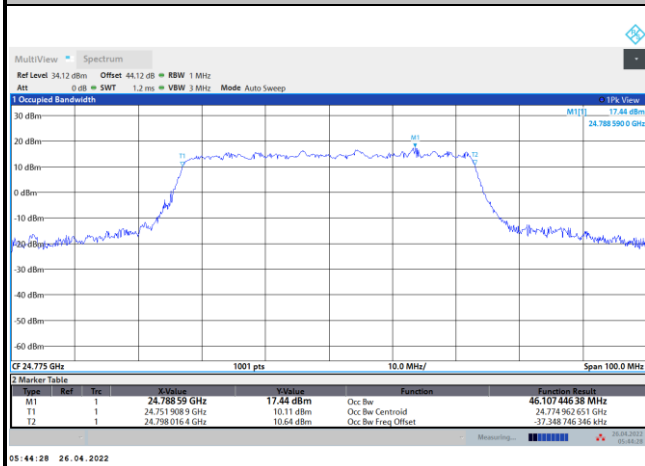




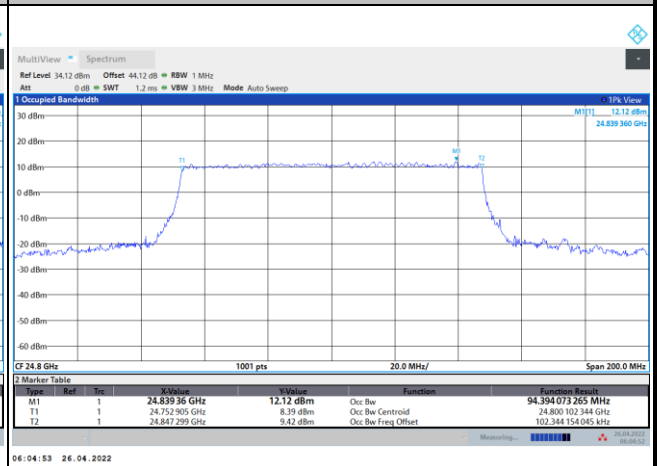
CP-OFDM Module B

NR Band n258B

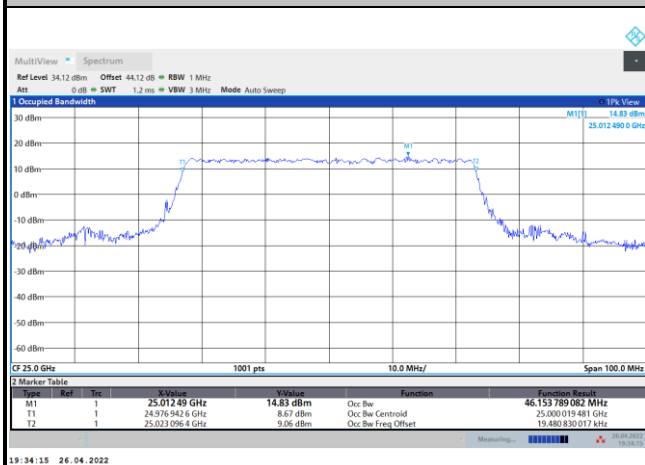
Lowest Channel / 50MHz / QPSK



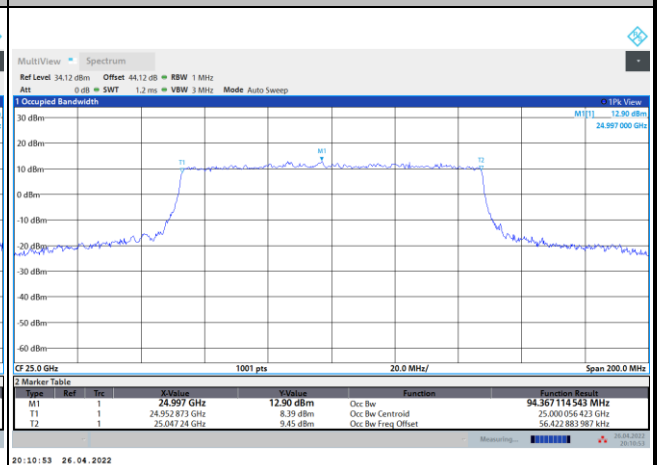
Lowest Channel / 100MHz / QPSK



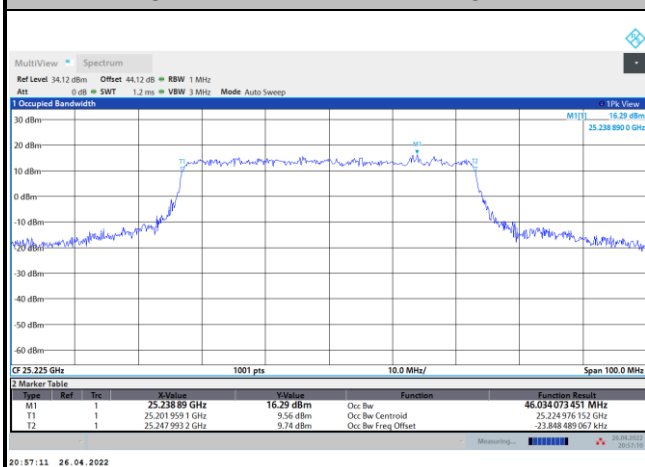
Middle Channel / 50MHz / QPSK



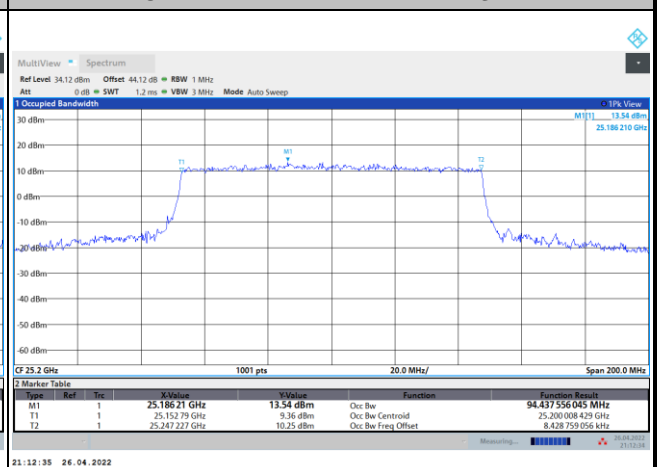
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / QPSK



Highest Channel / 100MHz / QPSK

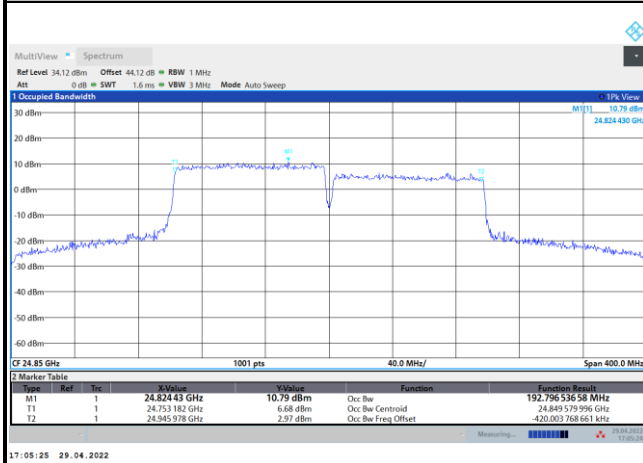




CP-OFDM Module B

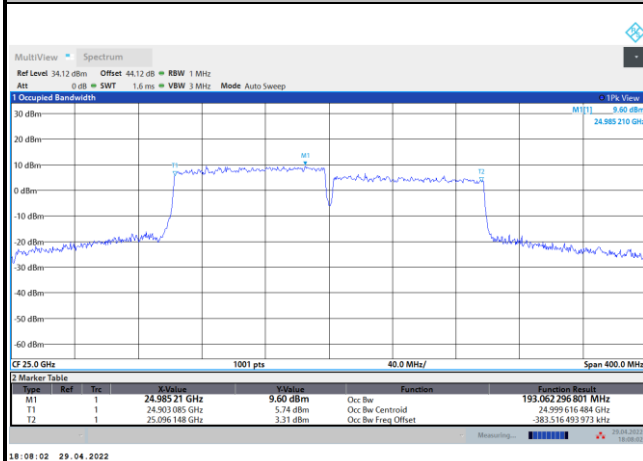
NR Band n258B

Lowest Channel / 200MHz / QPSK



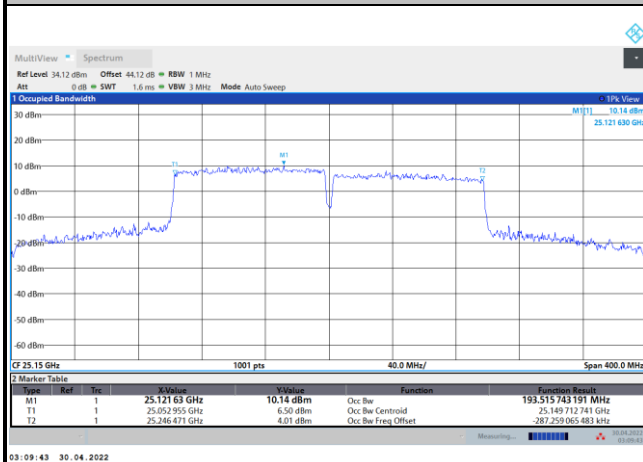
intentionally blank

Middle Channel / 200MHz / QPSK



intentionally blank

Highest Channel / 200MHz / QPSK



intentionally blank

Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module B NR Band n258B : BE (dBm) 1 RB								
BW			50MHz			100MHz			200MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-6.97	-7.47	-10.80	-11.32	-13.32	-13.85	-14.36	-13.78	-17.30
	>10%OB	≤-13	-34.42	-35.60	-36.83	-38.80	-38.87	-39.69	-16.82	-16.94	-21.04
High CH	0~10%OB	≤-5	-7.60	-9.71	-10.76	-10.03	-12.47	-15.83	-18.51	-19.45	-21.25
	>10%OB	≤-13	-34.26	-35.71	-36.95	-38.67	-39.31	-40.40	-22.38	-17.41	-20.98
Result			Compliance								

Mode			CP-OFDM Module B NR Band n258B : BE (dBm) 1 RB		
BW			50MHz	100MHz	200MHz
Limit (dBm)			QPSK	QPSK	QPSK
Low CH	0~10%OB	≧-5	-8.01	-14.02	-16.31
	>10%OB	≧-13	-35.59	-39.69	-18.09
High CH	0~10%OB	≧-5	-9.78	-14.38	-20.46
	>10%OB	≧-13	-34.91	-39.57	-14.82
Result			Compliance		

Mode			DFT-s-OFDM Module B NR Band n258B : BE (dBm) Full RB								
BW			50MHz			100MHz			200MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-17.74	-19.59	-20.24	-21.32	-24.37	-25.75	-25.43	-25.57	-27.24
	>10%OB	≤-13	-29.80	-30.70	-31.08	-32.85	-33.43	-34.21	-31.89	-32.38	-32.10
High CH	0~10%OB	≤-5	-18.14	-18.52	-22.22	-23.40	-26.49	-30.49	-32.49	-30.22	-31.95
	>10%OB	≤-13	-22.62	-27.24	-32.78	-25.69	-30.20	-35.13	-33.89	-31.33	-32.63
Result			Compliance								

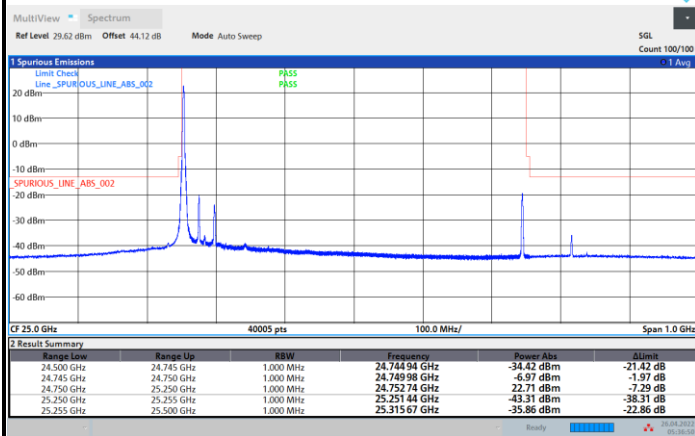
Mode			CP-OFDM Module B NR Band n258B : BE (dBm) Full RB		
BW			50MHz	100MHz	200MHz
Limit (dBm)			QPSK	QPSK	QPSK
Low CH	0~10%OB	≧-5	-18.23	-23.61	-25.66
	>10%OB	≧-13	-26.87	-30.89	-29.43
High CH	0~10%OB	≧-5	-18.94	-22.66	-25.60
	>10%OB	≧-13	-23.60	-25.91	-26.37
Result			Compliance		



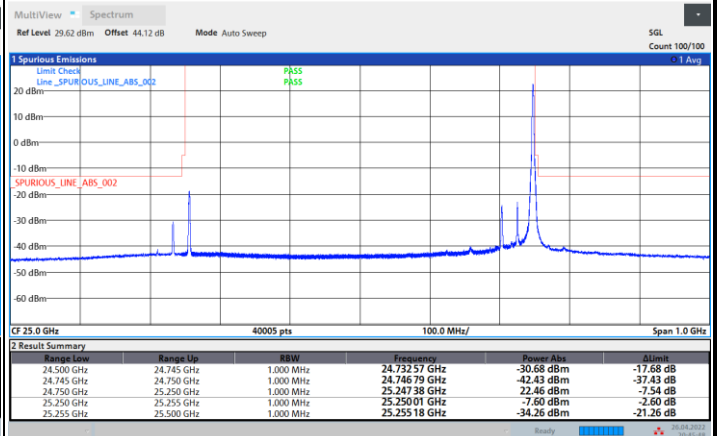
DFT-s-OFDM Module B

NR Band n258B / 50MHz / QPSK

Lowest Band Edge / 1 RB

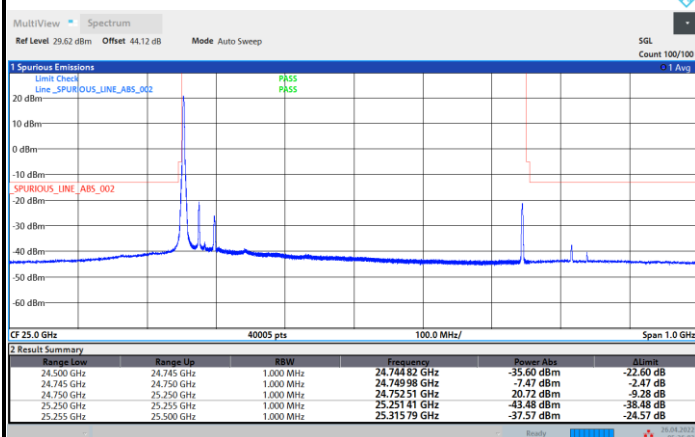


Highest Band Edge / 1 RB

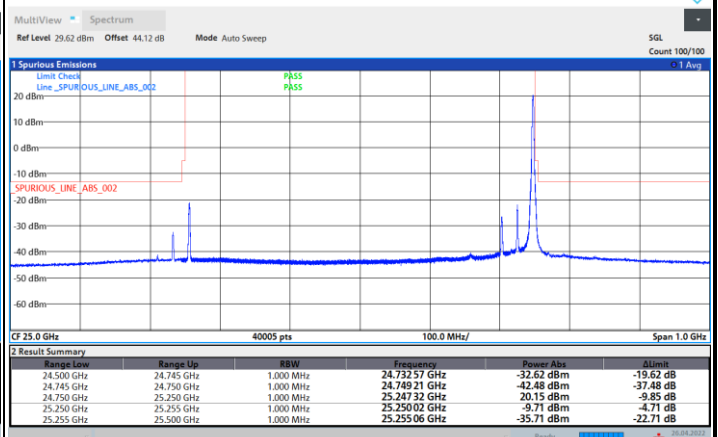


NR Band n258B / 50MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

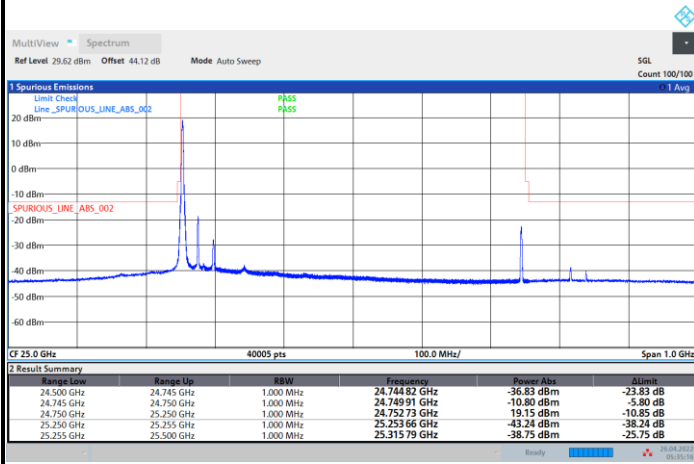




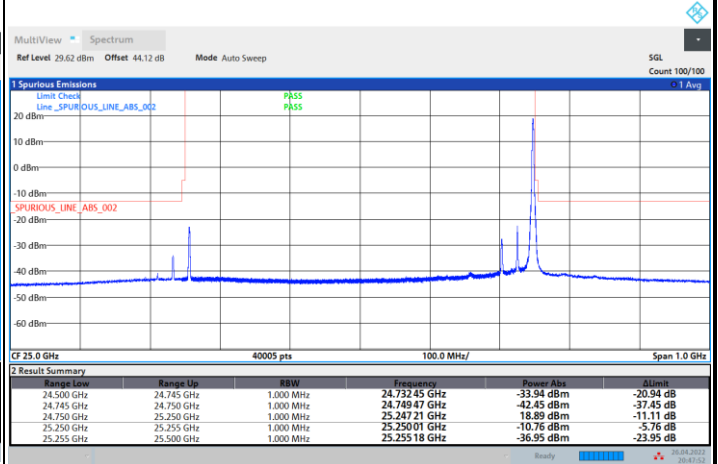
DFT-s-OFDM Module B

NR Band n258B / 50MHz / 64QAM

Lowest Band Edge / 1 RB

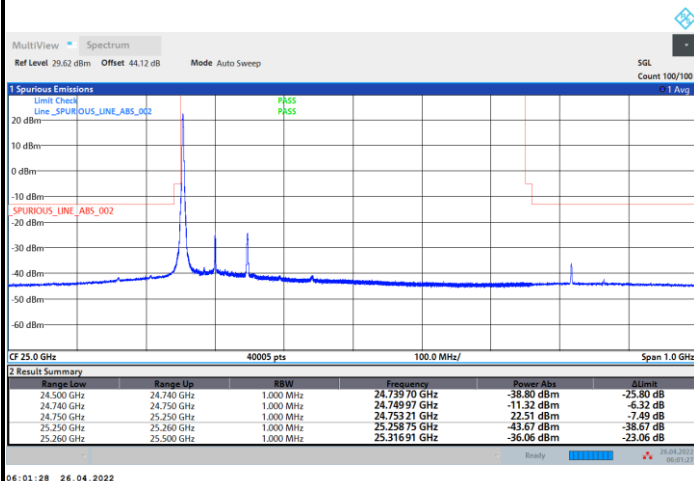


Highest Band Edge / 1 RB

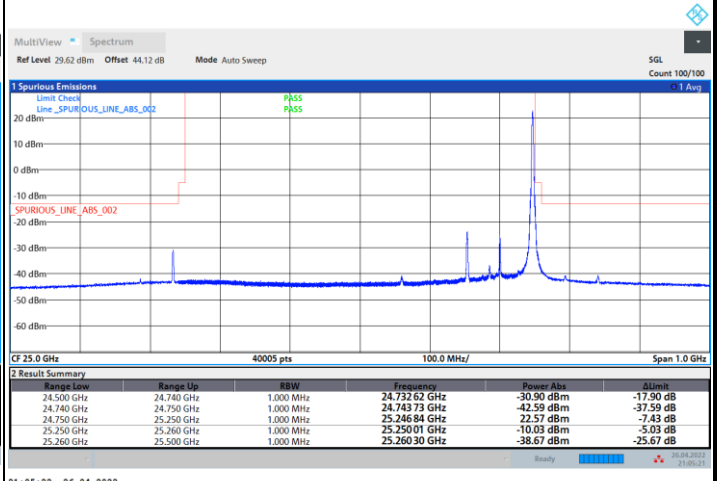


NR Band n258B / 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

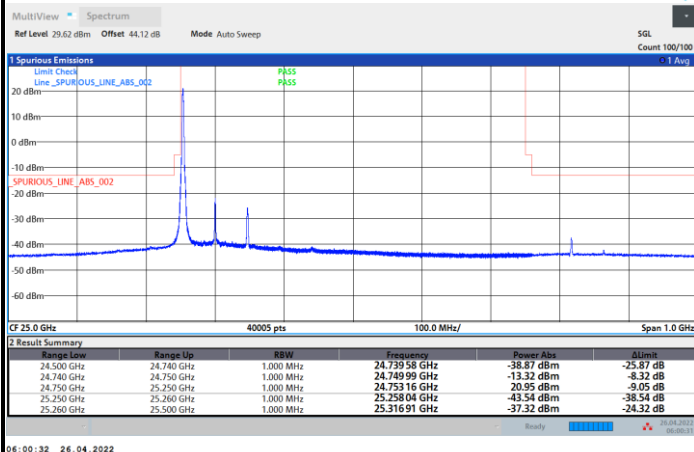




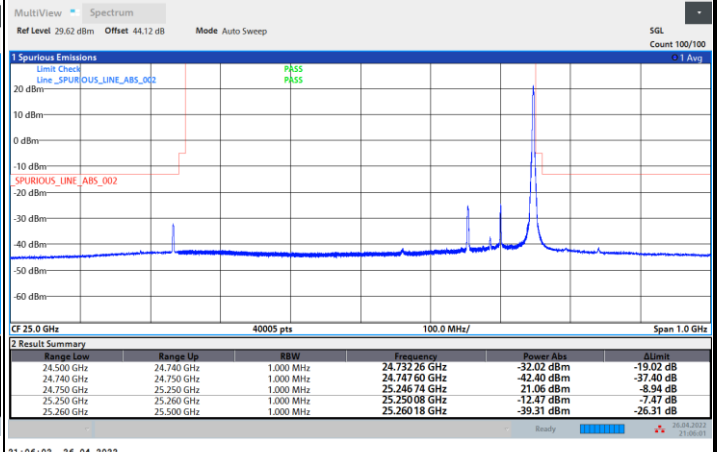
DFT-s-OFDM Module B

NR Band n258B / 100MHz / 16QAM

Lowest Band Edge / 1 RB

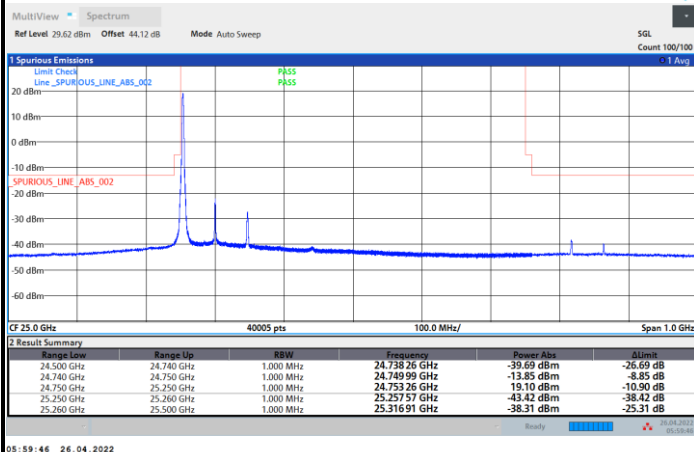


Highest Band Edge / 1 RB

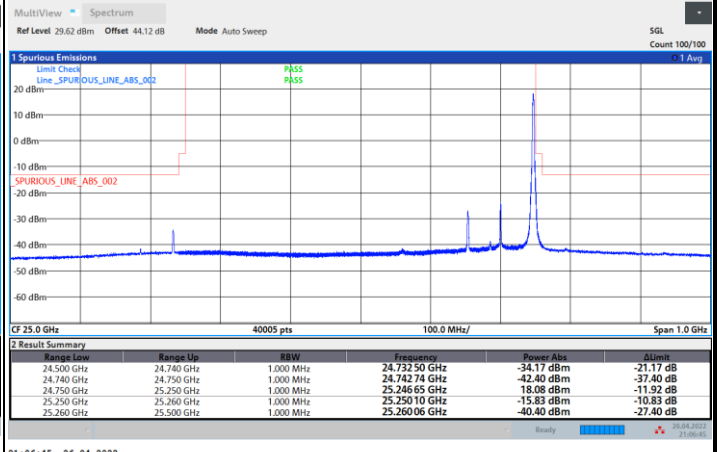


NR Band n258B / 100MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

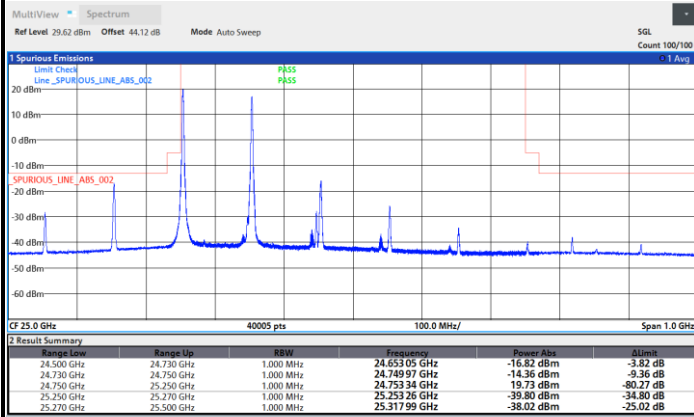




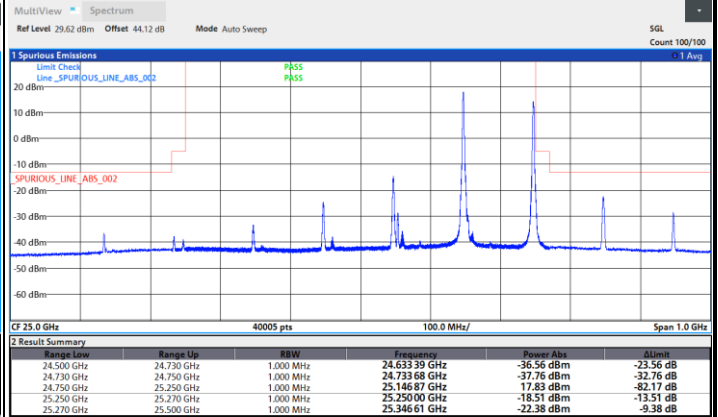
DFT-s-OFDM Module B

NR Band n258B / 200MHz / QPSK

Lowest Band Edge / 1 RB

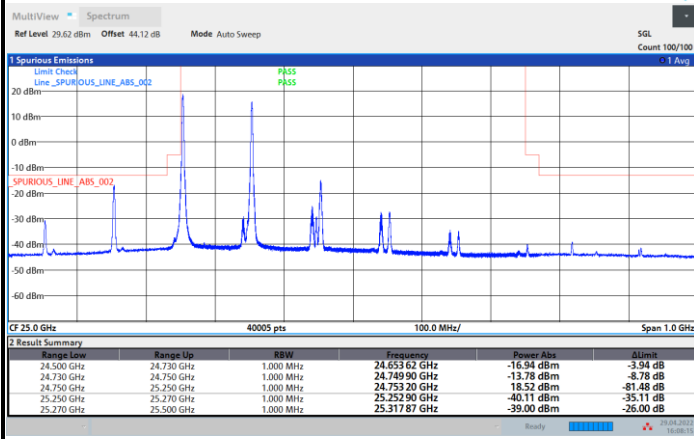


Highest Band Edge / 1 RB

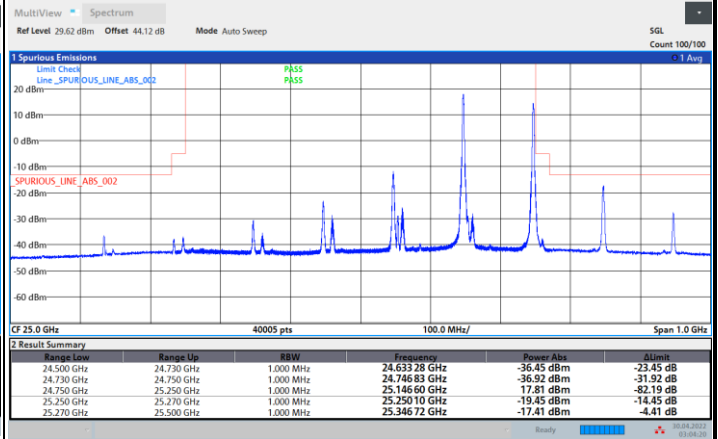


NR Band n258B / 200MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

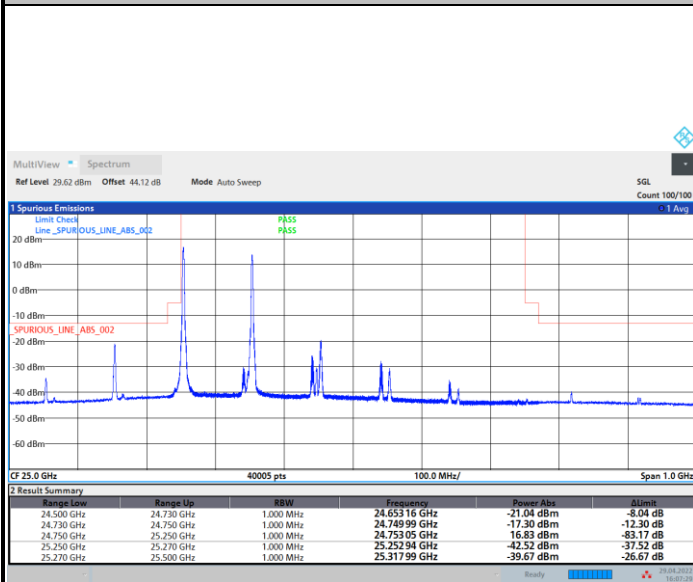




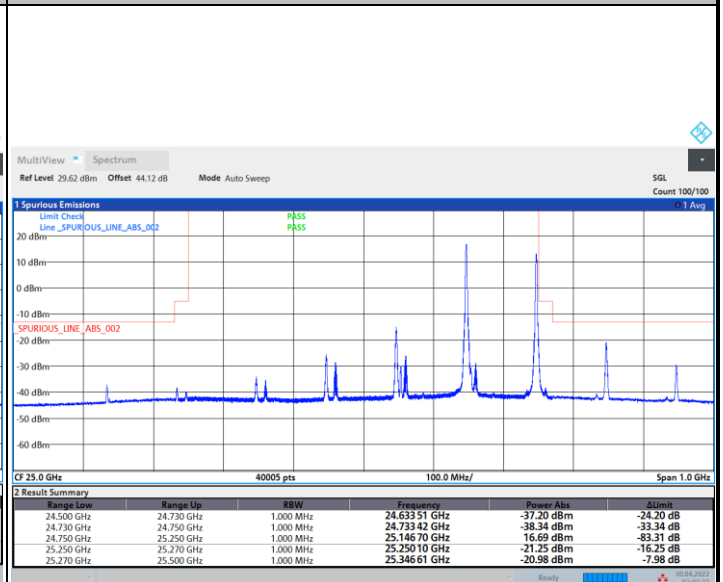
DFT-s-OFDM Module B

NR Band n258B / 200MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

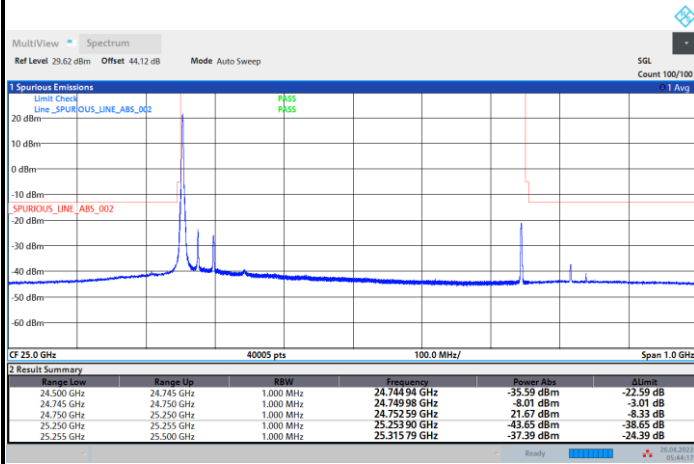




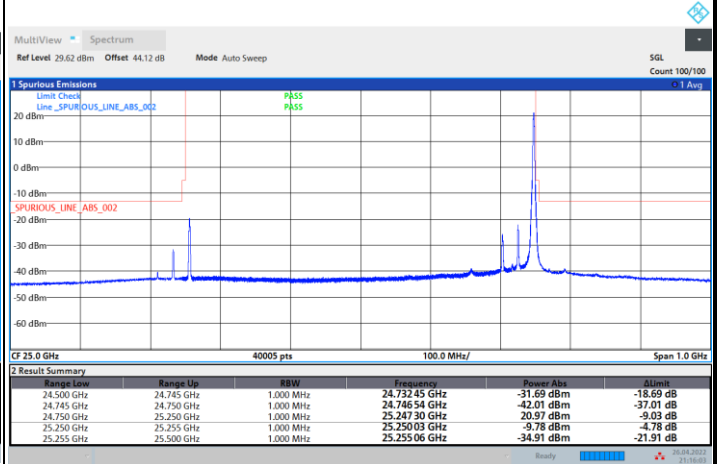
CP-OFDM Module B

NR Band n258B / 50MHz / QPSK

Lowest Band Edge / 1 RB

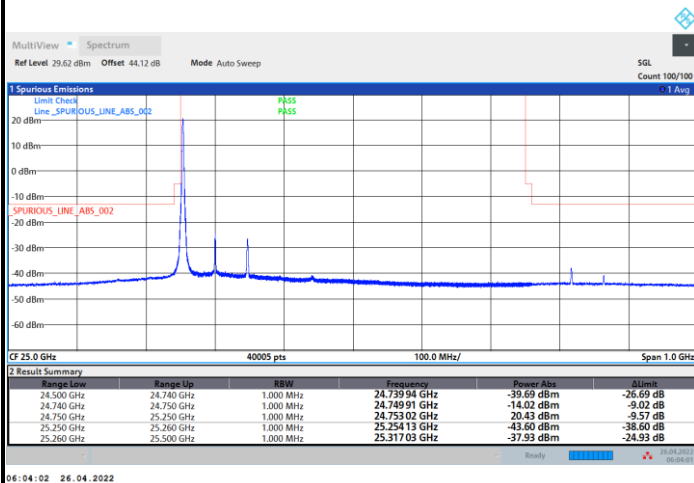


Highest Band Edge / 1 RB

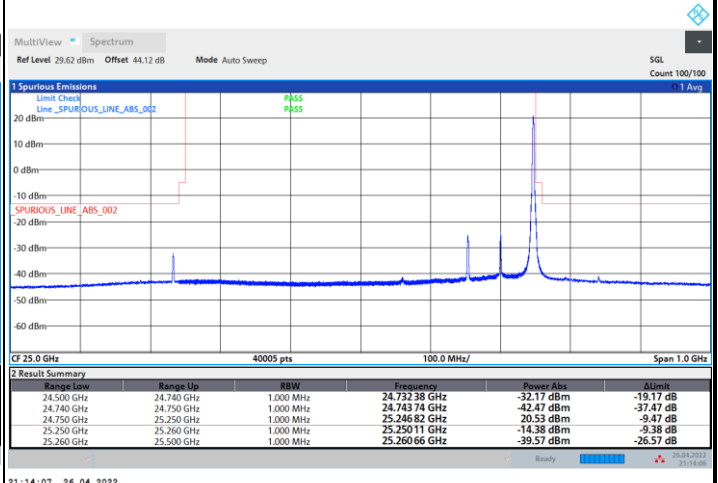


NR Band n258B / 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



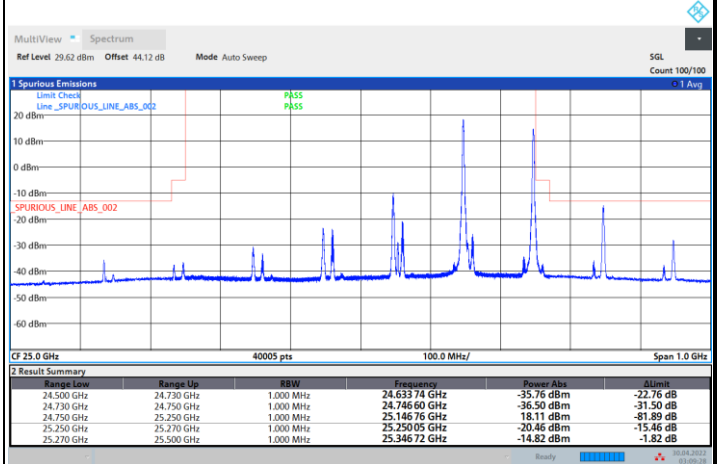
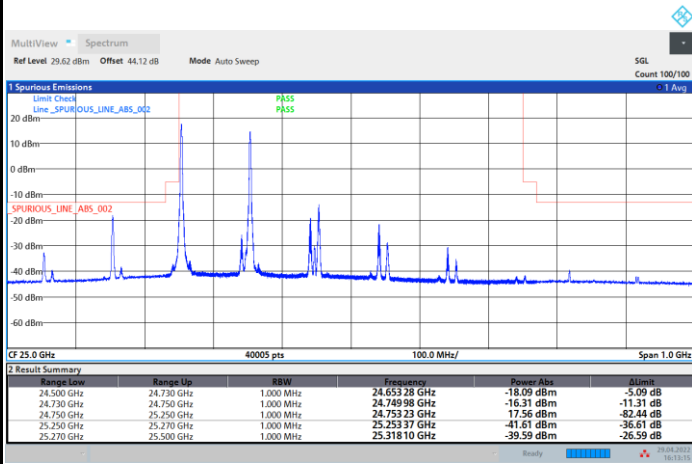


CP-OFDM Module B

NR Band n258B / 200MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

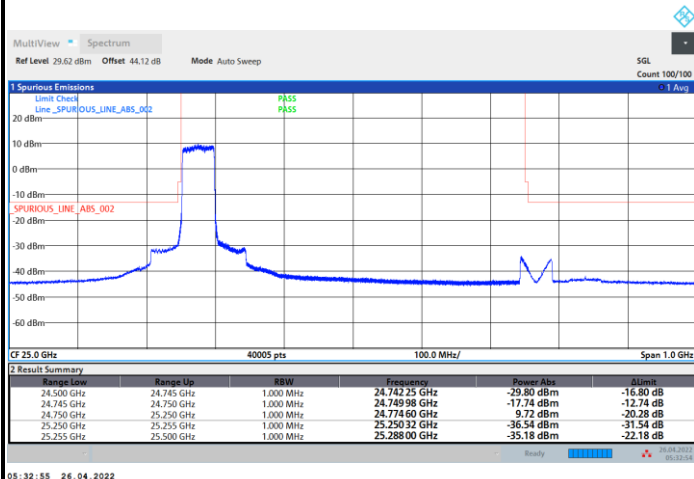




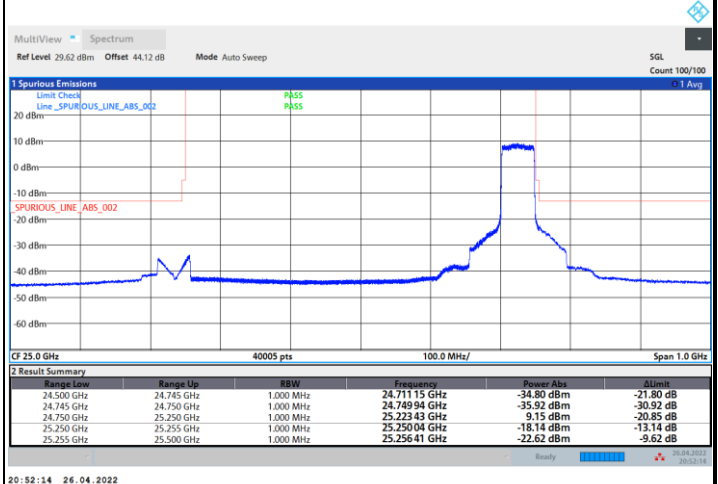
DFT-s-OFDM Module B

NR Band n258B / 50MHz / QPSK

Lowest Band Edge / Full RB

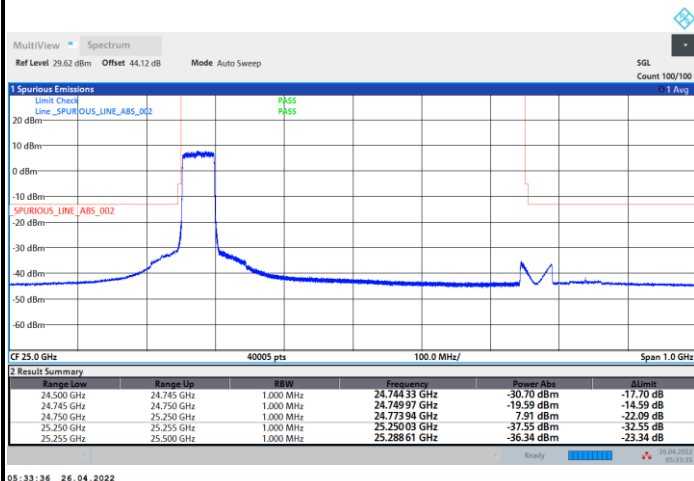


Highest Band Edge / Full RB

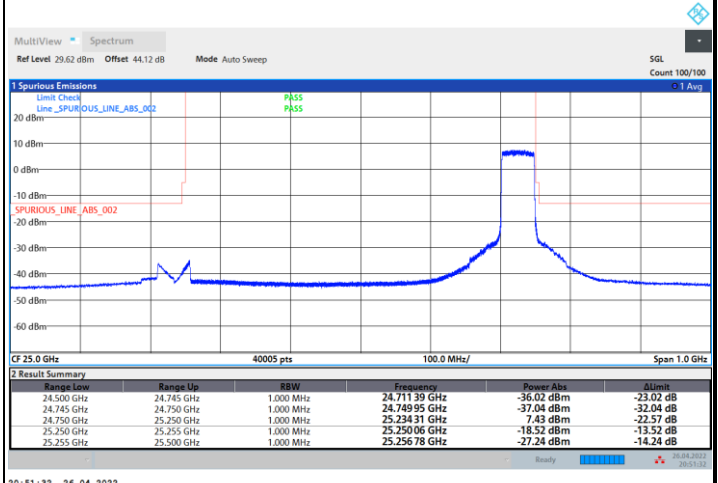


NR Band n258B / 50MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

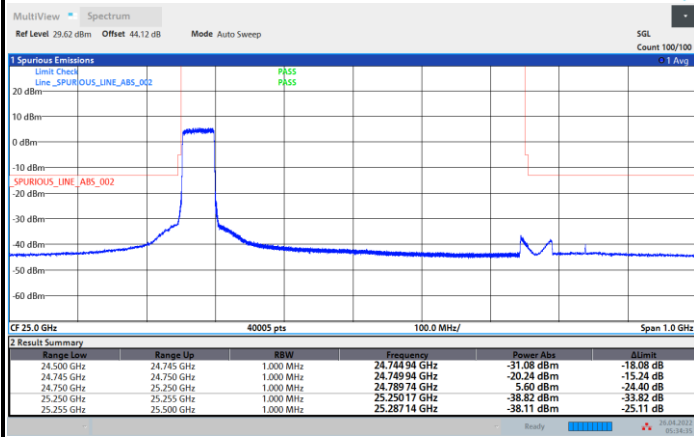




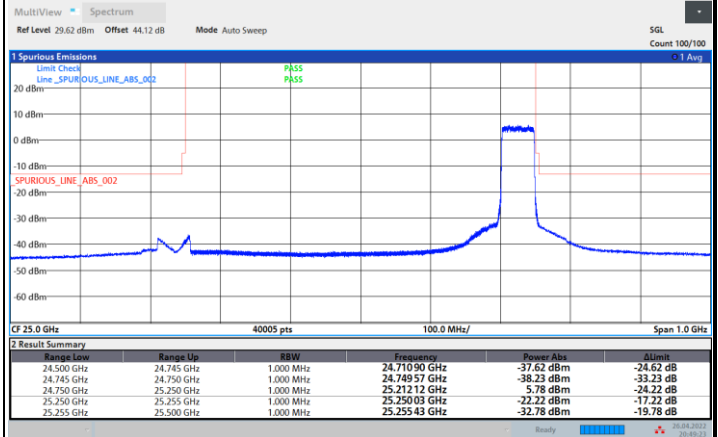
DFT-s-OFDM Module B

NR Band n258B / 50MHz / 64QAM

Lowest Band Edge / Full RB

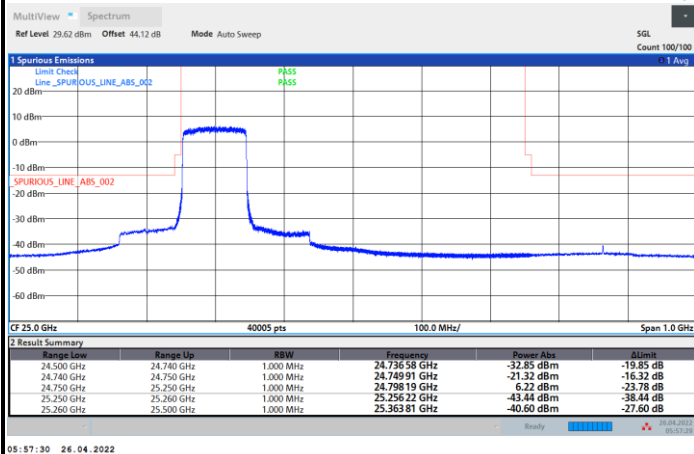


Highest Band Edge / Full RB

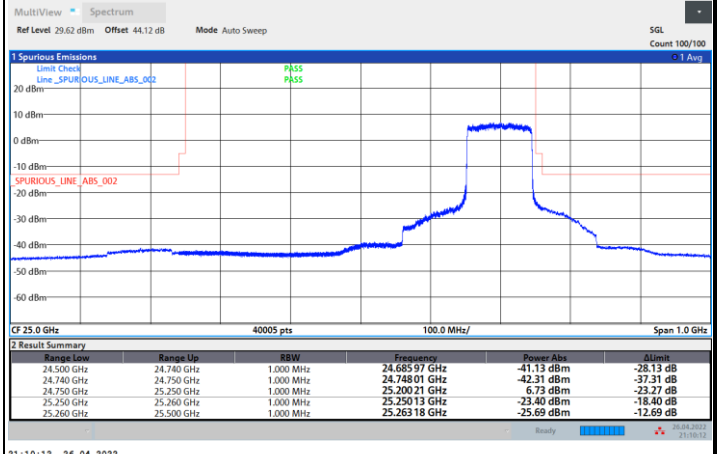


NR Band n258B / 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

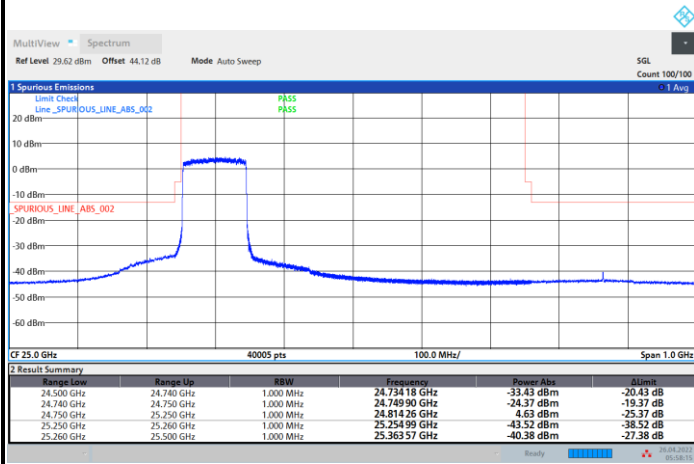




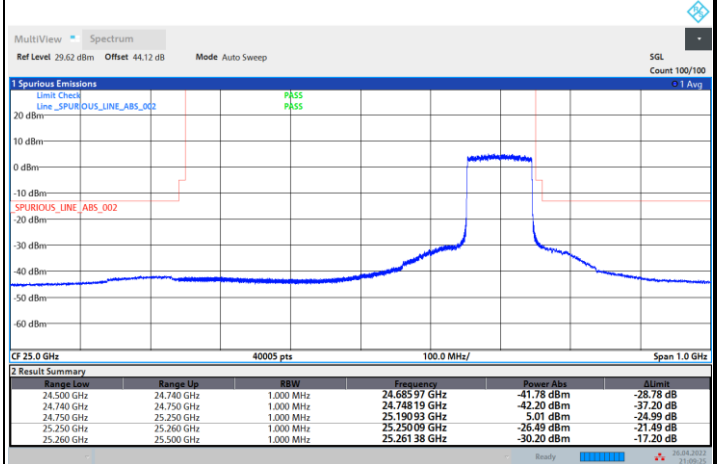
DFT-s-OFDM Module B

NR Band n258B / 100MHz / 16QAM

Lowest Band Edge / Full RB

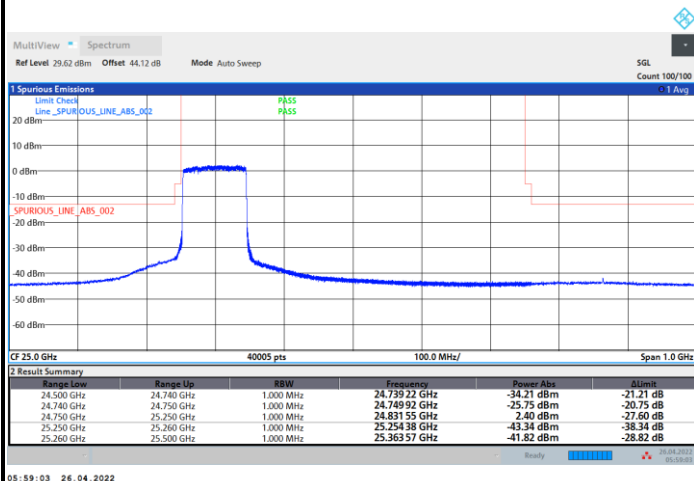


Highest Band Edge / Full RB

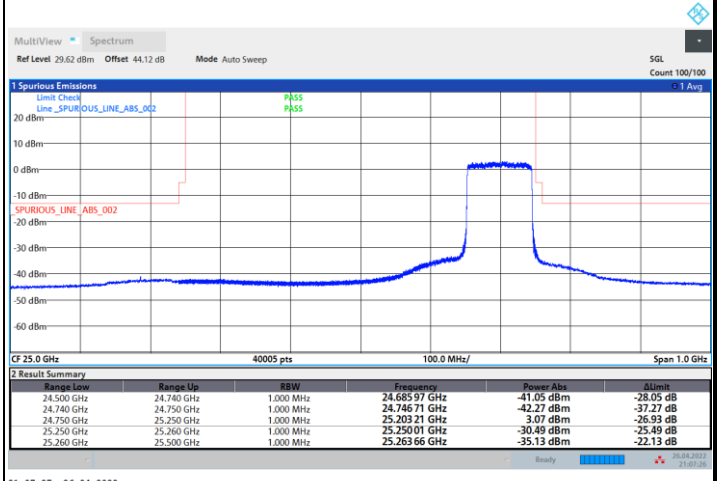


NR Band n258B / 100MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

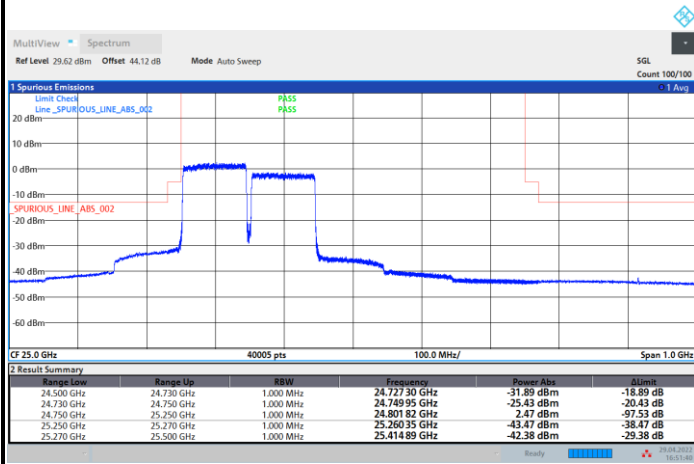




DFT-s-OFDM Module B

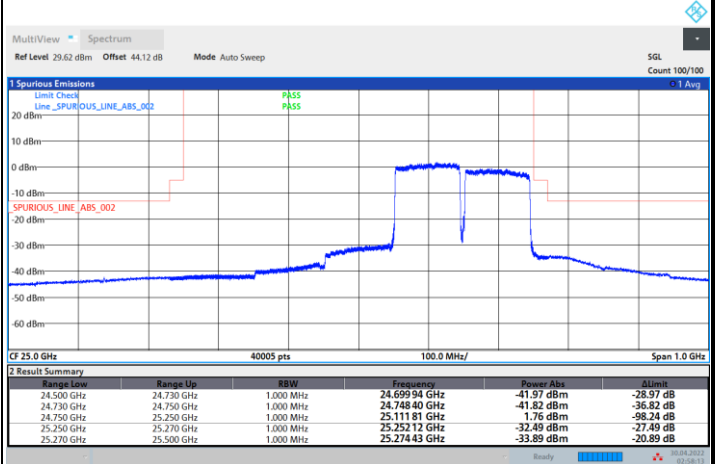
NR Band n258B / 200MHz / QPSK

Lowest Band Edge / Full RB



16:51:40 29.04.2022

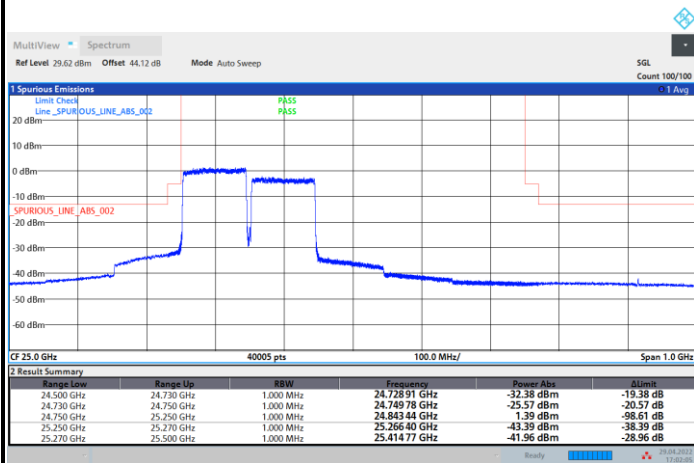
Highest Band Edge / Full RB



02:58:14 30.04.2022

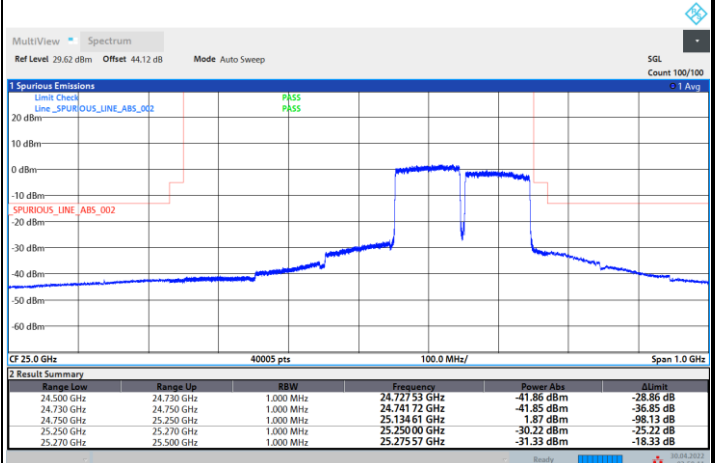
NR Band n258B / 200MHz / 16QAM

Lowest Band Edge / Full RB



17:02:05 29.04.2022

Highest Band Edge / Full RB



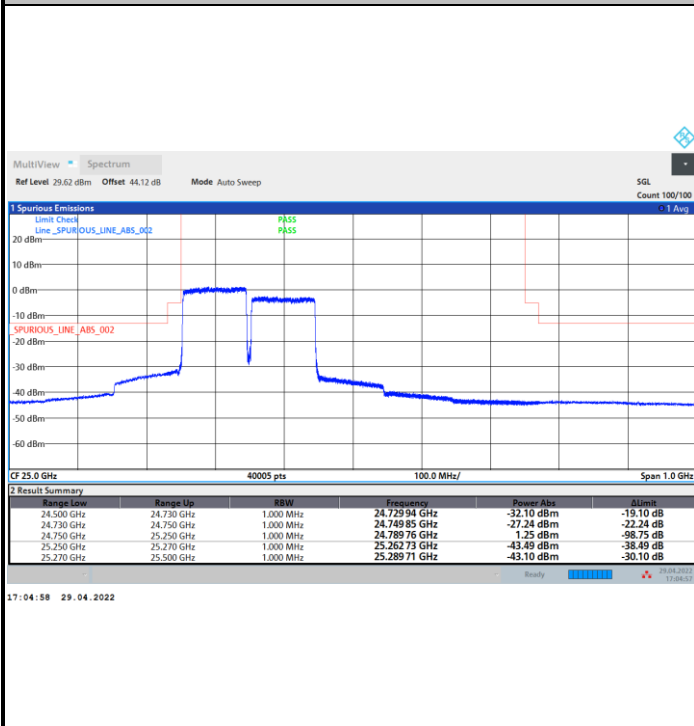
02:59:11 30.04.2022



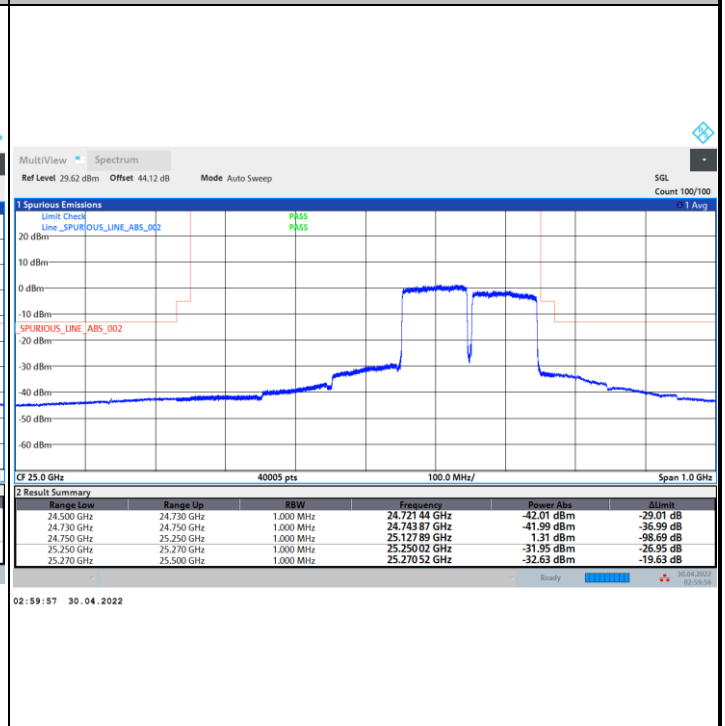
DFT-s-OFDM Module B

NR Band n258B / 200MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

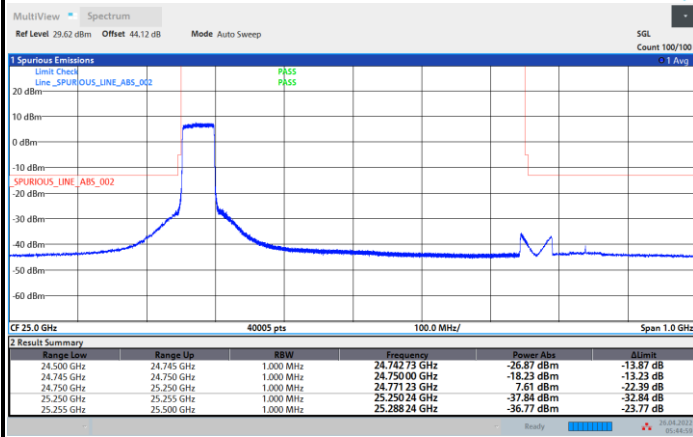




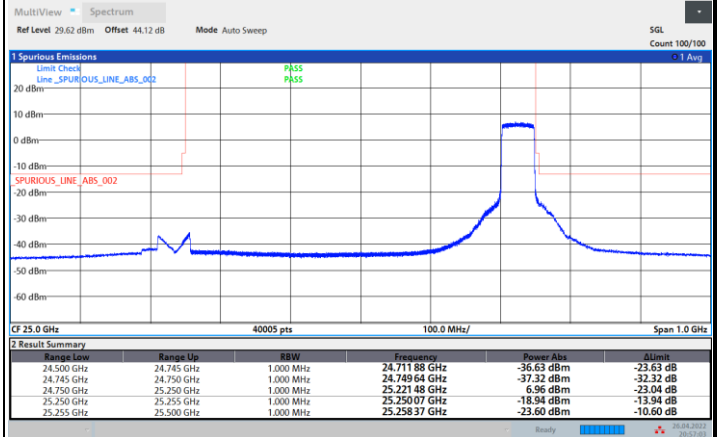
CP-OFDM Module B

NR Band n258B / 50MHz / QPSK

Lowest Band Edge / Full RB

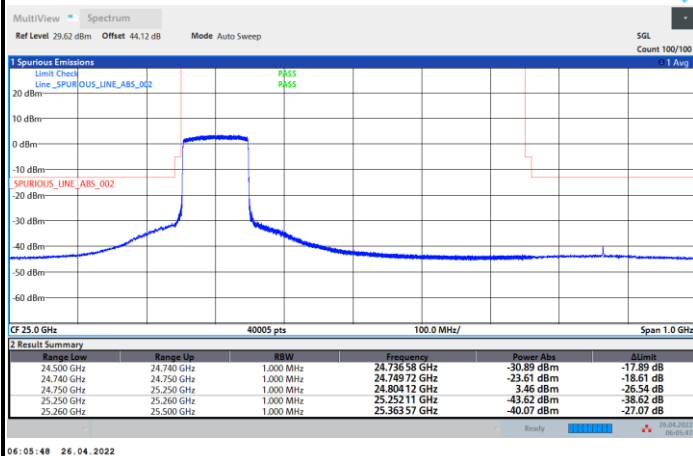


Highest Band Edge / Full RB

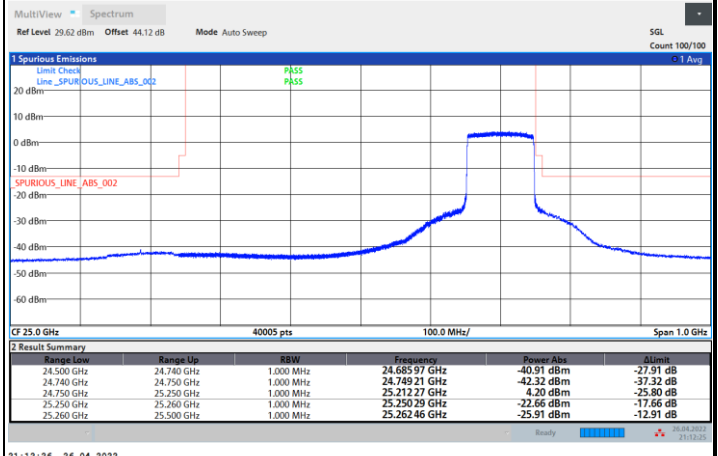


NR Band n258B / 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



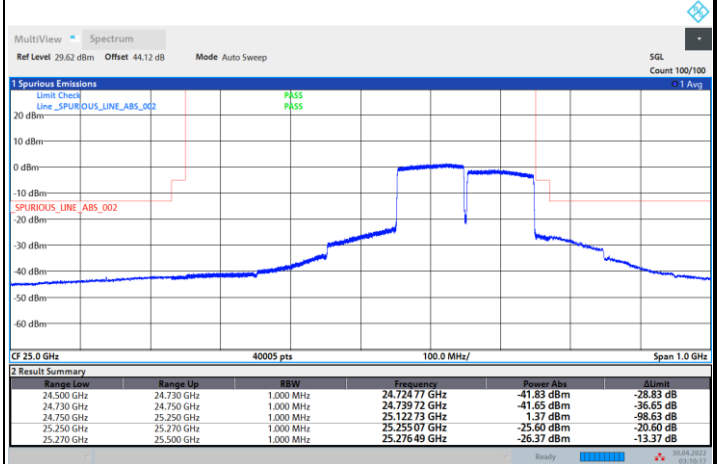
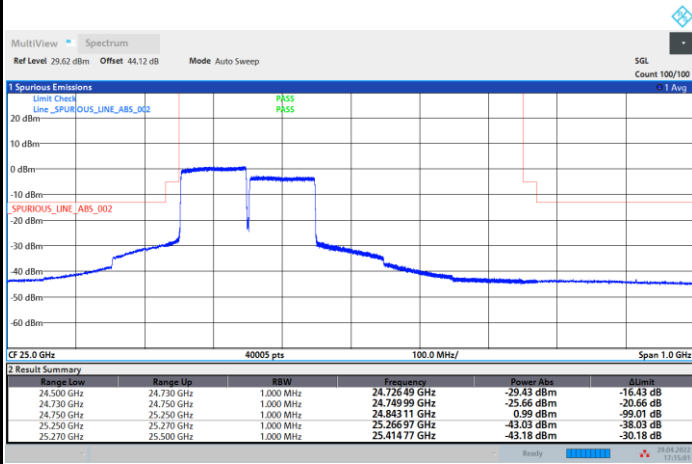


CP-OFDM Module B

NR Band n258B / 200MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

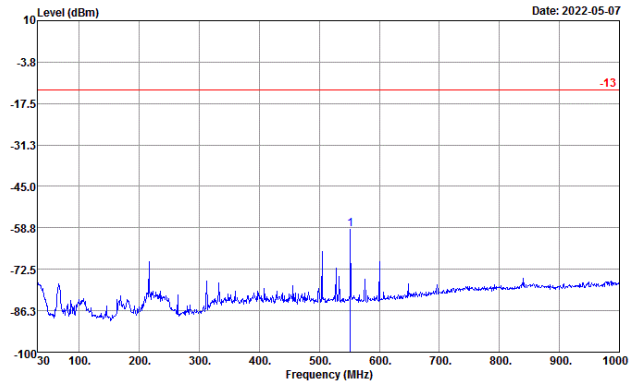




Spurious Emission

NR Band n258B (30MHz-1GHz)

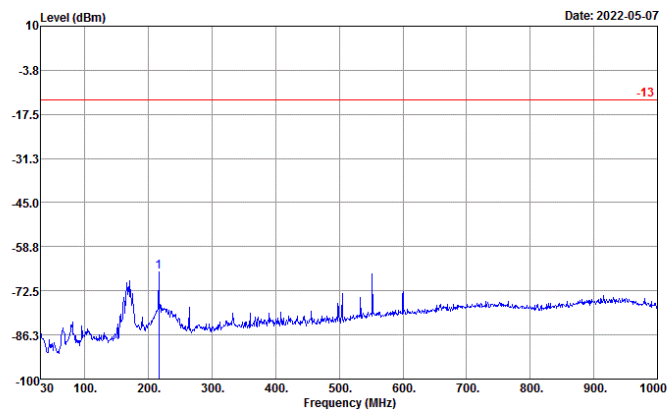
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 102919-05
 : n258b MB

Freq	Level	Limit	Over	Limit
			Limit	Line
MHz	dBm	dB	dB	dBm
1	551.86	-59.17	-46.17	-13.00

Vertical



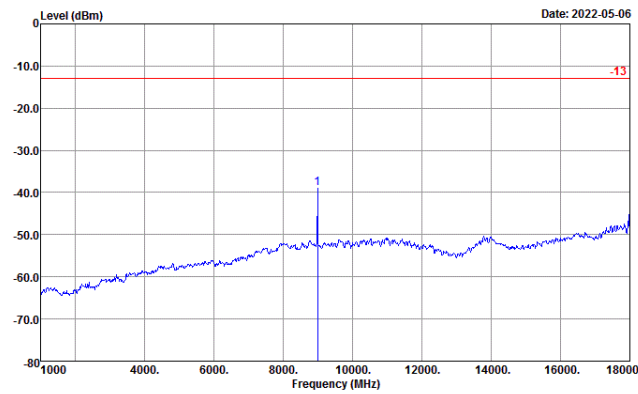
Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 102919-05
 : n258b MB

Freq	Level	Limit	Over	Limit
			Limit	Line
MHz	dBm	dB	dB	dBm
1	216.24	-66.69	-53.69	-13.00



NR Band n258B (1GHz-18GHz)

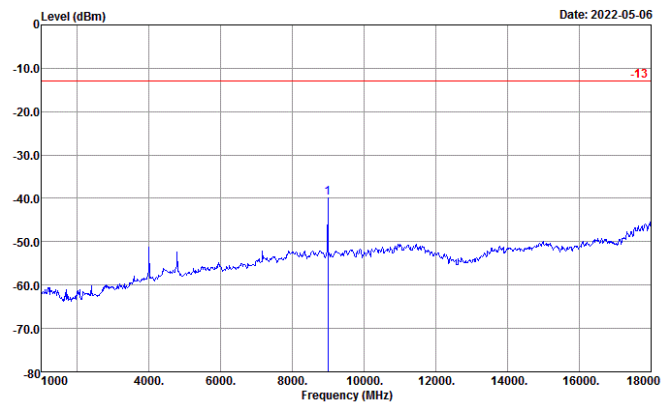
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 102919-05
 : n258B MB

Freq	Level	Over	Limit
		Limit	Line
MHz	dBm	dB	dBm
1	8990.00	-39.03	-26.03 -13.00

Vertical



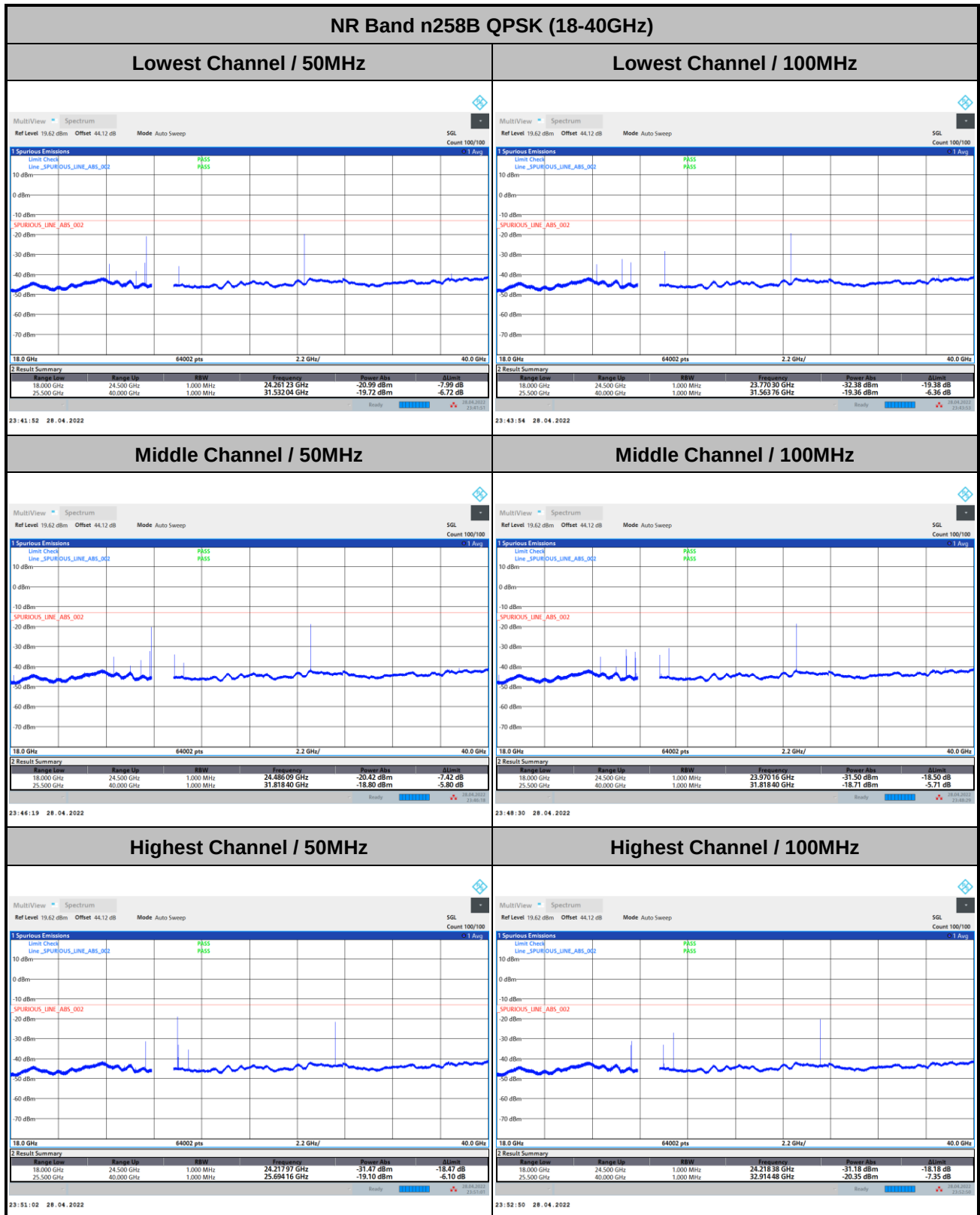
Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 102919-05
 : n258B MB

Freq	Level	Over	Limit
		Limit	Line
MHz	dBm	dB	dBm
1	8990.00	-39.95	-26.95 -13.00



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

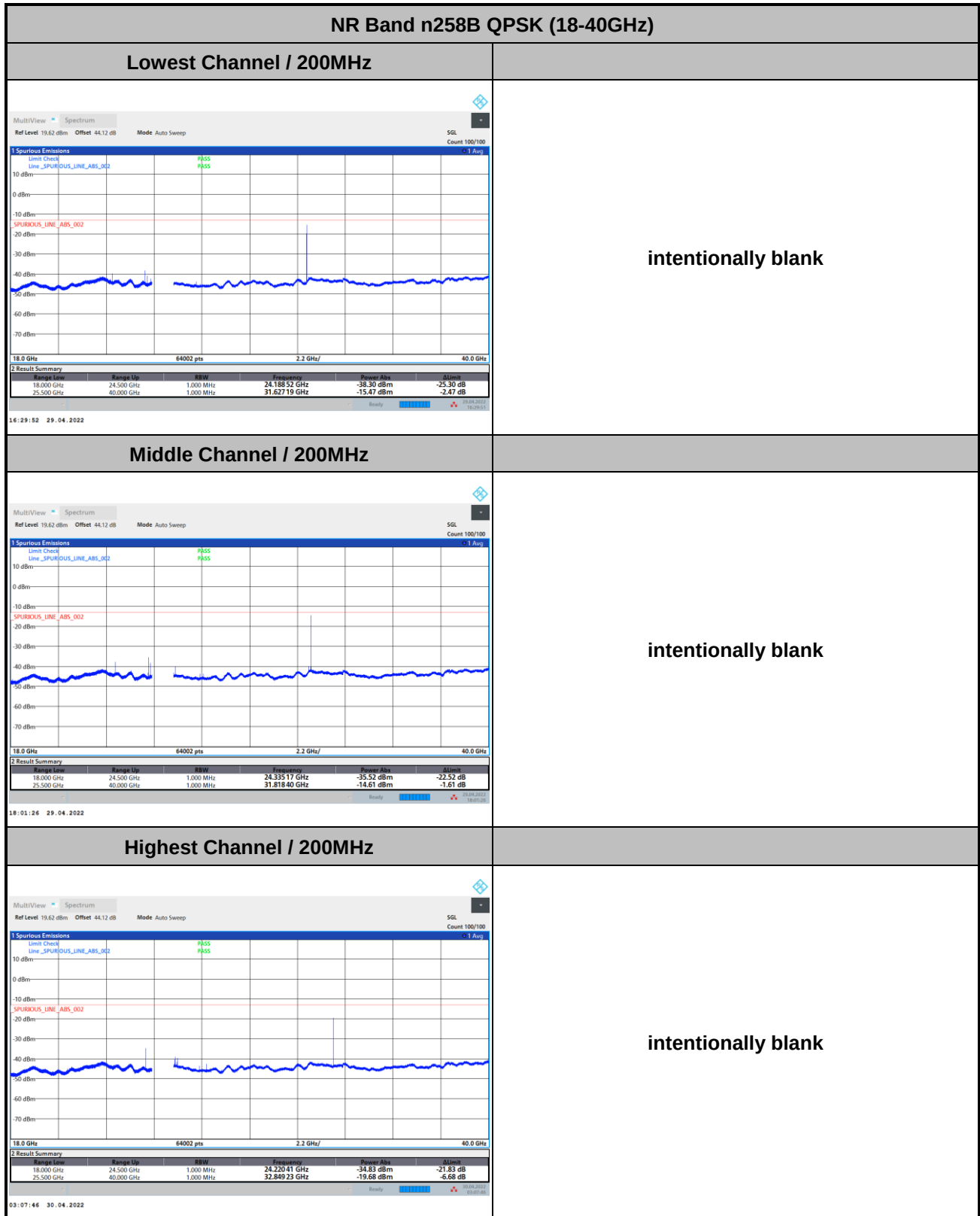
DFT-s-OFDM Module B



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



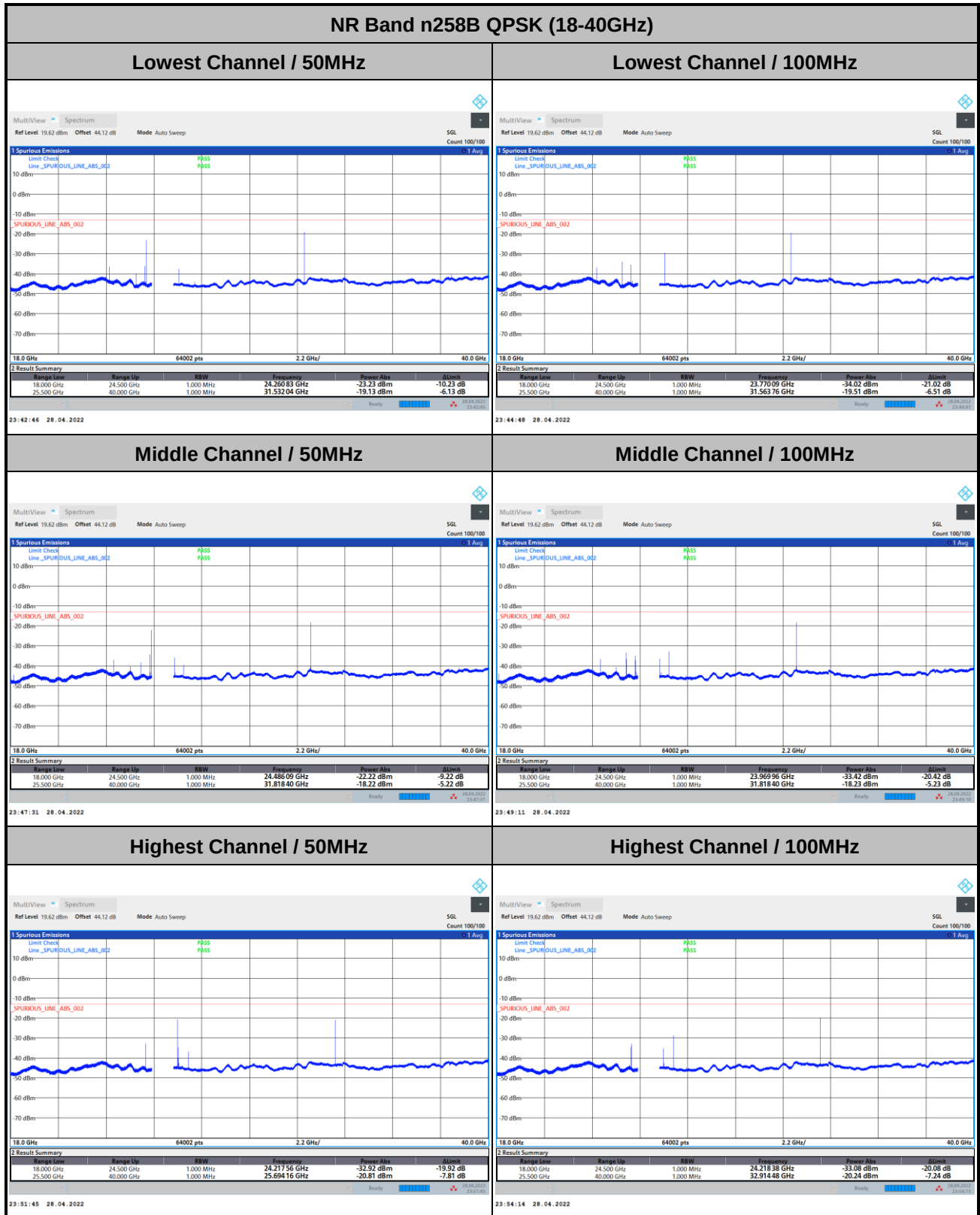
DFT-s-OFDM Module B



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



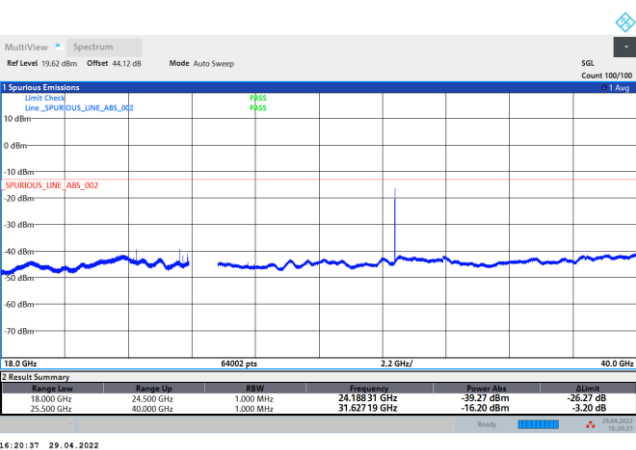
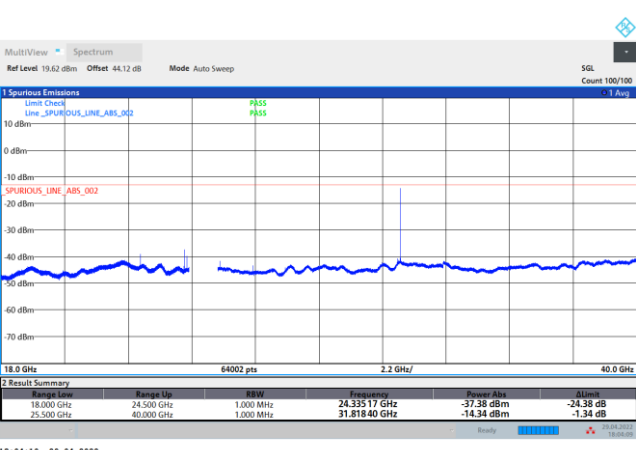
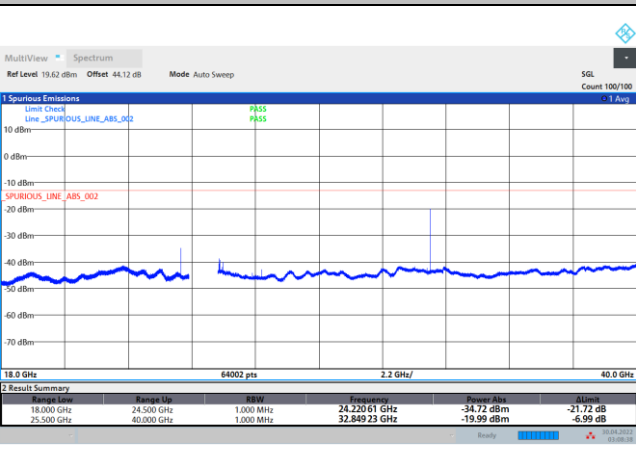
CP-OFDM Module B



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



CP-OFDM Module B

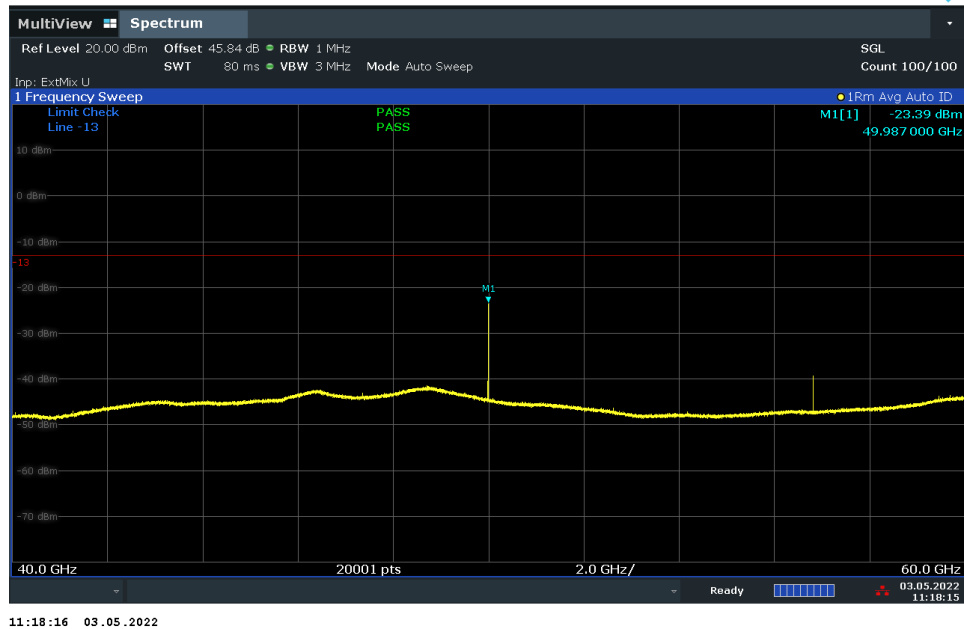
NR Band n258B QPSK (18-40GHz)	
Lowest Channel / 200MHz  intentionally blank	
Middle Channel / 200MHz  intentionally blank	
Highest Channel / 200MHz  intentionally blank	

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

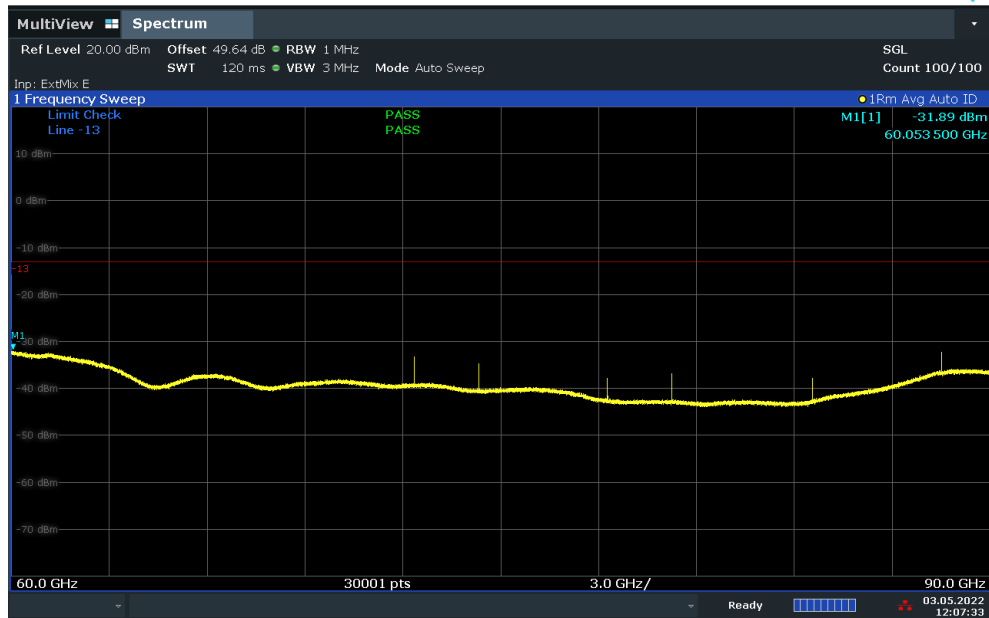


NR Band n258B

(40GHz-60GHz)



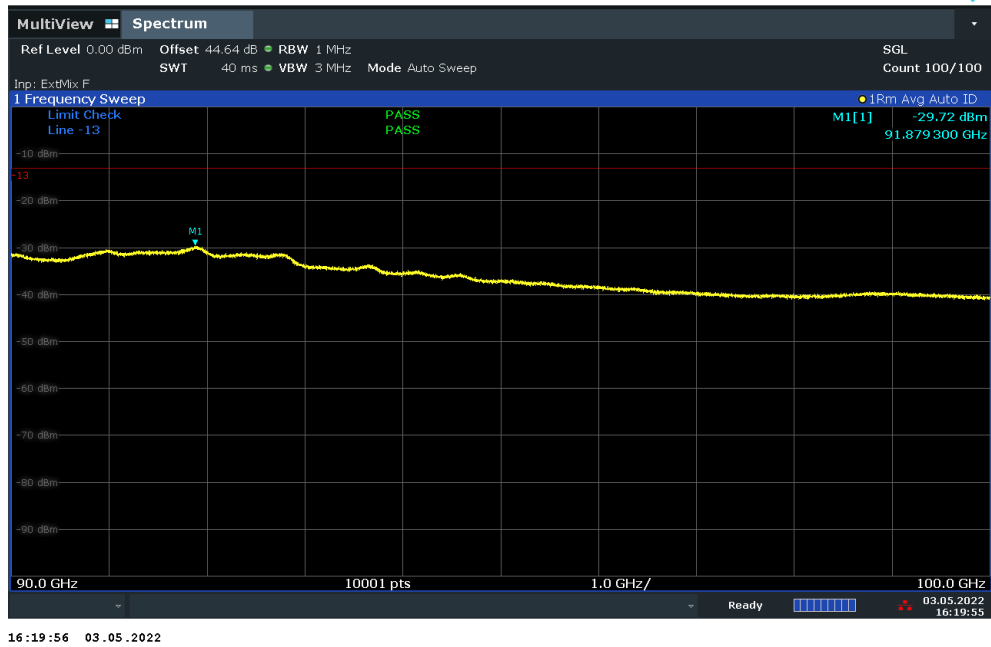
$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 43.1 + 0.54 + 107 + 20\log(1) - 104.8 = 45.84 \text{ (dB)}\end{aligned}$$

NR Band n258B
(60GHz-90GHz)


12:07:33 03.05.2022

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

$$= 46.9 + 0.54 + 107 + 20\log(1) - 104.8 = 49.64 \text{ (dB)}$$

NR Band n258B
(90GHz-100GHz)


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

$$= 47.92 + 0.54 + 107 + 20\log(0.5) - 104.8 = 44.64 \text{ (dB)}$$

Frequency Stability

Test Conditions		NR Band n258B / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	25.001032	83.900	2.179	Pass
40	Normal Voltage	25.001062	53.900	1.400	
30	Normal Voltage	25.0010819	34.000	0.883	
20(Ref.)	Normal Voltage	25.0011159	0.000	0.000	
10	Normal Voltage	25.0011379	-22.000	0.571	
0	Normal Voltage	25.0011808	-64.900	1.686	
-10	Normal Voltage	25.0011928	-76.900	1.997	
-20	Normal Voltage	25.0012188	-102.900	2.673	
-30	Normal Voltage	25.0012048	-88.900	2.309	
20	Maximum Voltage	25.0011129	3.000	0.078	
20	Normal Voltage	25.0011149	1.000	0.026	
20	Battery End Point	25.0011139	2.000	0.052	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.40 V. ; Maximum Voltage =4.30 V.
2. The frequency fundamental emissions stay within the operation band.

NR Band n260 Module A A AGH+V

Occupied Bandwidth

Mode	DFT-s-OFDM Module A NR Band n260 : 99%OBW(MHz)								
BW	50MHz			100MHz			200MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	46.03	46.19	46.28	91.53	91.68	91.52	189.55	189.17	189.22
Middle CH	46.04	46.14	46.47	91.55	91.59	91.60	189.27	189.49	189.52
Highest CH	46.06	46.19	46.30	91.51	91.51	91.48	190.58	190.69	190.62

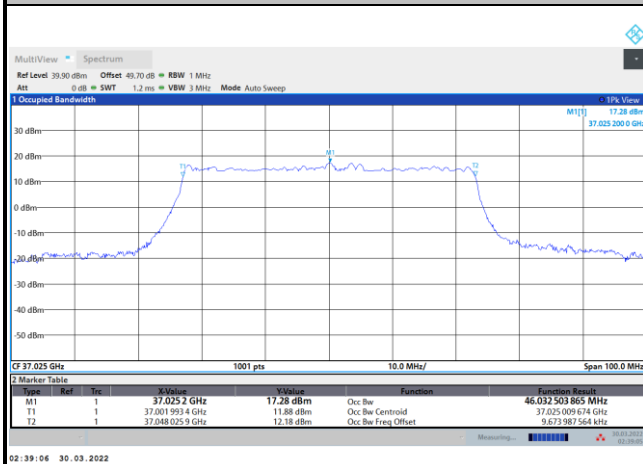
Mode	CP-OFDM Module A NR Band n260 : 99%OBW(MHz)		
BW	50MHz	100MHz	200MHz
Mod.	QPSK	QPSK	QPSK
Lowest CH	46.92	95.06	192.50
Middle CH	46.83	94.90	192.60
Highest CH	46.14	94.34	194.17



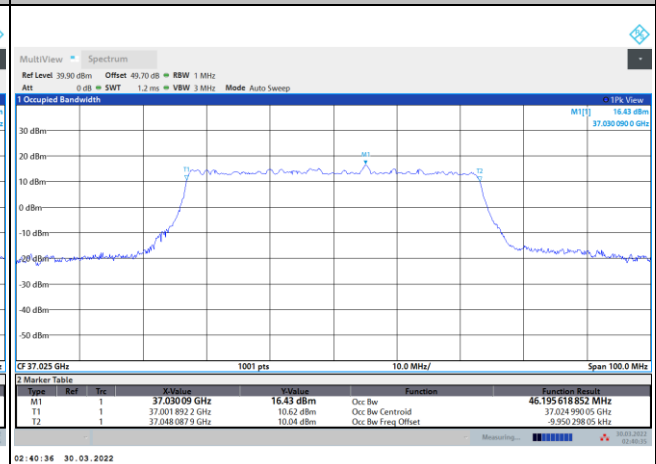
DFT-s-OFDM Module A

NR Band n260

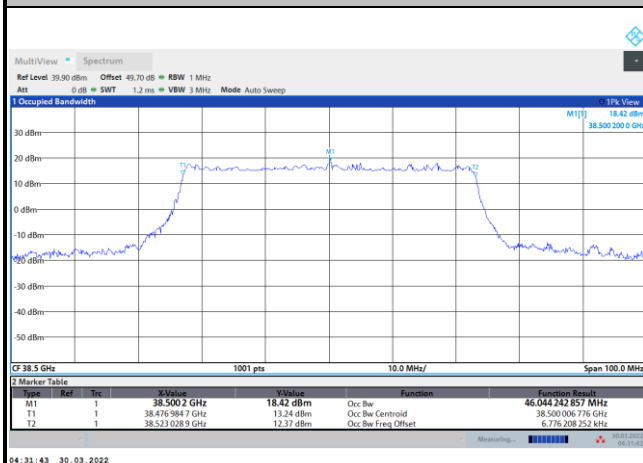
Lowest Channel / 50MHz / QPSK



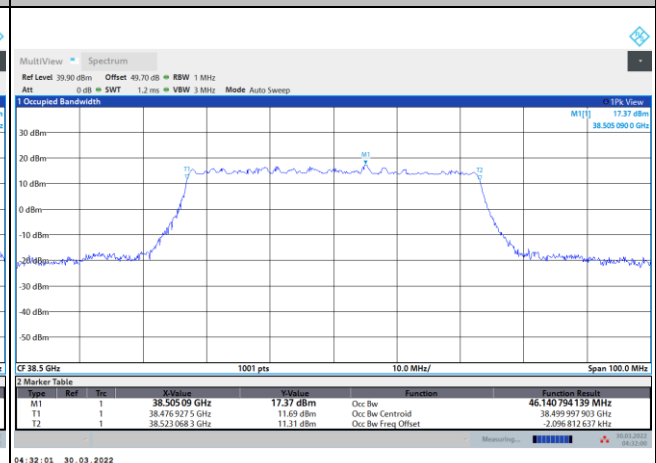
Lowest Channel / 50MHz / 16QAM



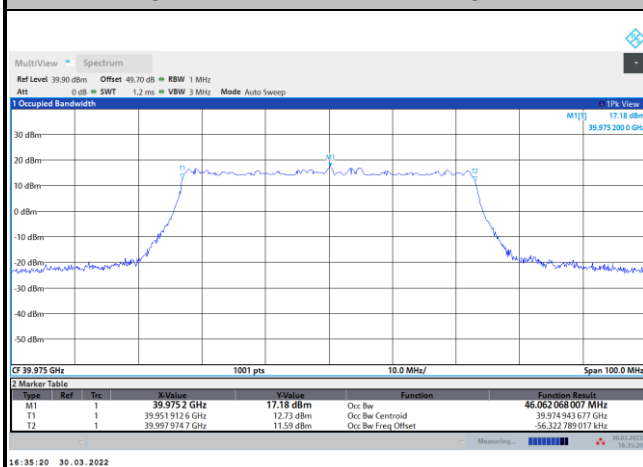
Middle Channel / 50MHz / QPSK



Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

