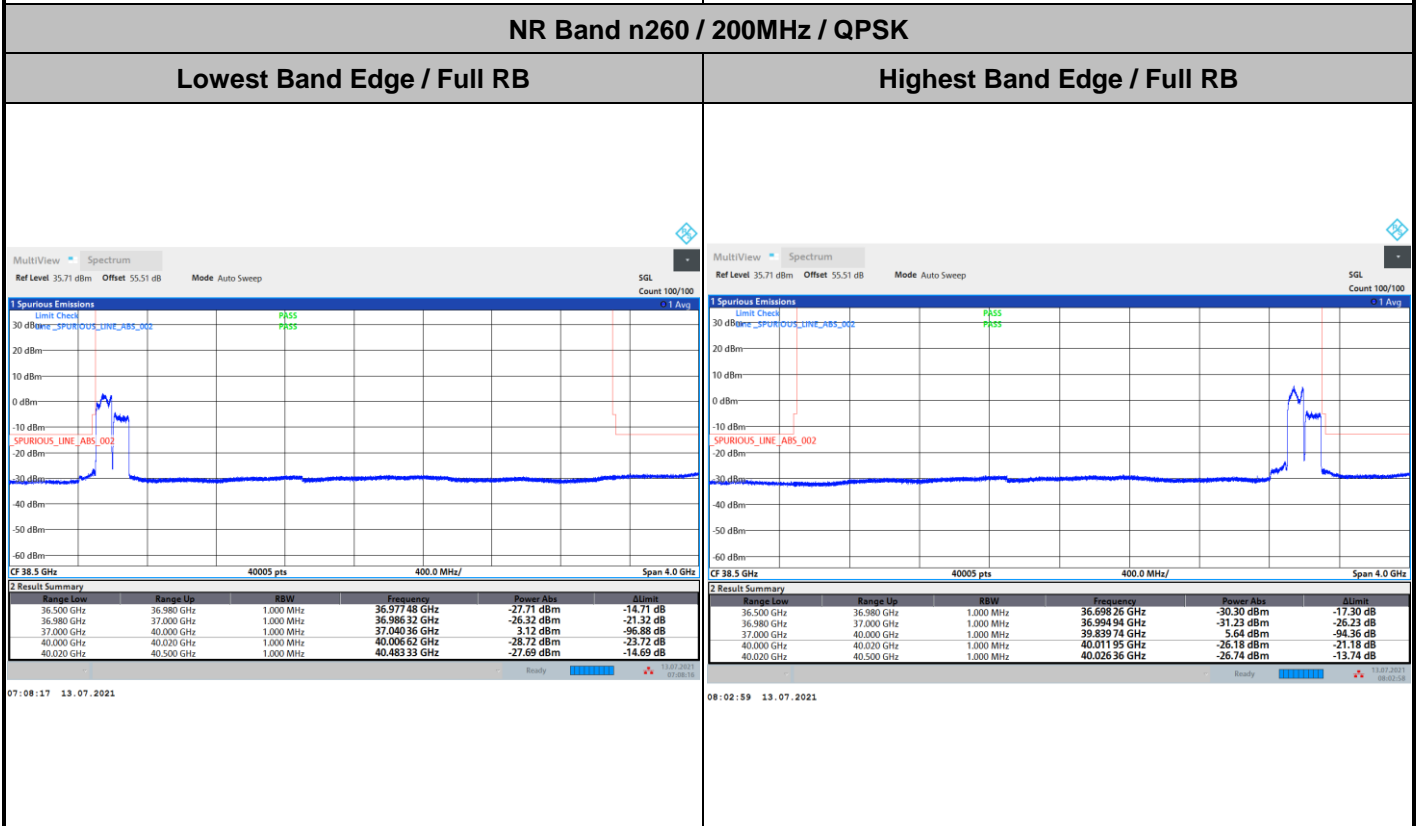
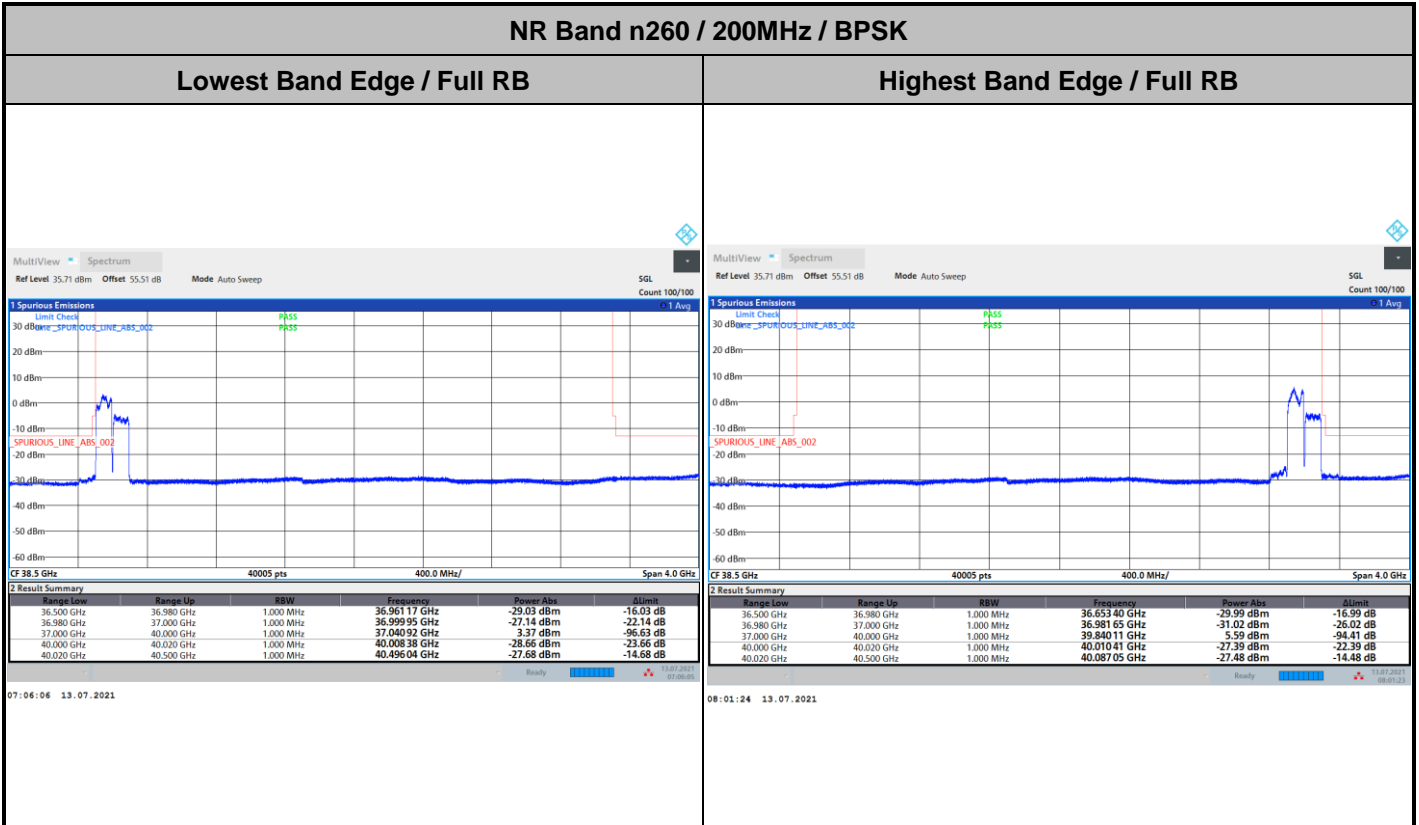


Highest Band Edge / Full RB





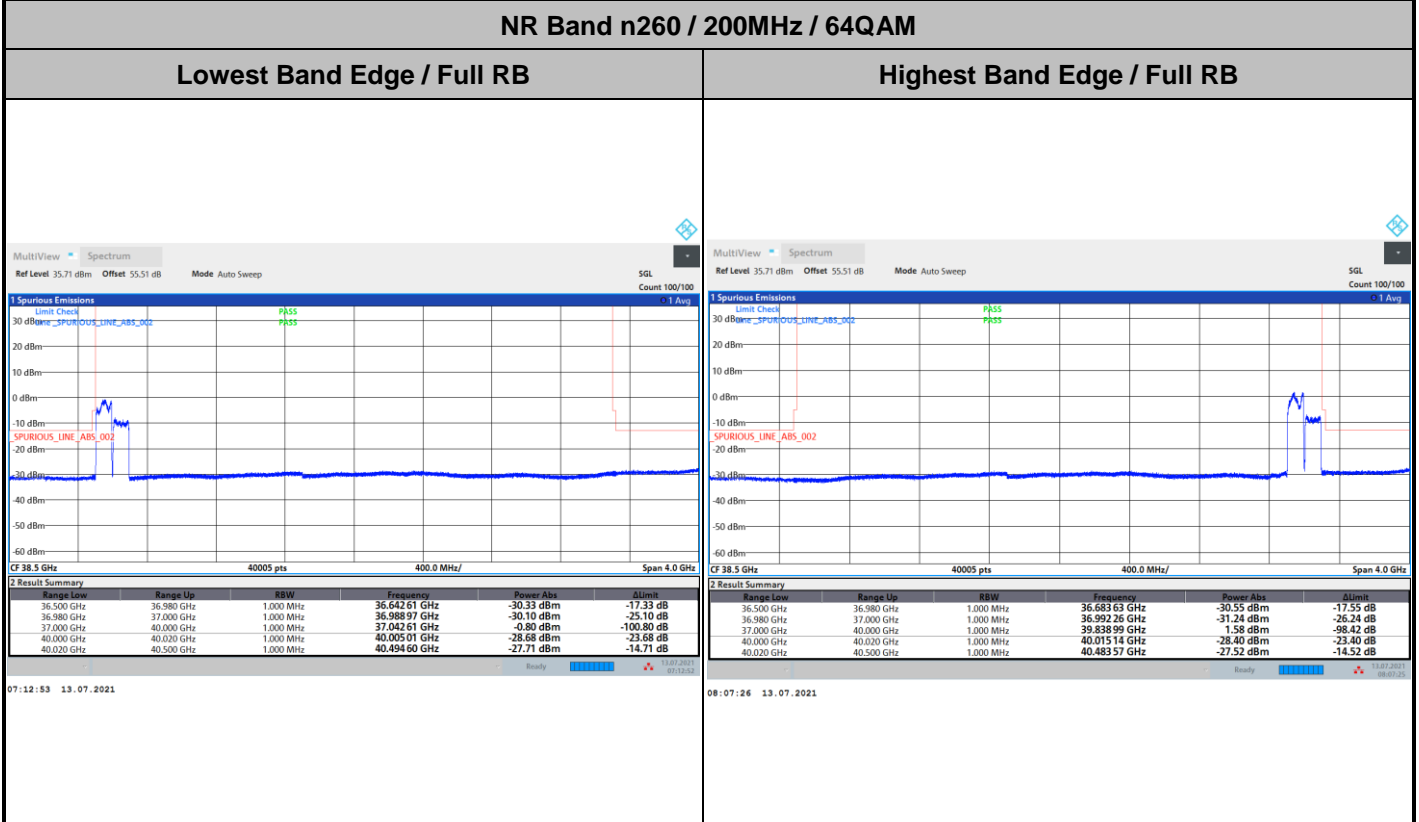
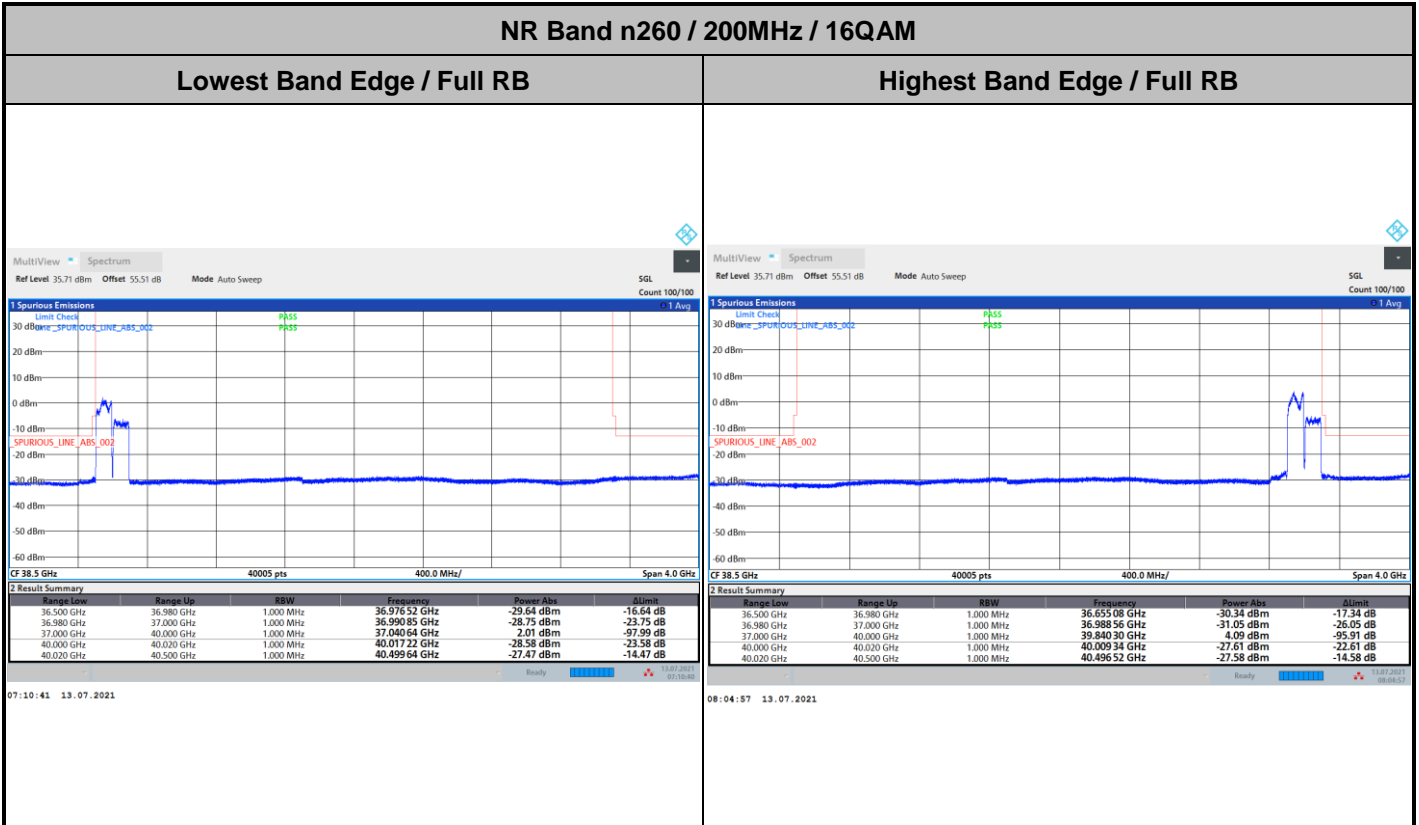
DFT-s-OFDM Module 0







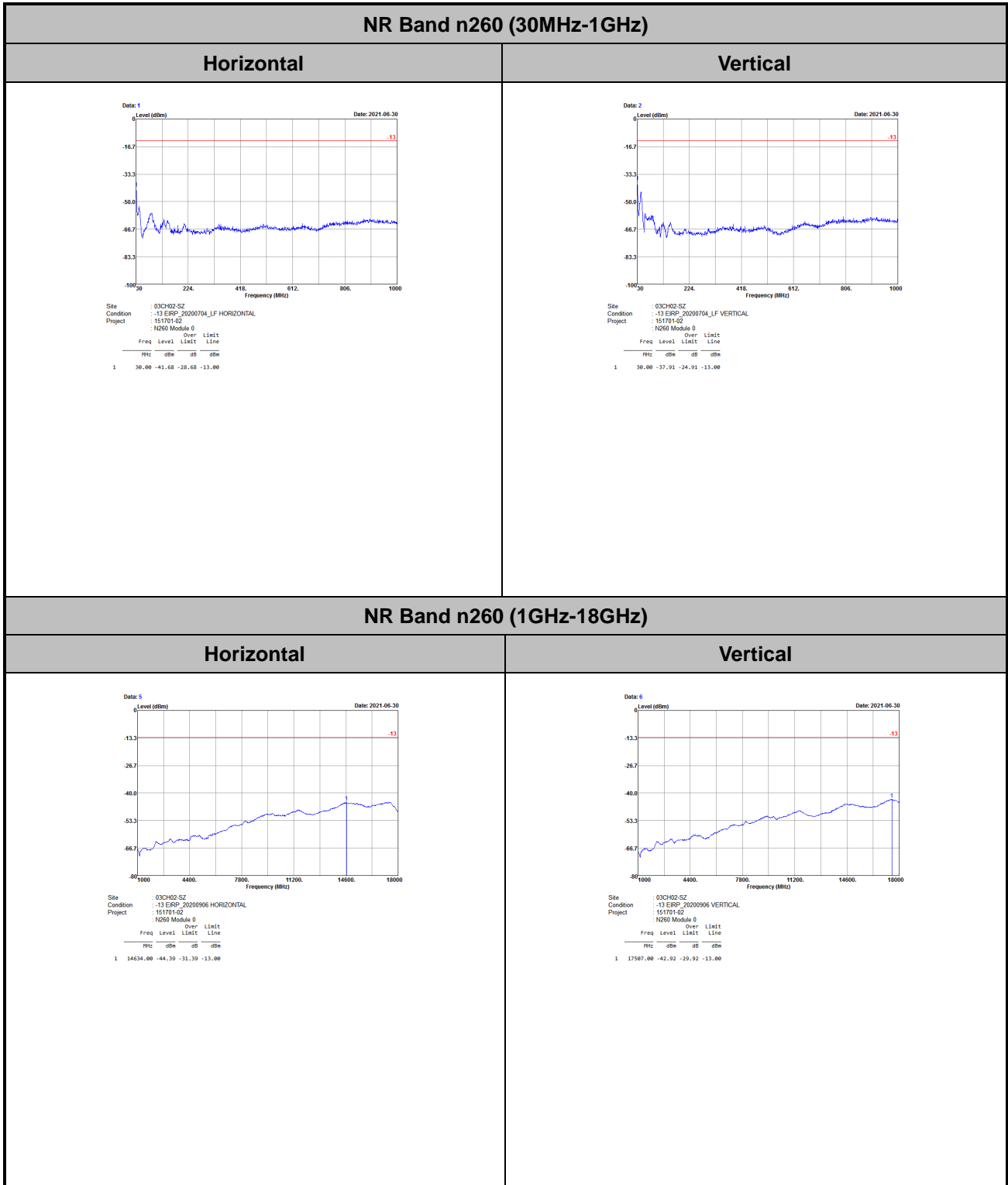
DFT-s-OFDM Module 0





# Spurious Emission

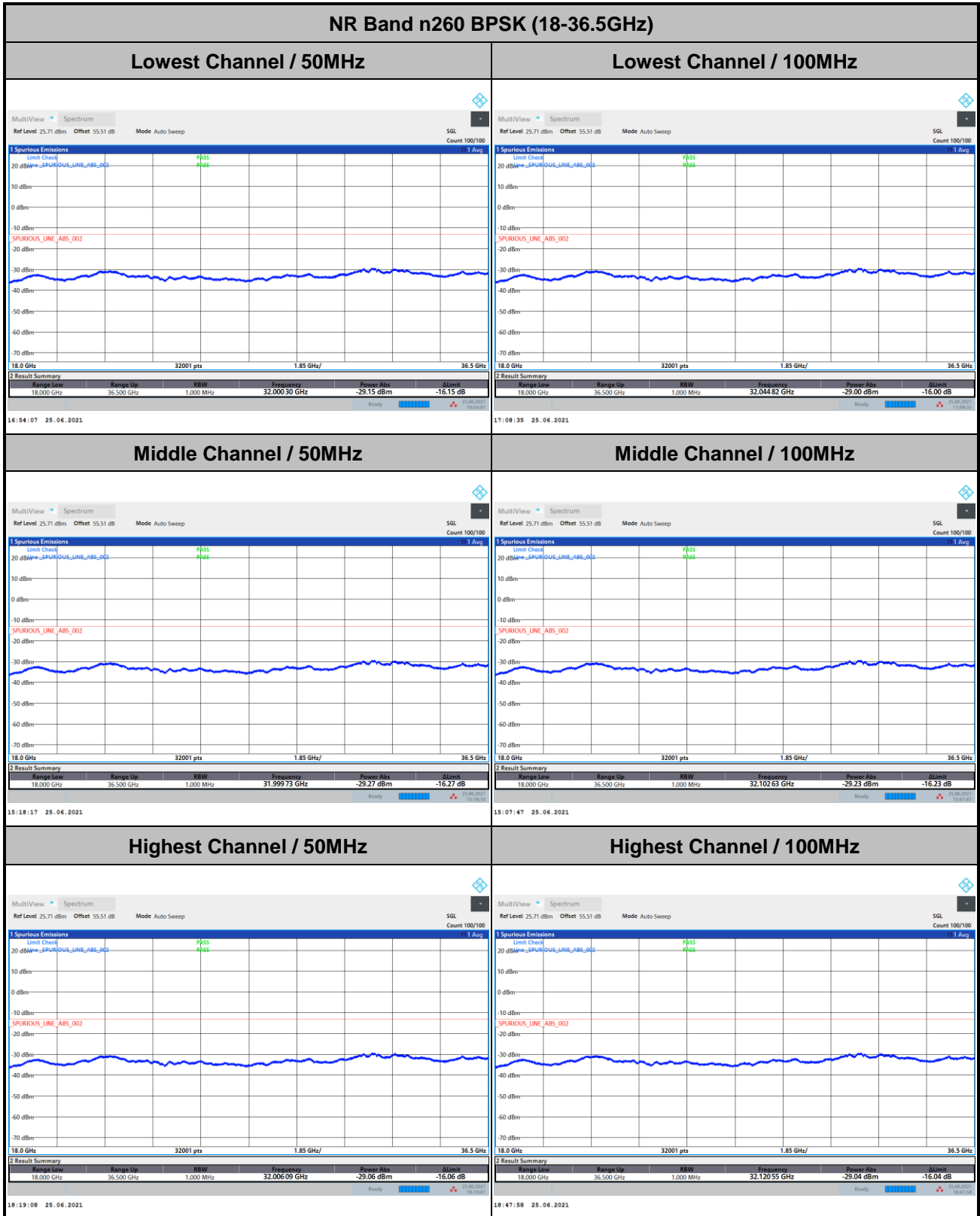
There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz. Only the noise floor is reported.





Spurious emission between 18GHz to 36.5GHz worst case plot is reported as following.

DFT-s-OFDM Module 0



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



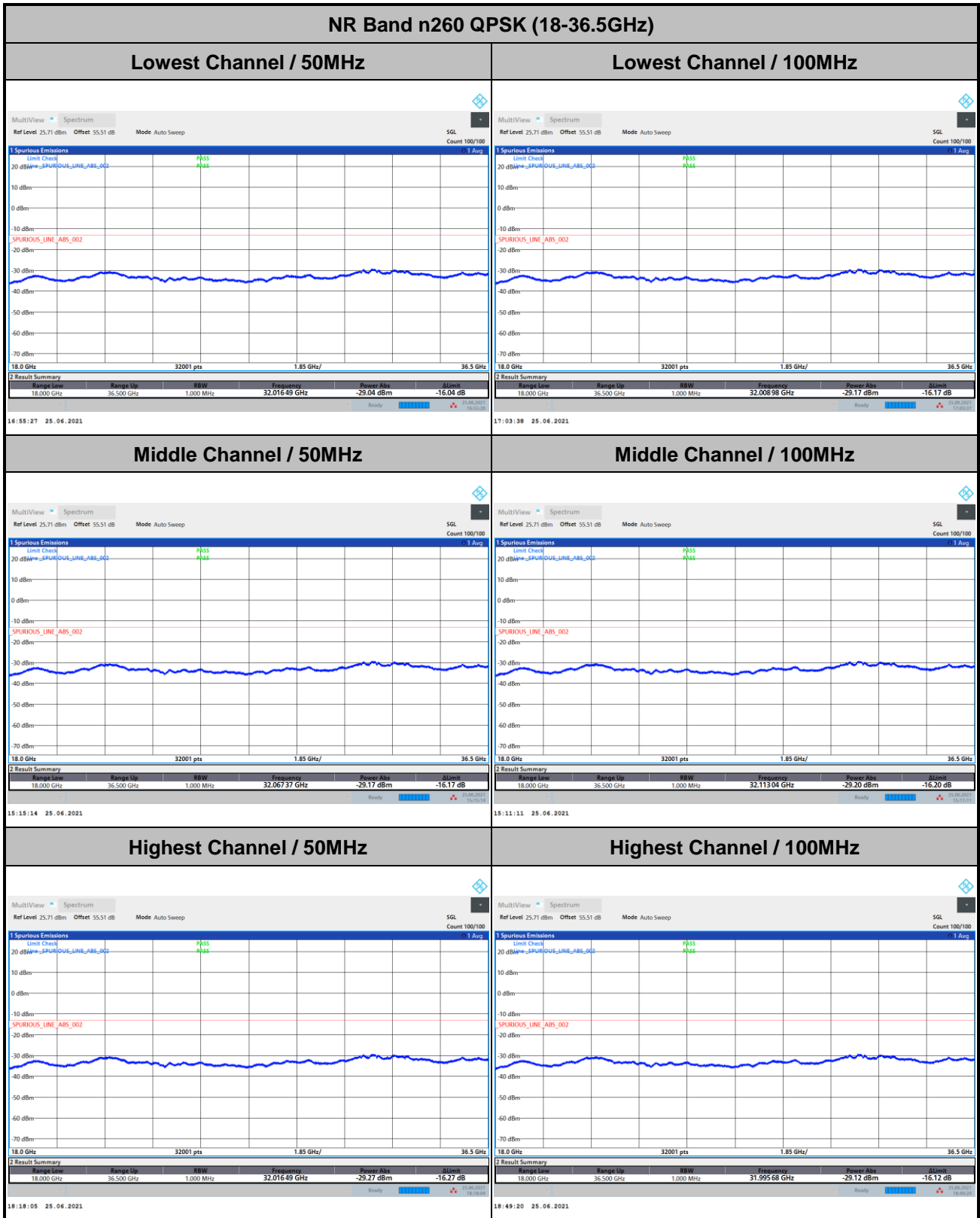
DFT-s-OFDM Module 0

NR Band n260 BPSK (18-36.5GHz)													
<p><b>Lowest Channel / 200MHz</b></p> <p>MultiView Spectrum Ref Level 25.71 dBm Offset 55.51 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Chan 20 dBm SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>18.0 GHz 32001 pts 1.85 GHz/ 36.5 GHz</p> <table border="1"> <thead> <tr> <th>Range Low</th> <th>Range Up</th> <th>RBW</th> <th>Frequency</th> <th>Power Abs</th> <th>Limit</th> </tr> </thead> <tbody> <tr> <td>18.000 GHz</td> <td>36.500 GHz</td> <td>1.000 MHz</td> <td>32.12518 GHz</td> <td>-28.83 dBm</td> <td>-15.82 dB</td> </tr> </tbody> </table> <p>08:29:57 13. 07. 2021</p>	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	36.500 GHz	1.000 MHz	32.12518 GHz	-28.83 dBm	-15.82 dB	intentionally blank
Range Low	Range Up	RBW	Frequency	Power Abs	Limit								
18.000 GHz	36.500 GHz	1.000 MHz	32.12518 GHz	-28.83 dBm	-15.82 dB								
<p><b>Middle Channel / 200MHz</b></p> <p>MultiView Spectrum Ref Level 25.71 dBm Offset 55.51 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Chan 20 dBm SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>18.0 GHz 32001 pts 1.85 GHz/ 36.5 GHz</p> <table border="1"> <thead> <tr> <th>Range Low</th> <th>Range Up</th> <th>RBW</th> <th>Frequency</th> <th>Power Abs</th> <th>Limit</th> </tr> </thead> <tbody> <tr> <td>18.000 GHz</td> <td>36.500 GHz</td> <td>1.000 MHz</td> <td>32.11882 GHz</td> <td>-28.87 dBm</td> <td>-15.87 dB</td> </tr> </tbody> </table> <p>08:31:15 13. 07. 2021</p>	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	36.500 GHz	1.000 MHz	32.11882 GHz	-28.87 dBm	-15.87 dB	intentionally blank
Range Low	Range Up	RBW	Frequency	Power Abs	Limit								
18.000 GHz	36.500 GHz	1.000 MHz	32.11882 GHz	-28.87 dBm	-15.87 dB								
<p><b>Highest Channel / 200MHz</b></p> <p>MultiView Spectrum Ref Level 25.71 dBm Offset 55.51 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Chan 20 dBm SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002</p> <p>10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm</p> <p>18.0 GHz 32001 pts 1.85 GHz/ 36.5 GHz</p> <table border="1"> <thead> <tr> <th>Range Low</th> <th>Range Up</th> <th>RBW</th> <th>Frequency</th> <th>Power Abs</th> <th>Limit</th> </tr> </thead> <tbody> <tr> <td>18.000 GHz</td> <td>36.500 GHz</td> <td>1.000 MHz</td> <td>32.01302 GHz</td> <td>-28.74 dBm</td> <td>-15.74 dB</td> </tr> </tbody> </table> <p>08:26:30 13. 07. 2021</p>	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	36.500 GHz	1.000 MHz	32.01302 GHz	-28.74 dBm	-15.74 dB	intentionally blank
Range Low	Range Up	RBW	Frequency	Power Abs	Limit								
18.000 GHz	36.500 GHz	1.000 MHz	32.01302 GHz	-28.74 dBm	-15.74 dB								

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



DFT-s-OFDM Module 0



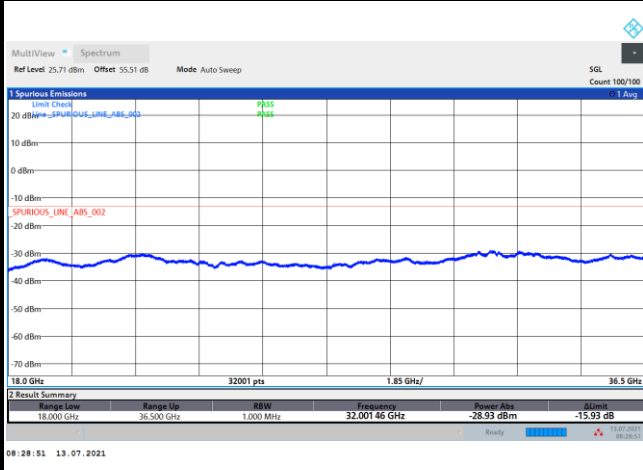
Remark: In band and out of band frequencies are omitted.



DFT-s-OFDM Module 0

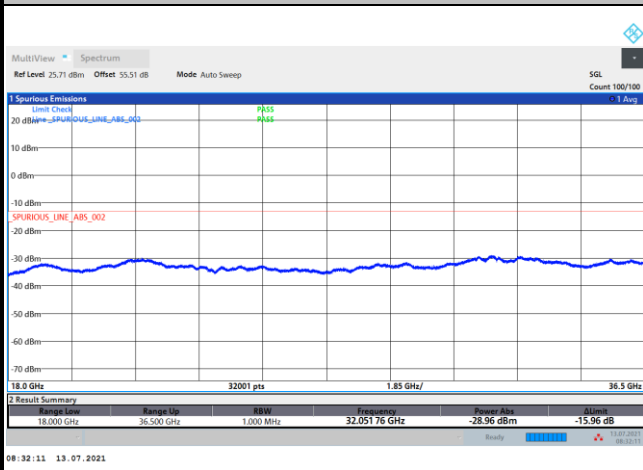
NR Band n260 QPSK (18-36.5GHz)

Lowest Channel / 200MHz



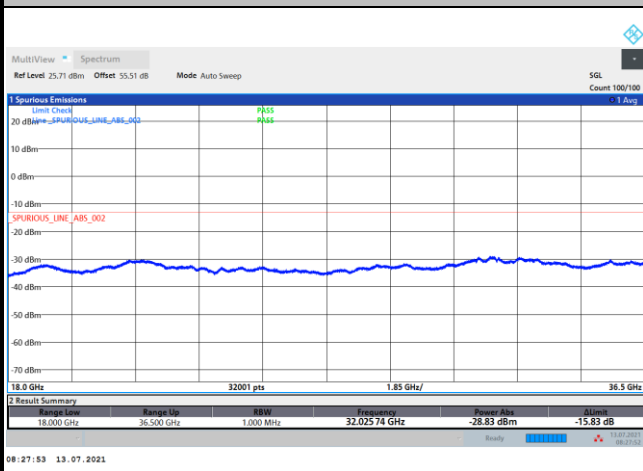
intentionally blank

Middle Channel / 200MHz



intentionally blank

Highest Channel / 200MHz

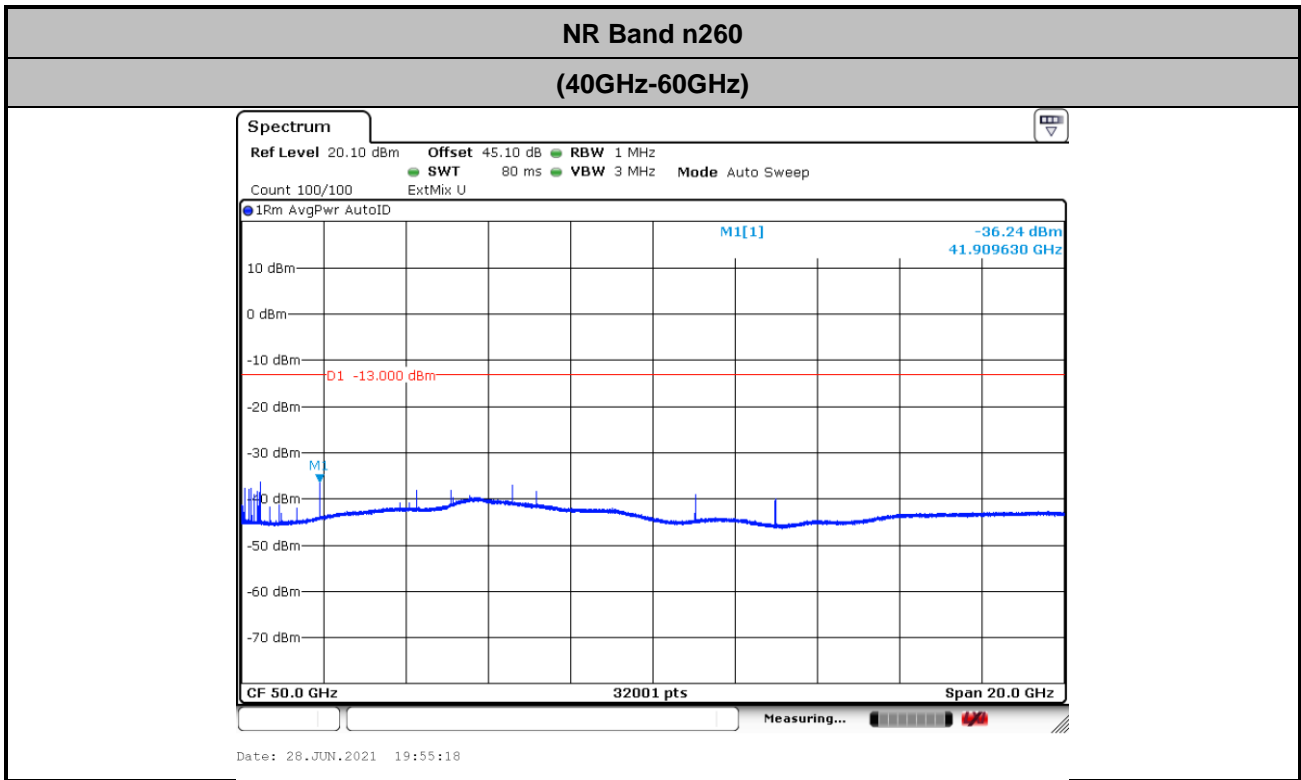


intentionally blank

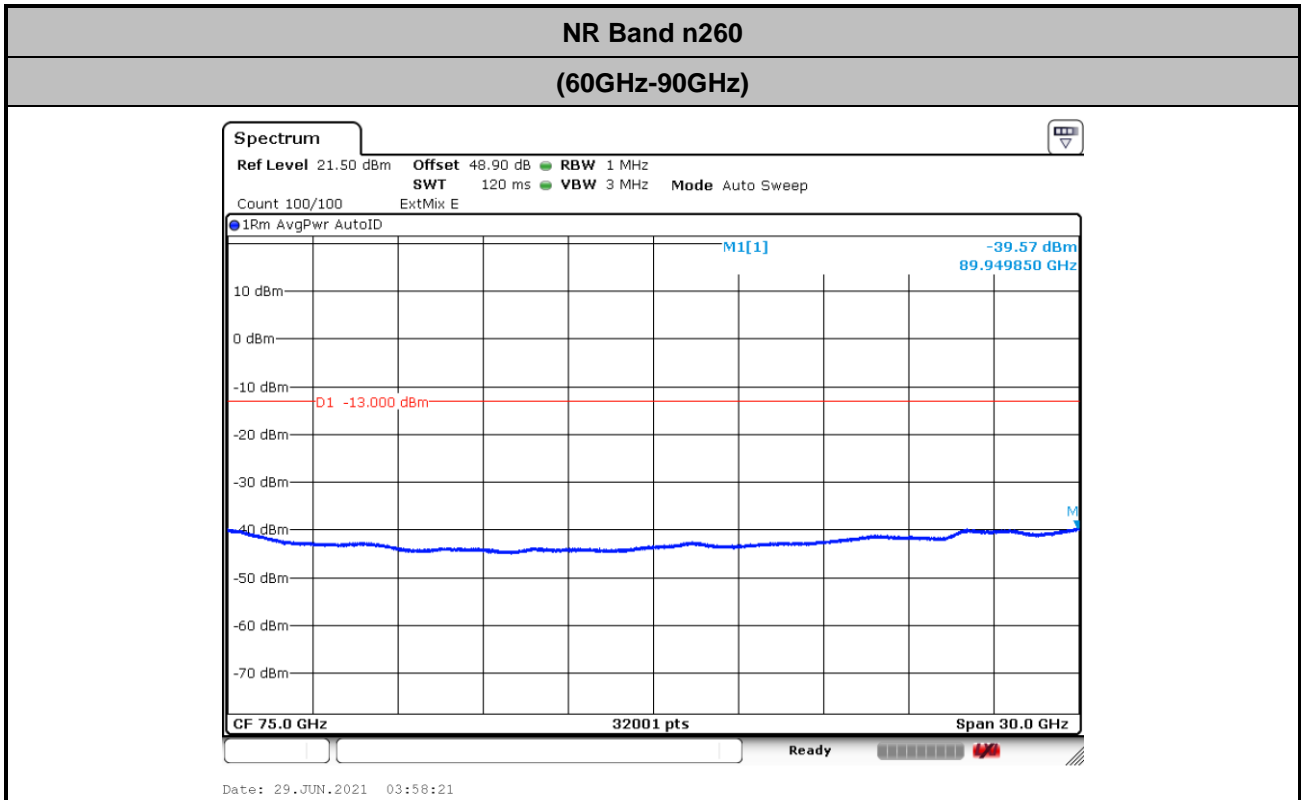
Remark: In band and out of band frequencies are omitted.



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

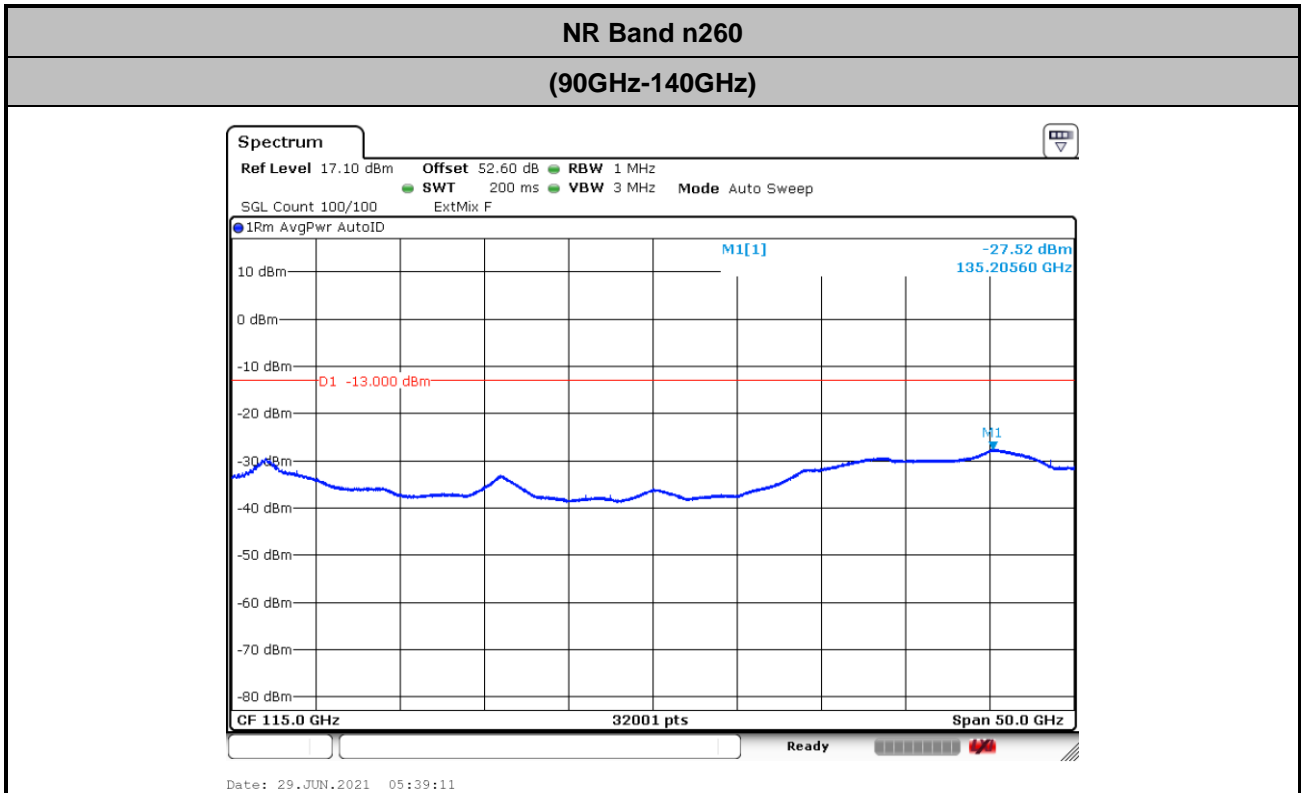


$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.5 + 0.4 + 107 + 20\log(1) - 104.8 = 45.1 \text{ (dB)} \end{aligned}$$



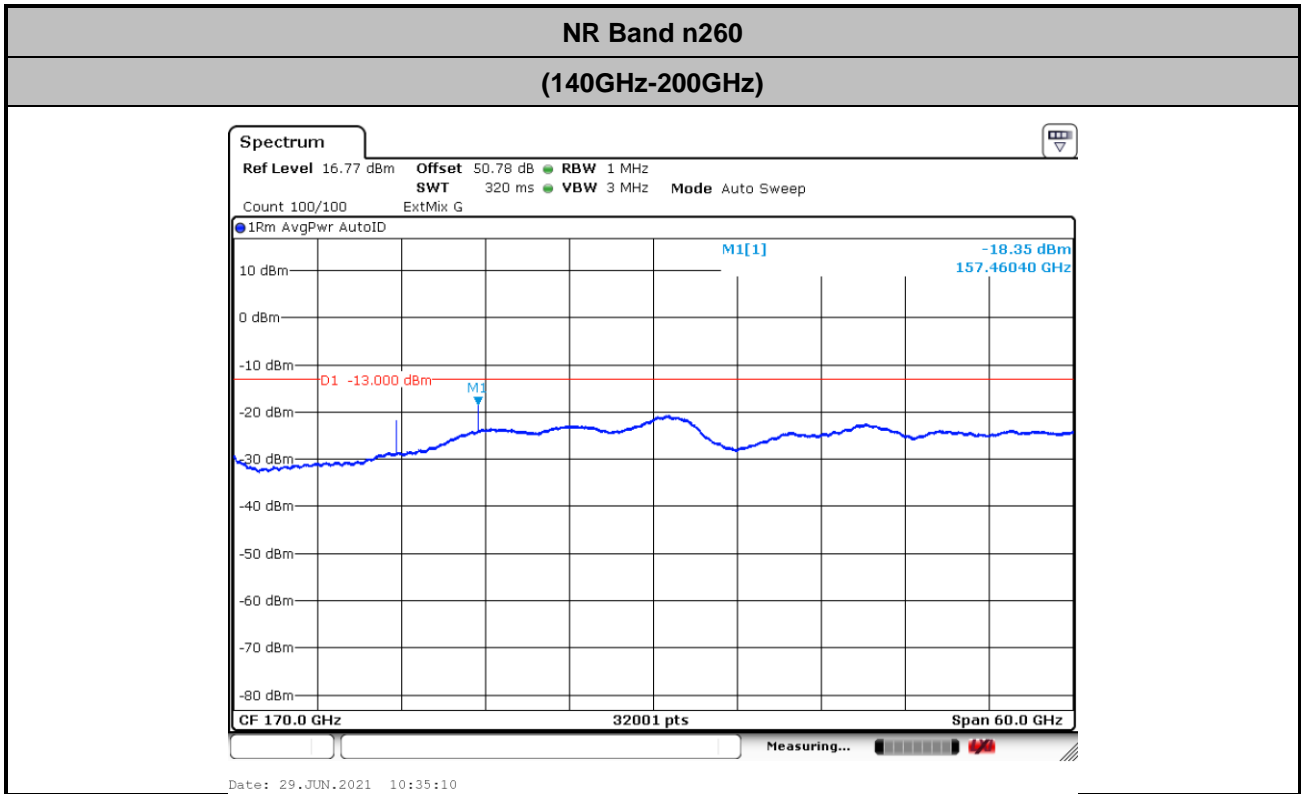
$$\begin{aligned}
 \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\
 &= 46.3 + 0.4 + 107 + 20\log(1) - 104.8 = 48.9 \text{ (dB)}
 \end{aligned}$$





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

$$= 50 + 0.4 + 107 + 20\log(1) - 104.8 = 52.6 \text{ (dB)}$$



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

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	38.4999062	93.800	2.436	PASS
40	Normal Voltage	38.4999074	92.600	2.405	
30	Normal Voltage	38.499912	88.000	2.286	
20(Ref.)	Normal Voltage	38.5	0.000	0.000	
10	Normal Voltage	38.5001713	-171.300	4.449	
0	Normal Voltage	38.5001933	-193.300	5.021	
-10	Normal Voltage	38.5002246	-224.600	5.834	
-20	Normal Voltage	38.5003045	-304.500	7.909	
-30	Normal Voltage	38.5003404	-340.400	8.842	
20	Maximum Voltage	38.50000145	-1.450	0.038	
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

## Occupied Bandwidth

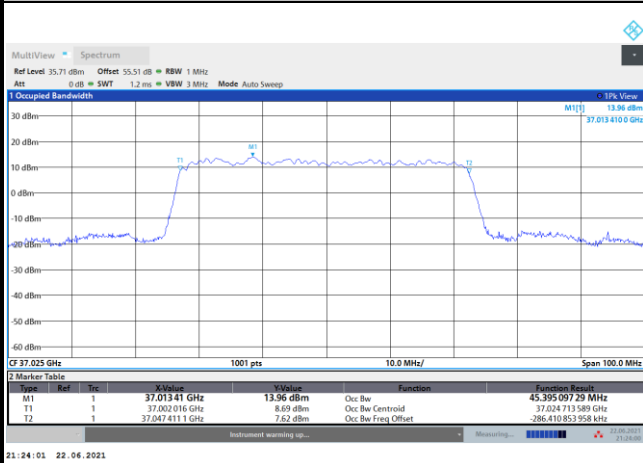
Mode	DFT-s-OFDM Module 1 NR Band n260 : 99%OBW(MHz)											
BW	50MHz				100MHz				200MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	45.39	45.35	45.32	45.34	90.65	91.04	90.43	90.84	185.98	185.77	186.10	186.71
Middle CH	45.22	45.17	45.09	45.01	90.71	90.69	90.53	90.61	186.16	186.41	187.01	187.56
Highest CH	45.34	45.26	45.16	45.09	90.83	90.71	90.57	90.63	187.41	187.59	188.32	189.16



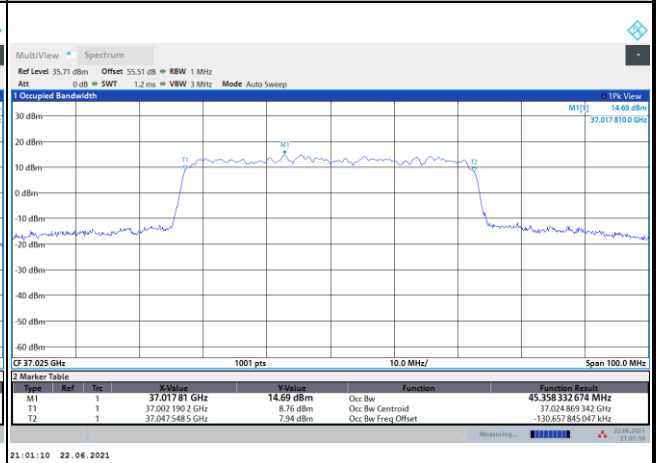
DFT-s-OFDM Module 1

NR Band n260

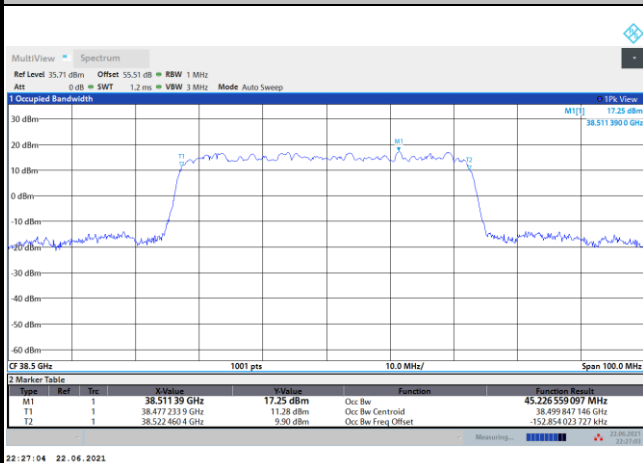
Lowest Channel / 50MHz / BPSK



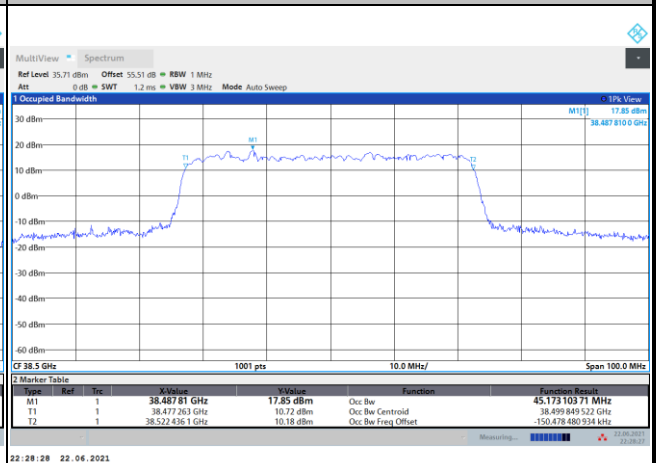
Lowest Channel / 50MHz / QPSK



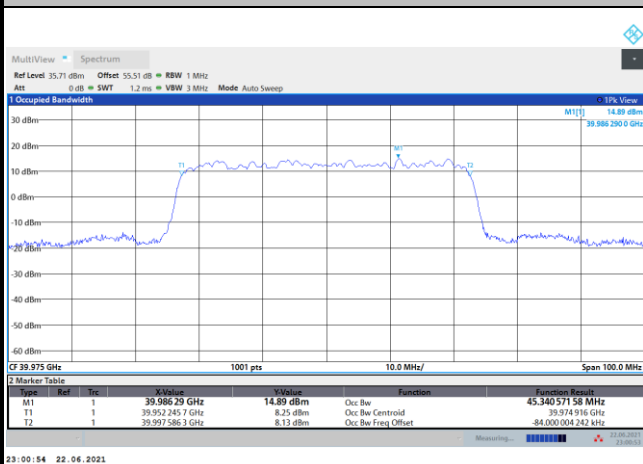
Middle Channel / 50MHz / BPSK



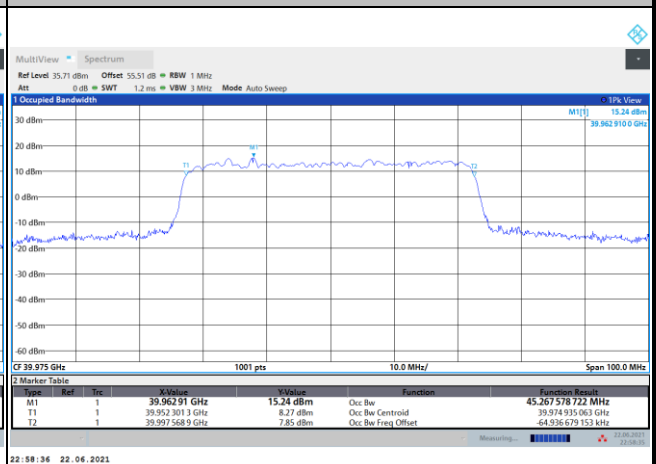
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

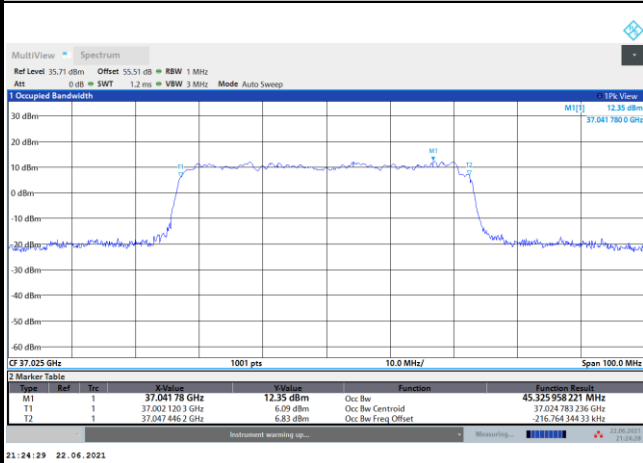




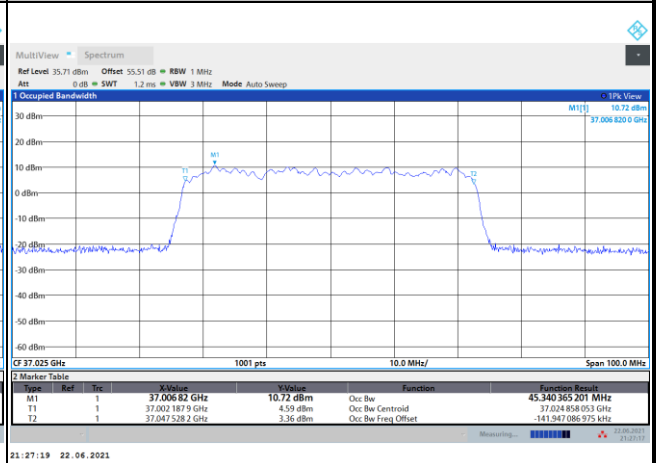
DFT-s-OFDM Module 1

NR Band n260

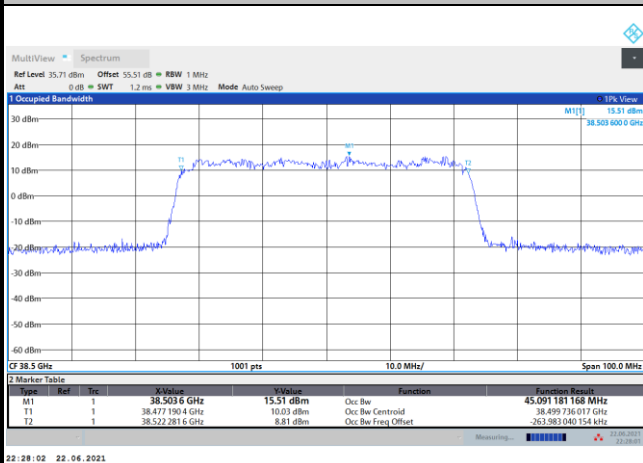
Lowest Channel / 50MHz / 16QAM



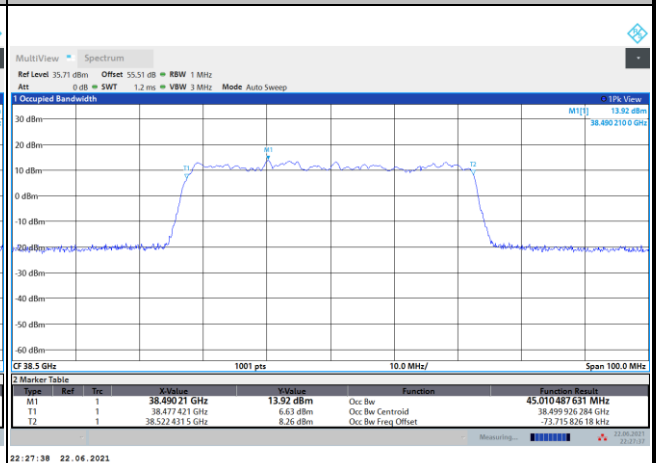
Lowest Channel / 50MHz / 64QAM



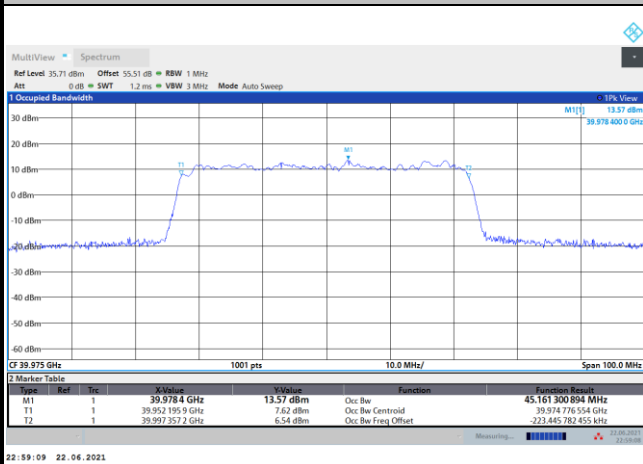
Middle Channel / 50MHz / 16QAM



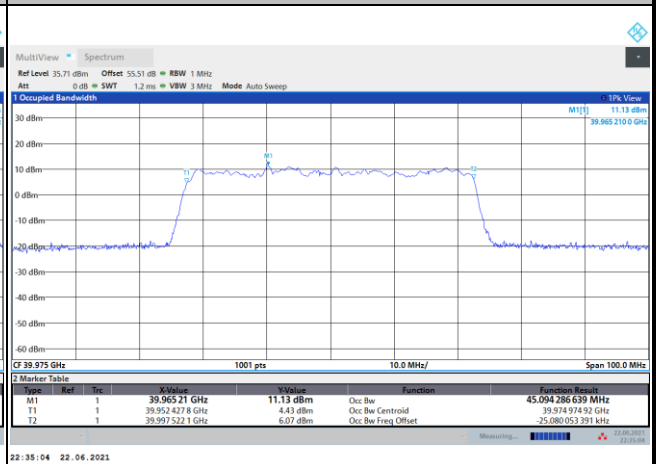
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

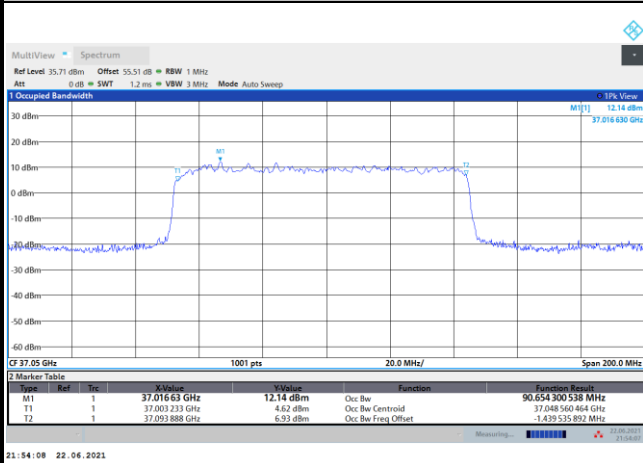




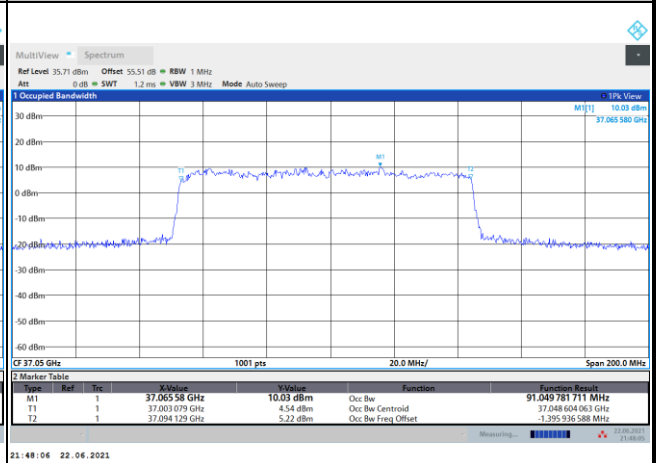
DFT-s-OFDM Module 1

NR Band n260

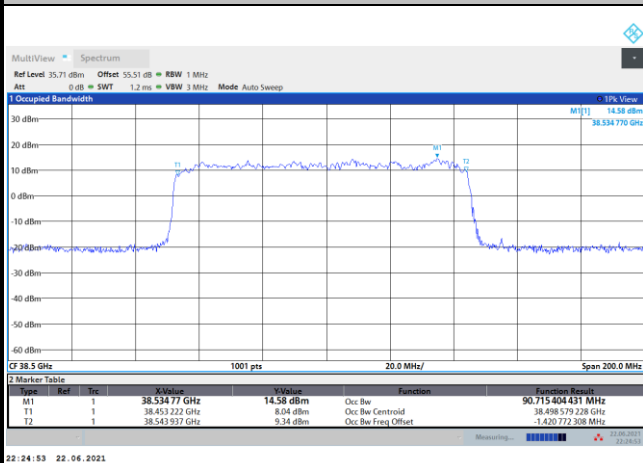
Lowest Channel / 100MHz / BPSK



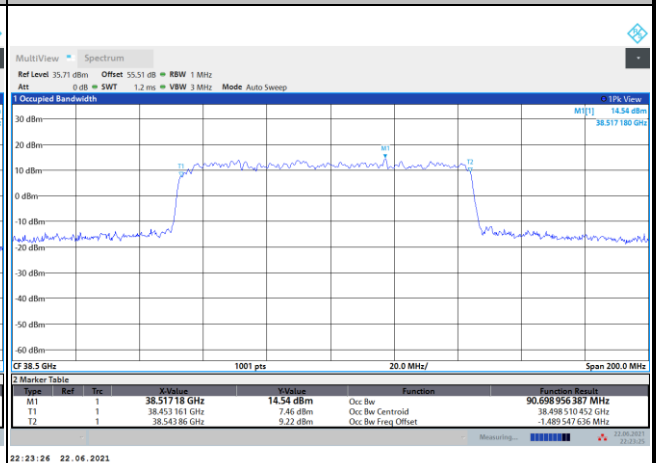
Lowest Channel / 100MHz / QPSK



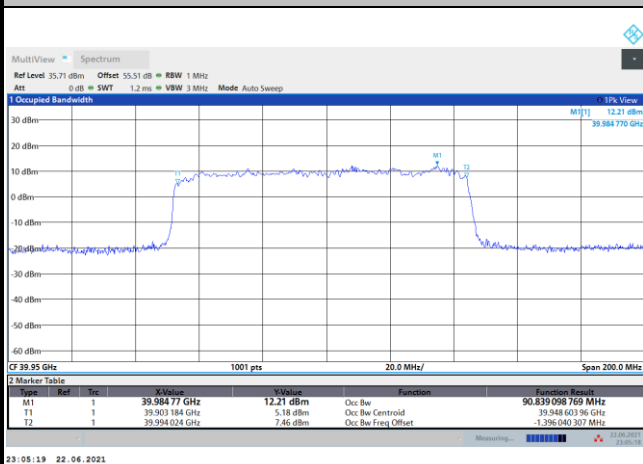
Middle Channel / 100MHz / BPSK



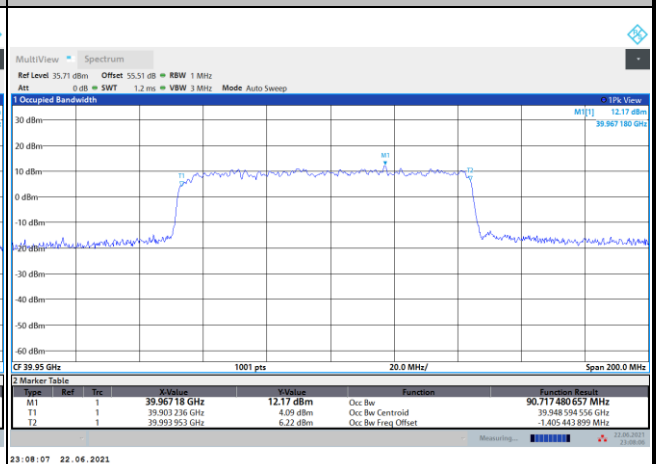
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

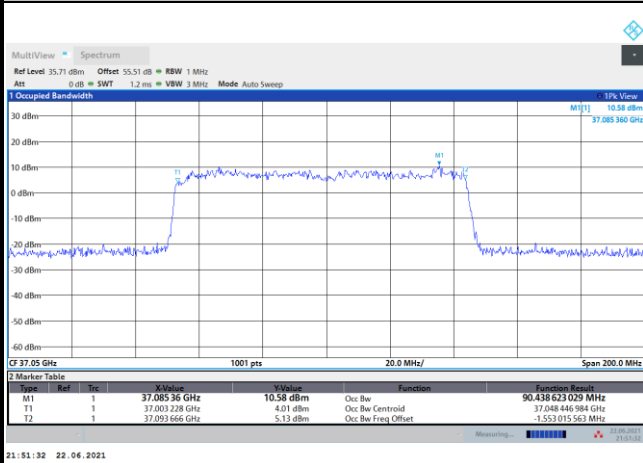




DFT-s-OFDM Module 1

NR Band n260

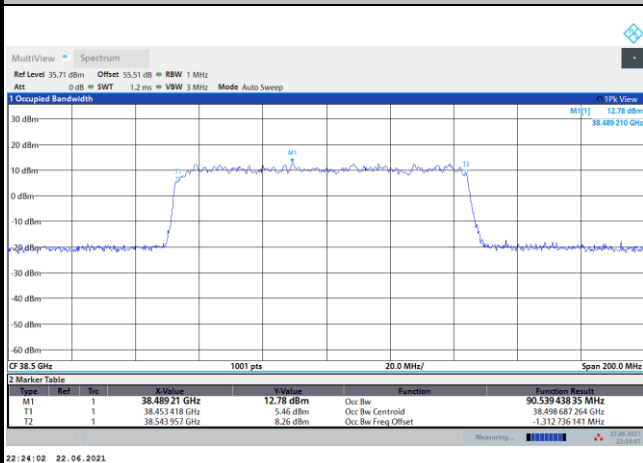
Lowest Channel / 100MHz / 16QAM



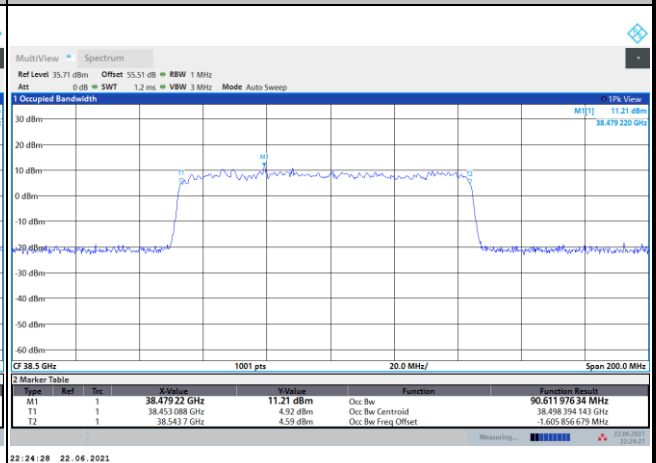
Lowest Channel / 100MHz / 64QAM



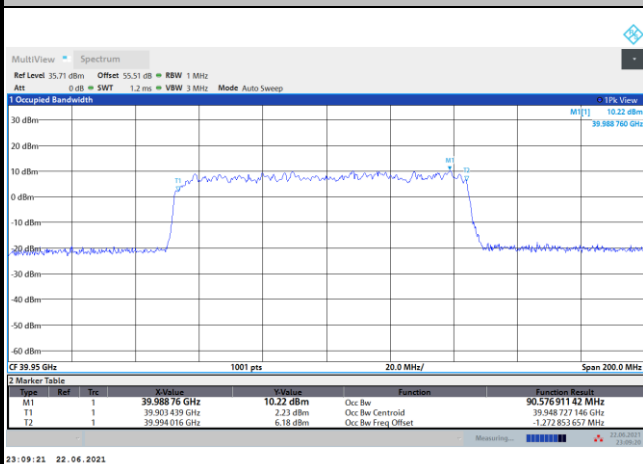
Middle Channel / 100MHz / 16QAM



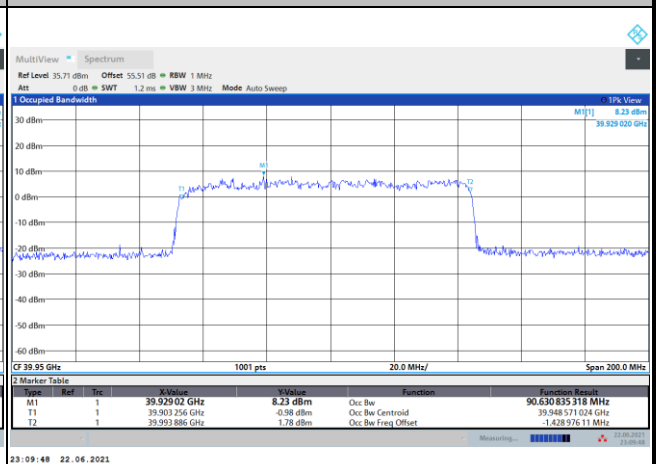
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM



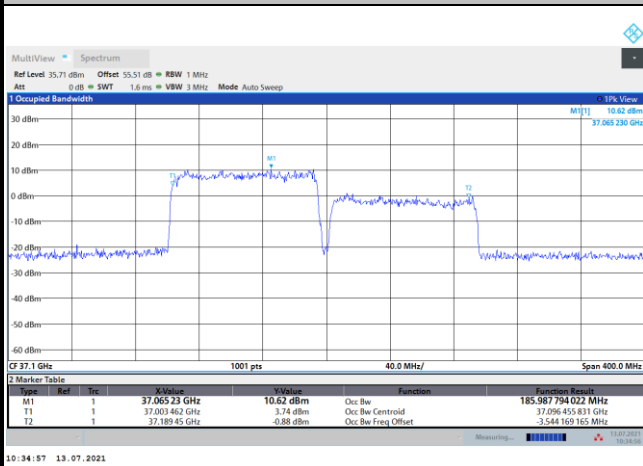




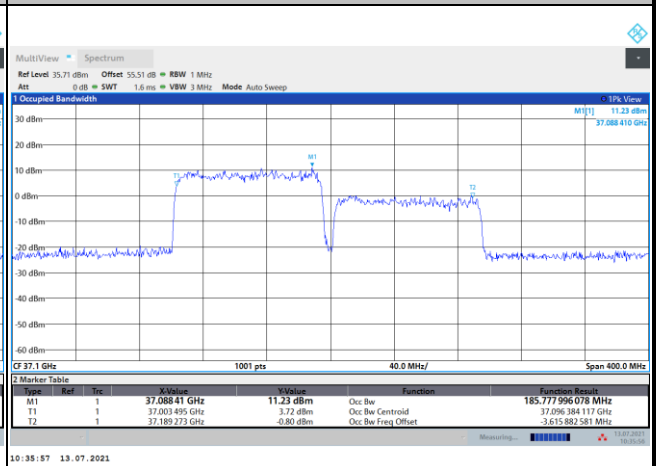
DFT-s-OFDM Module 1

NR Band n260

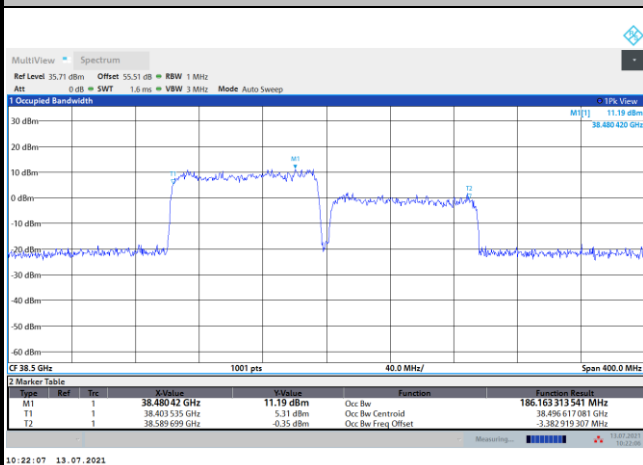
Lowest Channel / 200MHz / BPSK



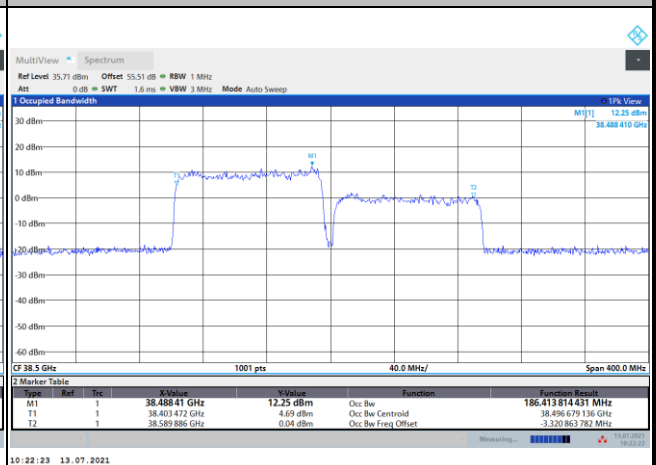
Lowest Channel / 200MHz / QPSK



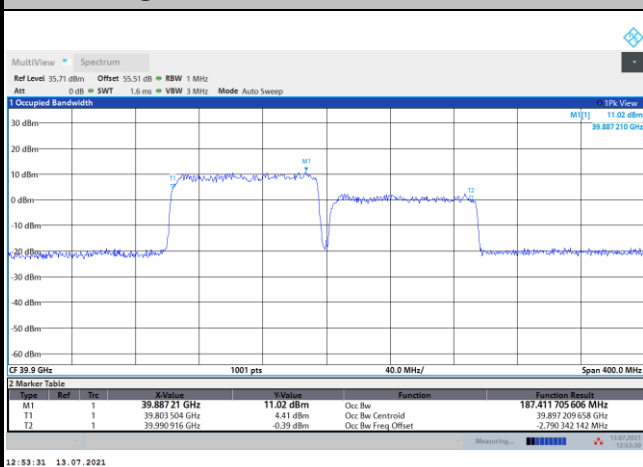
Middle Channel / 200MHz / BPSK



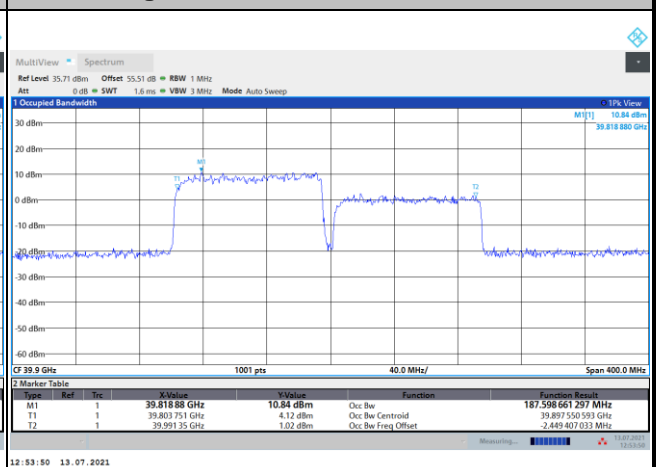
Middle Channel / 200MHz / QPSK



Highest Channel / 200MHz / BPSK



Highest Channel / 200MHz / QPSK

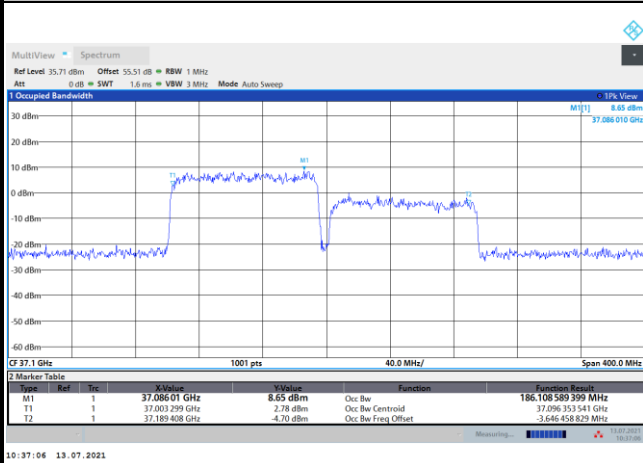




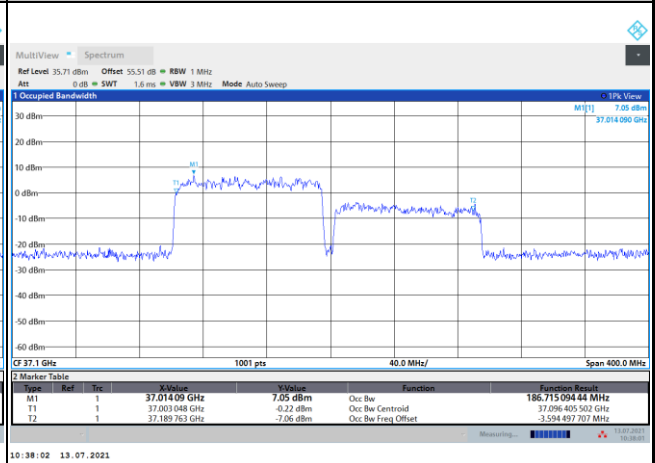
DFT-s-OFDM Module 1

NR Band n260

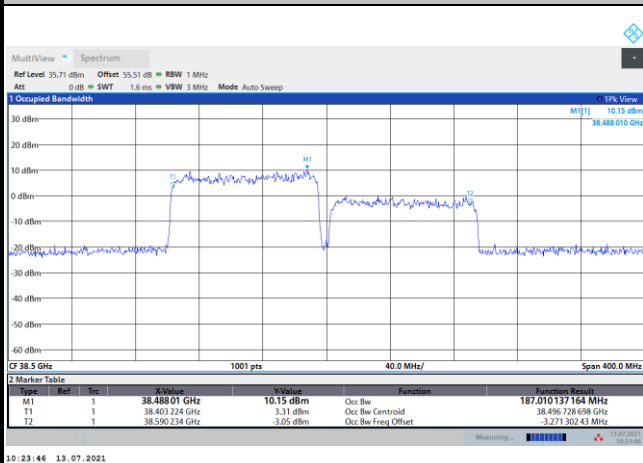
Lowest Channel / 200MHz / 16QAM



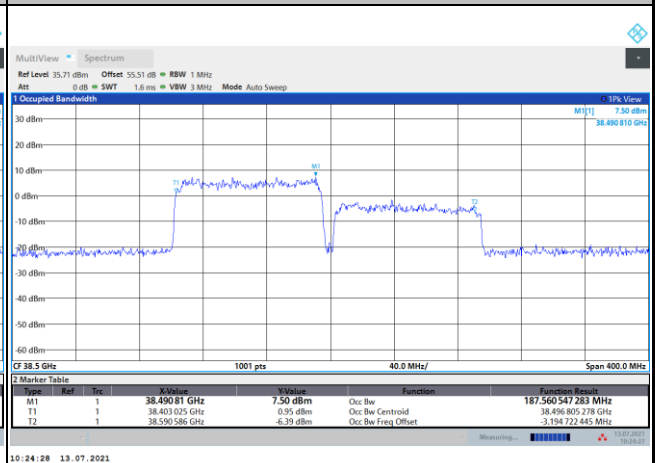
Lowest Channel / 200MHz / 64QAM



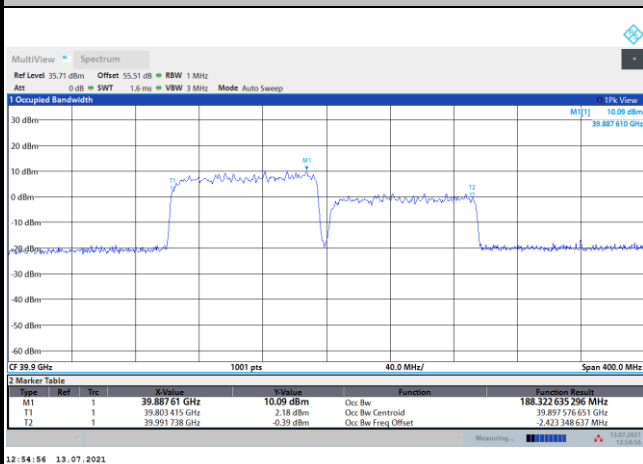
Middle Channel / 200MHz / 16QAM



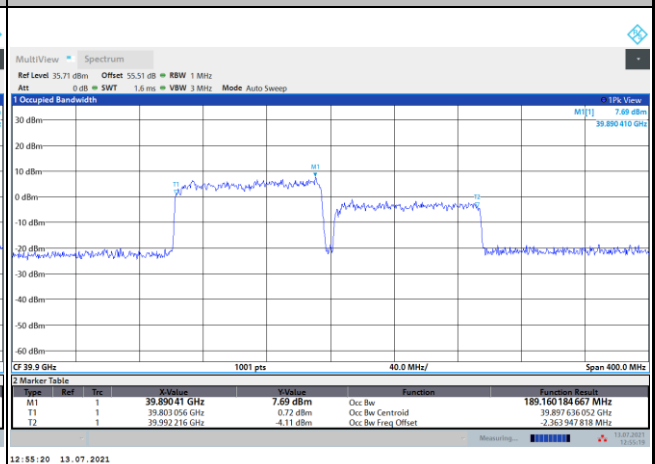
Middle Channel / 200MHz / 64QAM



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	-13.11	-12.73	-13.31	-17.6	-14.21	-11.45	-13.78	-16.85	-17.03	-17.63	-18.57	-18.03
	>10%OB	≅ -13	-28.82	-28.54	-29.3	-30.15	-28.29	-28.18	-28.16	-28.33	-26.87	-27.02	-27.17	-28.52
High CH	0~10%OB	≅ -5	-16.04	-15.93	-17.71	-20.88	-16.99	-16.31	-17.71	-20.88	-27.97	-28.54	-28.52	-27.78
	>10%OB	≅ -13	-25.85	-25.68	-26.11	-26.33	-26.49	-26.6	-26.11	-26.33	-27.66	-27.51	-27.74	-27.55
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	-23.55	-21.37	-26.55	-28.59	-24.83	-24.13	-27.04	-28.25	-28.51	-28.25	-29.71	-30.15
	>10%OB	≅ -13	-27.29	-22.44	-28.95	-30.56	-27.35	-25.6	-28.11	-28.24	-29.26	-29.35	-29.92	-30.51
High CH	0~10%OB	≅ -5	-24.48	-22.26	-26.11	-27.61	-26.07	-24.15	-26.38	-26.91	-28.33	-28.23	-28.29	-28.72
	>10%OB	≅ -13	-26.17	-22.71	-26.99	-27.75	-26.37	-24.86	-26.3	-25.97	-27.29	-27.51	-27.57	-27.73
Result			Compliance											