

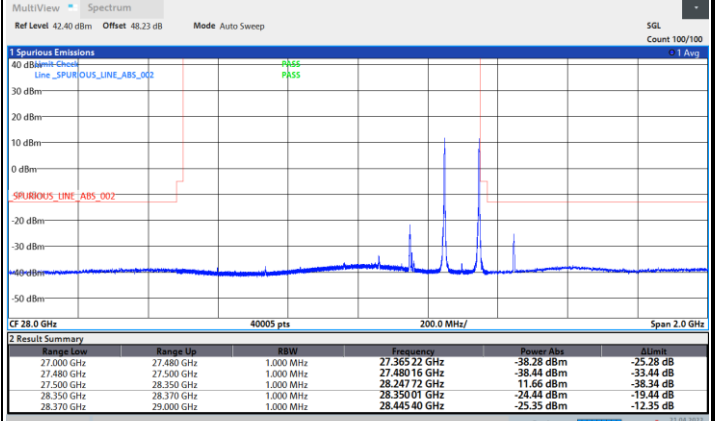
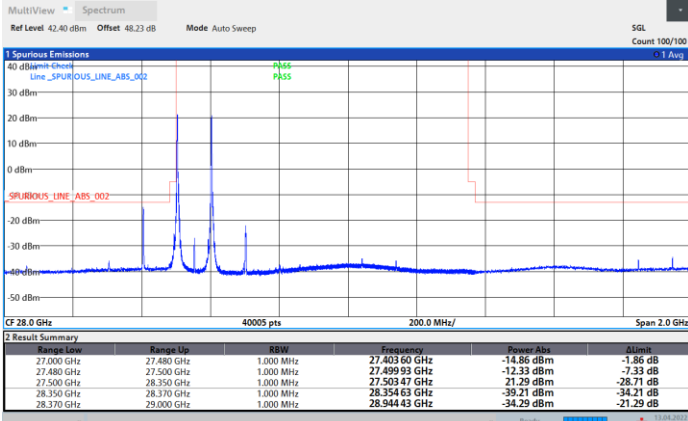


DFT-s-OFDM Module 0

NR Band n261 / 200MHz / BPSK

Lowest Band Edge / 1 RB

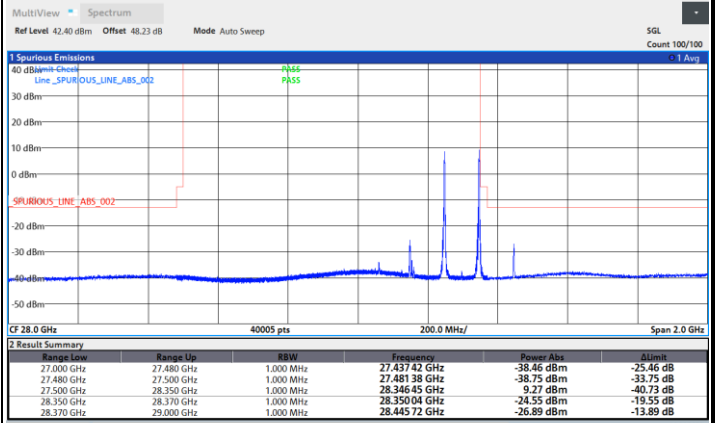
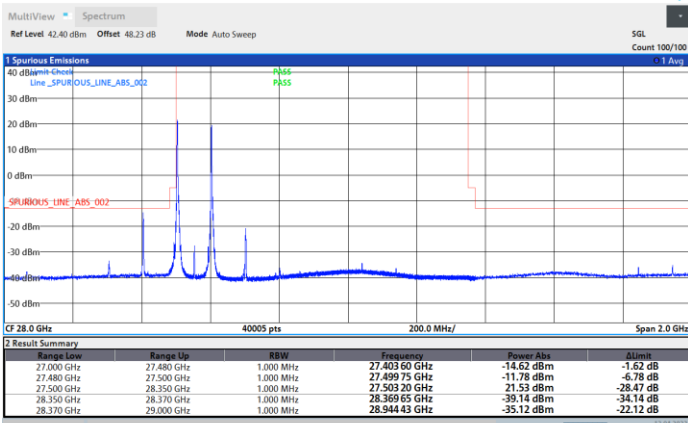
Highest Band Edge / 1 RB



NR Band n261 / 200MHz / QPSK

Lowest Band Edge / 1 RB

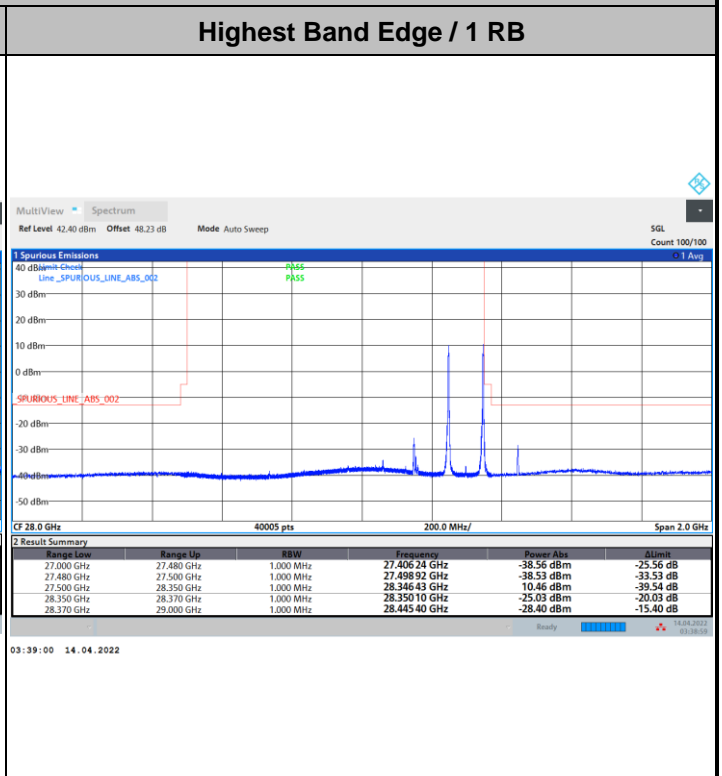
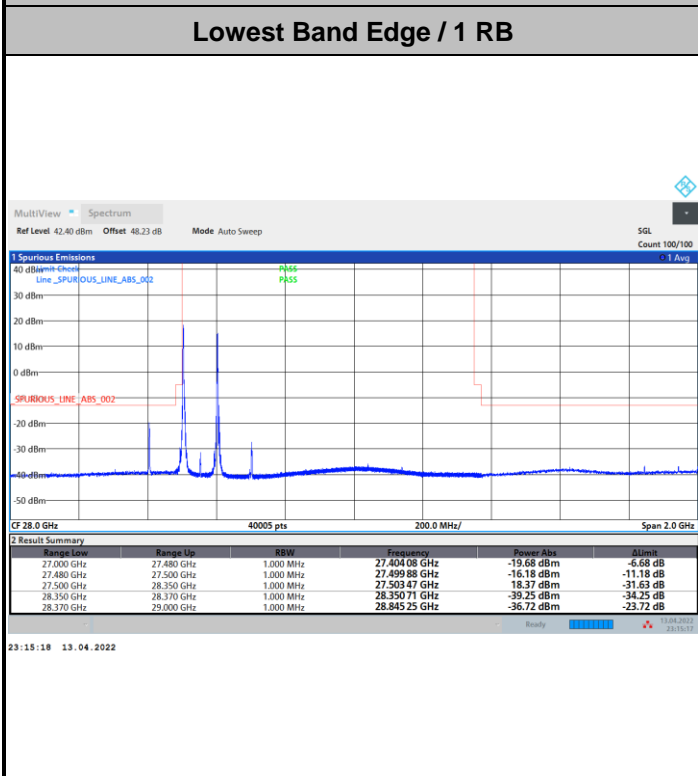
Highest Band Edge / 1 RB



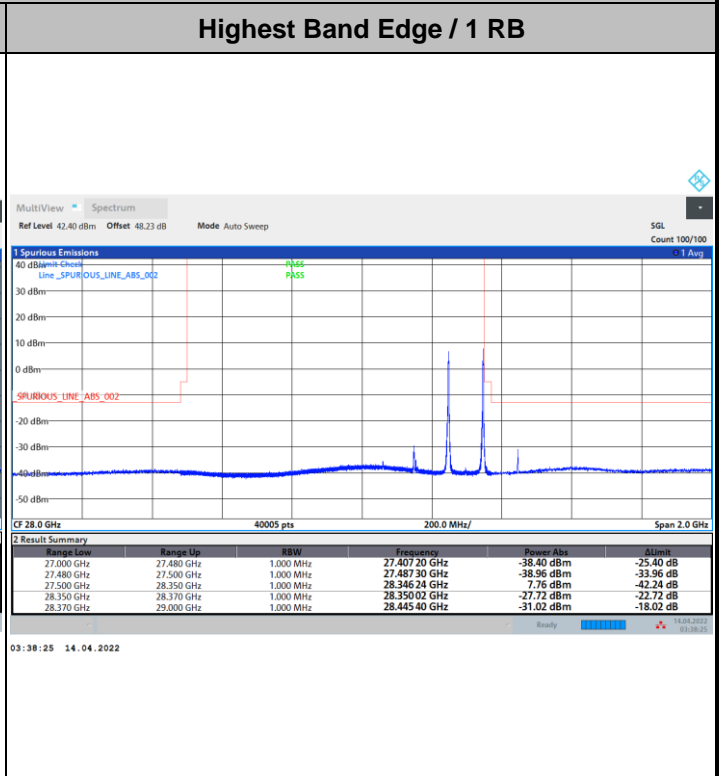
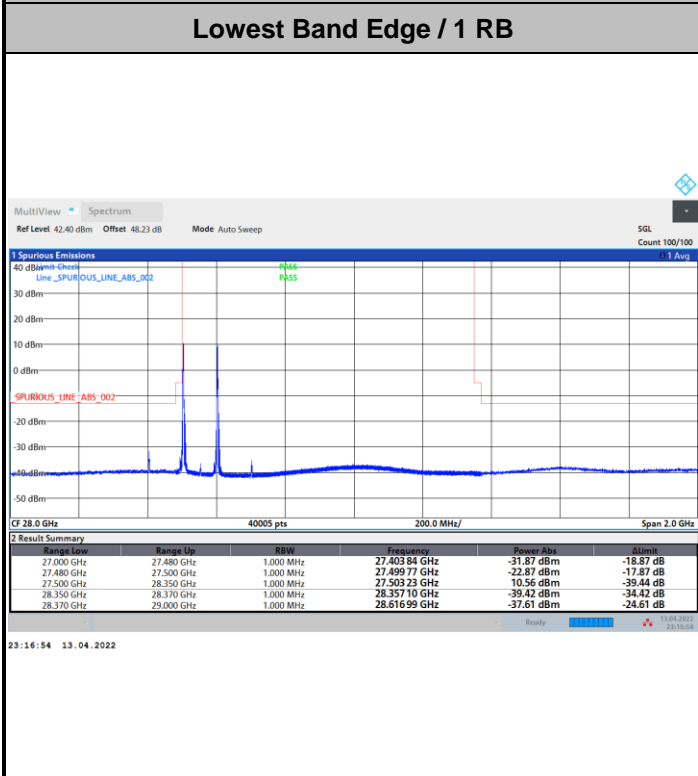


DFT-s-OFDM Module 0

NR Band n261 / 200MHz / 16QAM



NR Band n261 / 200MHz / 64QAM

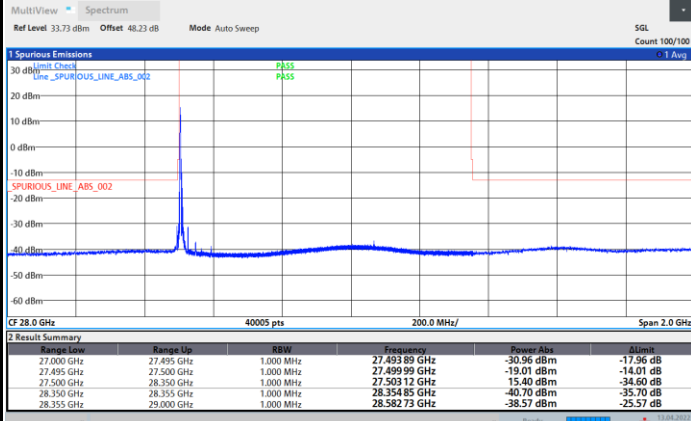




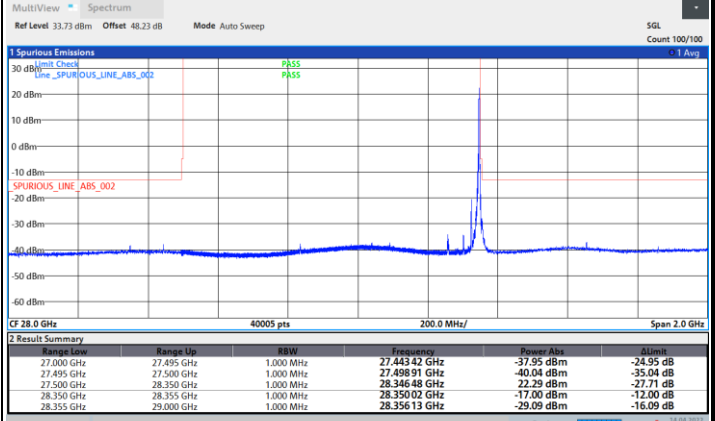
CP-OFDM Module 0

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

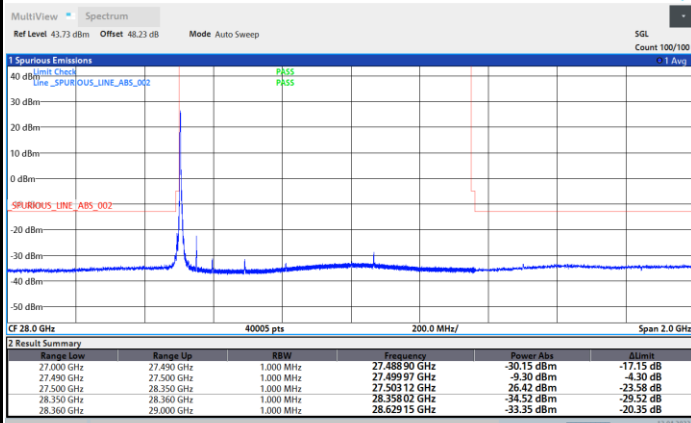


Highest Band Edge / 1 RB

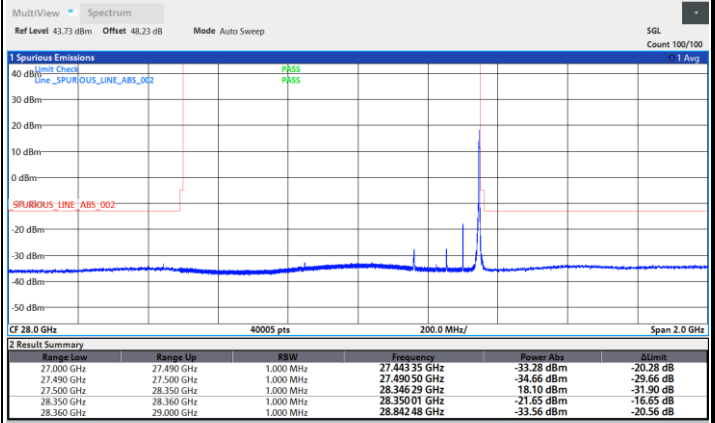


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



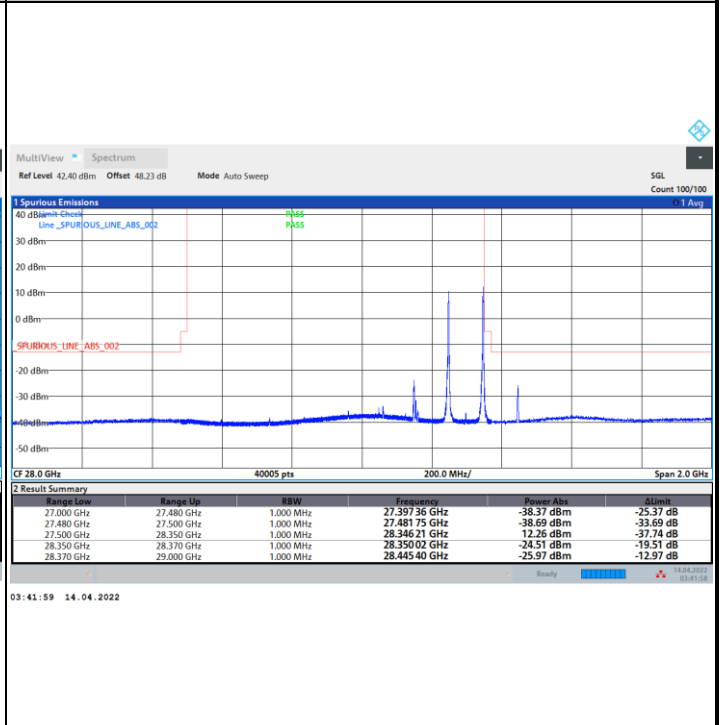
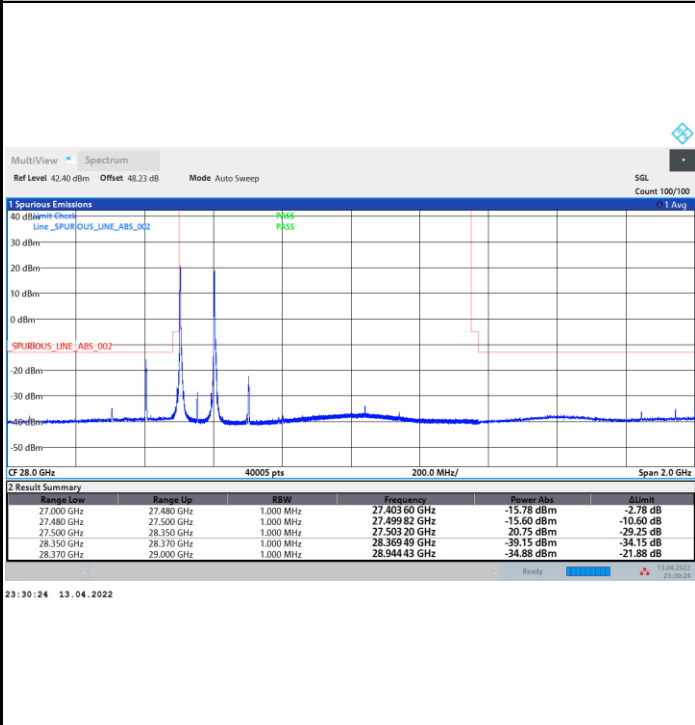


CP-OFDM Module 0

NR Band n261 / 200MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

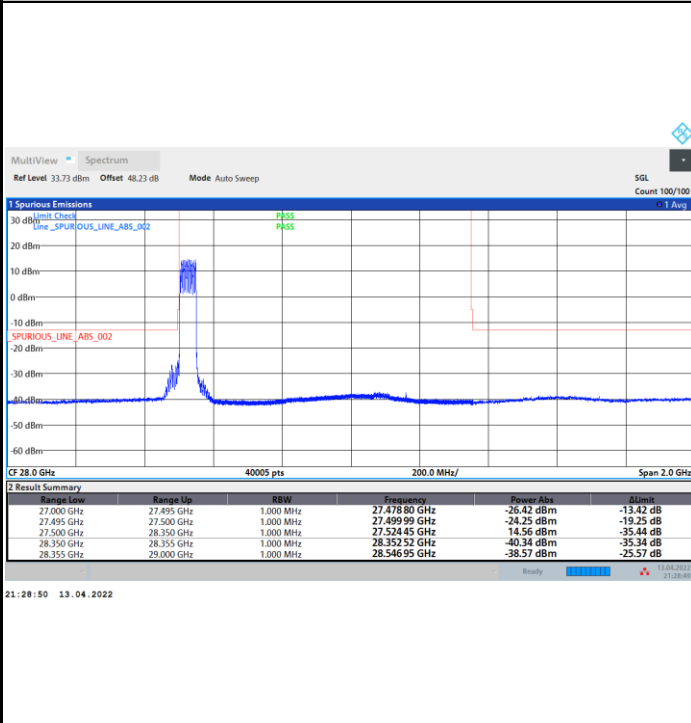




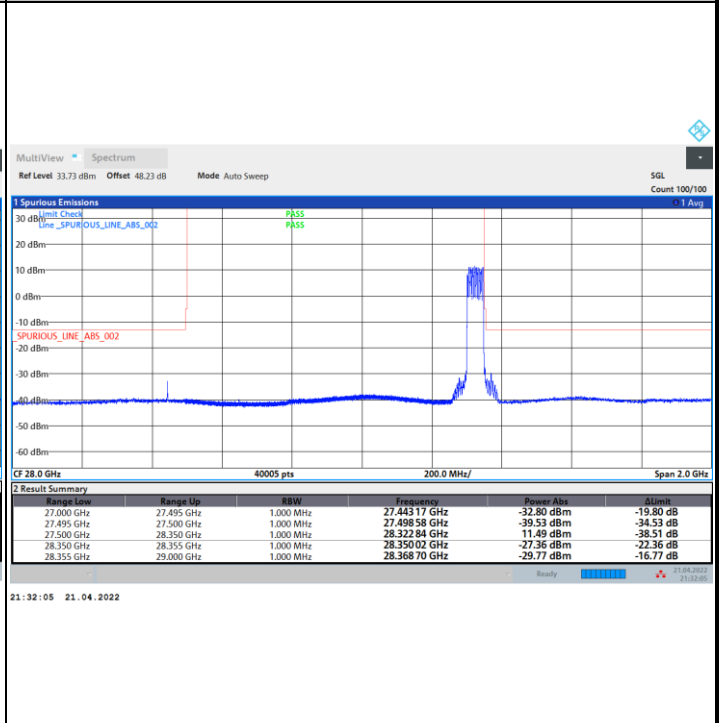
DFT-s-OFDM Module 0

NR Band n261 / 50MHz / BPSK

Lowest Band Edge / Full RB

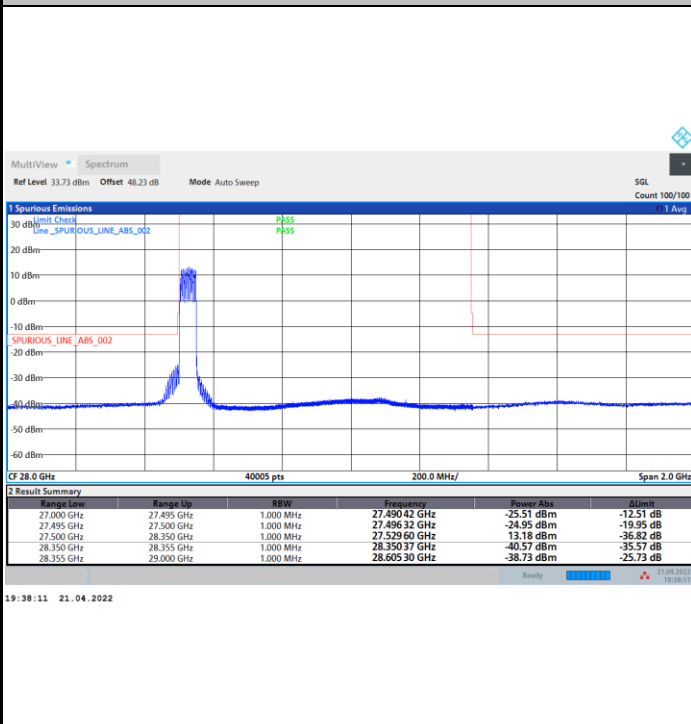


Highest Band Edge / Full RB

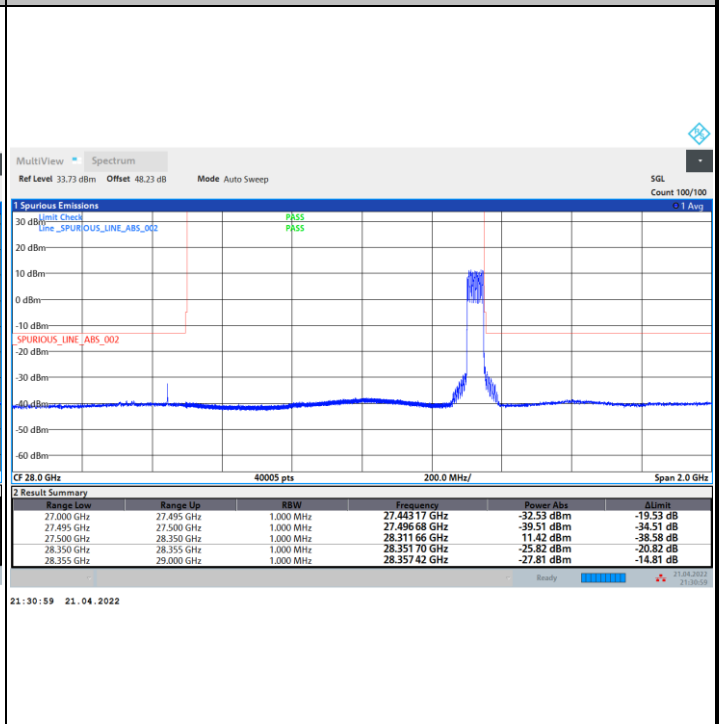


NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

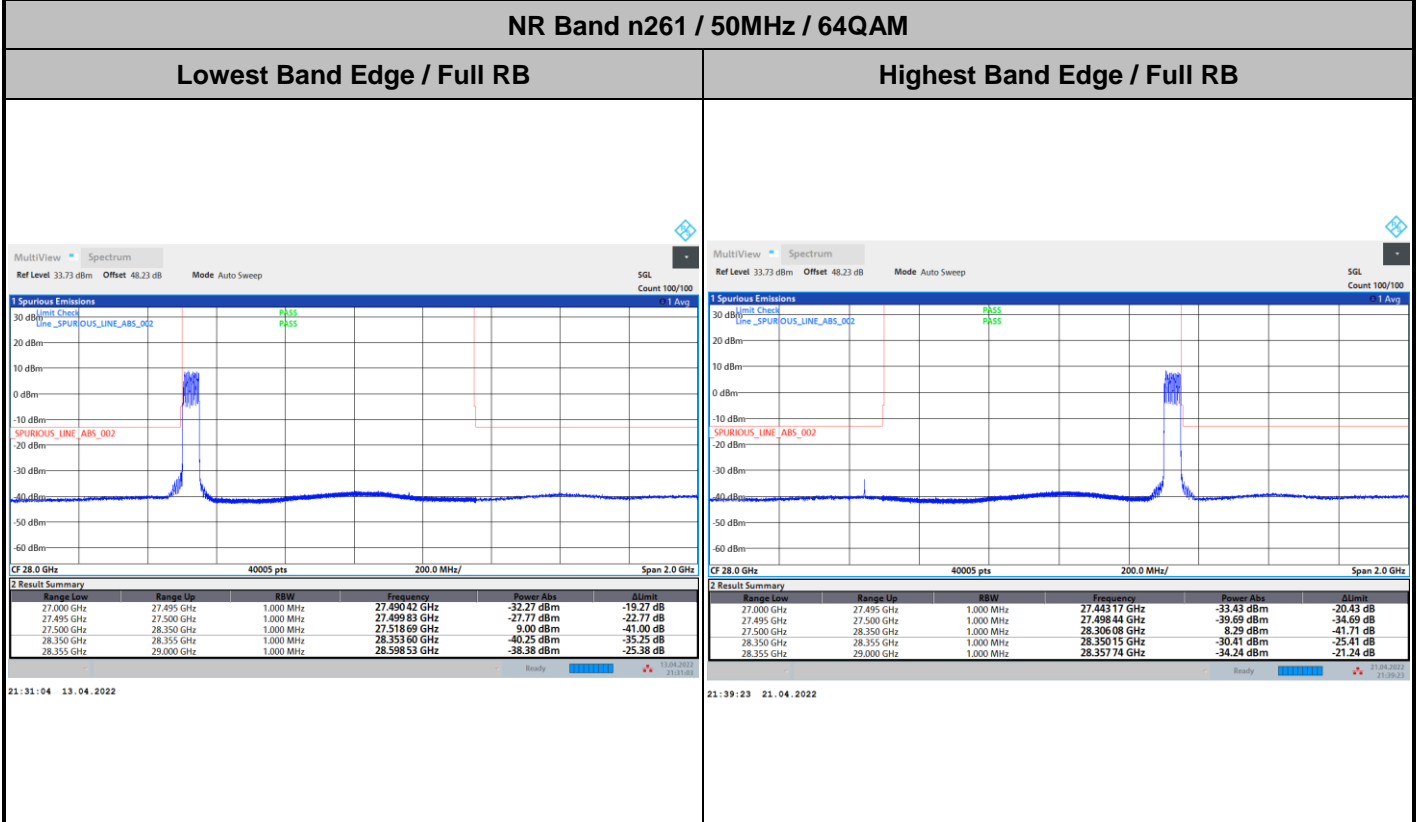
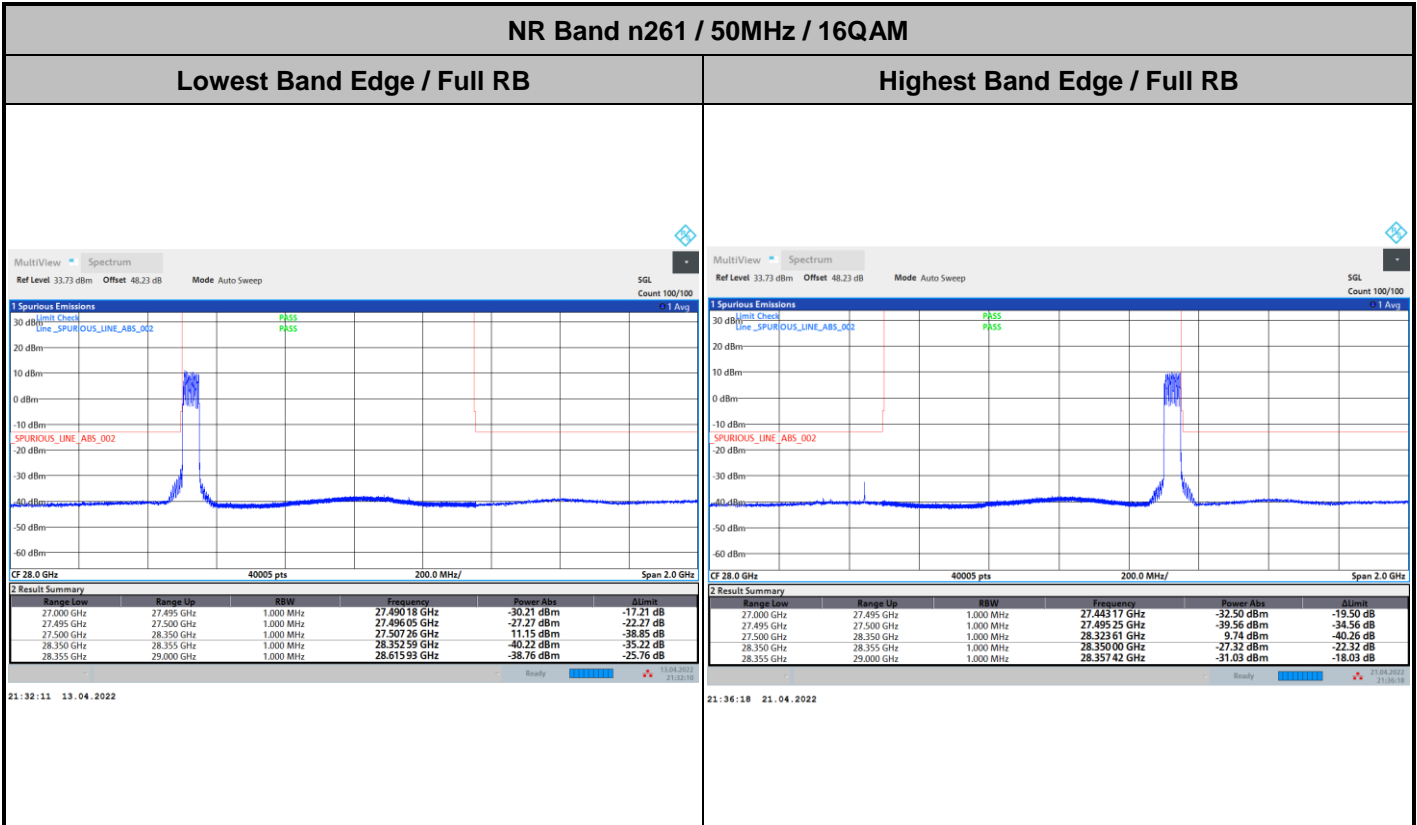


Highest Band Edge / Full RB





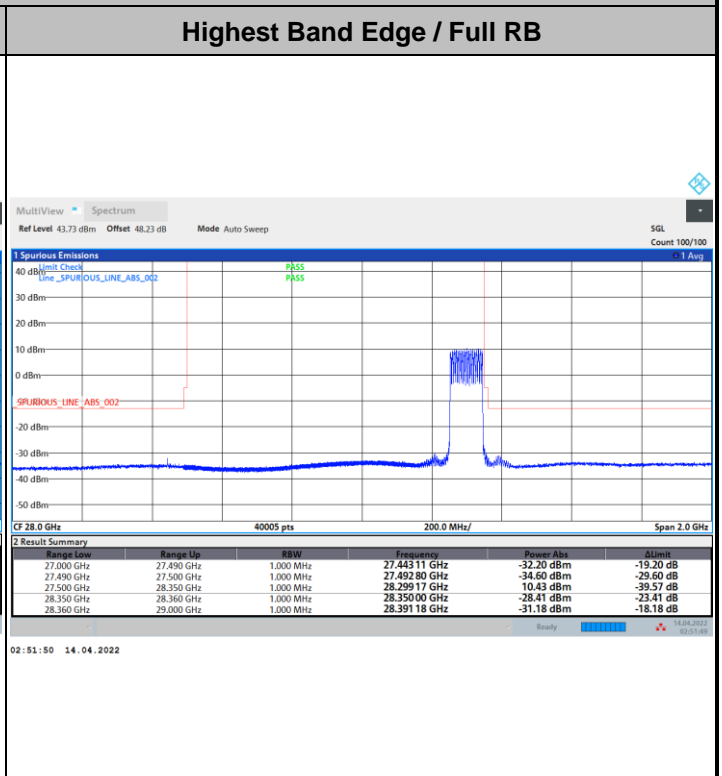
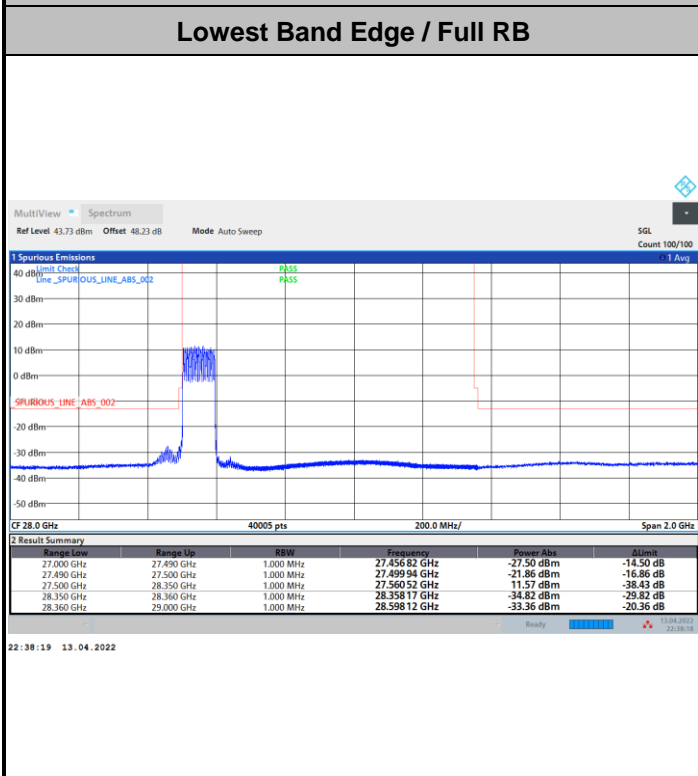
DFT-s-OFDM Module 0



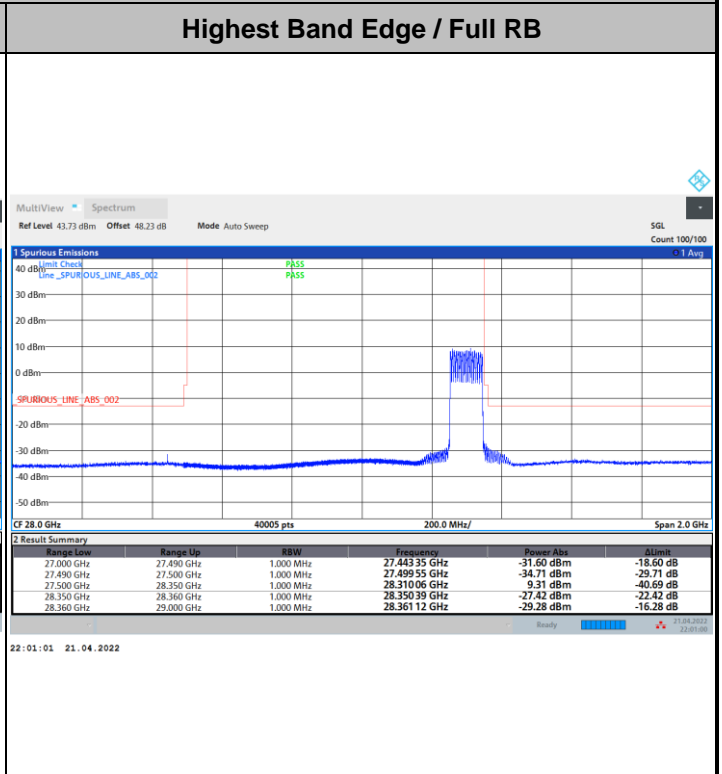
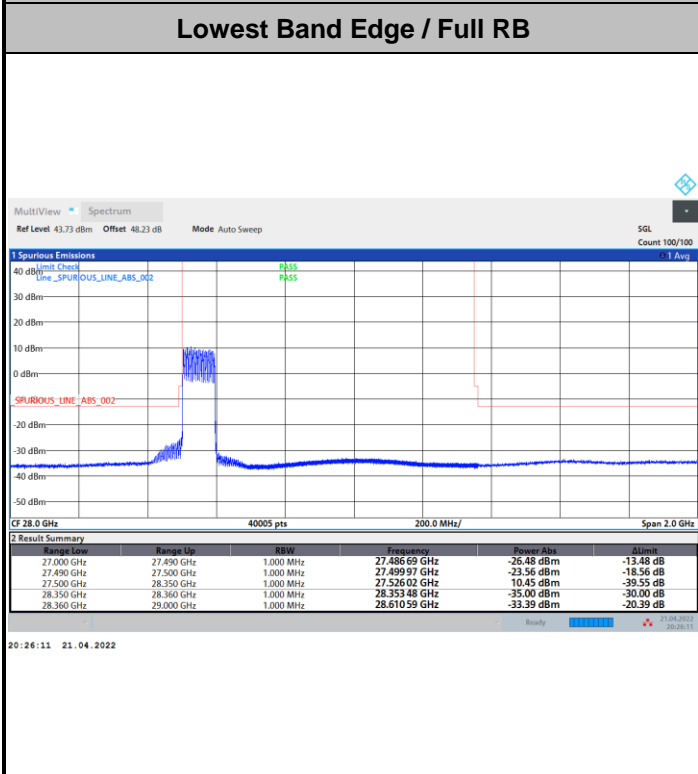


DFT-s-OFDM Module 0

NR Band n261 / 100MHz / BPSK



NR Band n261 / 100MHz / QPSK

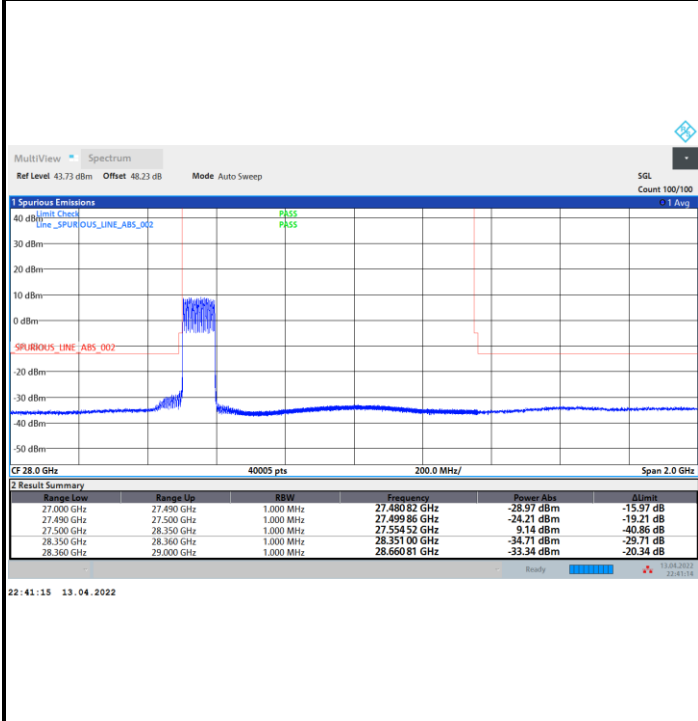




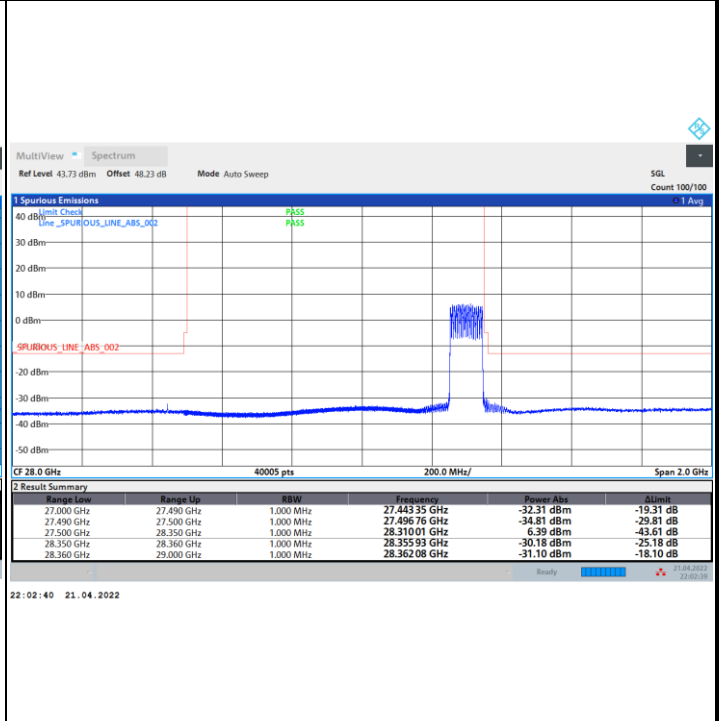
DFT-s-OFDM Module 0

NR Band n261 / 100MHz / 16QAM

Lowest Band Edge / Full RB

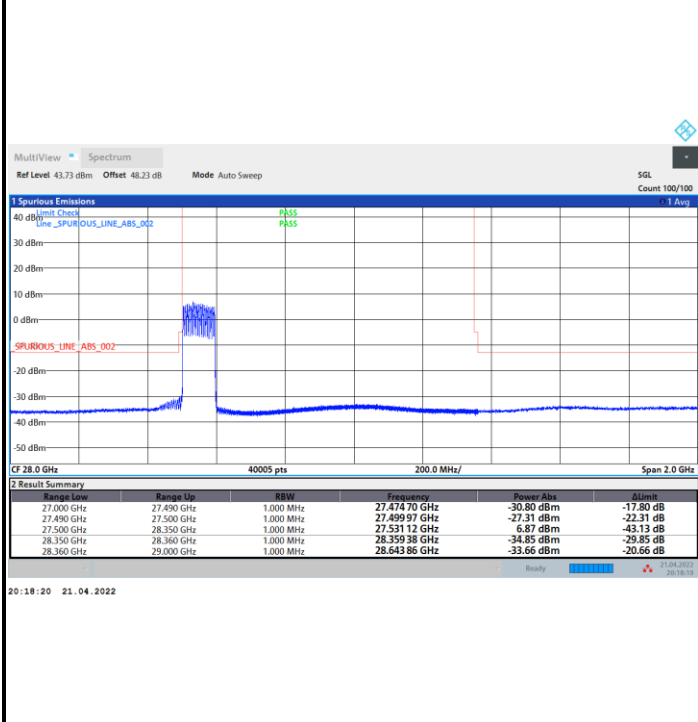


Highest Band Edge / Full RB

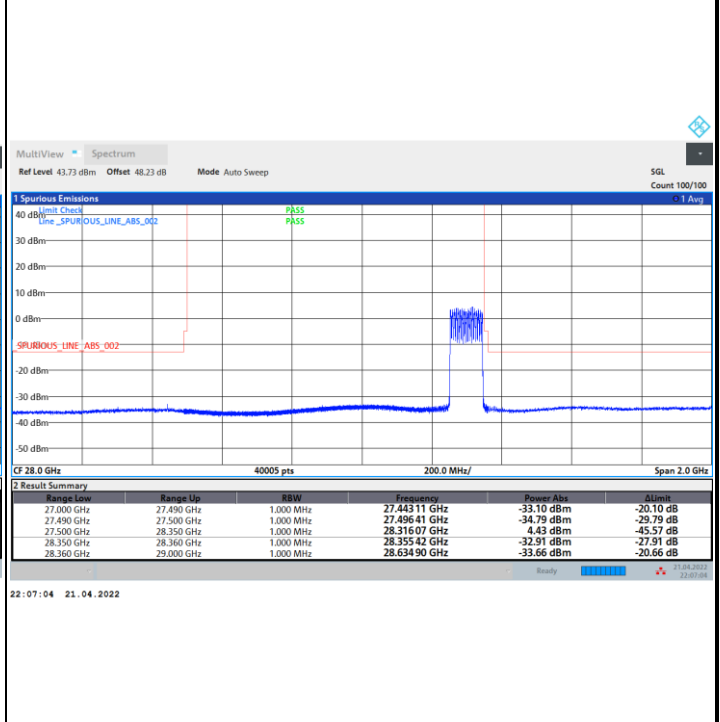


NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



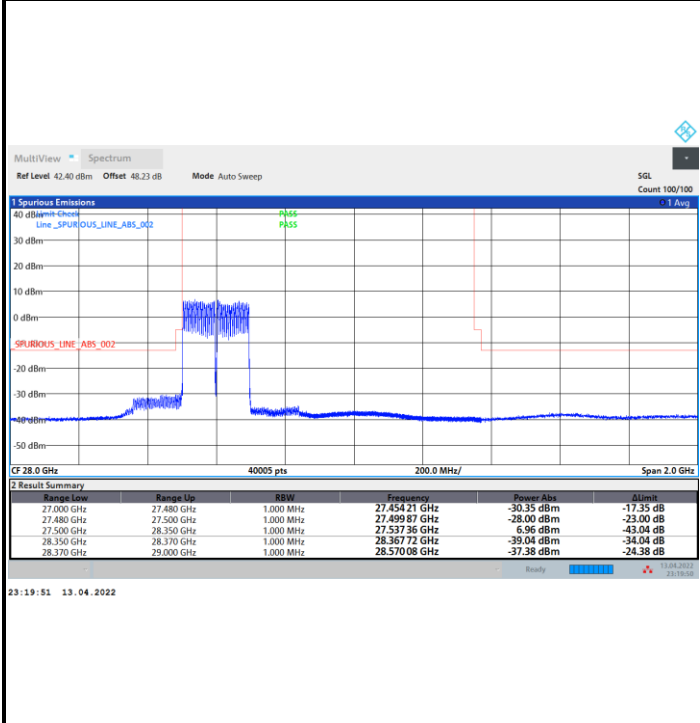




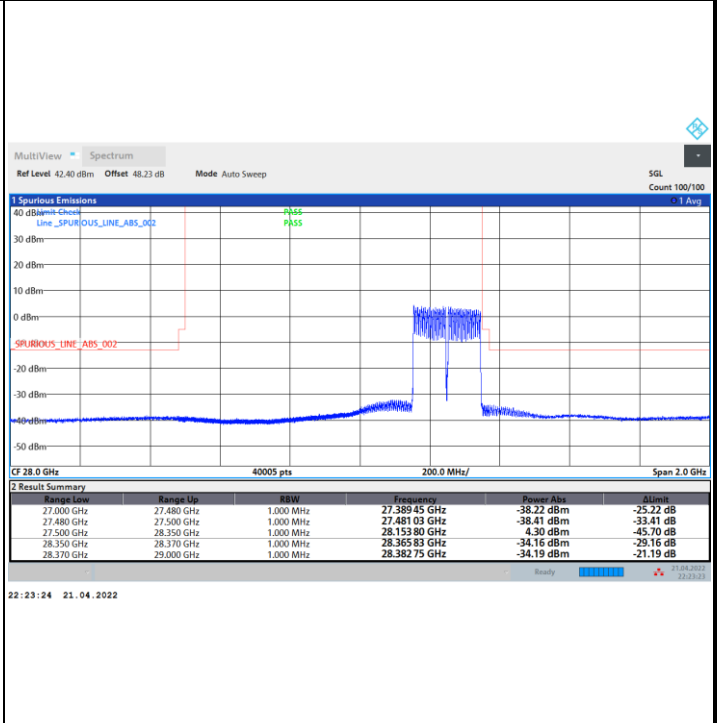
DFT-s-OFDM Module 0

NR Band n261 / 200MHz / BPSK

Lowest Band Edge / Full RB

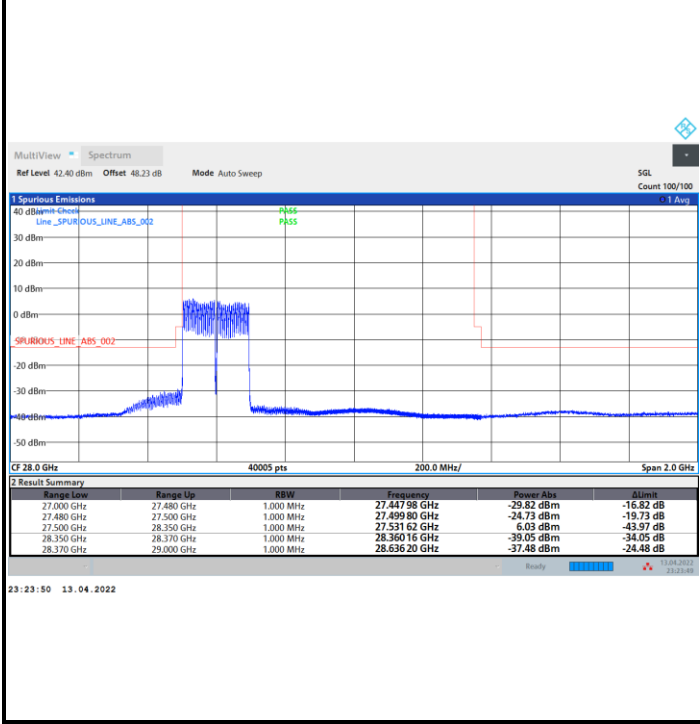


Highest Band Edge / Full RB

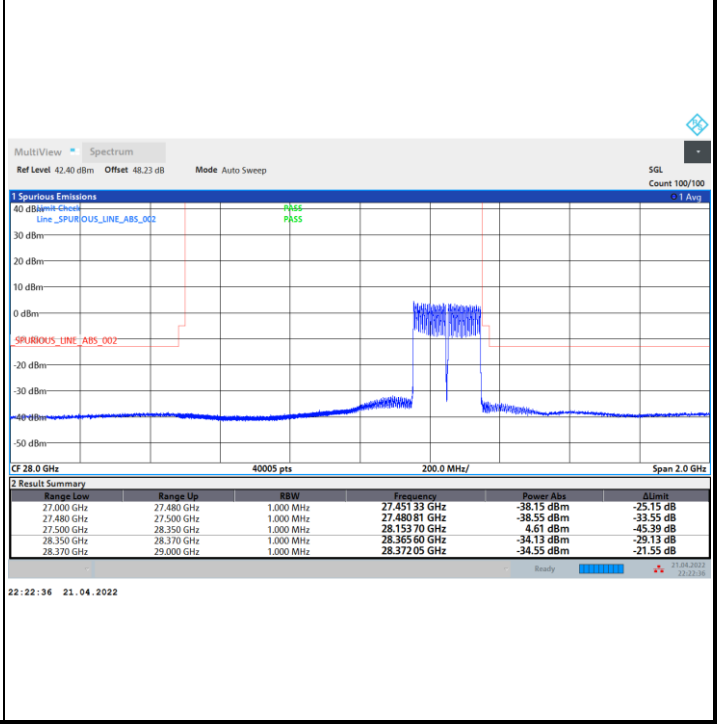


NR Band n261 / 200MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

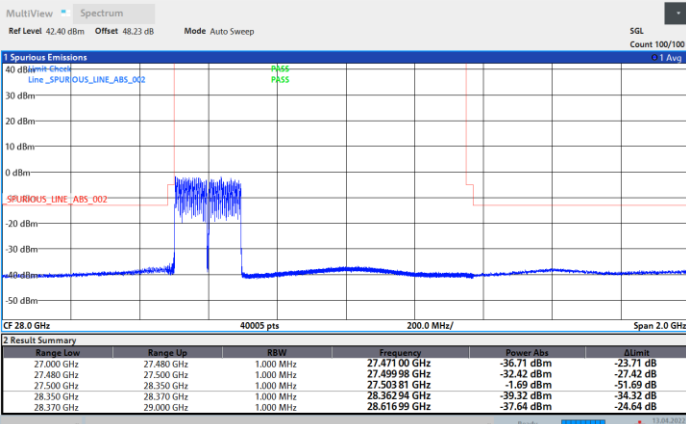




DFT-s-OFDM Module 0

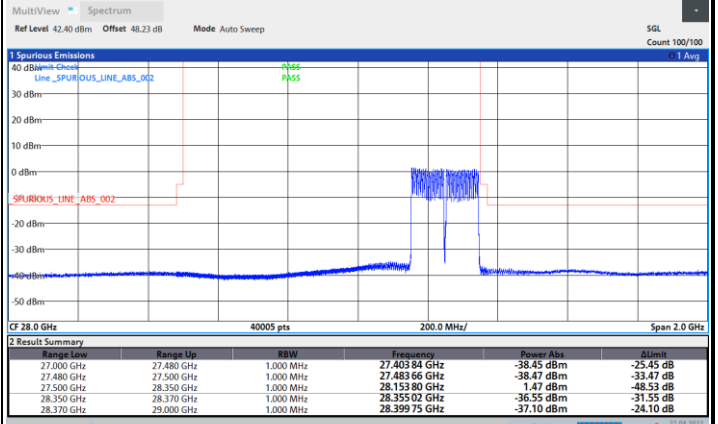
NR Band n261 / 200MHz / 16QAM

Lowest Band Edge / Full RB



23:12:59 13. 04. 2022

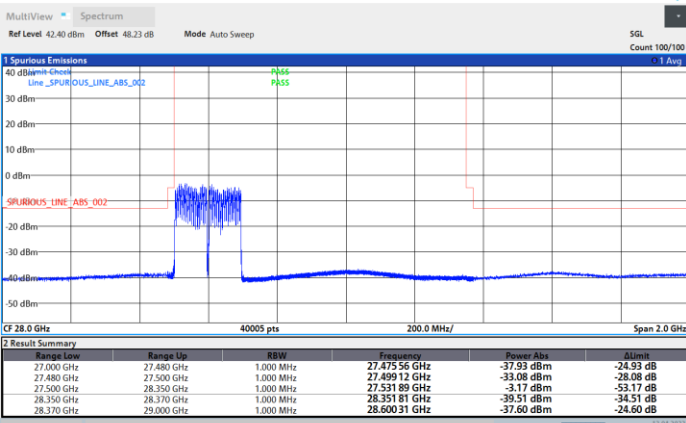
Highest Band Edge / Full RB



22:19:10 21. 04. 2022

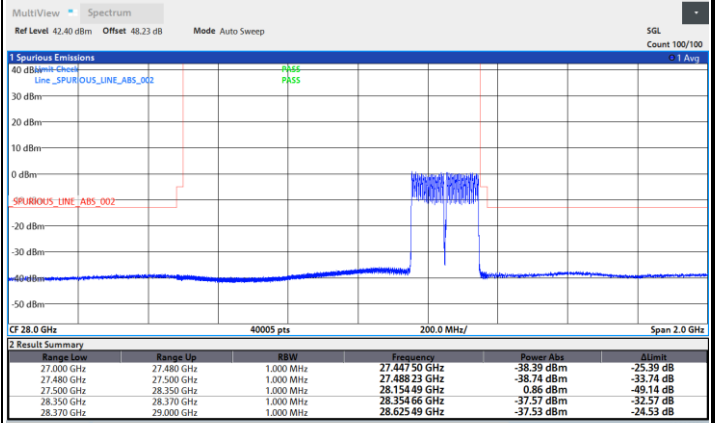
NR Band n261 / 200MHz / 64QAM

Lowest Band Edge / Full RB



23:22:09 13. 04. 2022

Highest Band Edge / Full RB



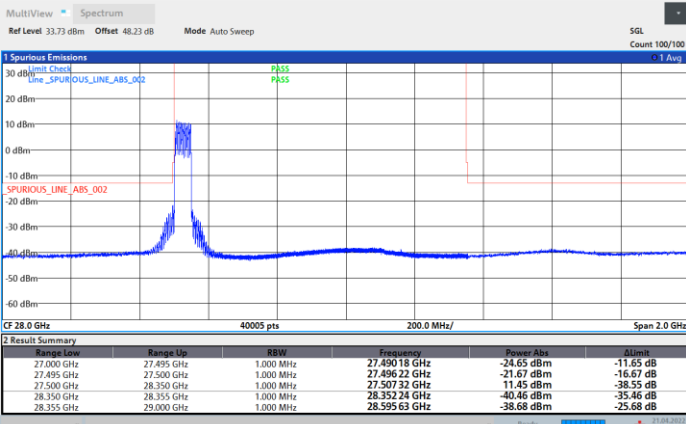
03:35:14 14. 04. 2022



CP-OFDM Module 0

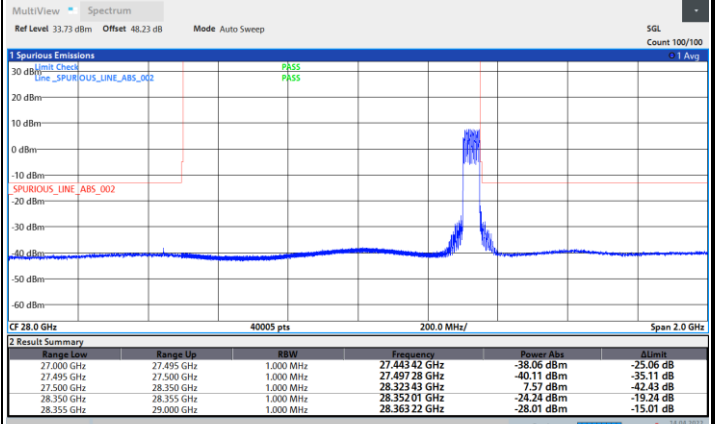
NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB



20:06:58 21.04.2022

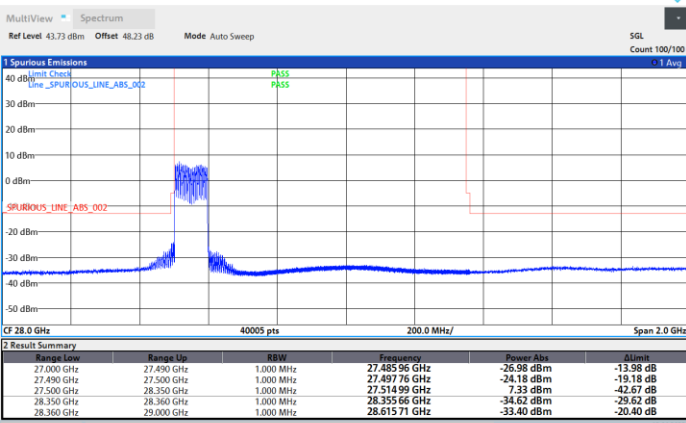
Highest Band Edge / Full RB



02:32:02 14.04.2022

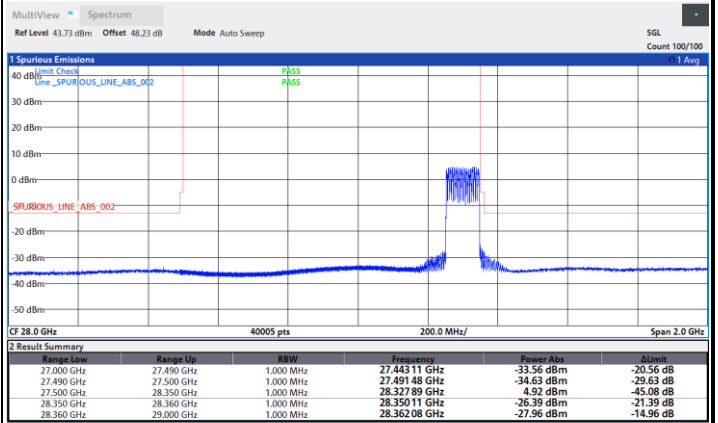
NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB



22:48:26 13.04.2022

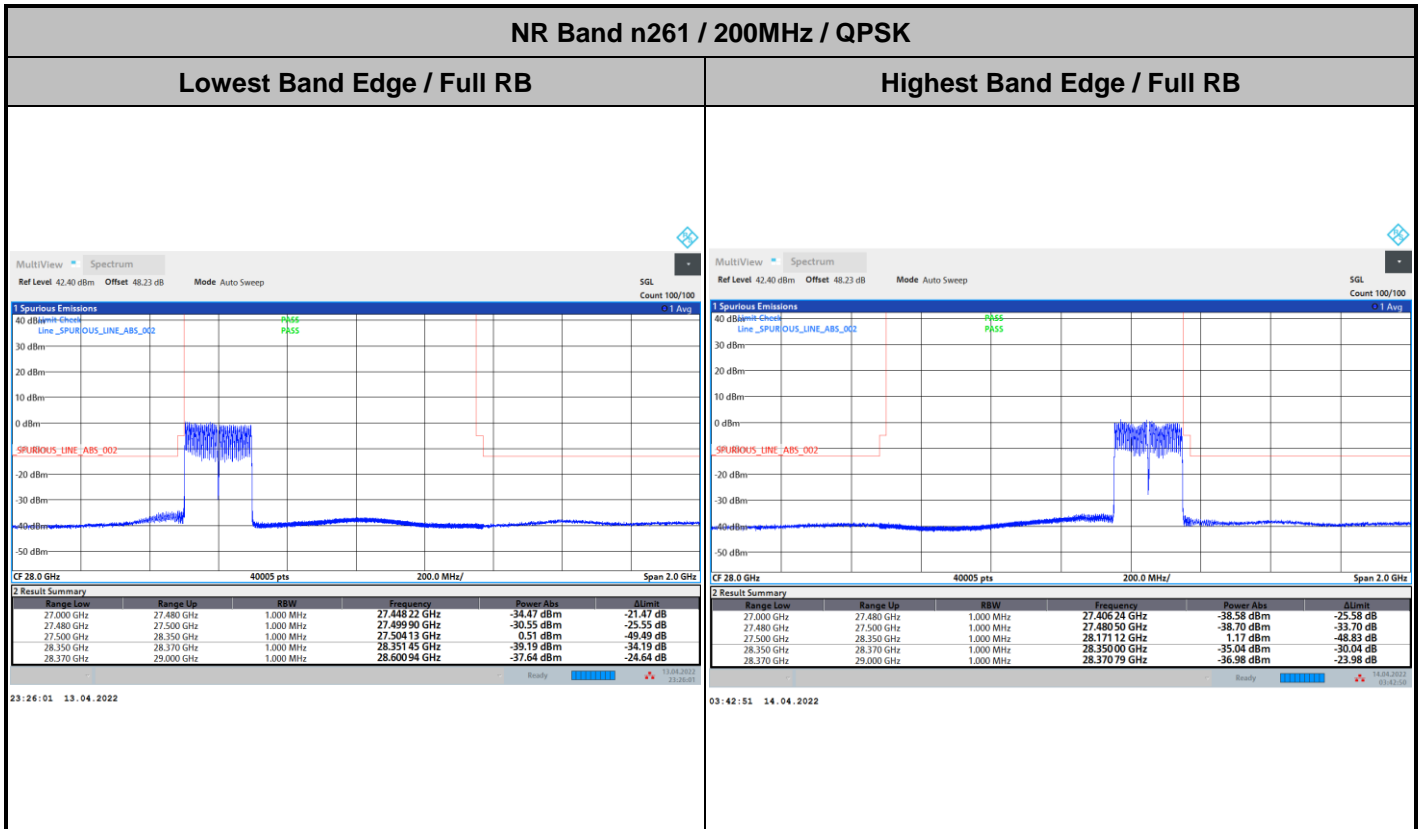
Highest Band Edge / Full RB



03:15:11 14.04.2022



CP-OFDM Module 0

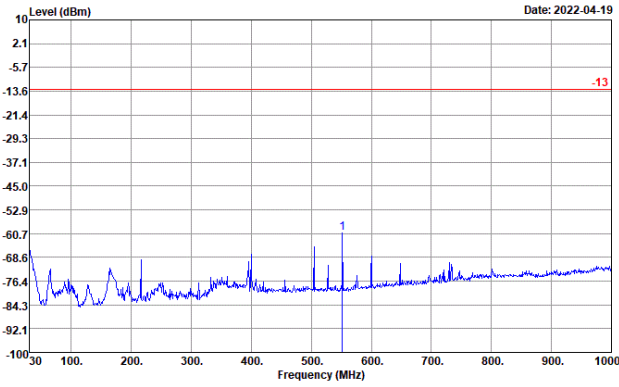




# Spurious Emission

## NR Band n261 (30MHz-1GHz)

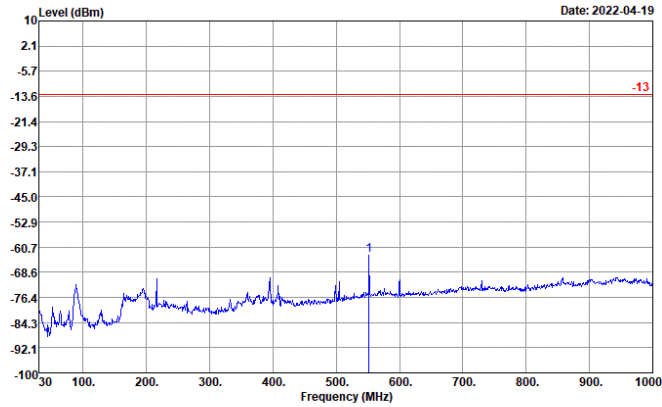
### Horizontal



Site : 03CH19-HY  
 Condition : -13 ERP EIRP\_20210305 HORIZONTAL  
 Project : ID2414  
 : n261 MO

Over	Limit	Read
Freq	Level	Limit
MHz	dBm	dB
1	551.86 -60.45	-47.45 -13.00

### Vertical



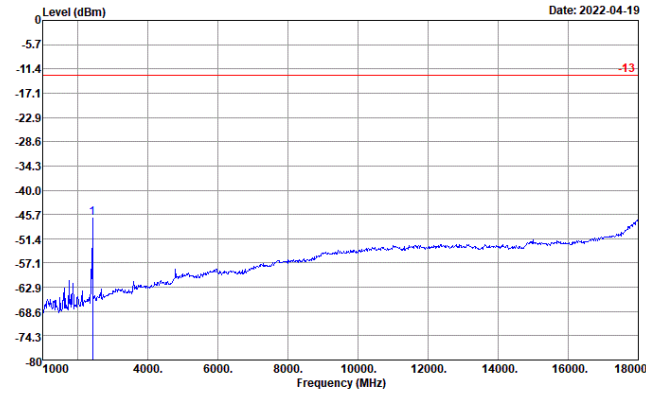
Site : 03CH19-HY  
 Condition : -13 ERP EIRP\_20210305 VERTICAL  
 Project : ID2414  
 : n261 MO

Over	Limit	Read
Freq	Level	Limit
MHz	dBm	dB
1	551.86 -63.13	-50.13 -13.00



NR Band n261 (1GHz-18GHz)

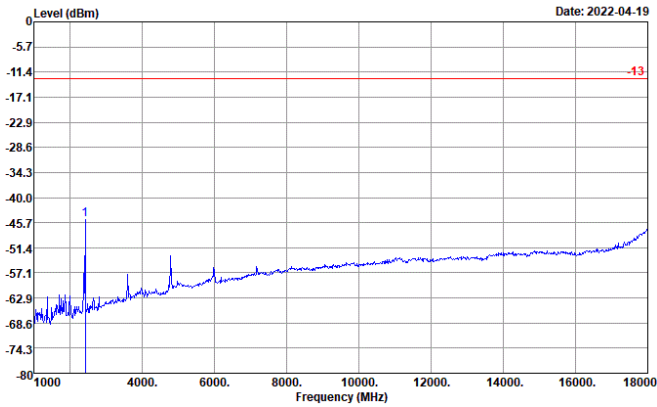
Horizontal



Site : 03CH19-HY  
 Condition : -13 ERP EIRP\_20210305 HORIZONTAL  
 Project : ID2414  
 : n261 MO

Freq	Level	Over	Limit	Read	
MHz	dBm	dB	dBm	dBm	
1	2428.00	-46.57	-33.57	-13.00	-57.64

Vertical



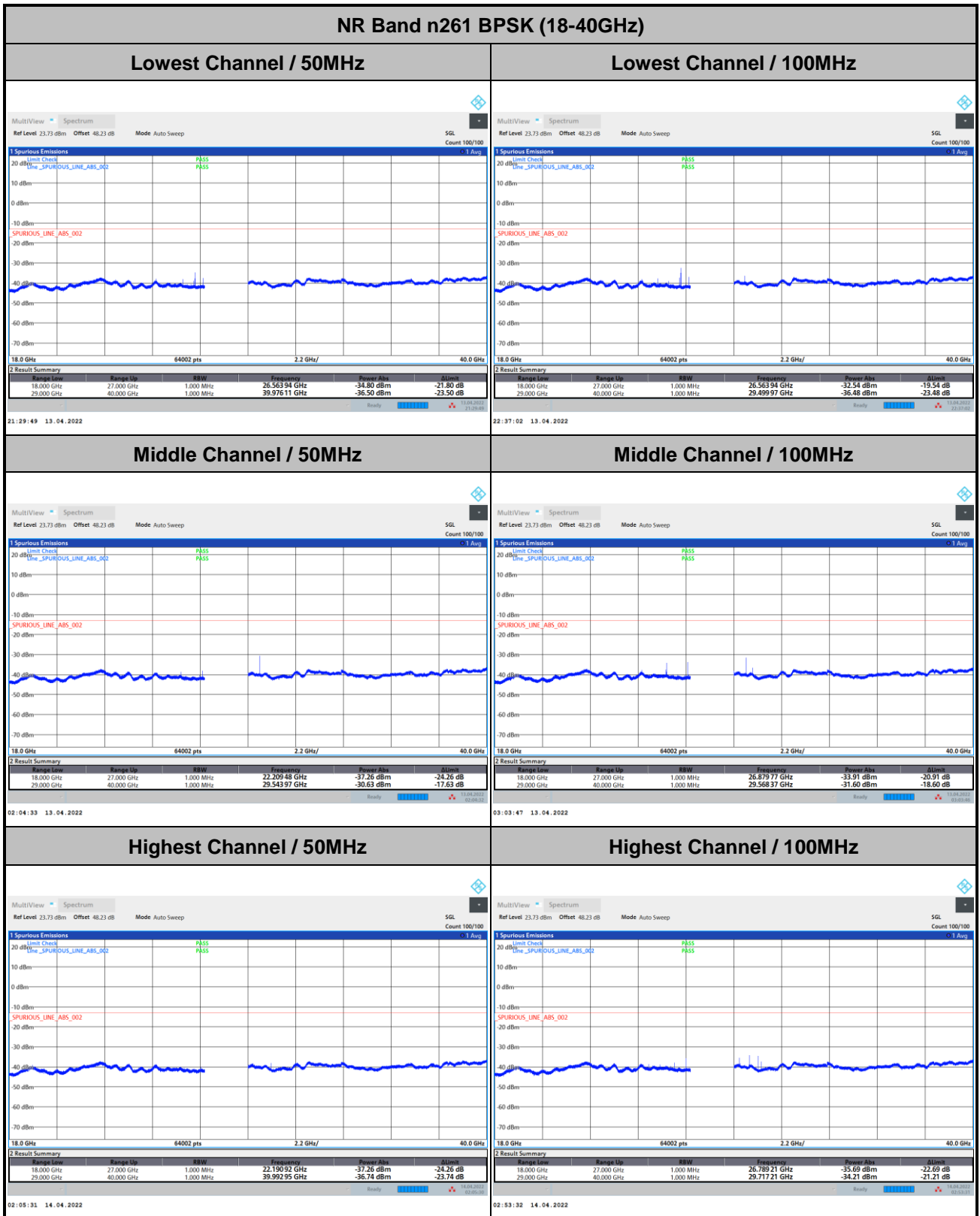
Site : 03CH19-HY  
 Condition : -13 ERP EIRP\_20210305 VERTICAL  
 Project : ID2414  
 : n261 MO

Freq	Level	Over	Limit	Read	
MHz	dBm	dB	dBm	dBm	
1	2428.00	-44.92	-31.92	-13.00	-55.62



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

DFT-s-OFDM Module 0



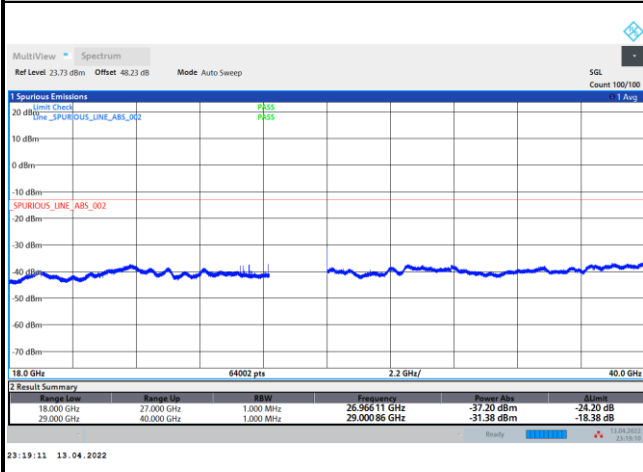
Remark: In band and out of band frequencies are omitted.



DFT-s-OFDM Module 0

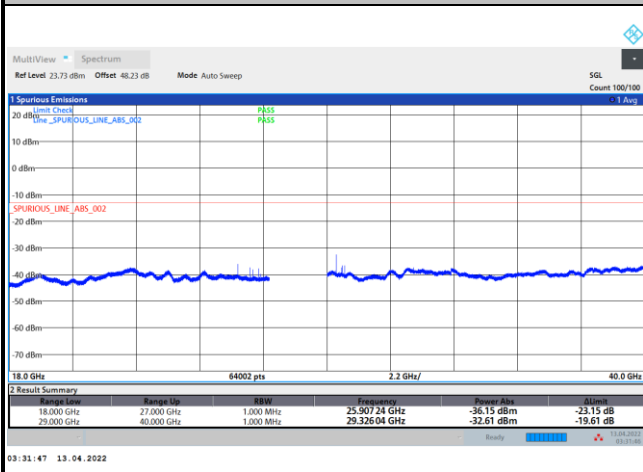
NR Band n261 BPSK (18-40GHz)

Lowest Channel / 200MHz



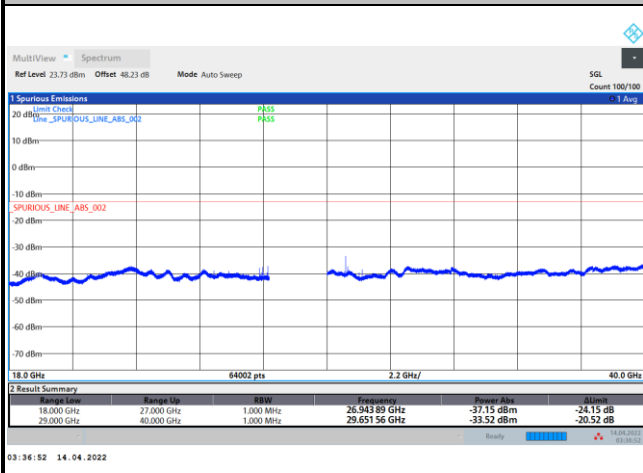
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Middle Channel / 200MHz



intentionally blank

Highest Channel / 200MHz



intentionally blank

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

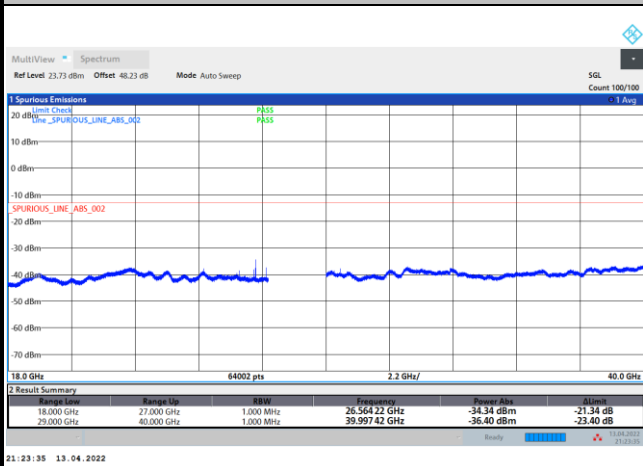




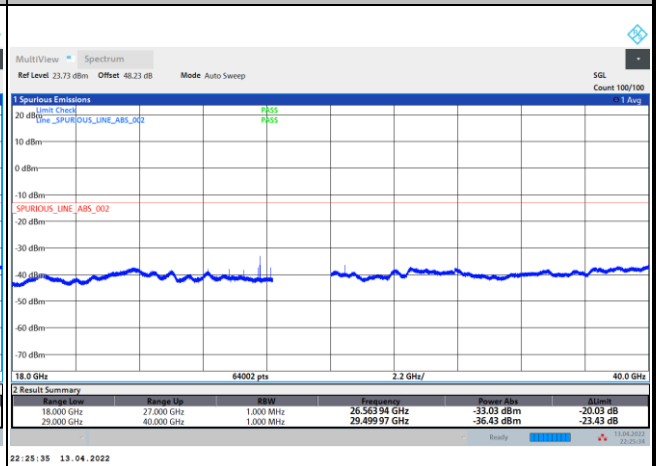
DFT-s-OFDM Module 0

NR Band n261 QPSK (18-40GHz)

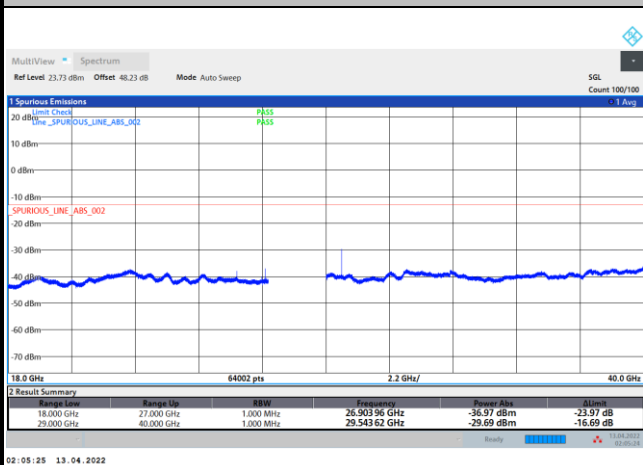
Lowest Channel / 50MHz



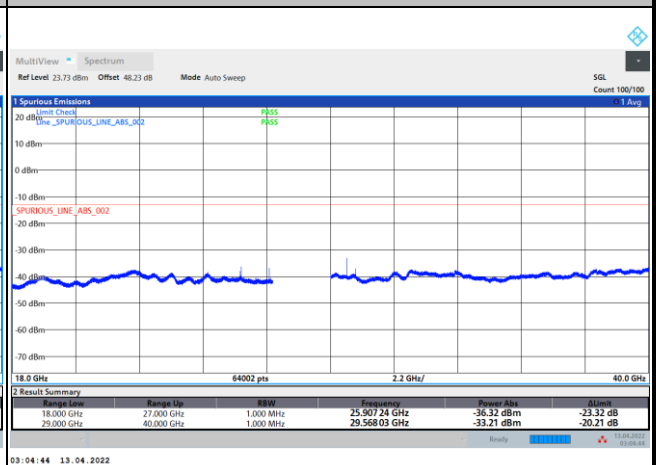
Lowest Channel / 100MHz



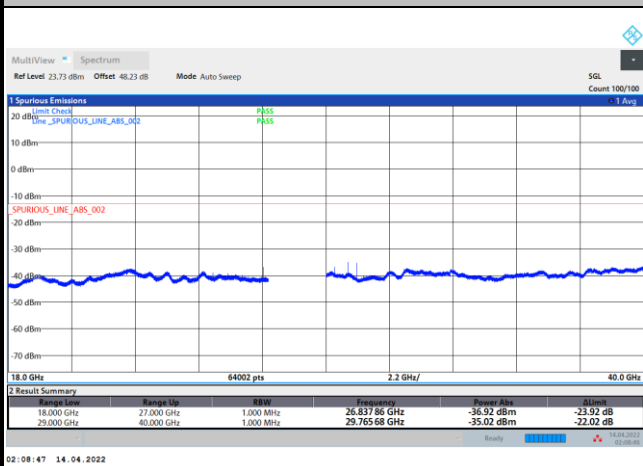
Middle Channel / 50MHz



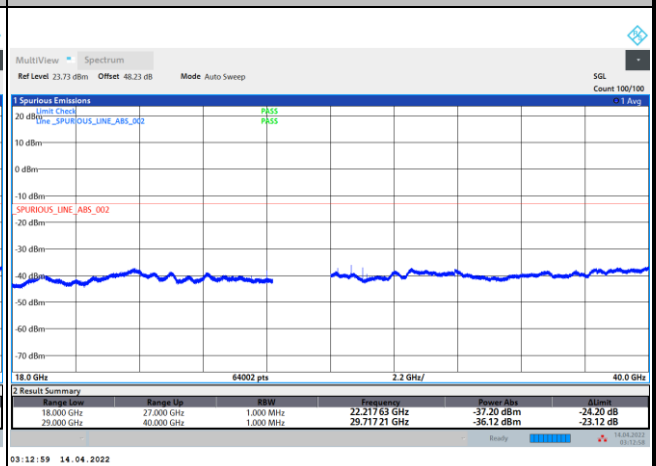
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz



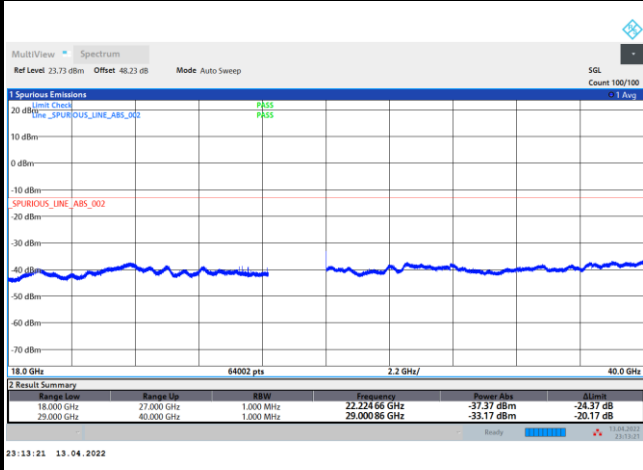
Remark: In band and out of band frequencies are omitted.



DFT-s-OFDM Module 0

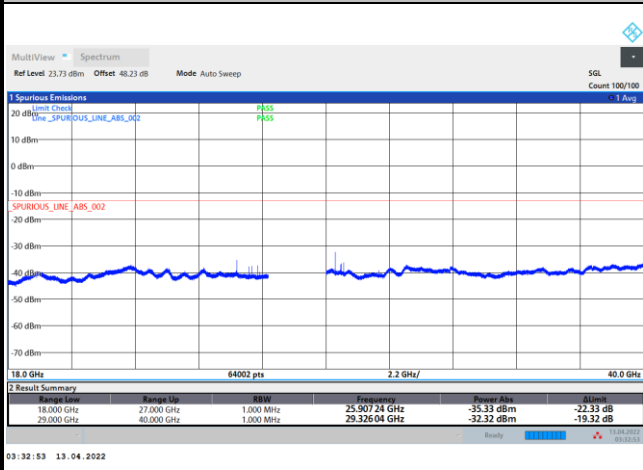
NR Band n261 QPSK (18-40GHz)

Lowest Channel / 200MHz



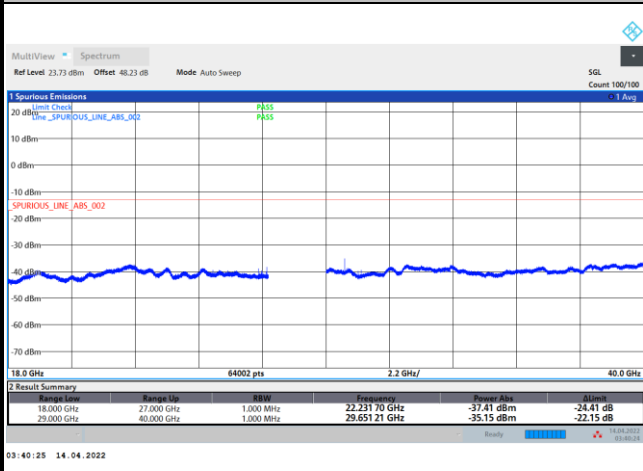
intentionally blank

Middle Channel / 200MHz



intentionally blank

Highest Channel / 200MHz



intentionally blank

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



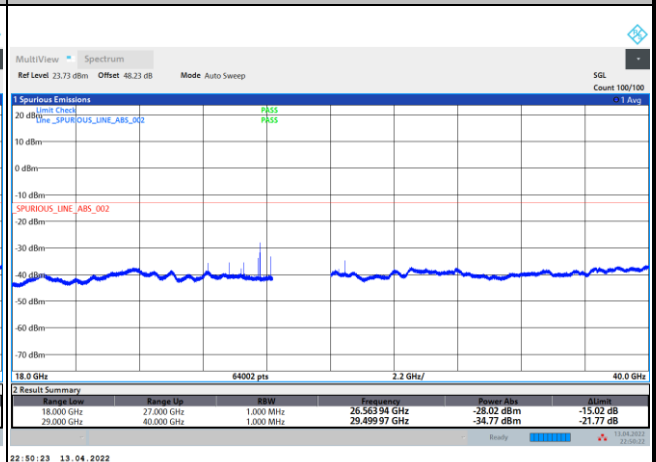
CP-OFDM Module 0

NR Band n261 QPSK (18-40GHz)

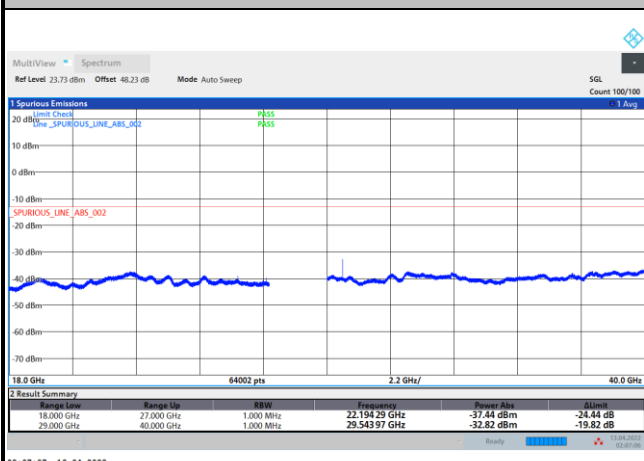
Lowest Channel / 50MHz



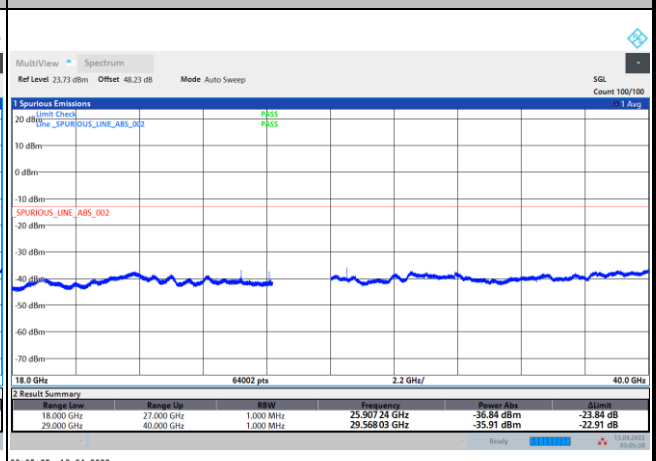
Lowest Channel / 100MHz



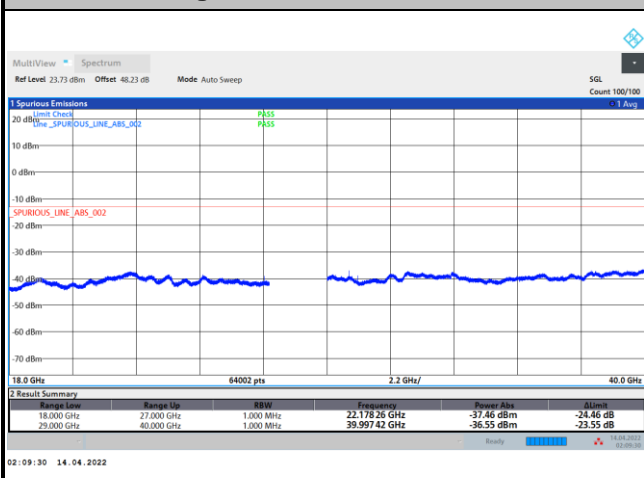
Middle Channel / 50MHz



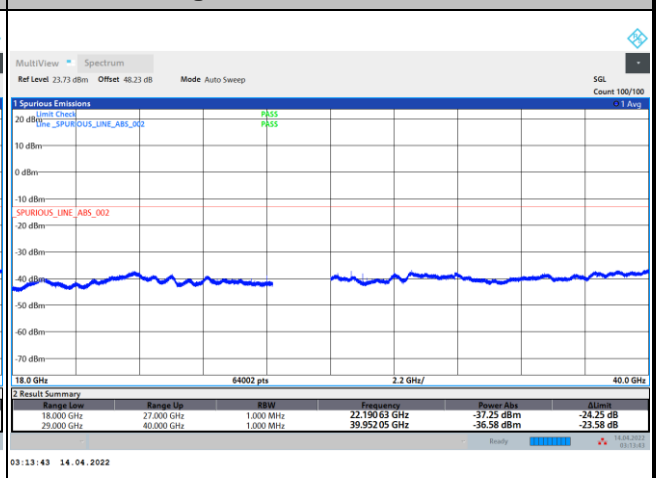
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz



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



CP-OFDM Module 0

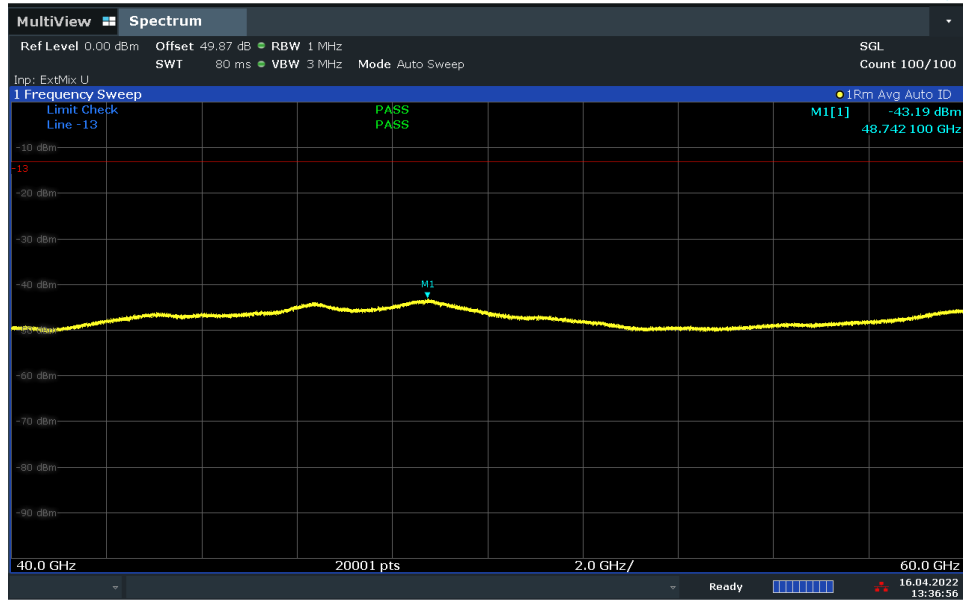
NR Band n261 QPSK (18-40GHz)																			
<p><b>Lowest Channel / 200MHz</b></p> <p>MultiView Spectrum Ref Level 23.73 dBm Offset 48.23 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Check Line SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002</p> <p>18.0 GHz 64002 pts 2.2 GHz/ 40.0 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>27.000 GHz</td> <td>1.000 MHz</td> <td>22.178 26 GHz</td> <td>-37.16 dBm</td> <td>-24.16 dB</td> </tr> <tr> <td>29.000 GHz</td> <td>40.000 GHz</td> <td>1.000 MHz</td> <td>29.000 86 GHz</td> <td>-32.42 dBm</td> <td>-19.42 dB</td> </tr> </tbody> </table> <p>23:31:46 13. 04. 2022</p>	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	27.000 GHz	1.000 MHz	22.178 26 GHz	-37.16 dBm	-24.16 dB	29.000 GHz	40.000 GHz	1.000 MHz	29.000 86 GHz	-32.42 dBm	-19.42 dB	<p>intentionally blank</p>
Range Low	Range Up	RBW	Frequency	Power Abs	Limit														
18.000 GHz	27.000 GHz	1.000 MHz	22.178 26 GHz	-37.16 dBm	-24.16 dB														
29.000 GHz	40.000 GHz	1.000 MHz	29.000 86 GHz	-32.42 dBm	-19.42 dB														
<p><b>Middle Channel / 200MHz</b></p> <p>MultiView Spectrum Ref Level 23.73 dBm Offset 48.23 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Check Line SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002</p> <p>18.0 GHz 64002 pts 2.2 GHz/ 40.0 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>27.000 GHz</td> <td>1.000 MHz</td> <td>22.203 57 GHz</td> <td>-37.31 dBm</td> <td>-24.31 dB</td> </tr> <tr> <td>29.000 GHz</td> <td>40.000 GHz</td> <td>1.000 MHz</td> <td>29.325 69 GHz</td> <td>-36.34 dBm</td> <td>-23.34 dB</td> </tr> </tbody> </table> <p>03:34:04 13. 04. 2022</p>	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	27.000 GHz	1.000 MHz	22.203 57 GHz	-37.31 dBm	-24.31 dB	29.000 GHz	40.000 GHz	1.000 MHz	29.325 69 GHz	-36.34 dBm	-23.34 dB	<p>intentionally blank</p>
Range Low	Range Up	RBW	Frequency	Power Abs	Limit														
18.000 GHz	27.000 GHz	1.000 MHz	22.203 57 GHz	-37.31 dBm	-24.31 dB														
29.000 GHz	40.000 GHz	1.000 MHz	29.325 69 GHz	-36.34 dBm	-23.34 dB														
<p><b>Highest Channel / 200MHz</b></p> <p>MultiView Spectrum Ref Level 23.73 dBm Offset 48.23 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Check Line SPURIOUS_LINE_ABS_002 PASS SPURIOUS_LINE_ABS_002</p> <p>18.0 GHz 64002 pts 2.2 GHz/ 40.0 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>27.000 GHz</td> <td>1.000 MHz</td> <td>22.222 41 GHz</td> <td>-37.12 dBm</td> <td>-24.12 dB</td> </tr> <tr> <td>29.000 GHz</td> <td>40.000 GHz</td> <td>1.000 MHz</td> <td>39.991 92 GHz</td> <td>-36.65 dBm</td> <td>-23.65 dB</td> </tr> </tbody> </table> <p>03:41:20 14. 04. 2022</p>	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	27.000 GHz	1.000 MHz	22.222 41 GHz	-37.12 dBm	-24.12 dB	29.000 GHz	40.000 GHz	1.000 MHz	39.991 92 GHz	-36.65 dBm	-23.65 dB	<p>intentionally blank</p>
Range Low	Range Up	RBW	Frequency	Power Abs	Limit														
18.000 GHz	27.000 GHz	1.000 MHz	22.222 41 GHz	-37.12 dBm	-24.12 dB														
29.000 GHz	40.000 GHz	1.000 MHz	39.991 92 GHz	-36.65 dBm	-23.65 dB														

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



NR Band n261

(40GHz-60GHz)



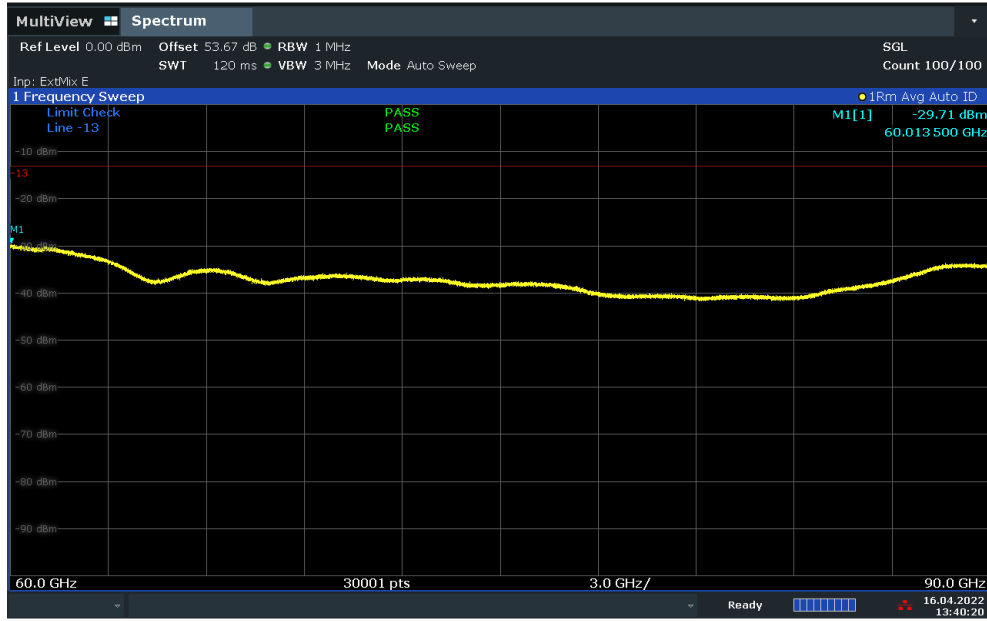
13:36:57 16.04.2022

$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 43.1 + 0.54 + 107 + 20\log(1) - 104.8 + 4.03 = 49.87 \text{ (dB)}$$



NR Band n261

(60GHz-90GHz)



13:40:21 16.04.2022

$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 46.9 + 0.54 + 107 + 20\log(1) - 104.8 + 4.03 = 53.67 \text{ (dB)}$$



NR Band n261

(90GHz-100GHz)



13:44:35 16.04.2022

$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 47.92 + 0.54 + 107 + 20\log(0.5) - 104.8 + 4.03 = 48.67 \text{ (dB)}$$



Frequency Stability

Test Conditions		NR Band n261 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	27.92485	150.000	5.372	PASS
40	Normal Voltage	27.92485	150.000	5.372	
30	Normal Voltage	27.9249	100.000	3.581	
20(Ref.)	Normal Voltage	27.925	0.000	0.000	
10	Normal Voltage	27.92495	50.000	1.791	
0	Normal Voltage	27.92505	-50.000	1.791	
-10	Normal Voltage	27.9251	-100.000	3.581	
-20	Normal Voltage	27.92515	-150.000	5.372	
-30	Normal Voltage	27.9252	-200.000	7.162	
20	Maximum Voltage	27.92495	50.000	1.791	
20	Normal Voltage	27.92495	50.000	1.791	
20	Battery End Point	27.92505	-50.000	1.791	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.30 V. ; Maximum Voltage =4.25 V.
2. The frequency fundamental emissions stay within the operation band.





# NR Band n261 Module 1 AG0+1

## Occupied Bandwidth

Mode	DFT-s-OFDM Module 1 NR Band n261 : 99%OBW(MHz)											
BW	50MHz				100MHz				200MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	46.08	45.85	45.79	45.81	89.31	89.36	89.36	89.33	187.83	187.70	187.94	187.95
Middle CH	45.89	45.46	45.53	45.60	89.01	89.41	89.39	89.46	187.65	187.80	187.69	188.06
Highest CH	45.66	45.32	45.49	45.40	89.43	89.41	90.08	89.42	188.09	187.60	188.22	187.83

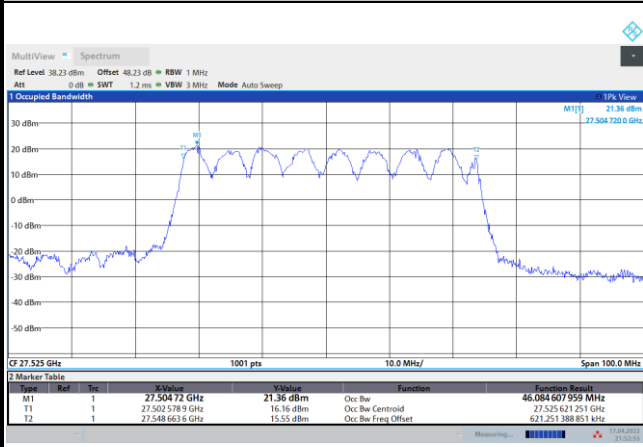
Mode	CP-OFDM Module 1 NR Band n261 : 99%OBW(MHz)					
BW	50MHz		100MHz		200MHz	
Mod.	QPSK		QPSK		QPSK	
Lowest CH	45.96		93.45		191.81	
Middle CH	45.67		93.23		191.76	
Highest CH	45.64		93.30		192.00	



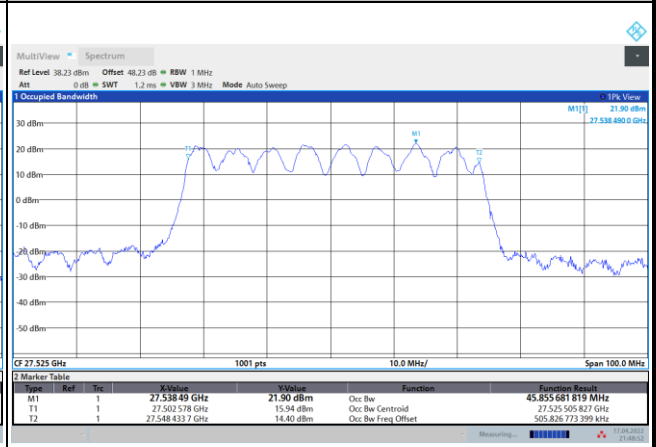
DFT-s-OFDM Module 1

NR Band n261

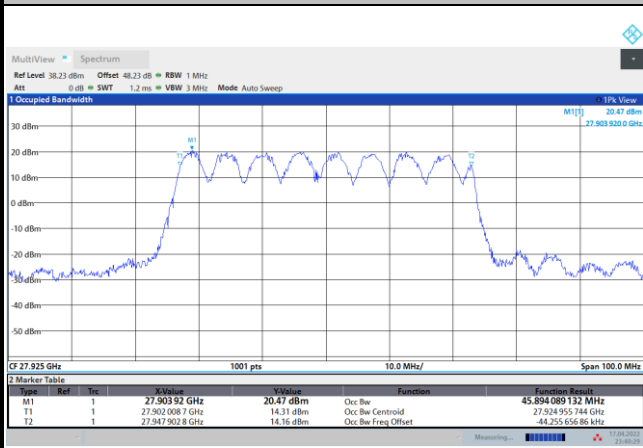
Lowest Channel / 50MHz / BPSK



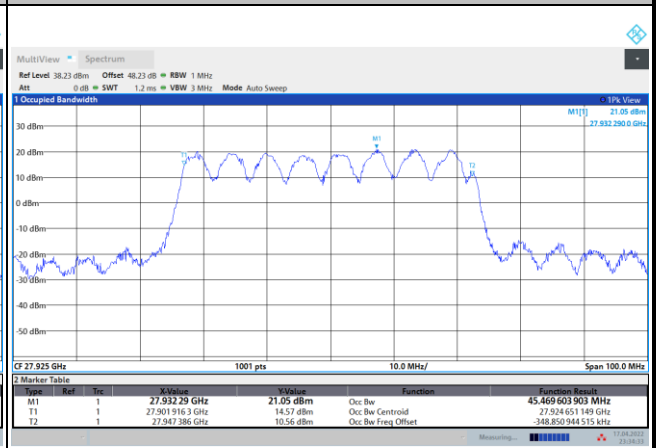
Lowest Channel / 50MHz / QPSK



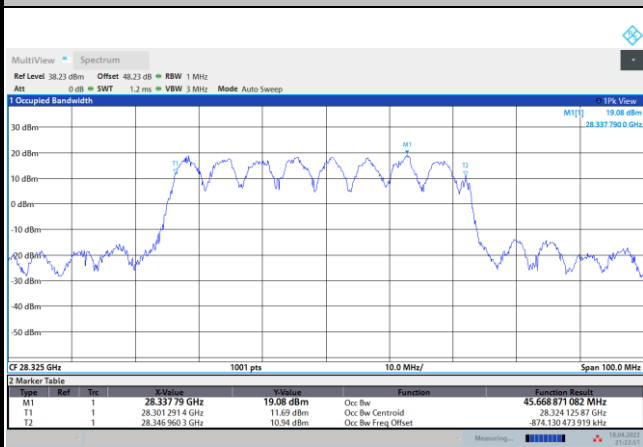
Middle Channel / 50MHz / BPSK



Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

