

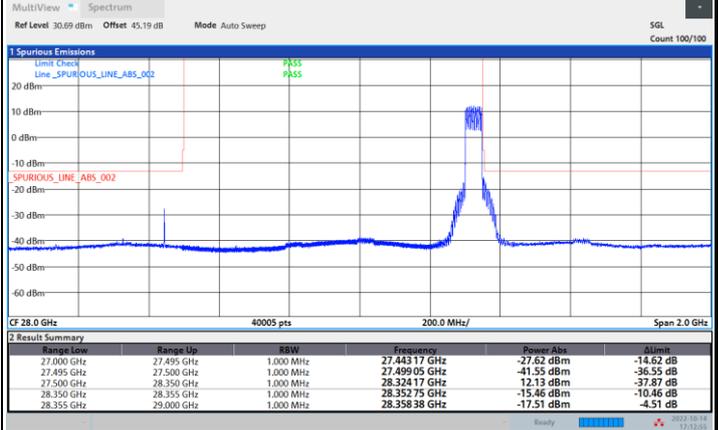
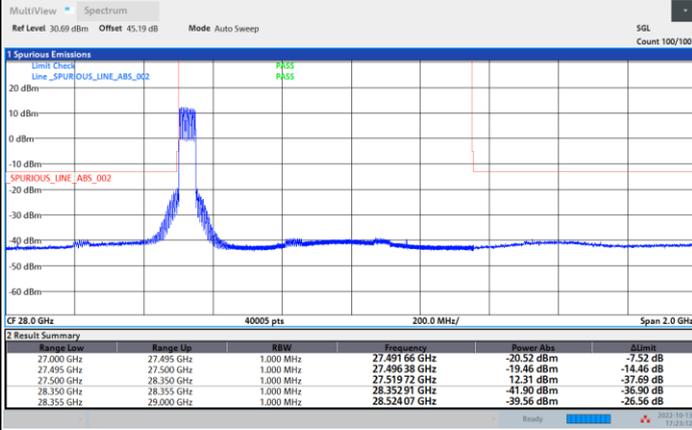


CP-OFDM Module 0

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

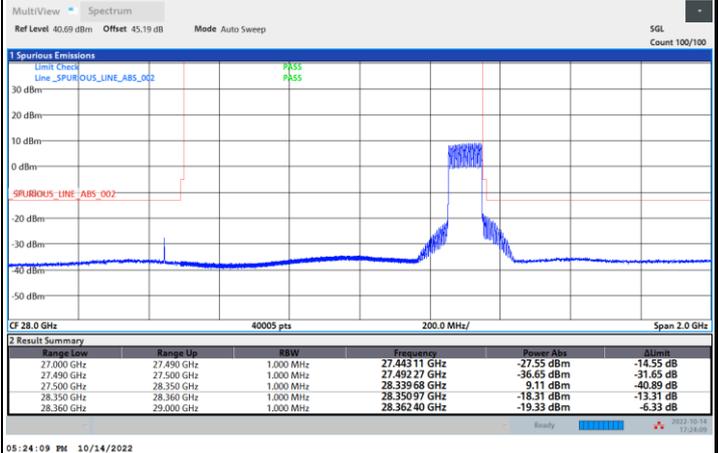
Highest Band Edge / Full RB



NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

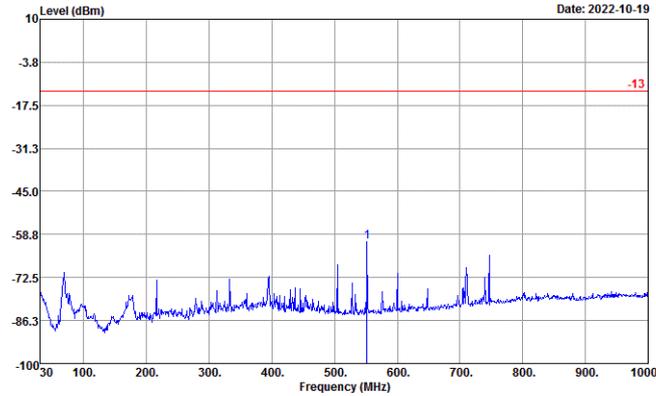




Spurious Emission

NR Band n261 (30MHz-1GHz)

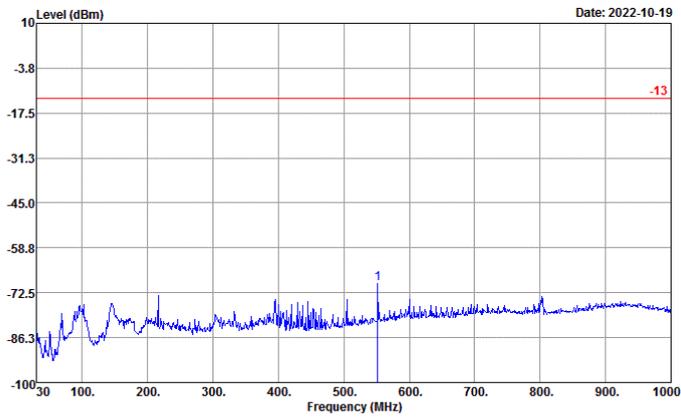
Horizontal



Site : 03CH10-HY
 Condition : -13 EIRP_WO HORIZONTAL
 Project : 190614-06
 : n261 MO

Freq	Level	Over	Limit	Read	
MHz	dBm	dB	dBm	dBm	
1	551.86	-60.99	-47.99	-13.00	-62.18

Vertical



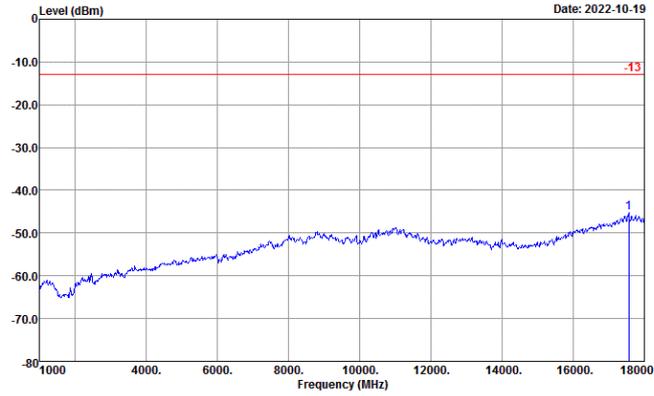
Site : 03CH10-HY
 Condition : -13 EIRP_WO VERTICAL
 Project : 190614-06
 : n261 MO

Freq	Level	Over	Limit	Read	
MHz	dBm	dB	dBm	dBm	
1	551.86	-69.56	-56.56	-13.00	-73.47



NR Band n261 (1GHz-18GHz)

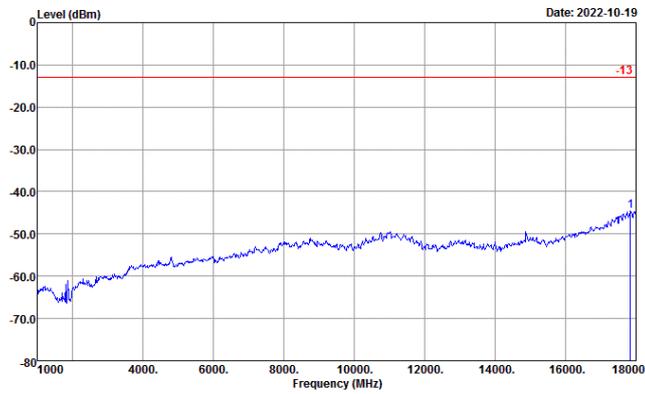
Horizontal



Site : 03CH10-HY
 Condition : -13 EIRP_WO HORIZONTAL
 Project : I90614-06
 : n261 MO

Freq	Level	Over	Limit	Read
MHz	dBm	dB	dBm	dBm
1 17558.00	-45.34	-32.34	-13.00	-59.42

Vertical



Site : 03CH10-HY
 Condition : -13 EIRP_WO VERTICAL
 Project : I90614-06
 : n261 MO

Freq	Level	Over	Limit	Read
MHz	dBm	dB	dBm	dBm
1 17847.00	-44.48	-31.48	-13.00	-61.12



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

DFT-s-OFDM Module 0

NR Band n261 BPSK (18-40GHz)

Lowest Channel / 50MHz



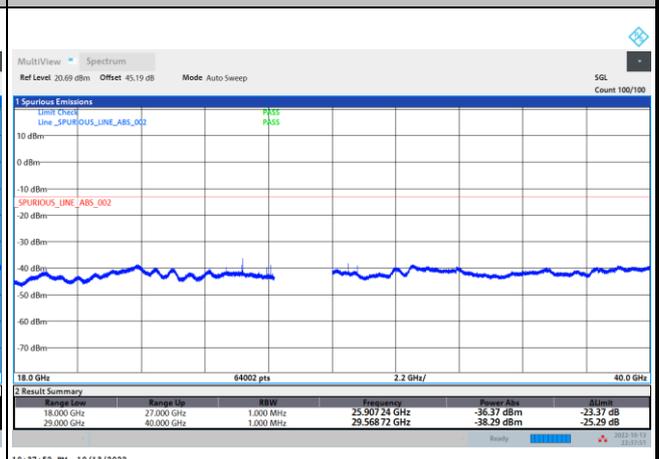
Lowest Channel / 100MHz



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)

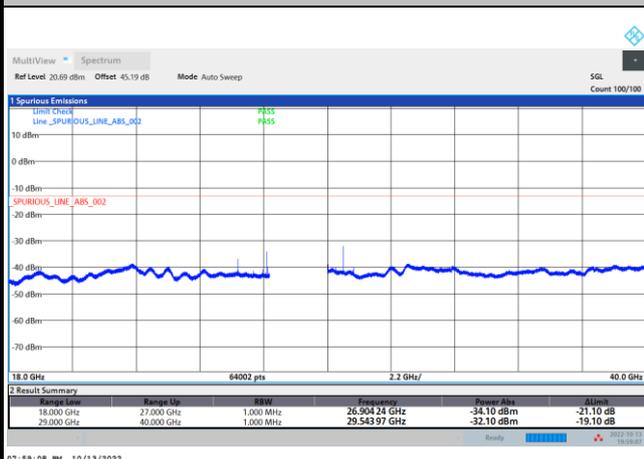
Lowest Channel / 50MHz



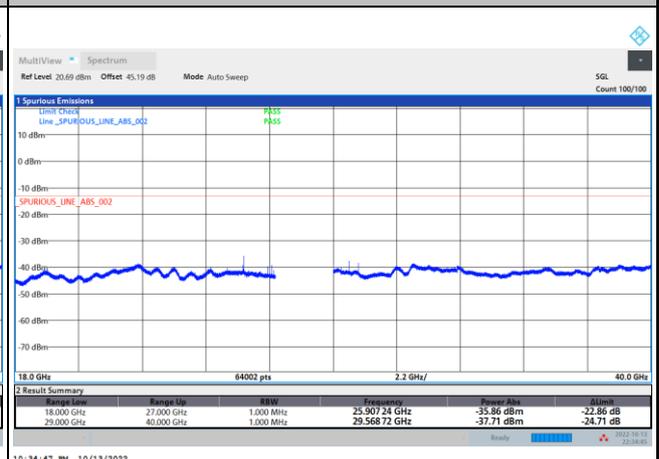
Lowest Channel / 100MHz



Middle Channel / 50MHz



Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz



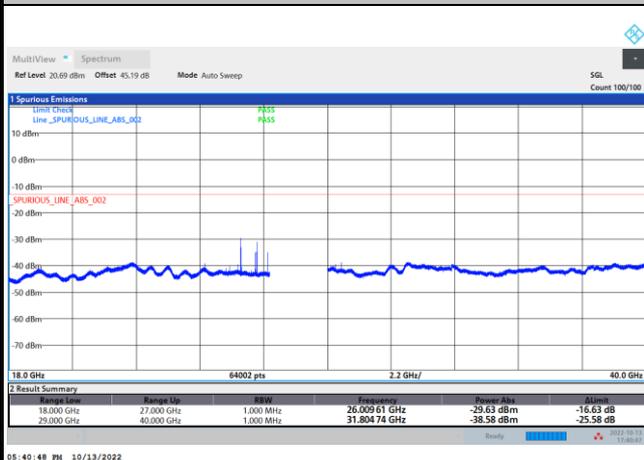
Remark: In band and out of band frequencies are omitted.



CP-OFDM Module 0

NR Band n261 QPSK (18-40GHz)

Lowest Channel / 50MHz



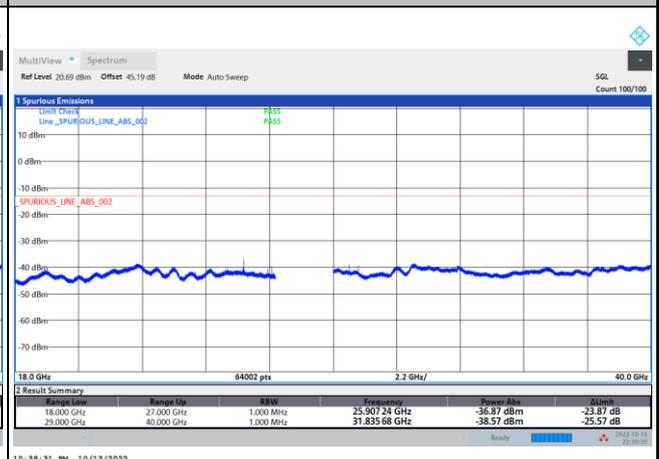
Lowest Channel / 100MHz



Middle Channel / 50MHz



Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

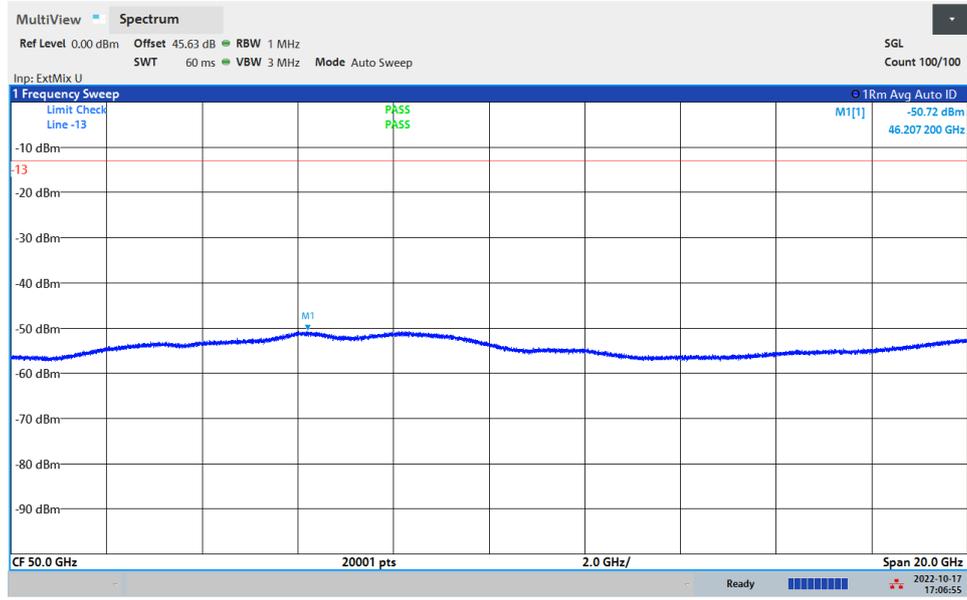


Remark: In band and out of band frequencies are omitted.



NR Band n261

(40GHz-60GHz)



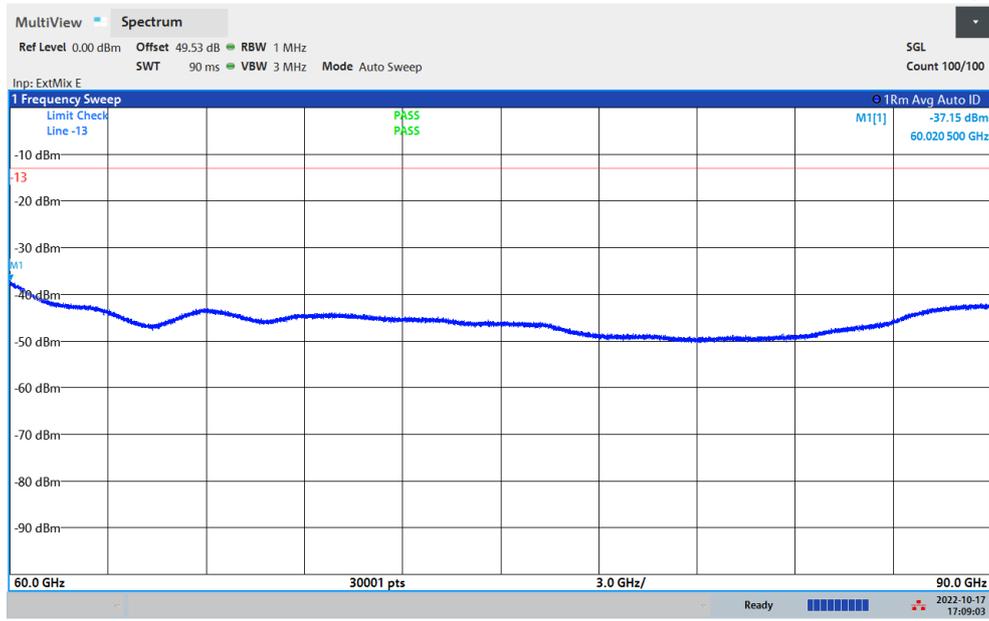
$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8$$

$$= 43 + 0.43 + 107 + 20\log(1) - 104.8 = 45.63 \text{ (dB)}$$



NR Band n261

(60GHz-90GHz)



$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8$$
$$= 46.9 + 0.43 + 107 + 20\log(1) - 104.8 = 49.53 \text{ (dB)}$$



NR Band n261

(90GHz-100GHz)



05:11:14 PM 10/17/2022

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

$$= 47.92 + 0.43 + 107 + 20\log(0.5) - 104.8 = 44.53 \text{ (dB)}$$



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	27.9251418	-178.800	6.403	PASS
40	Normal Voltage	27.9250999	-136.900	4.902	
30	Normal Voltage	27.925003	-40.000	1.432	
20(Ref.)	Normal Voltage	27.924963	0.000	0.000	
10	Normal Voltage	27.9248581	104.900	3.756	
0	Normal Voltage	27.9248301	132.900	4.759	
-10	Normal Voltage	27.9248101	152.900	5.475	
-20	Normal Voltage	27.9247502	212.800	7.620	
-30	Normal Voltage	27.9247152	247.800	8.874	
20	Maximum Voltage	27.92497449	-11.490	0.411	
20	Normal Voltage	27.92493652	26.480	0.948	
20	Battery End Point	27.9248626	100.400	3.595	

Note:

1. Normal Voltage =3.85 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 n261 Module 1 AG0+1

Occupied Bandwidth

Mode	DFT-s-OFDM Module 1 NR Band n261 : 99%OBW(MHz)							
BW	50MHz				100MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	46.19	46.01	46.01	46.08	89.29	88.93	89.20	88.93
Middle CH	46.13	45.94	46.22	46.14	88.82	89.07	88.69	88.39
Highest CH	46.19	46.13	46.12	46.01	88.90	89.14	89.21	88.95

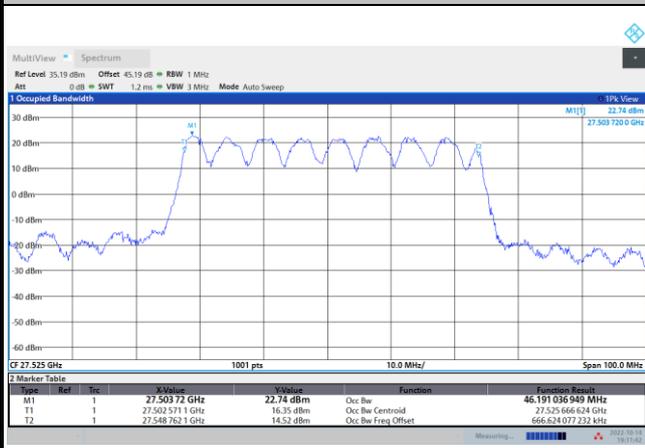
Mode	CP-OFDM Module 1 NR Band n261 : 99%OBW(MHz)	
BW	50MHz	100MHz
Mod.	QPSK	QPSK
Lowest CH	46.09	93.52
Middle CH	46.03	93.74
Highest CH	46.07	93.71



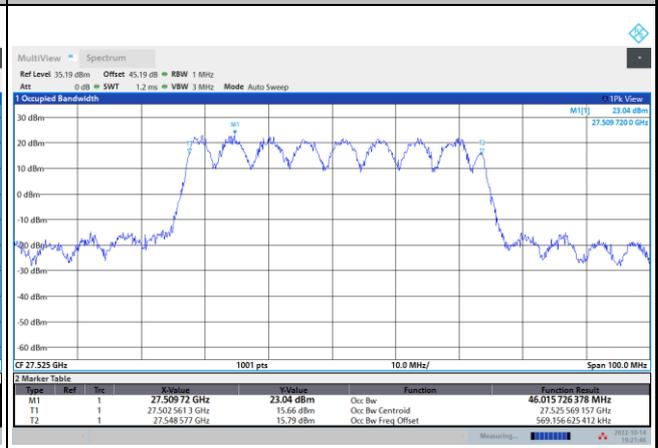
DFT-s-OFDM Module 1

NR Band n261

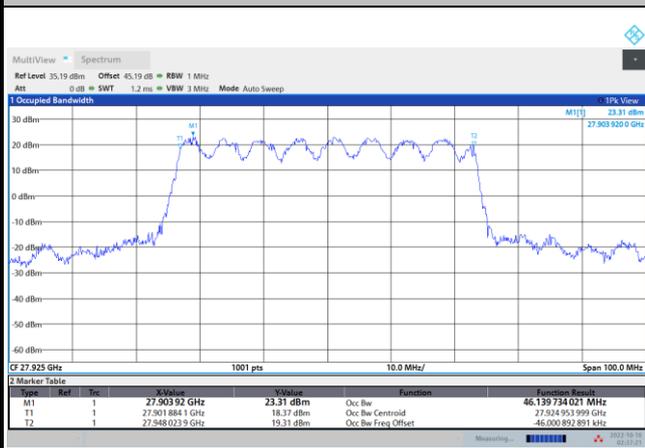
Lowest Channel / 50MHz / BPSK



Lowest Channel / 50MHz / QPSK



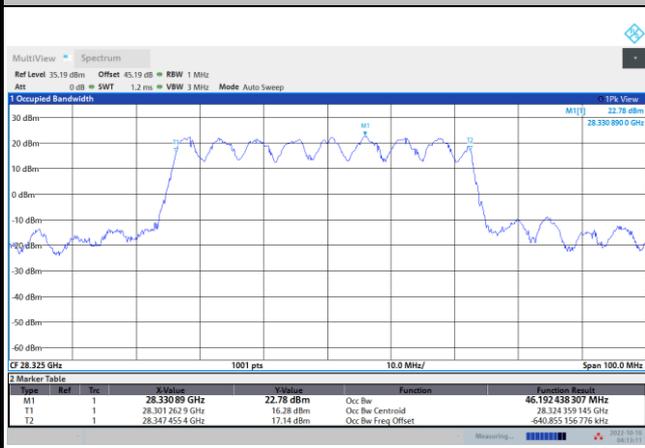
Middle Channel / 50MHz / BPSK



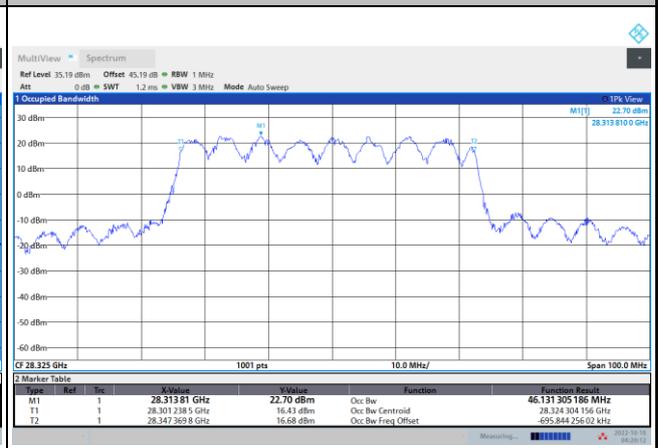
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

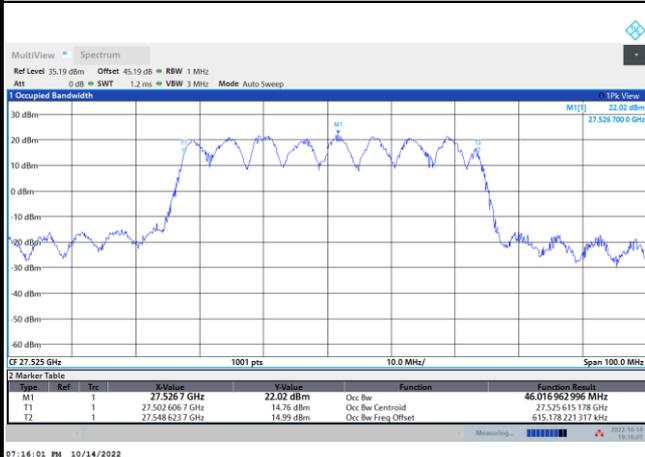




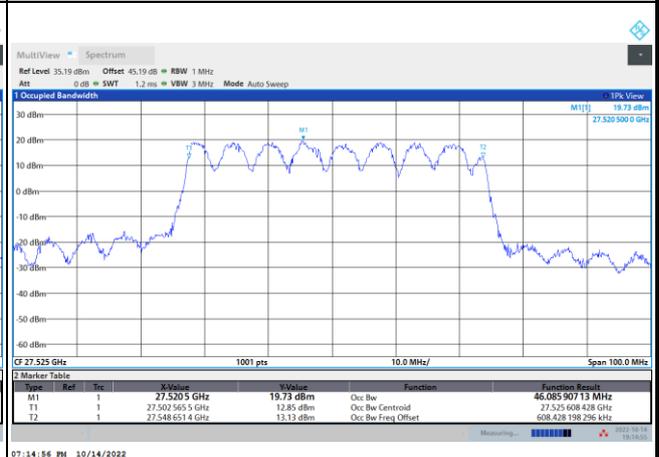
DFT-s-OFDM Module 1

NR Band n261

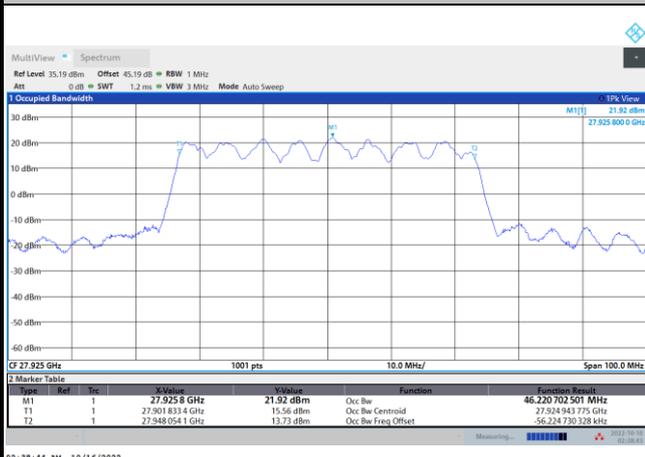
Lowest Channel / 50MHz / 16QAM



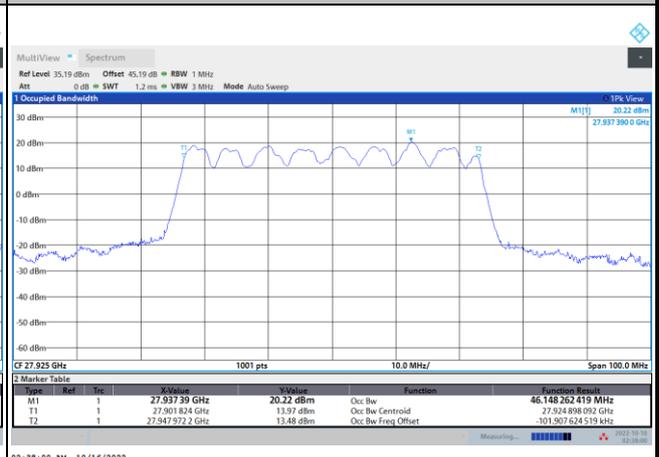
Lowest Channel / 50MHz / 64QAM



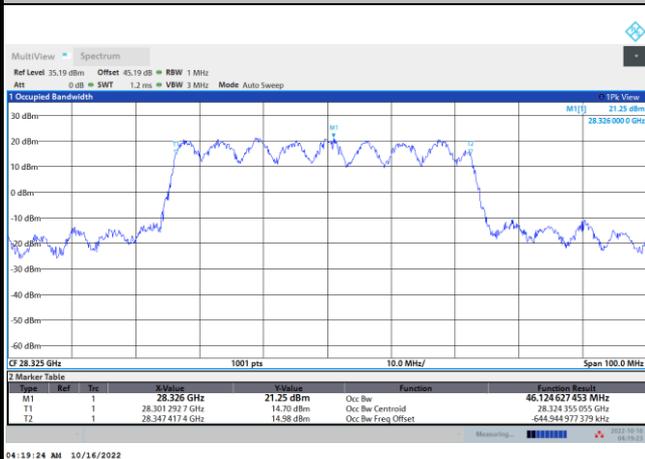
Middle Channel / 50MHz / 16QAM



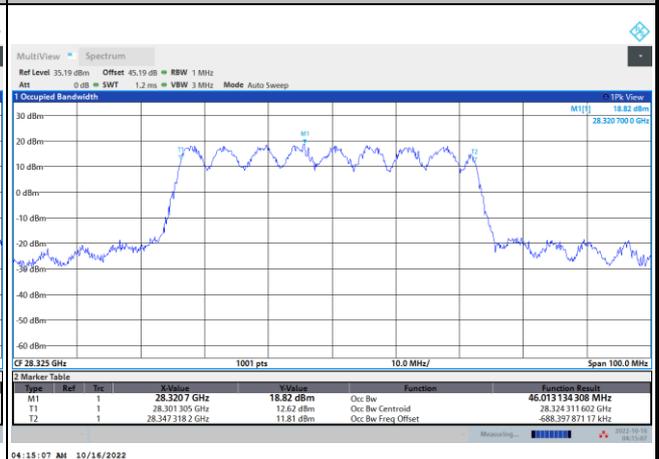
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

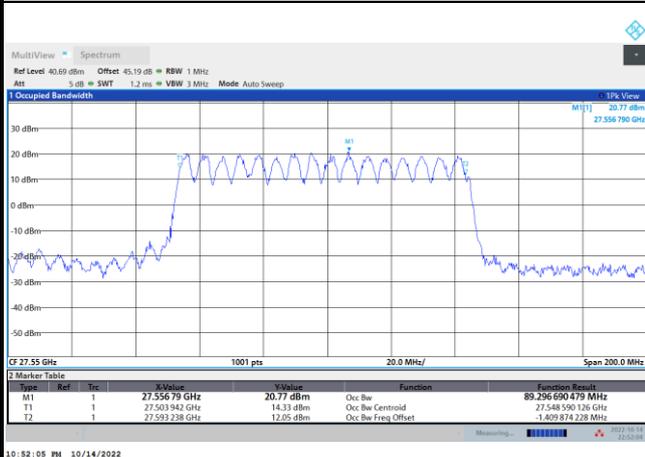




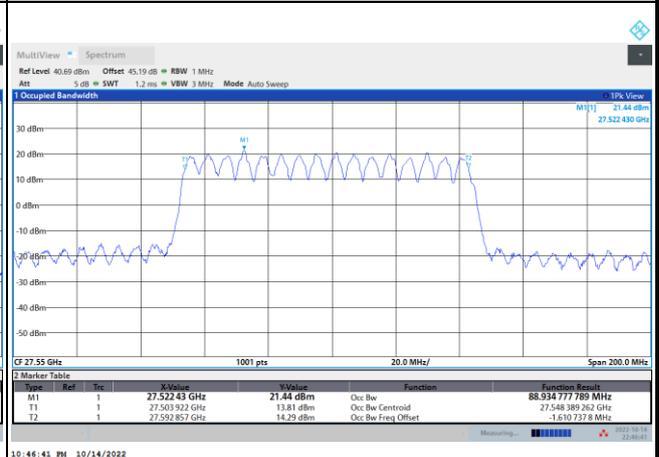
DFT-s-OFDM Module 1

NR Band n261

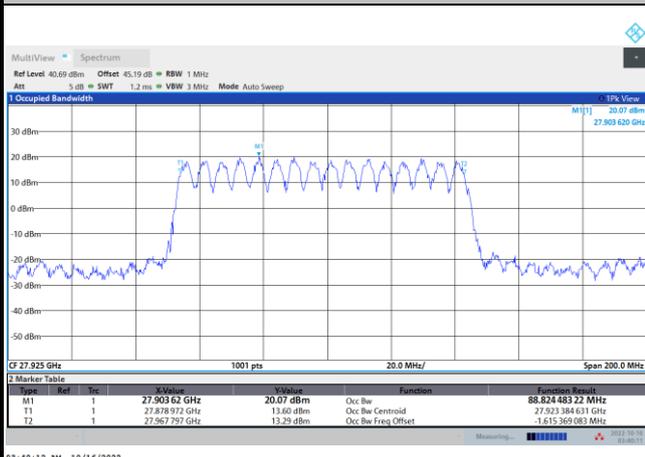
Lowest Channel / 100MHz / BPSK



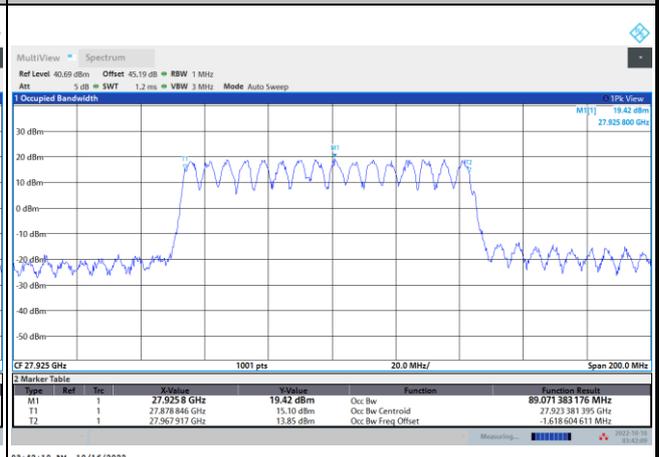
Lowest Channel / 100MHz / QPSK



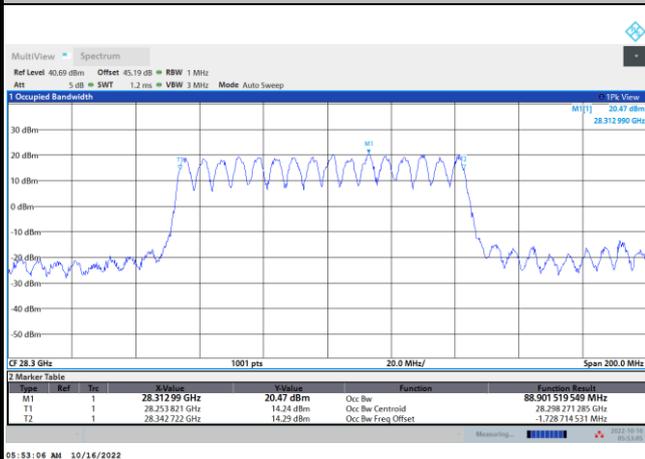
Middle Channel / 100MHz / BPSK



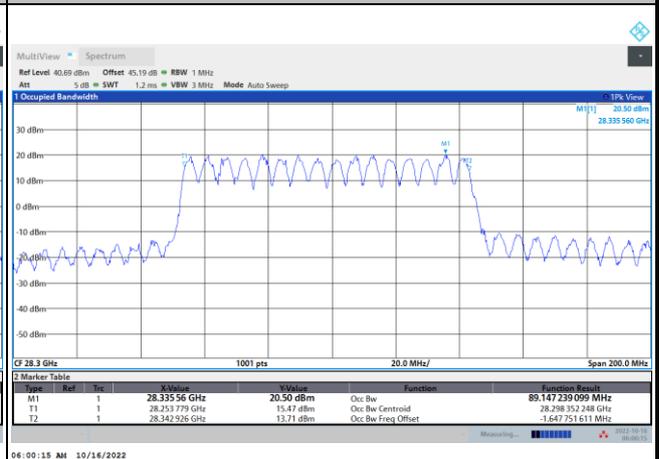
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

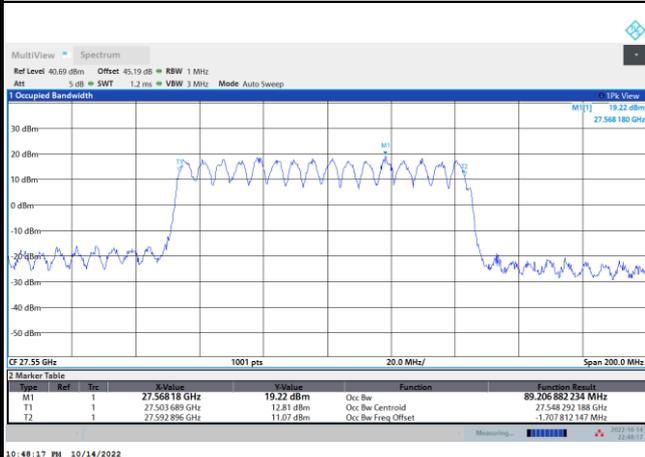




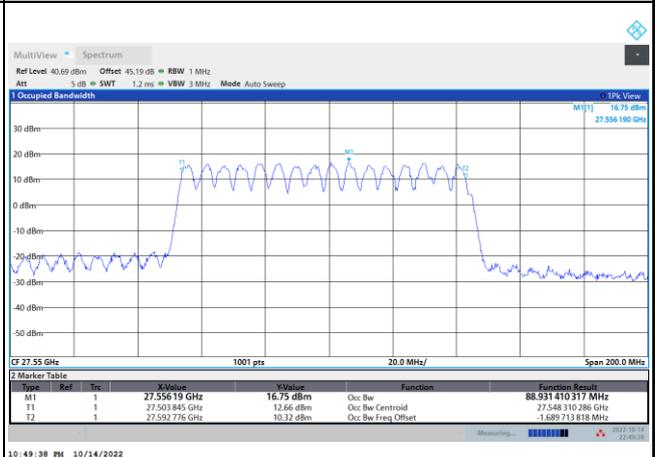
DFT-s-OFDM Module 1

NR Band n261

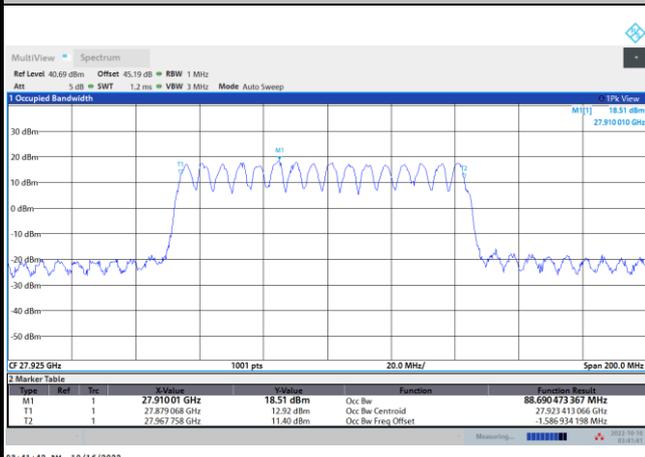
Lowest Channel / 100MHz / 16QAM



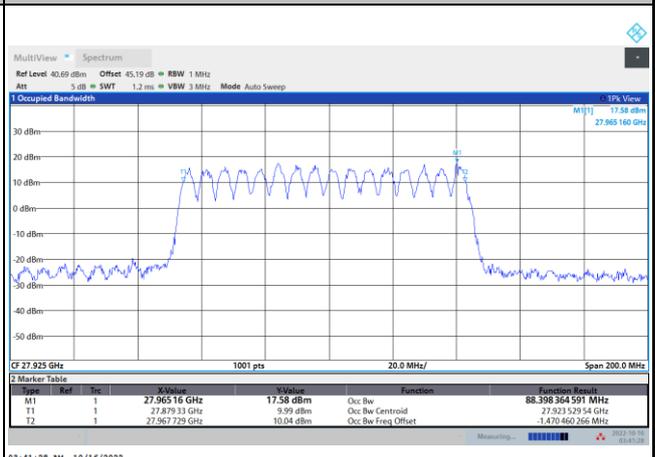
Lowest Channel / 100MHz / 64QAM



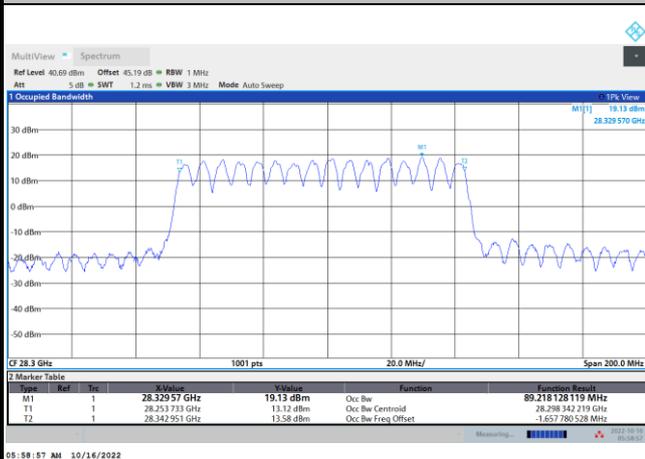
Middle Channel / 100MHz / 16QAM



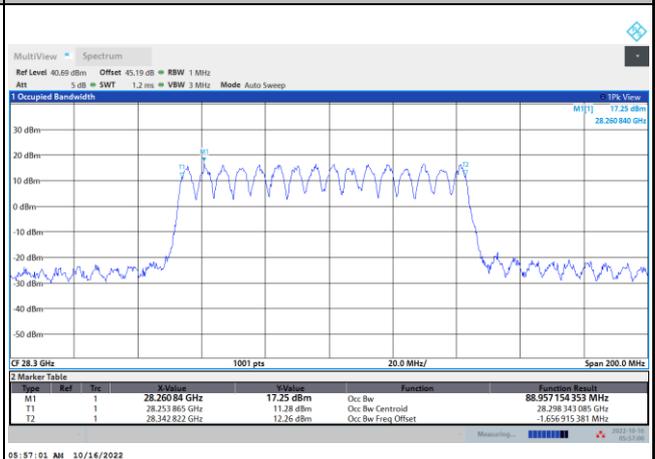
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM

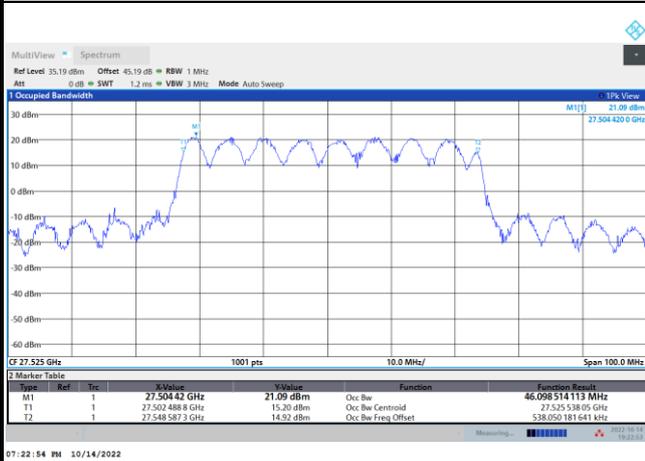




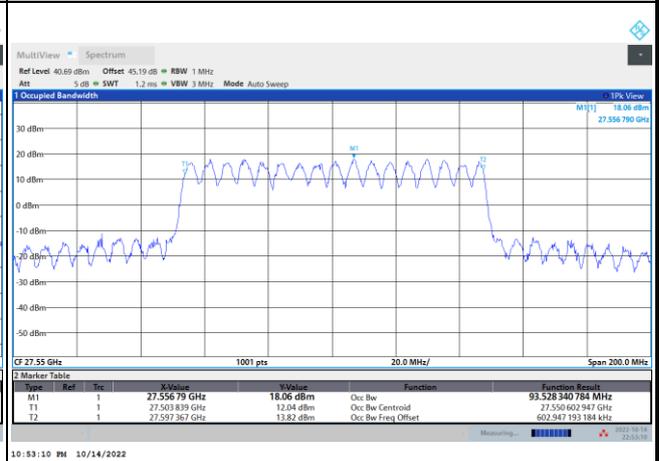
CP-OFDM Module 1

NR Band n261

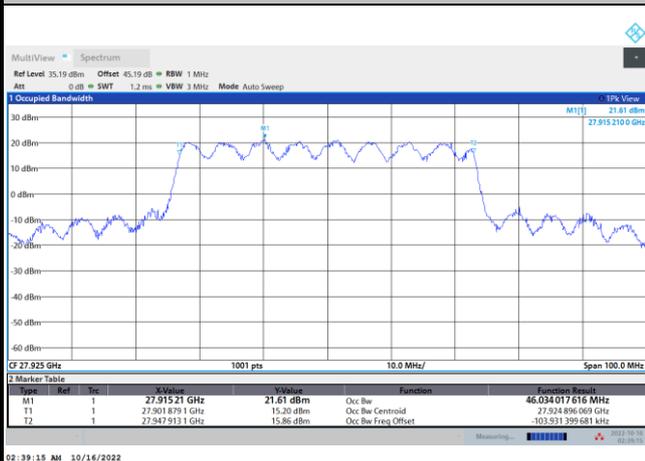
Lowest Channel / 50MHz / QPSK



Lowest Channel / 100MHz / QPSK



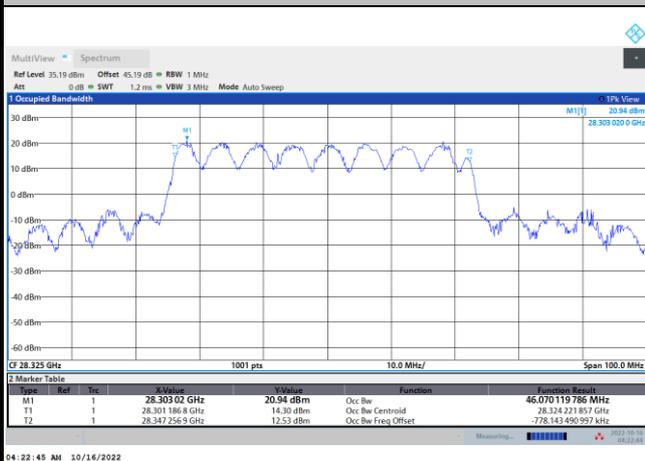
Middle Channel / 50MHz / QPSK



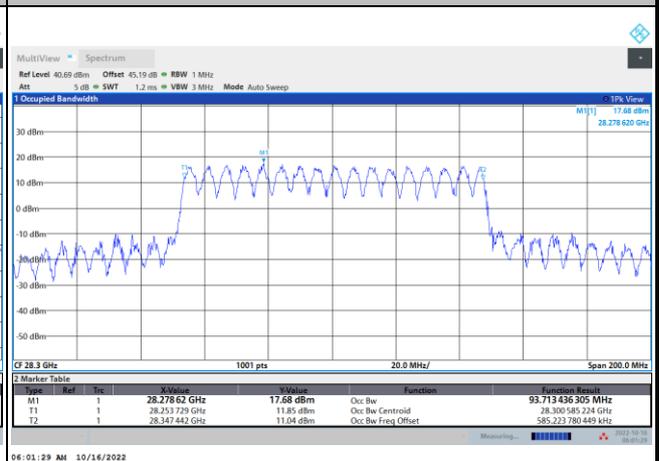
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / QPSK



Highest Channel / 100MHz / QPSK





Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module 1 NR Band n261 : BE (dBm) 1 RB							
BW			50MHz				100MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-17.97	-17.60	-22.15	-23.28	-11.66	-10.67	-12.22	-15.14
	>10%OB	≤ -13	-27.15	-27.45	-28.06	-31.07	-29.93	-29.94	-30.18	-32.02
High CH	0~10%OB	≤ -5	-14.60	-12.96	-15.34	-16.75	-7.15	-6.73	-6.92	-8.99
	>10%OB	≤ -13	-22.62	-23.24	-24.55	-25.93	-24.41	-24.50	-26.12	-28.11
Result			Compliance							

Mode			CP-OFDM Module 1 NR Band n261 : BE (dBm) 1 RB			
BW			50MHz		100MHz	
Limit (dBm)			QPSK		QPSK	
Low CH	0~10%OB	≤ -5	-20.46		-15.54	
	>10%OB	≤ -13	-28.27		-32.18	
High CH	0~10%OB	≤ -5	-15.17		-8.26	
	>10%OB	≤ -13	-25.47		-26.63	
Result			Compliance			

Mode			DFT-s-OFDM Module 1 NR Band n261 : BE (dBm) Full RB							
BW			50MHz				100MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-22.41	-21.20	-23.27	-24.55	-21.73	-22.85	-23.39	-25.35
	>10%OB	≤ -13	-22.73	-22.98	-22.81	-24.63	-25.11	-24.72	-25.44	-27.28
High CH	0~10%OB	≤ -5	-20.40	-15.79	-19.78	-25.98	-22.06	-18.28	-22.60	-28.29
	>10%OB	≤ -13	-21.05	-16.55	-21.11	-27.12	-23.40	-19.92	-24.47	-29.94
Result			Compliance							

Mode			CP-OFDM Module 1 NR Band n261 : BE (dBm) Full RB			
BW			50MHz		100MHz	
Limit (dBm)			QPSK		QPSK	
Low CH	0~10%OB	≤ -5	-20.69		-22.03	
	>10%OB	≤ -13	-20.96		-23.59	
High CH	0~10%OB	≤ -5	-16.35		-17.81	
	>10%OB	≤ -13	-18.94		-20.32	
Result			Compliance			

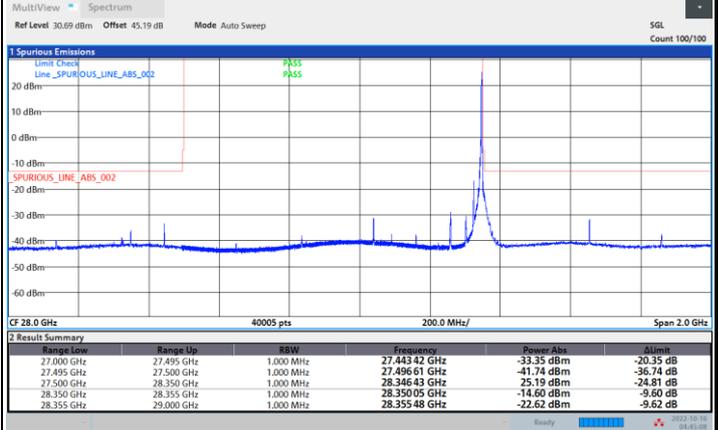
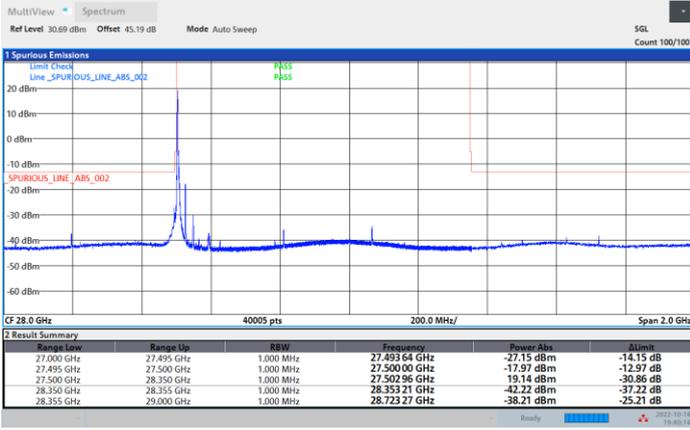


DFT-s-OFDM Module 1

NR Band n261 / 50MHz / BPSK

Lowest Band Edge / 1 RB

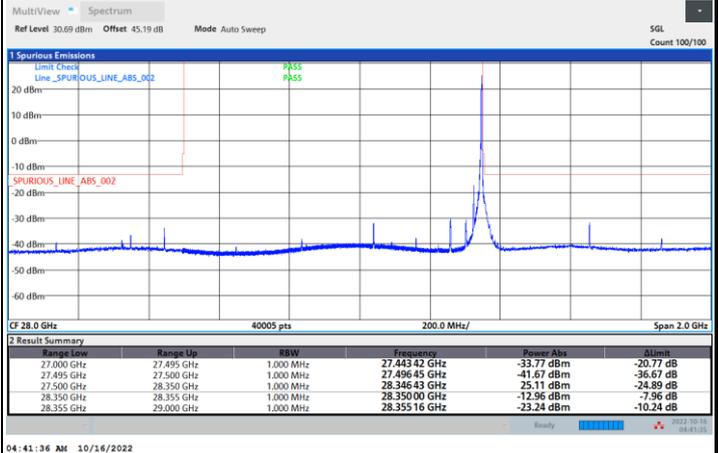
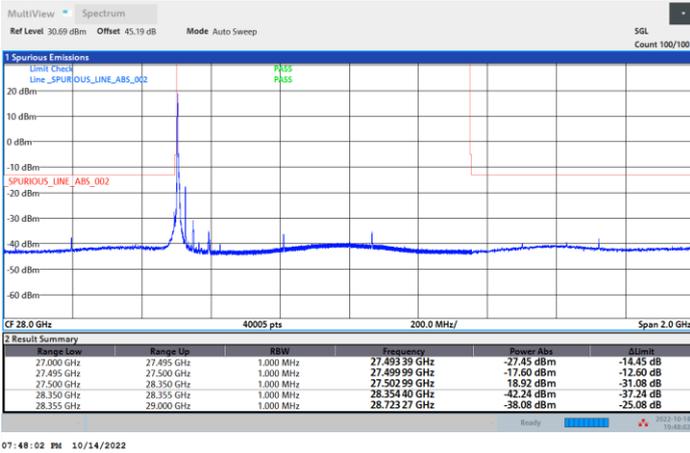
Highest Band Edge / 1 RB



NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

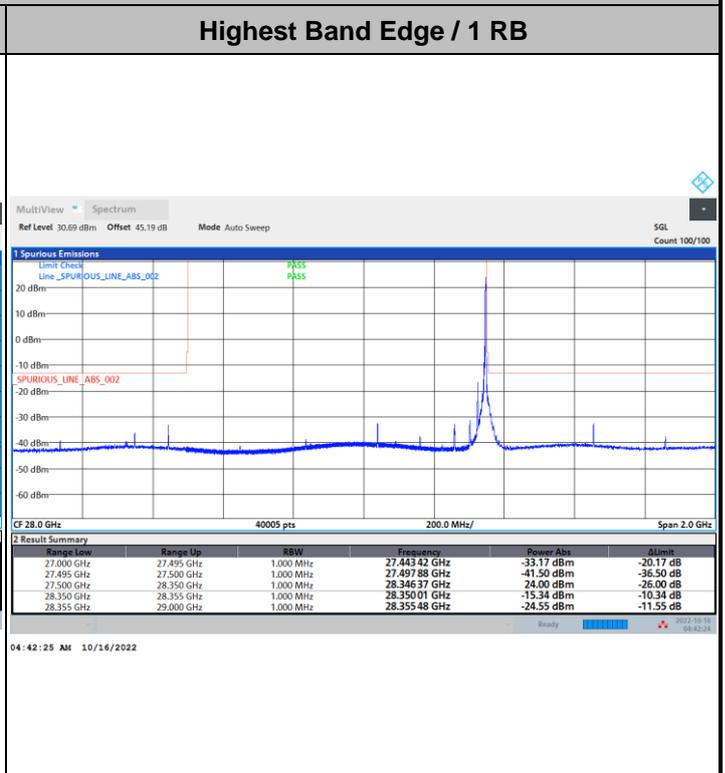
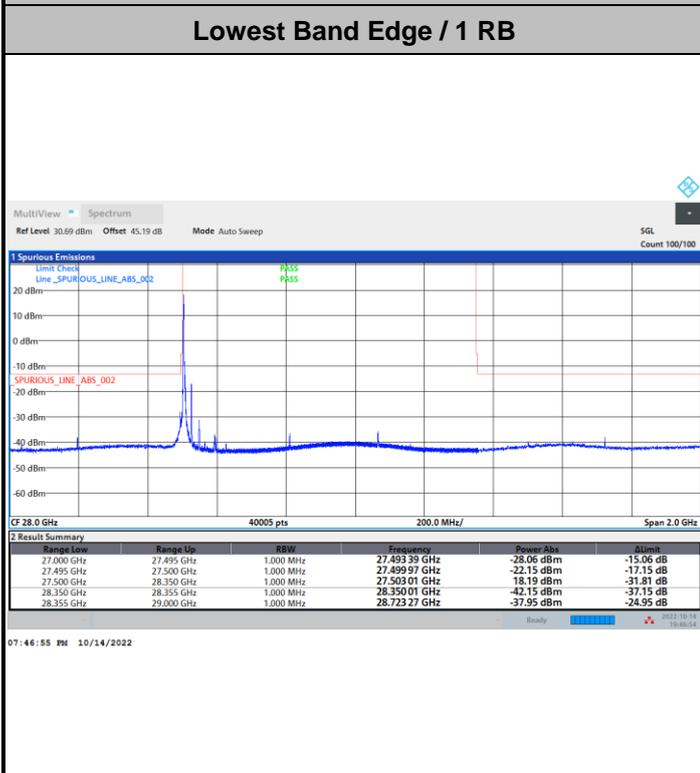
Highest Band Edge / 1 RB



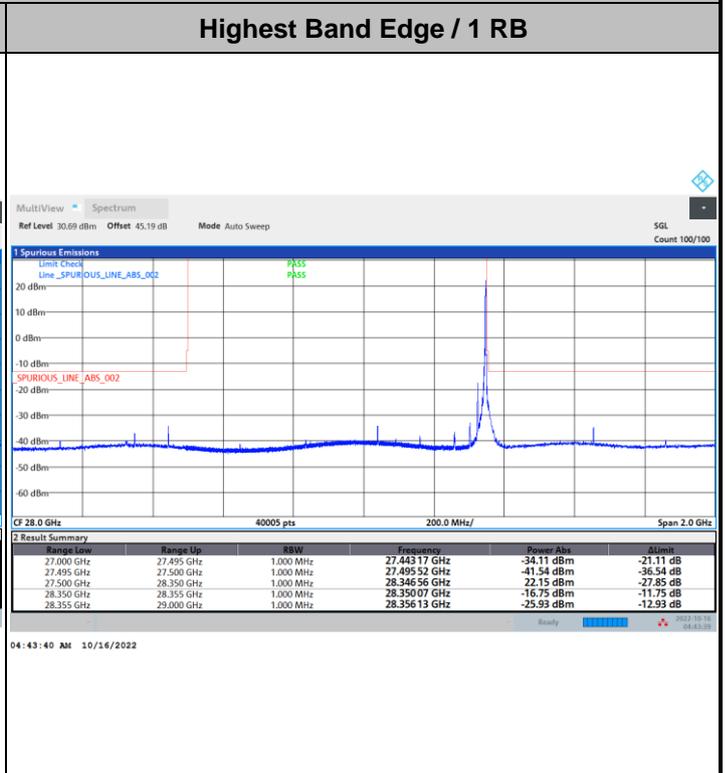
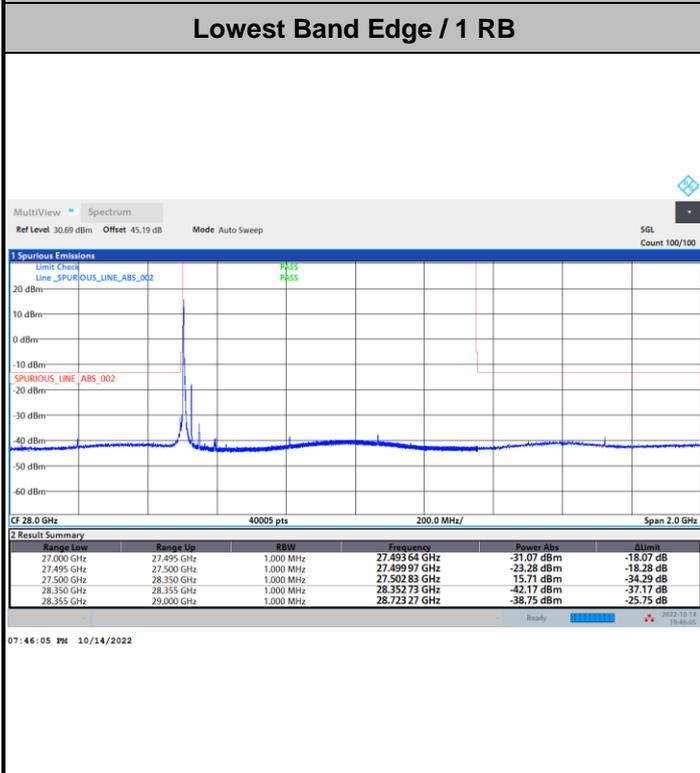


DFT-s-OFDM Module 1

NR Band n261 / 50MHz / 16QAM



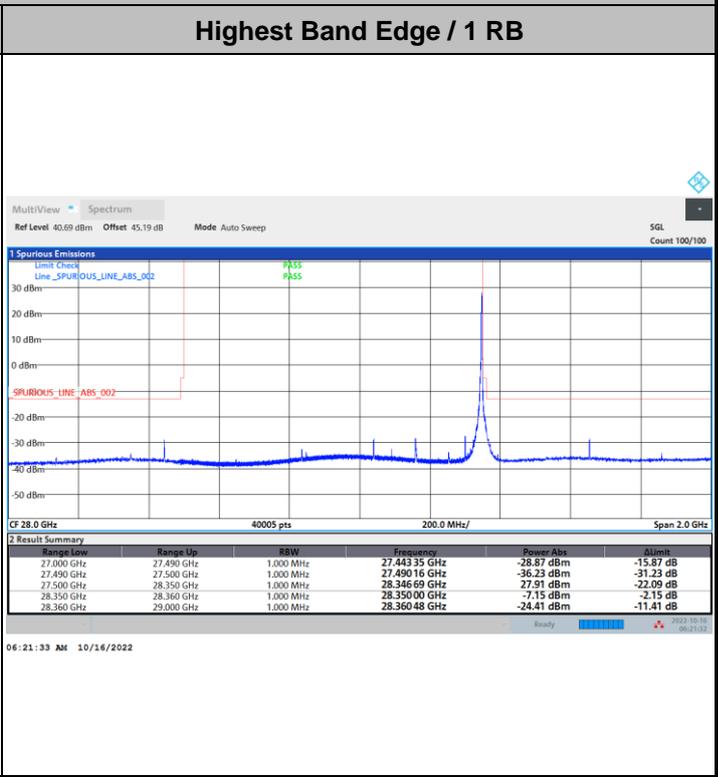
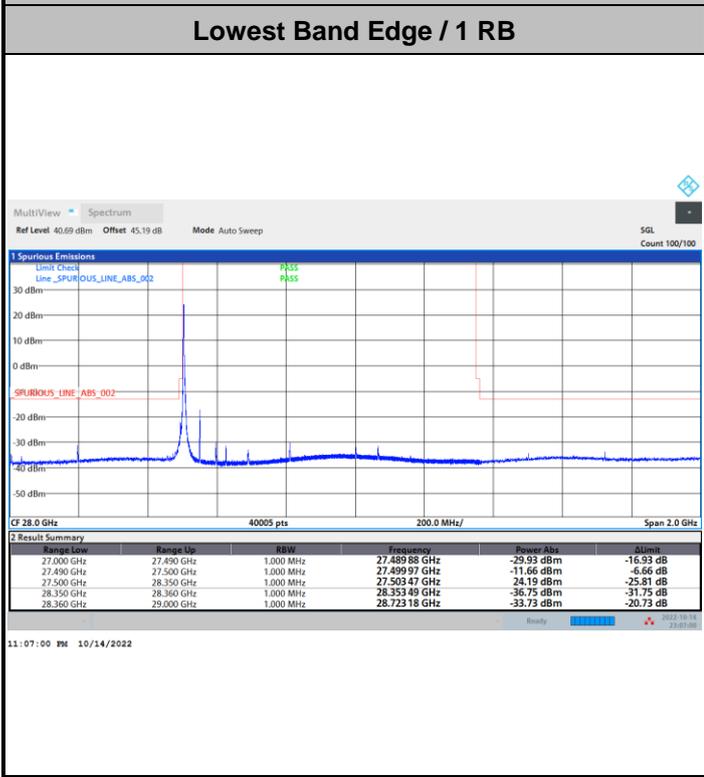
NR Band n261 / 50MHz / 64QAM



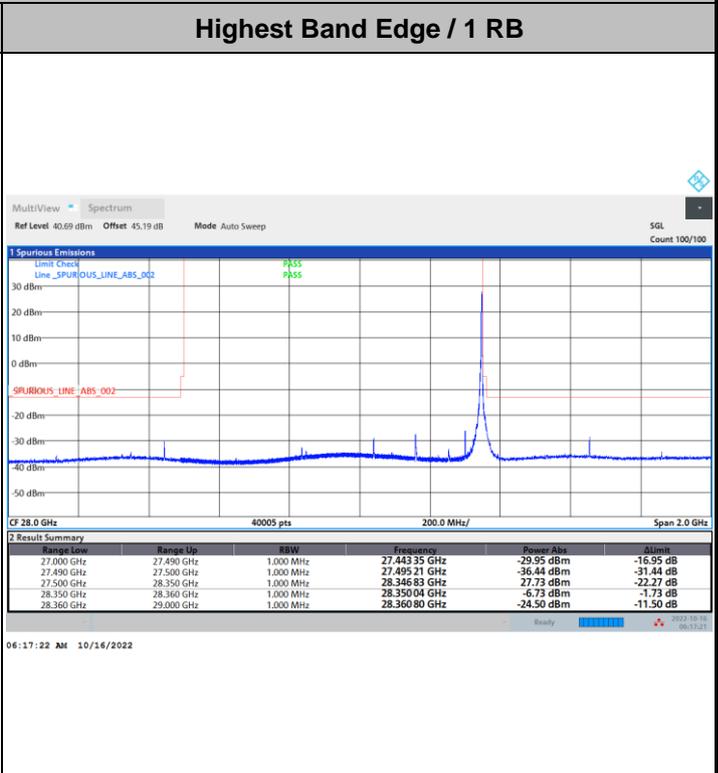
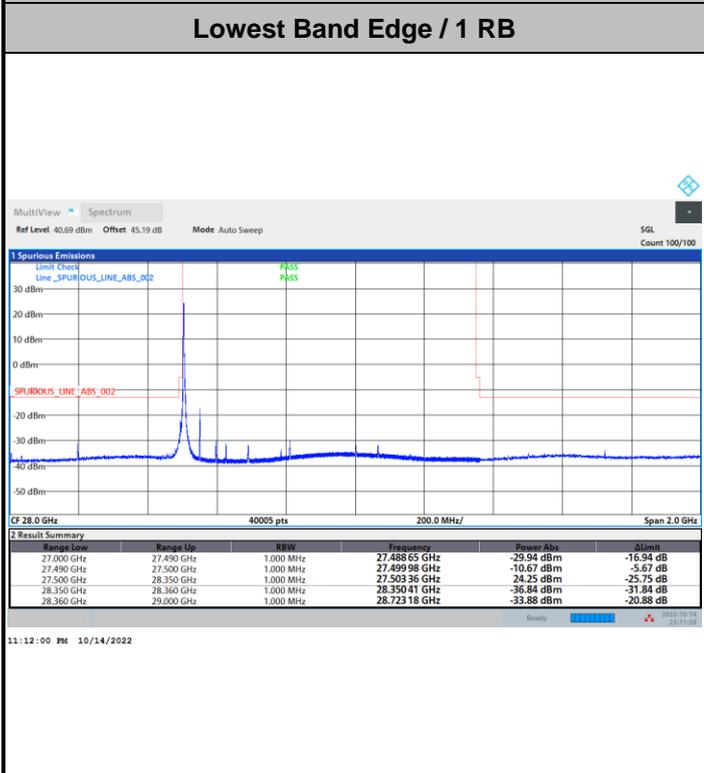


DFT-s-OFDM Module 1

NR Band n261 / 100MHz / BPSK



NR Band n261 / 100MHz / QPSK



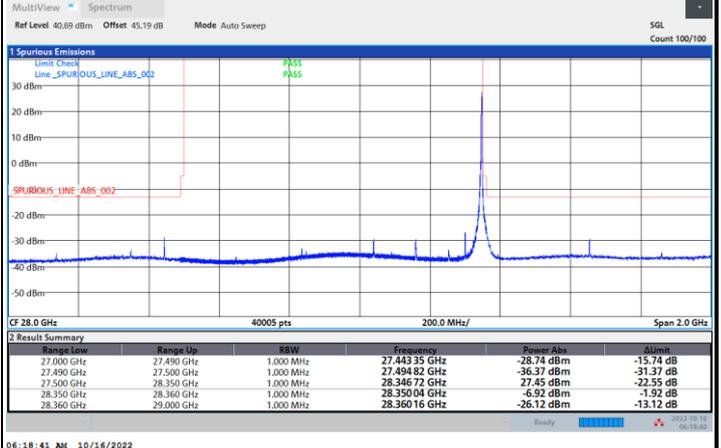
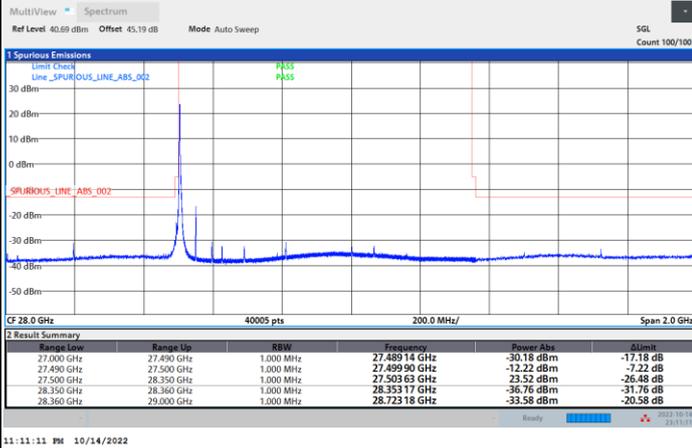


DFT-s-OFDM Module 1

NR Band n261 / 100MHz / 16QAM

Lowest Band Edge / 1 RB

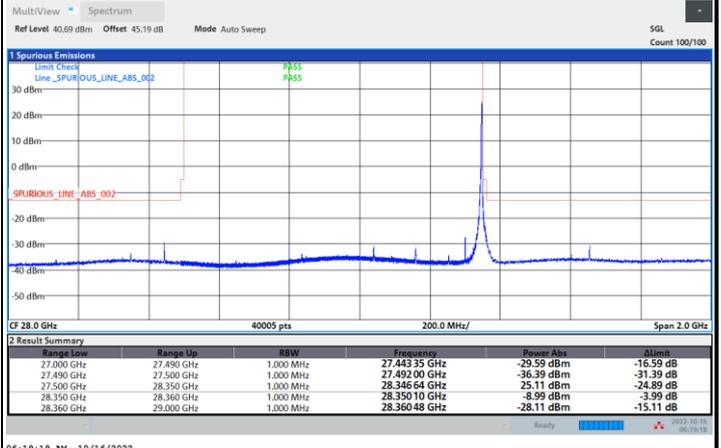
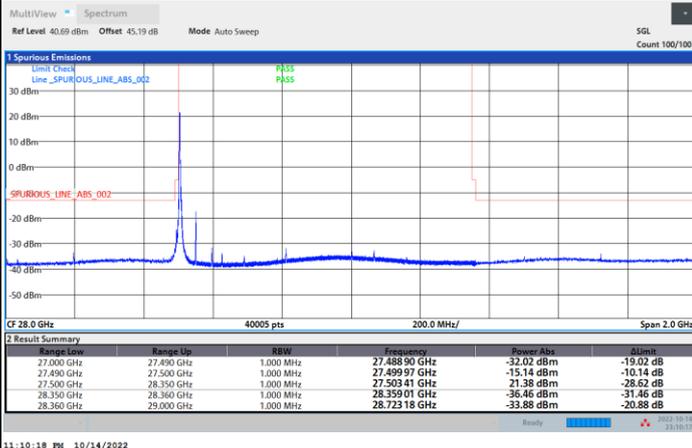
Highest Band Edge / 1 RB



NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



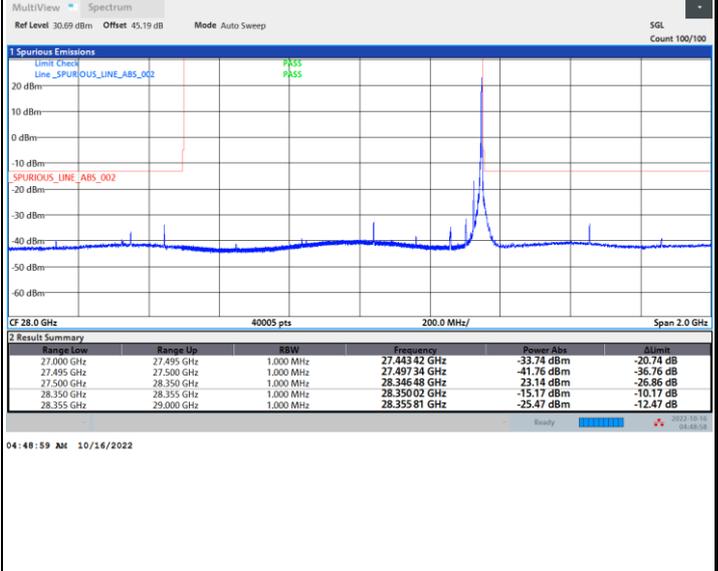
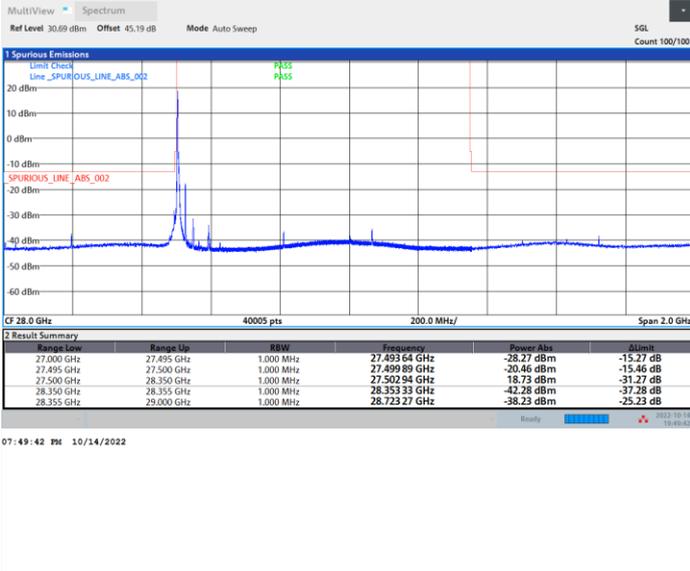


CP-OFDM Module 1

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

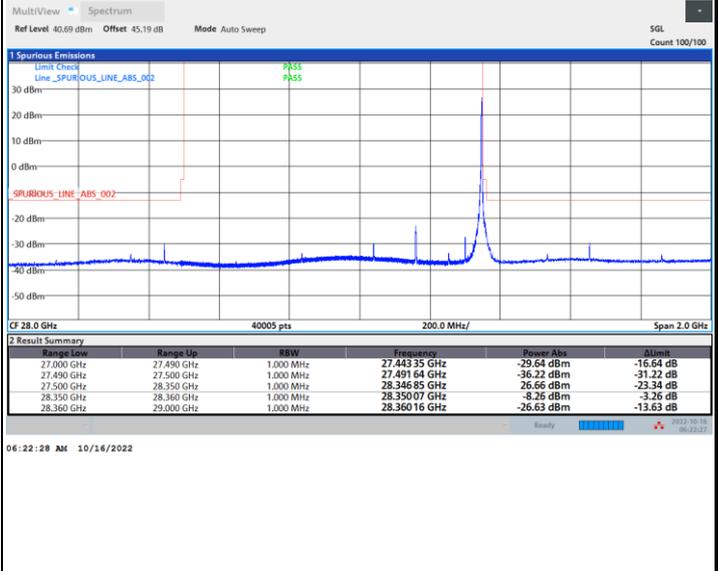
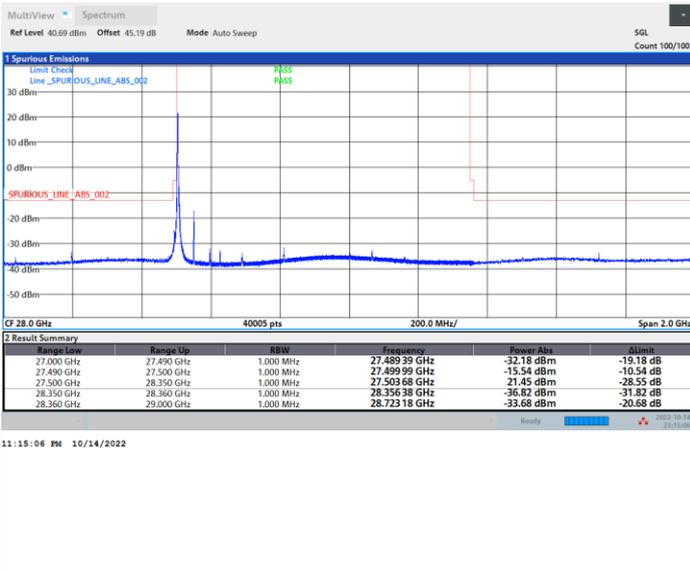
Highest Band Edge / 1 RB



NR Band n261 / 100MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

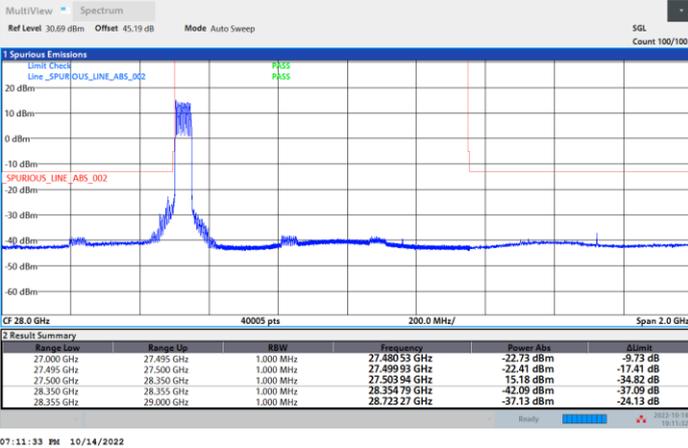




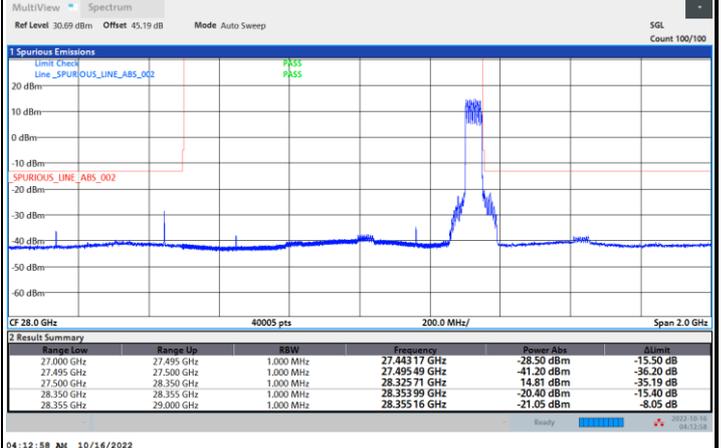
DFT-s-OFDM Module 1

NR Band n261 / 50MHz / BPSK

Lowest Band Edge / Full RB

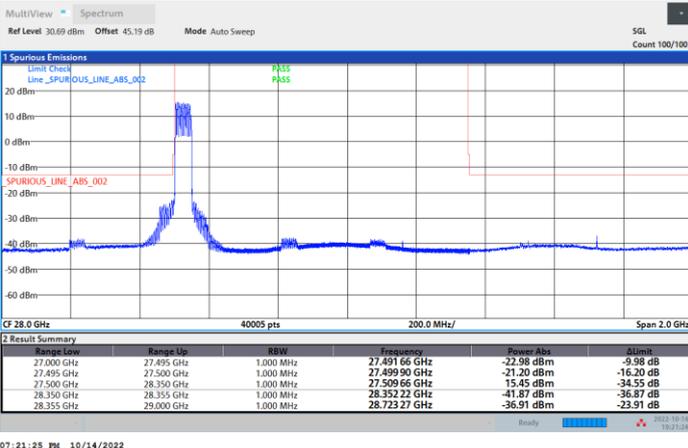


Highest Band Edge / Full RB



NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

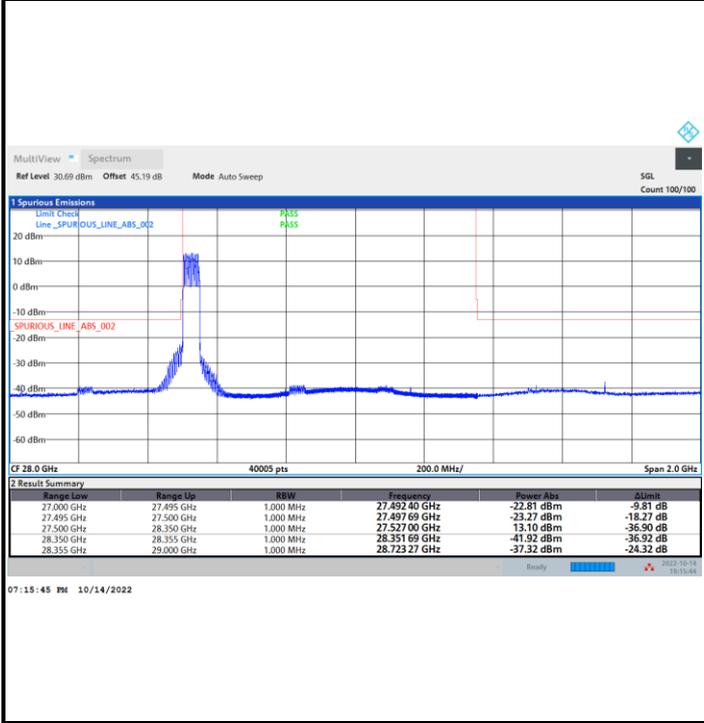




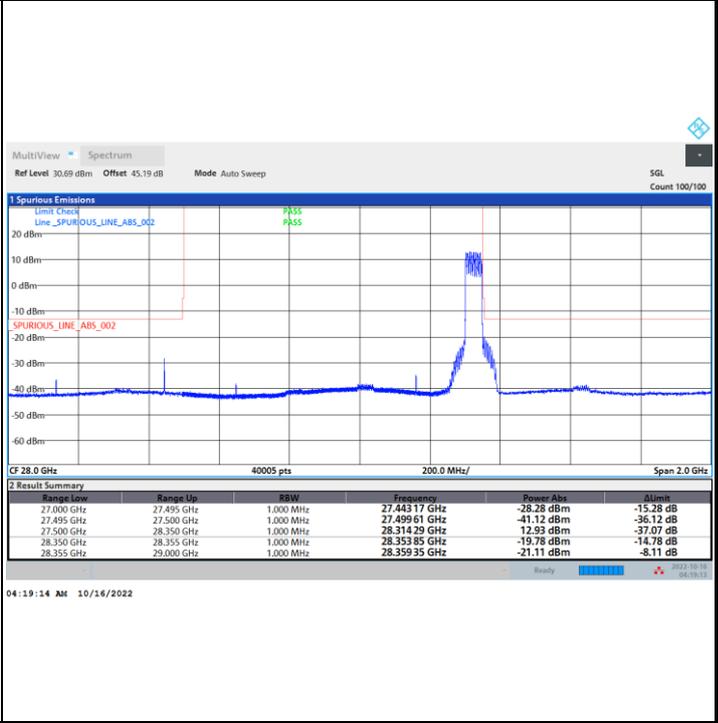
DFT-s-OFDM Module 1

NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / Full RB

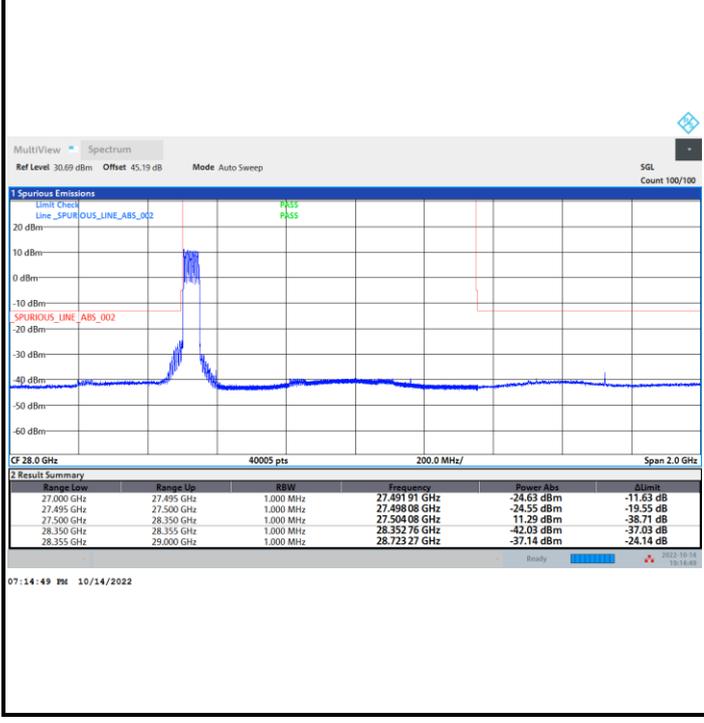


Highest Band Edge / Full RB

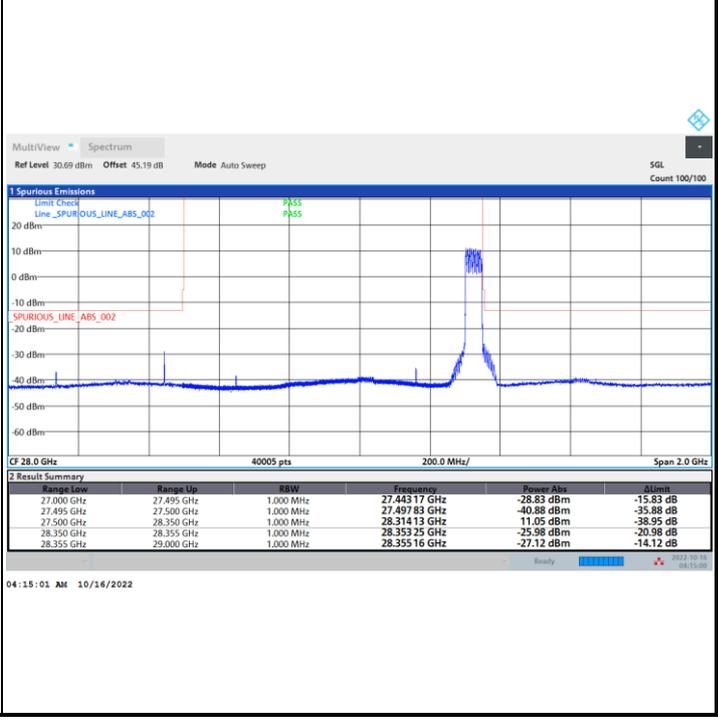


NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

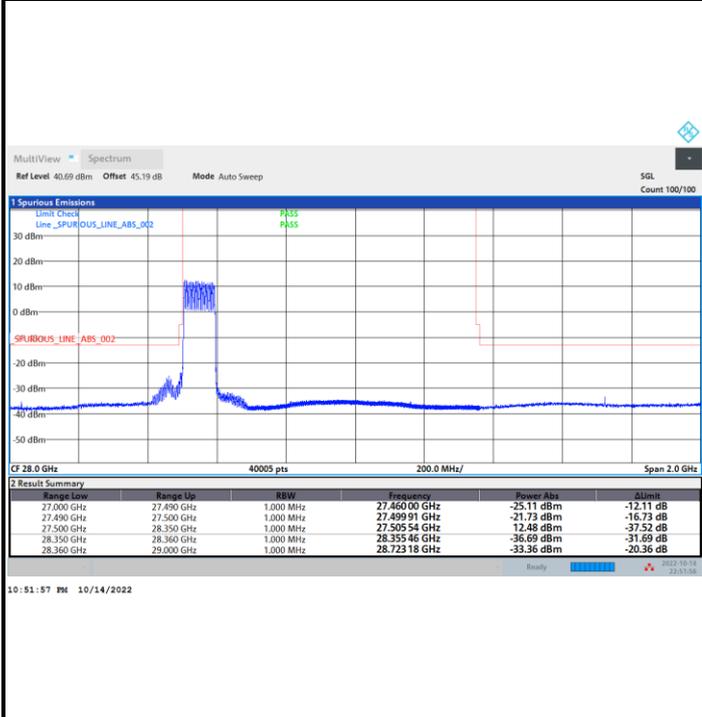




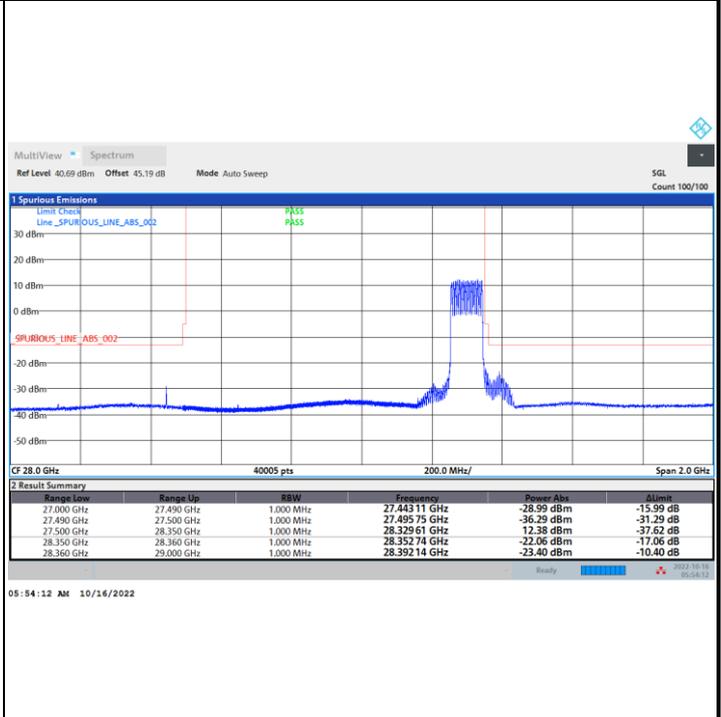
DFT-s-OFDM Module 1

NR Band n261 / 100MHz / BPSK

Lowest Band Edge / Full RB

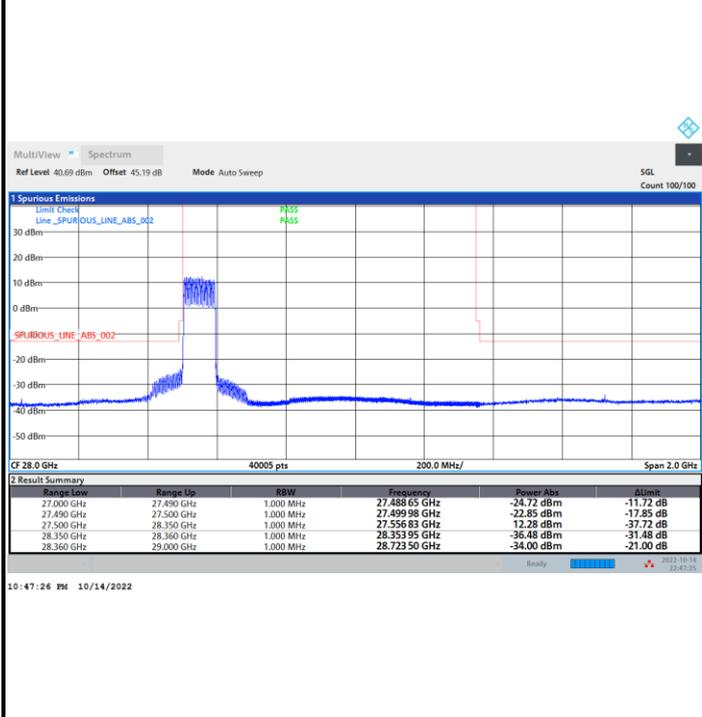


Highest Band Edge / Full RB



NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

