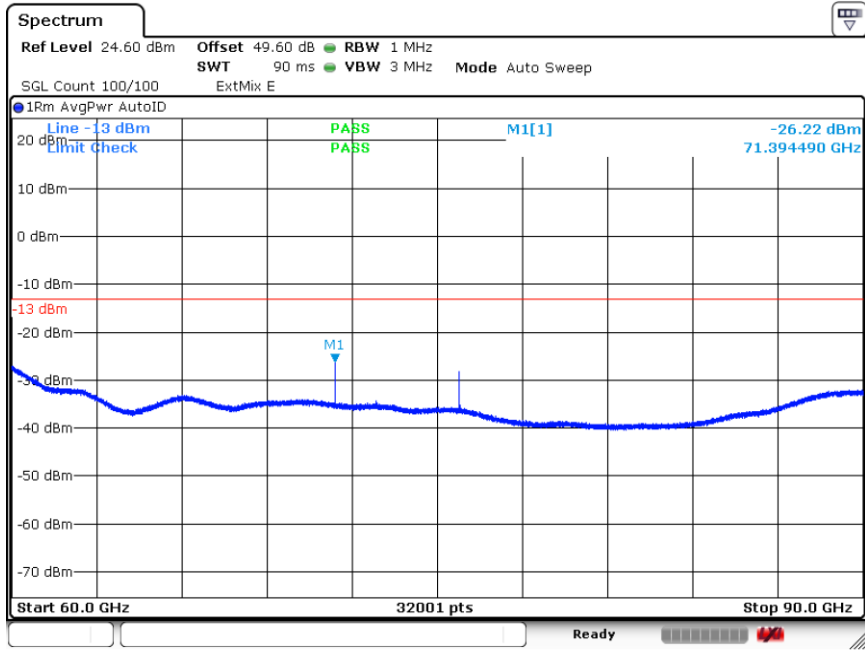




NR Band n258A

(60GHz-90GHz)



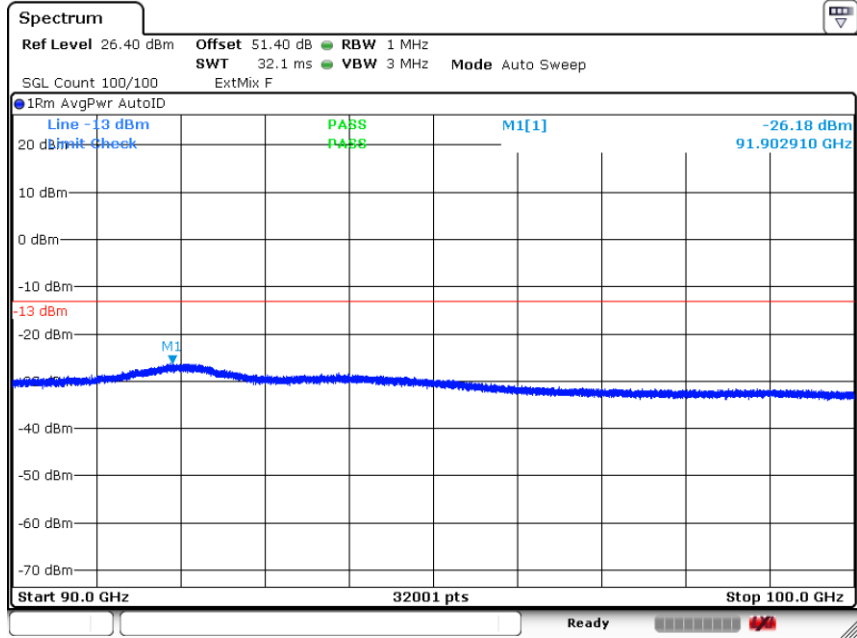
Date: 30.DEC.2020 17:10:57

Remark: Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8
 = 45.4 + 2 + 107 + 20log(1) – 104.8 = 49.6 (dB)



NR Band n258A

(90GHz-100GHz)



Date: 30.DEC.2020 17:31:28

Remark: Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8
 = 47.2 + 2 + 107 + 20log(1) – 104.8 = 51.4 (dB)



Frequency Stability

Test Conditions		NR Band n258a / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	24.35018332	-183.320	7.529	Pass
40	Normal Voltage	24.3500979	-97.900	4.021	
30	Normal Voltage	24.35004695	-46.950	1.928	
20(Ref.)	Normal Voltage	24.35	0.000	0.000	
10	Normal Voltage	24.34996354	36.460	1.497	
0	Normal Voltage	24.34994106	58.940	2.421	
-10	Normal Voltage	24.34991858	81.420	3.344	
-20	Normal Voltage	24.34989361	106.390	4.369	
-30	Normal Voltage	24.34988511	114.890	4.718	
20	Maximum Voltage	24.3500005	-0.500	0.021	
20	Normal Voltage	24.349995	5.000	0.205	
20	Battery End Point	24.34999301	6.990	0.287	

Note:

1. Normal Voltage =7.74 V. ; Battery End Point (BEP) =7.2 V. ; Maximum Voltage =8.9 V.
2. The frequency fundamental emissions stay within the operation band.



NR Band n258A Module 1

Occupied Bandwidth

AG0

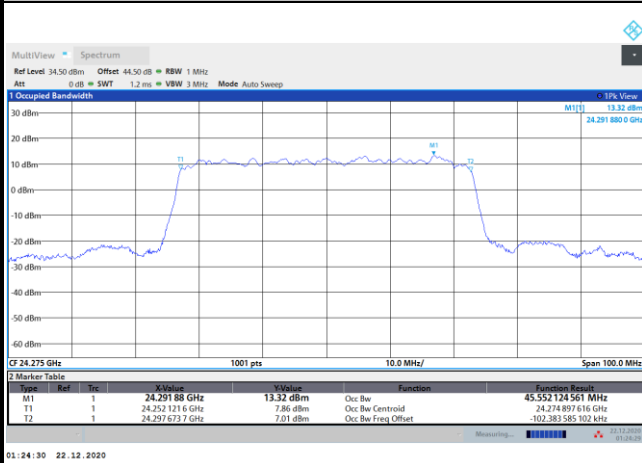
Mode	DFT-s-OFDM Module 1 NR Band n258A : 99%OBW(MHz)											
BW	50MHz				100MHz				200MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	45.55	45.32	45.22	45.29	89.86	90.65	90.39	90.67	-	-	-	-
Middle CH	45.68	45.61	45.30	45.40	90.04	91.00	90.60	90.93	188.36	189.03	188.94	189.23
Highest CH	45.63	45.52	45.24	45.35	89.71	90.59	90.28	90.50	-	-	-	-



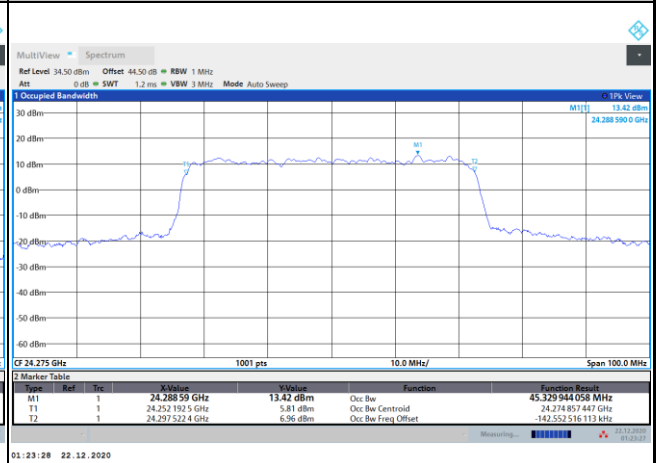
DFT-s-OFDM Module 1

NR Band n258A

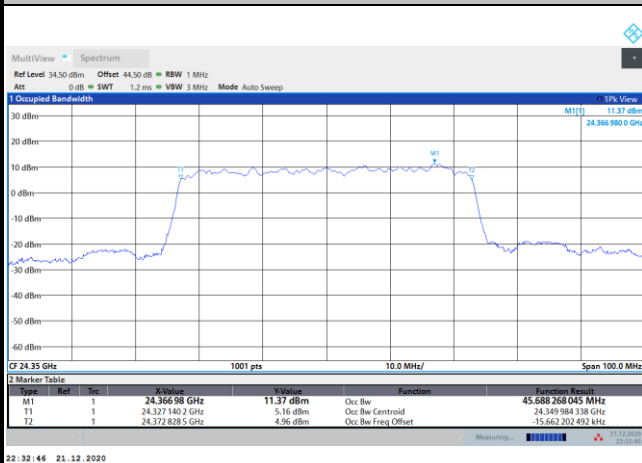
Lowest Channel / 50MHz / BPSK



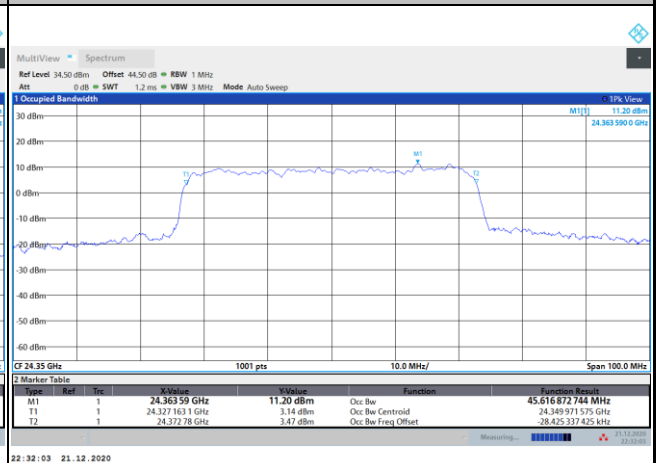
Lowest Channel / 50MHz / QPSK



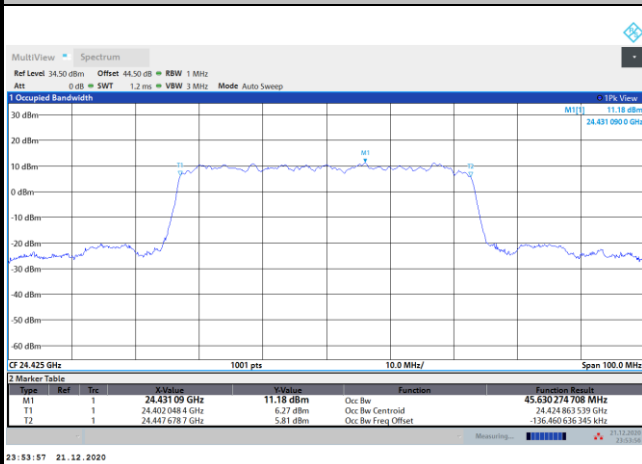
Middle Channel / 50MHz / BPSK



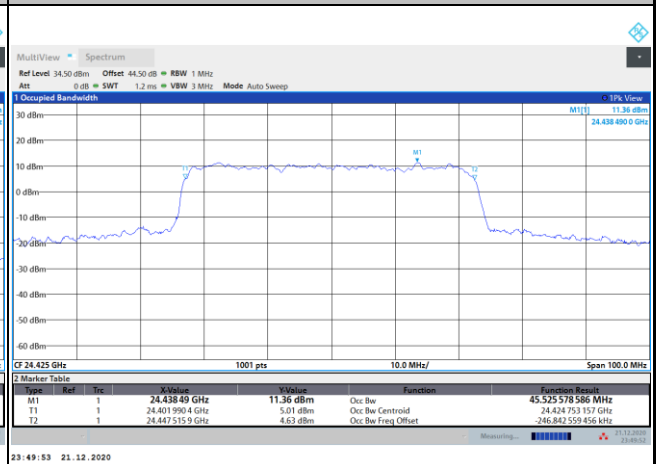
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

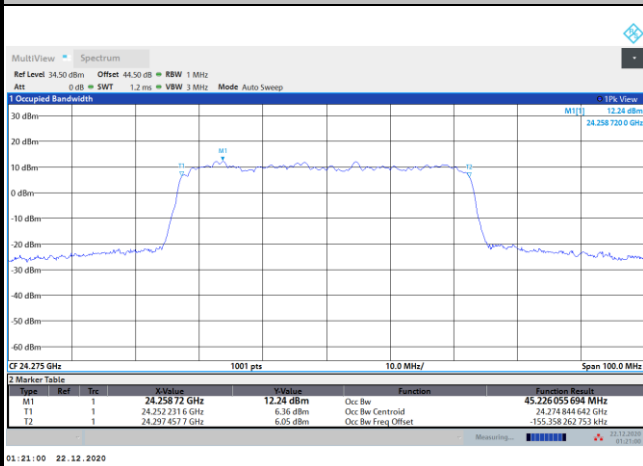




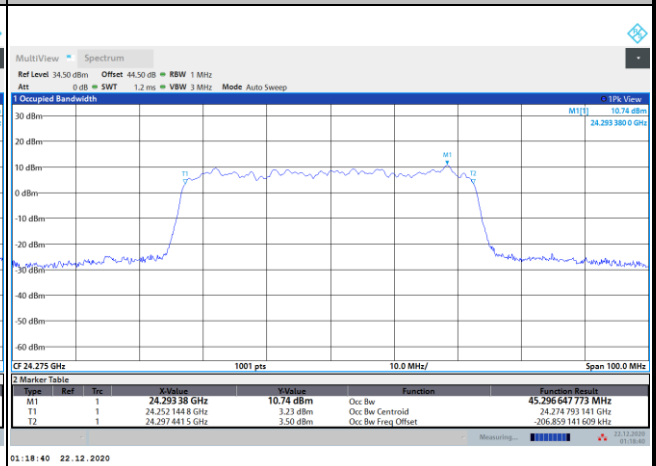
DFT-s-OFDM Module 1

NR Band n258A

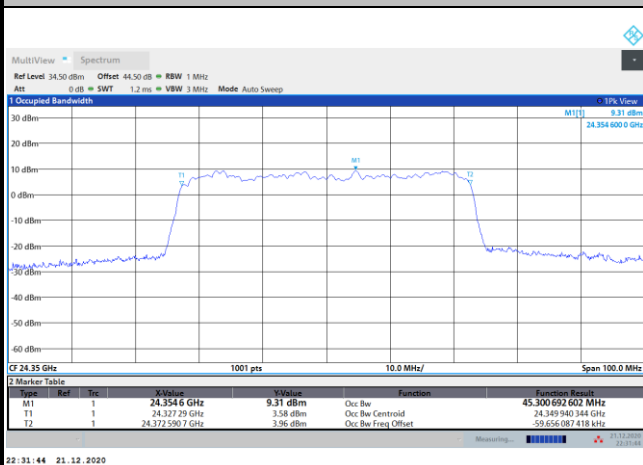
Lowest Channel / 50MHz / 16QAM



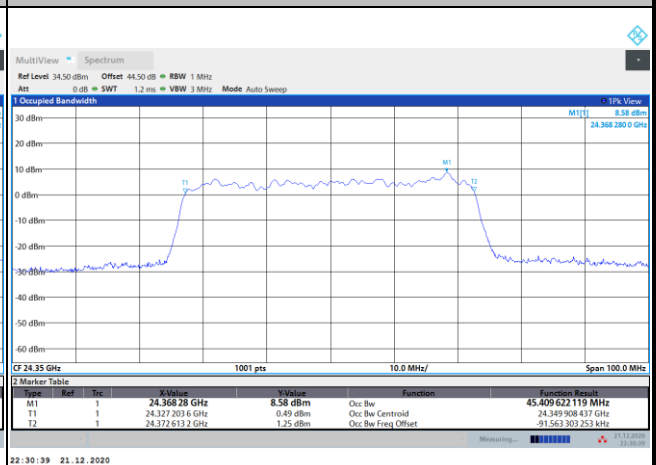
Lowest Channel / 50MHz / 64QAM



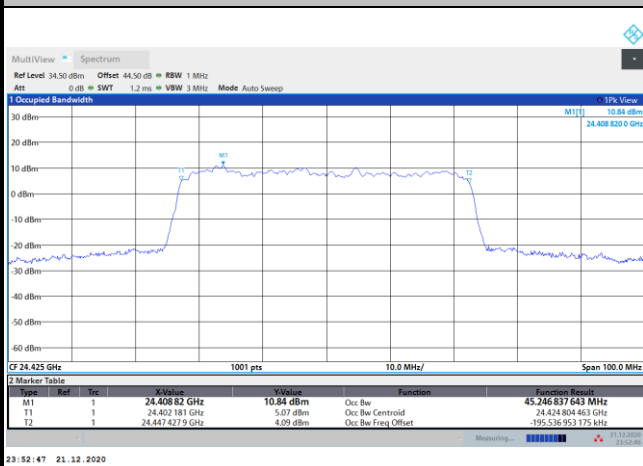
Middle Channel / 50MHz / 16QAM



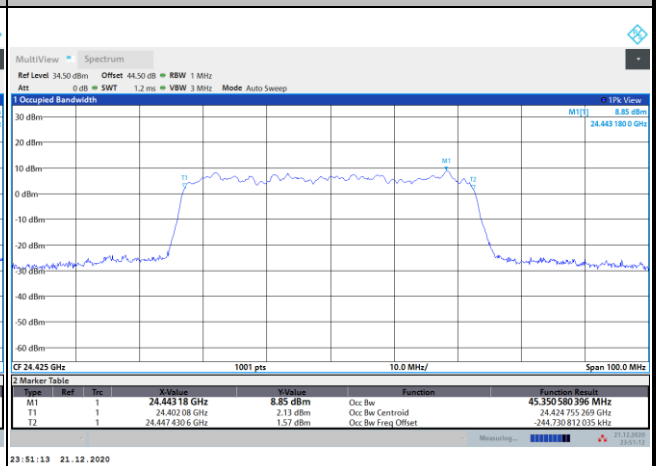
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

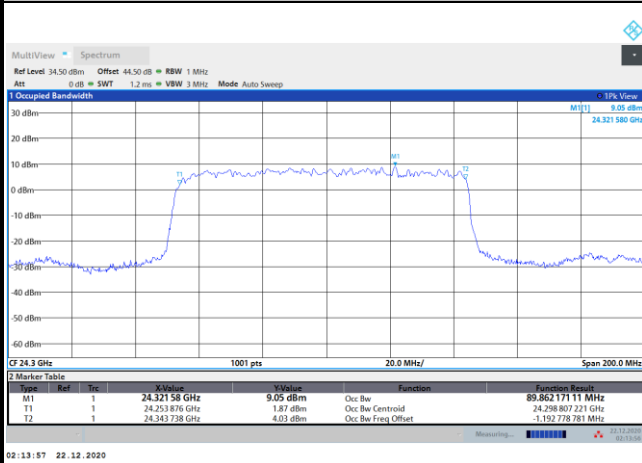




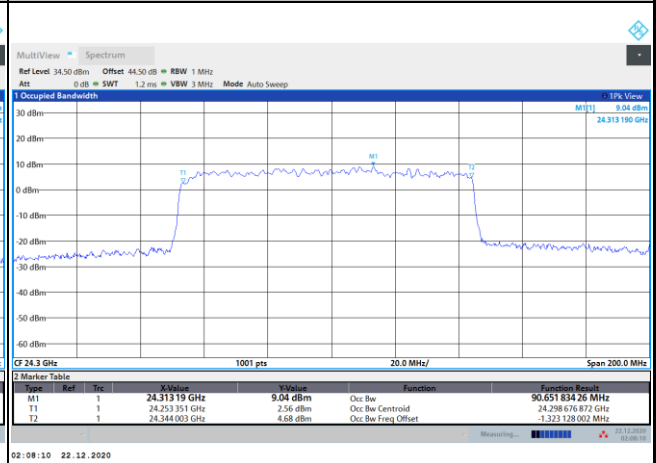
DFT-s-OFDM Module 1

NR Band n258A

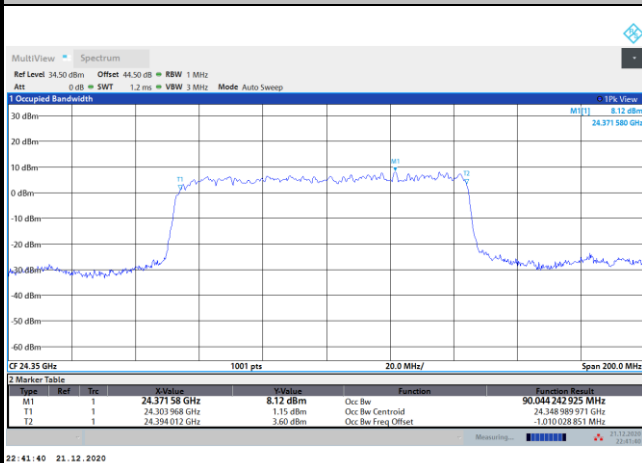
Lowest Channel / 100MHz / BPSK



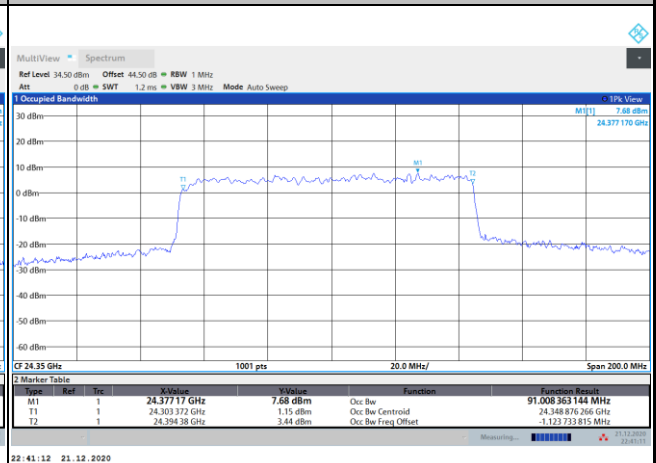
Lowest Channel / 100MHz / QPSK



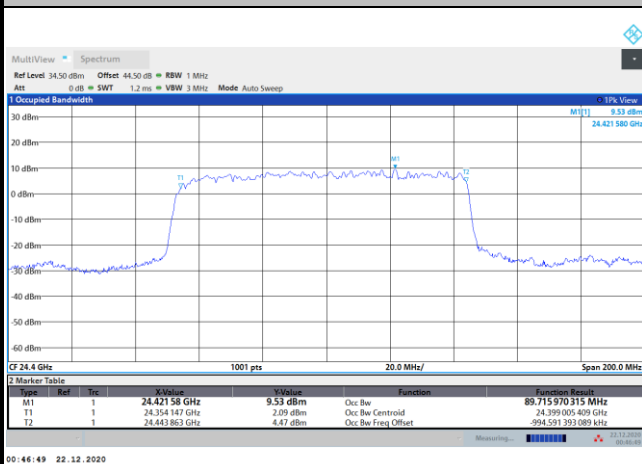
Middle Channel / 100MHz / BPSK



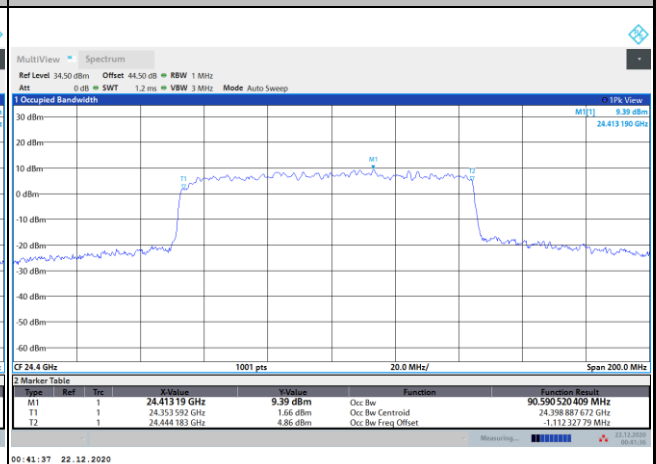
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

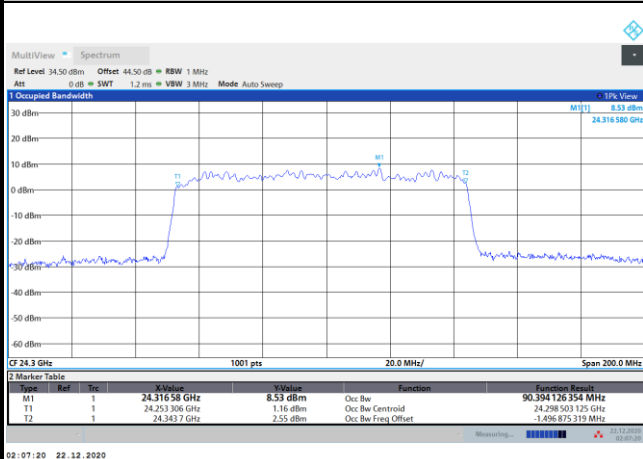




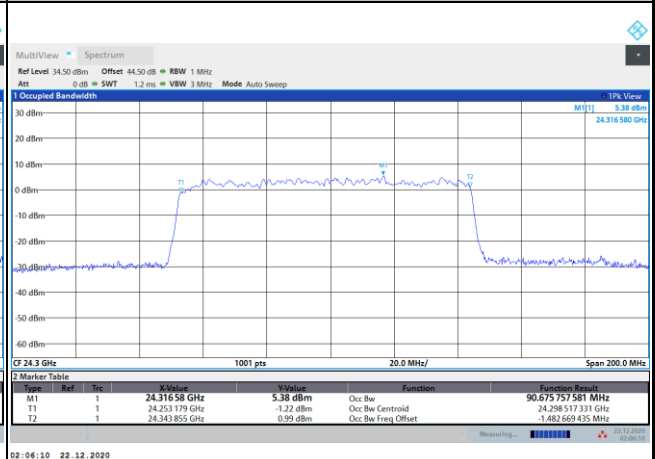
DFT-s-OFDM Module 1

NR Band n258A

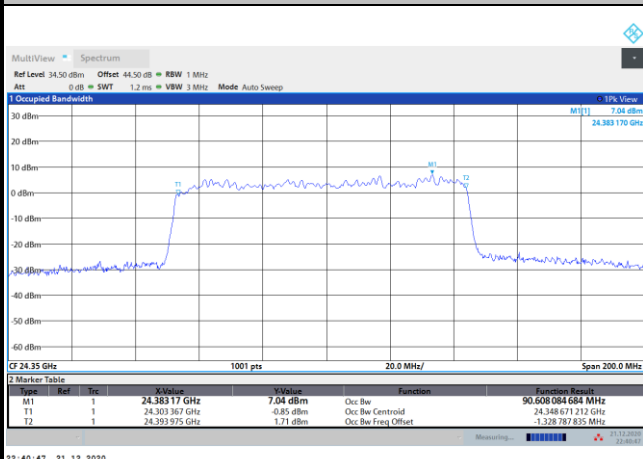
Lowest Channel / 100MHz / 16QAM



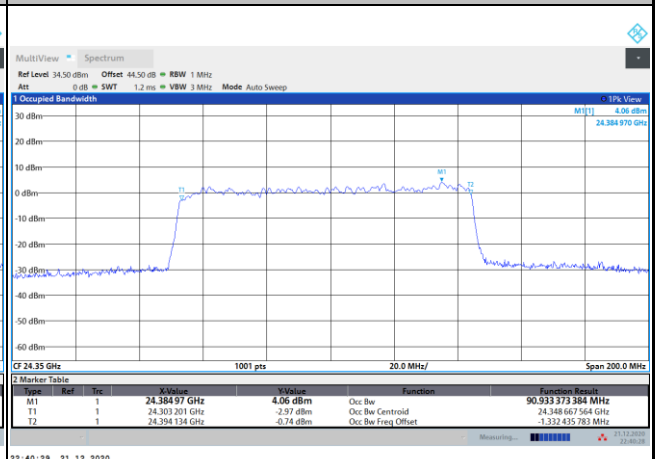
Lowest Channel / 100MHz / 64QAM



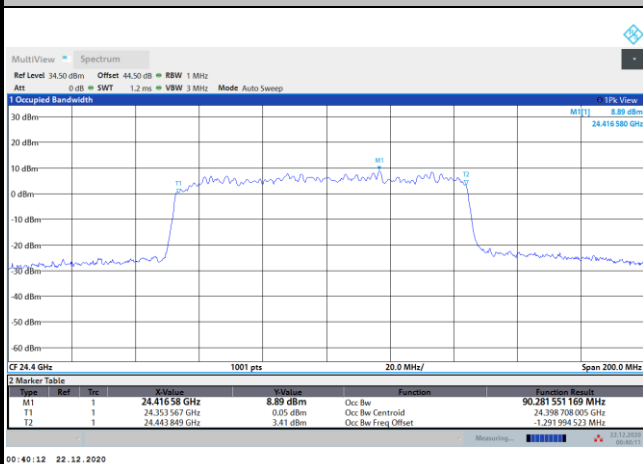
Middle Channel / 100MHz / 16QAM



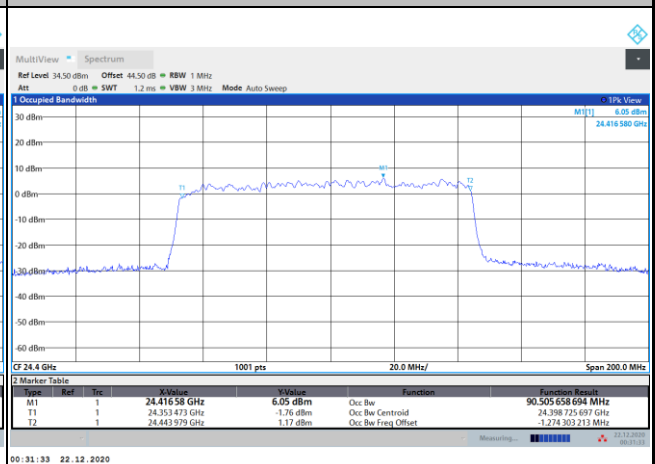
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM

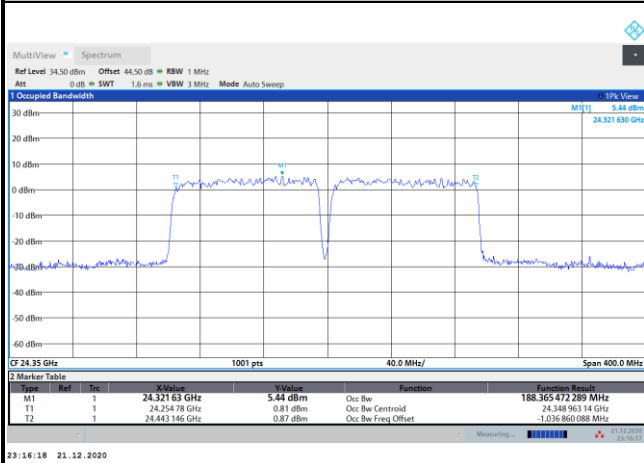




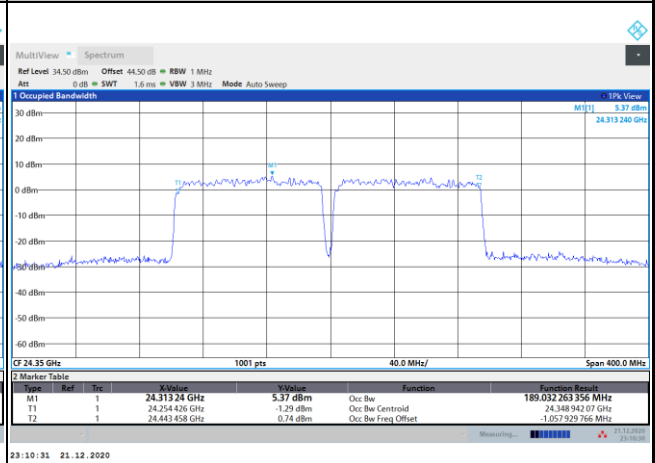
DFT-s-OFDM Module 1

NR Band n258A

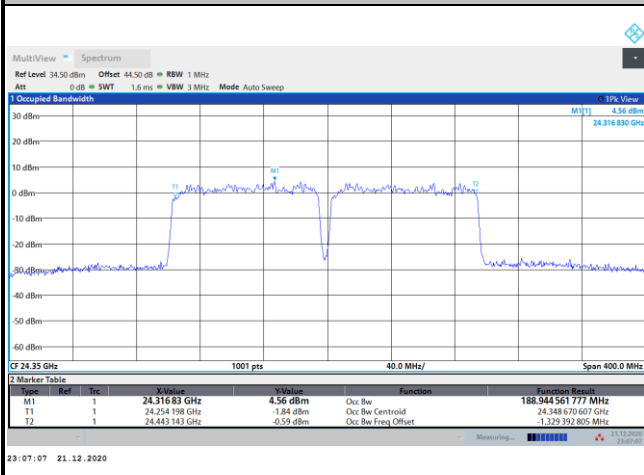
Middle Channel / 200MHz / BPSK



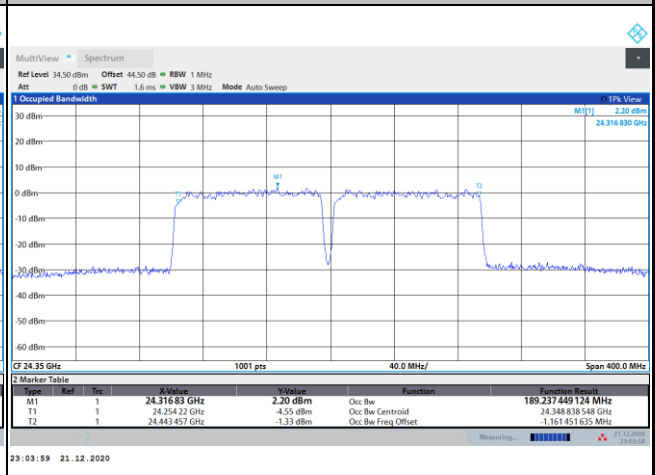
Middle Channel / 200MHz / QPSK



Middle Channel / 200MHz / 16QAM



Middle Channel / 200MHz / 64QAM





AG1

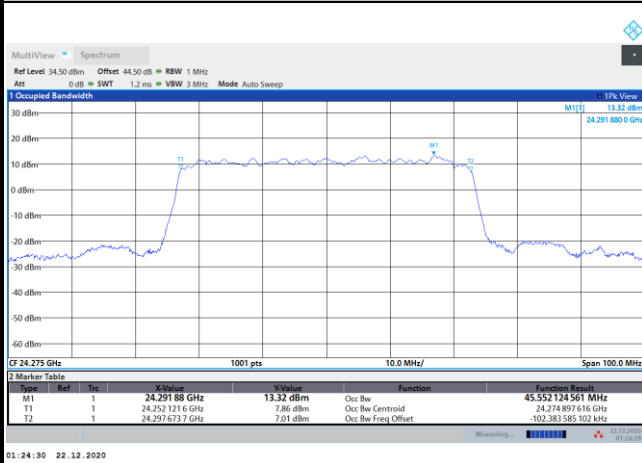
Mode	DFT-s-OFDM Module 1 NR Band n258A : 99%OBW(MHz)											
BW	50MHz				100MHz				200MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	45.55	45.32	45.22	45.29	89.86	90.65	90.39	90.67	-	-	-	-
Middle CH	45.12	45.12	45.43	45.36	90.25	90.17	90.32	90.09	188.76	188.57	188.42	188.34
Highest CH	45.09	45.16	45.45	45.34	90.00	89.83	89.99	89.72	-	-	-	-



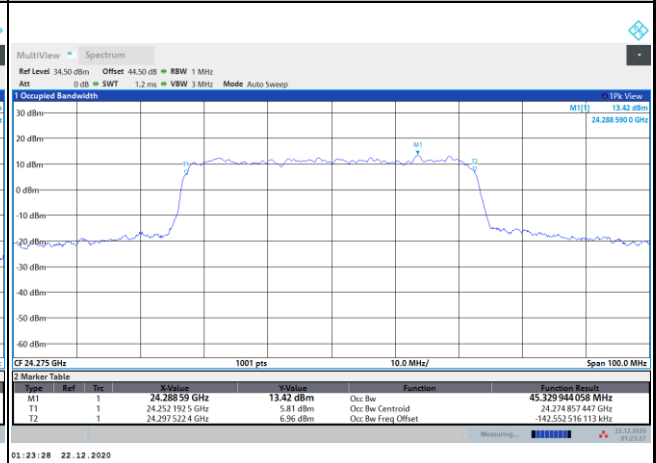
DFT-s-OFDM Module 1

NR Band n258A

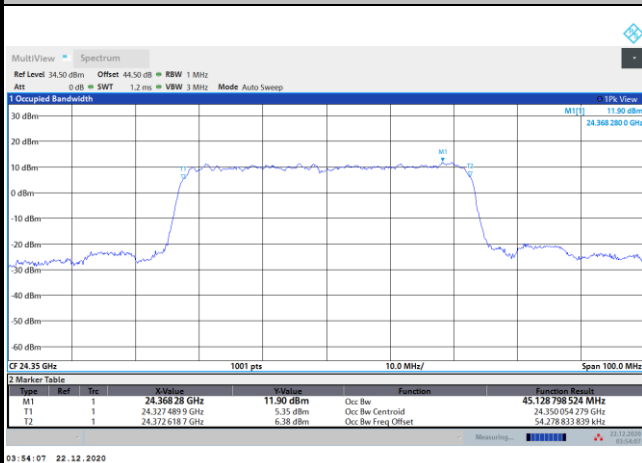
Lowest Channel / 50MHz / BPSK



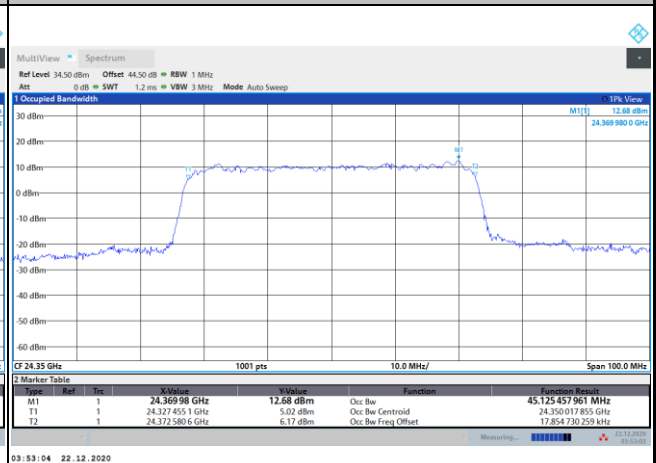
Lowest Channel / 50MHz / QPSK



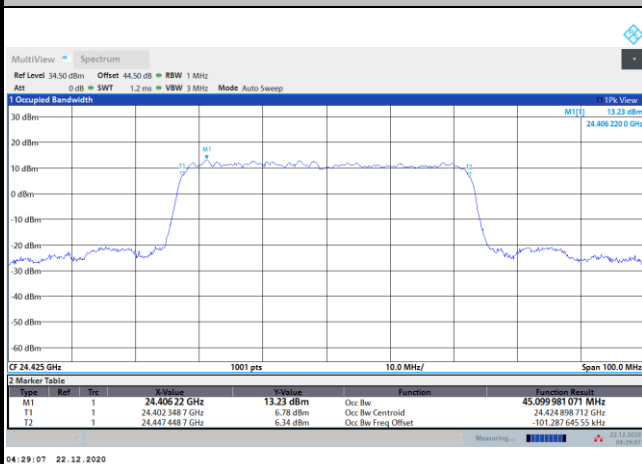
Middle Channel / 50MHz / BPSK



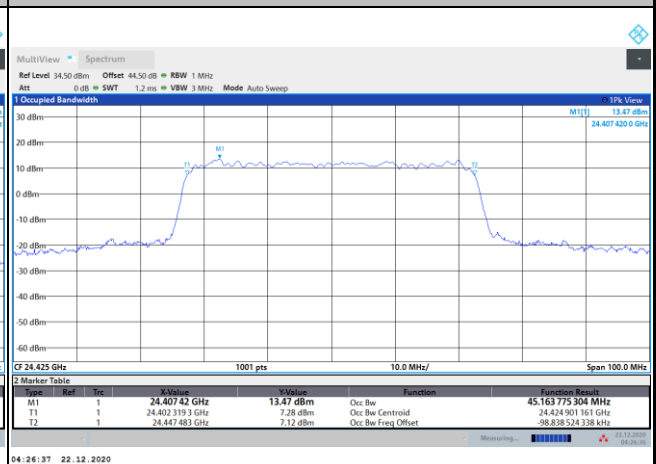
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

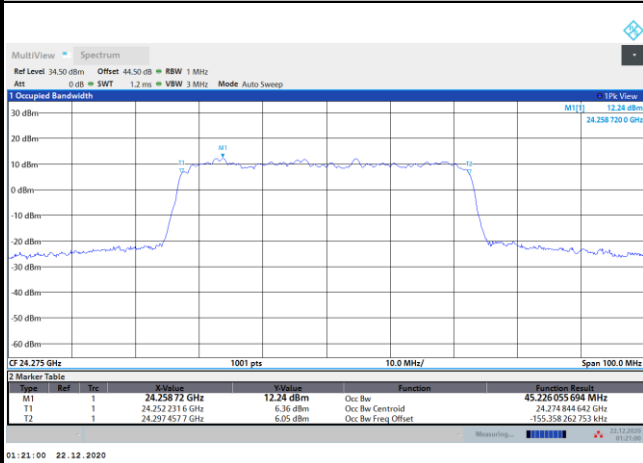




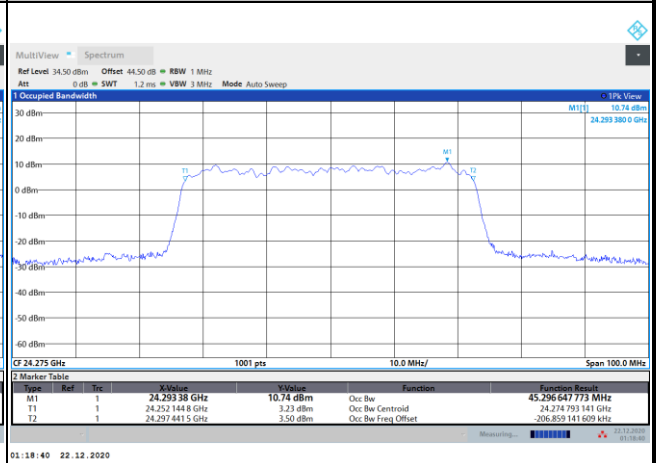
DFT-s-OFDM Module 1

NR Band n258A

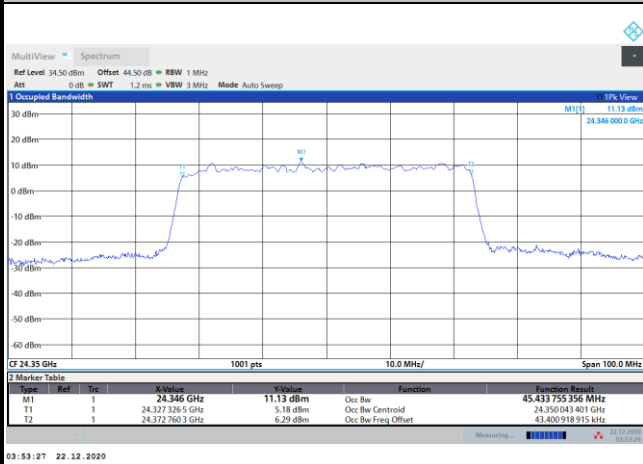
Lowest Channel / 50MHz / 16QAM



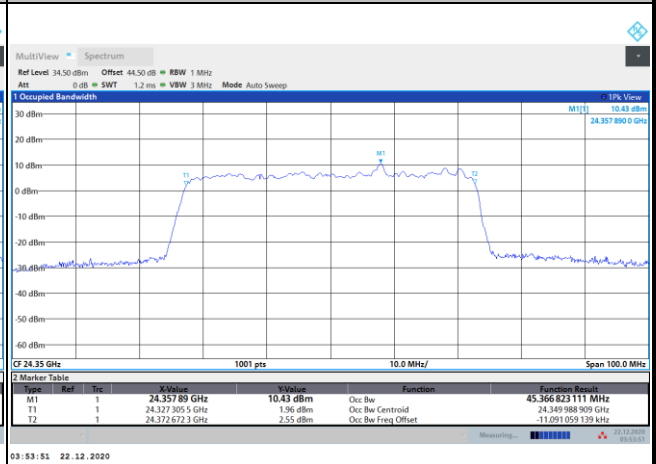
Lowest Channel / 50MHz / 64QAM



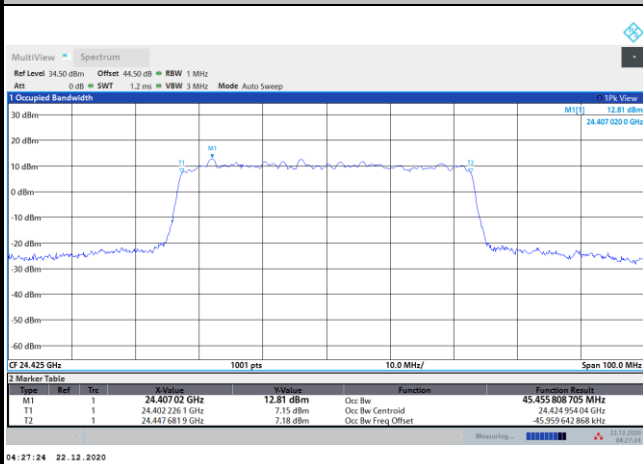
Middle Channel / 50MHz / 16QAM



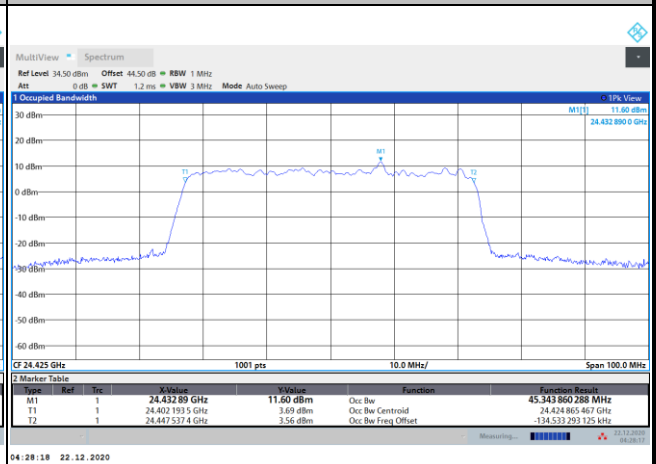
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

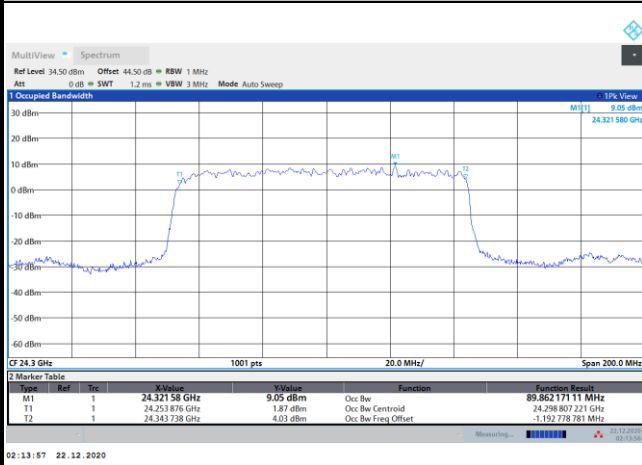




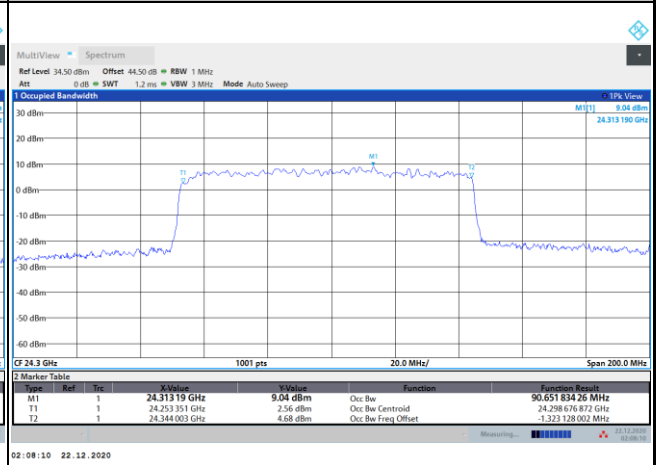
DFT-s-OFDM Module 1

NR Band n258A

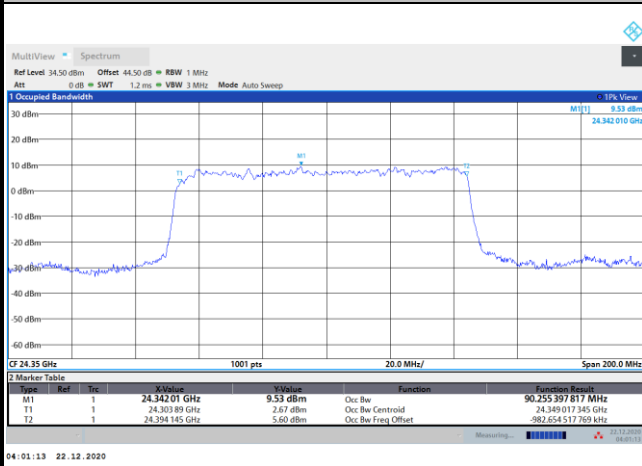
Lowest Channel / 100MHz / BPSK



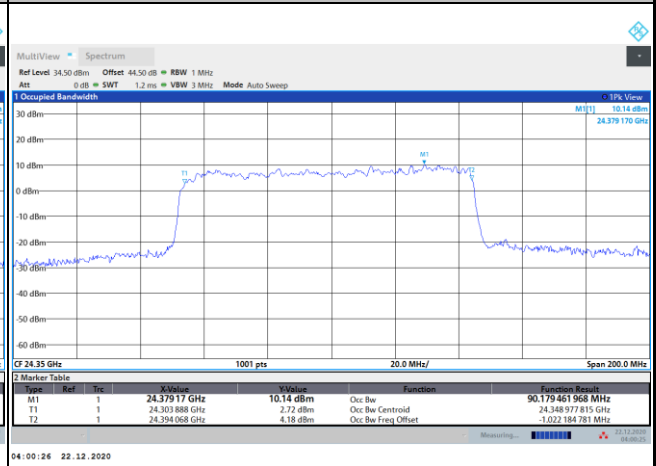
Lowest Channel / 100MHz / QPSK



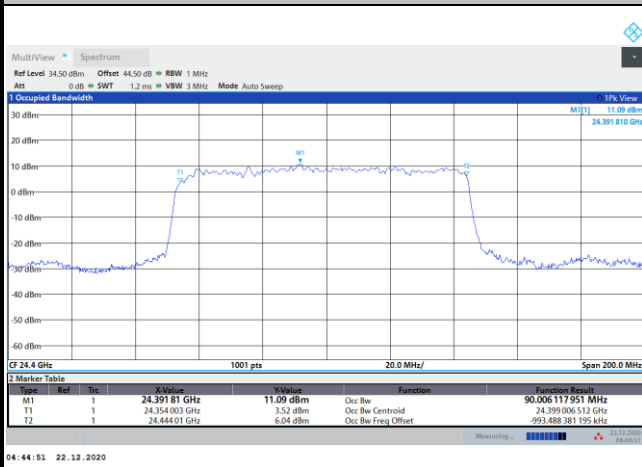
Middle Channel / 100MHz / BPSK



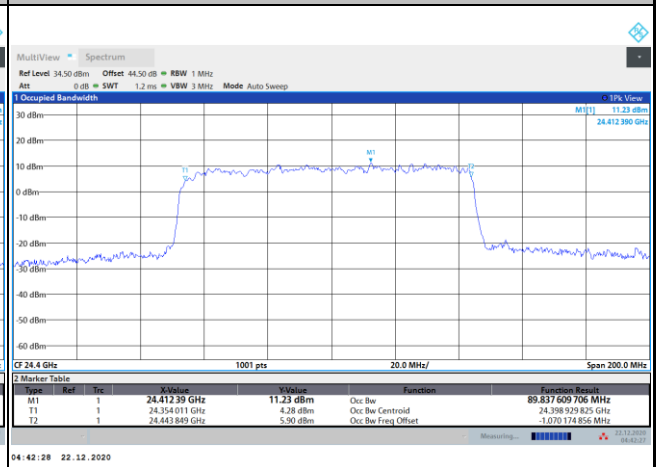
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

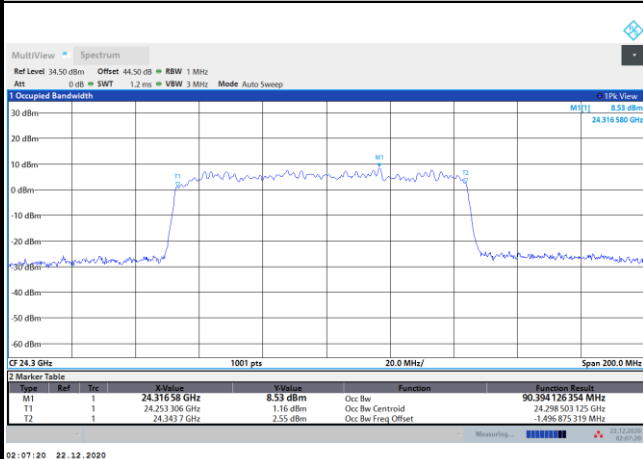




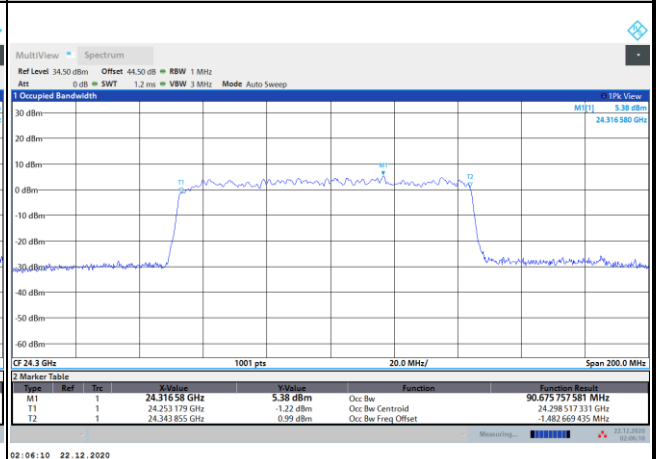
DFT-s-OFDM Module 1

NR Band n258A

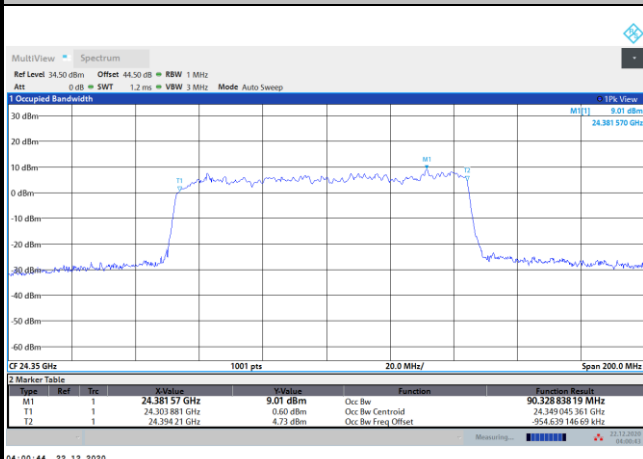
Lowest Channel / 100MHz / 16QAM



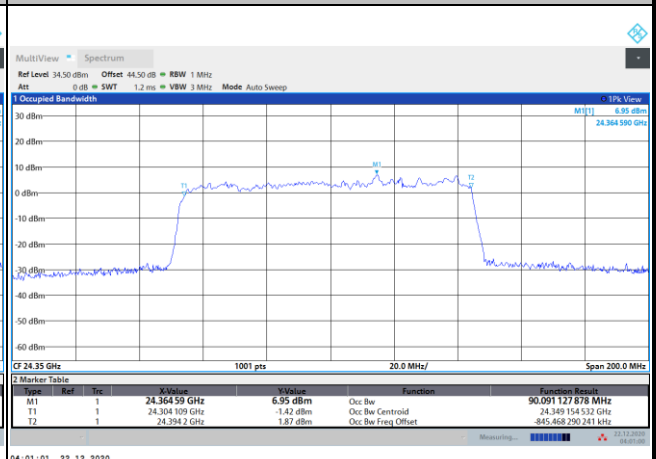
Lowest Channel / 100MHz / 64QAM



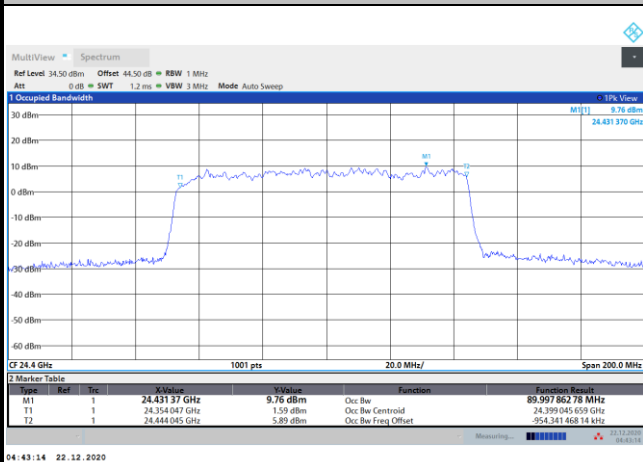
Middle Channel / 100MHz / 16QAM



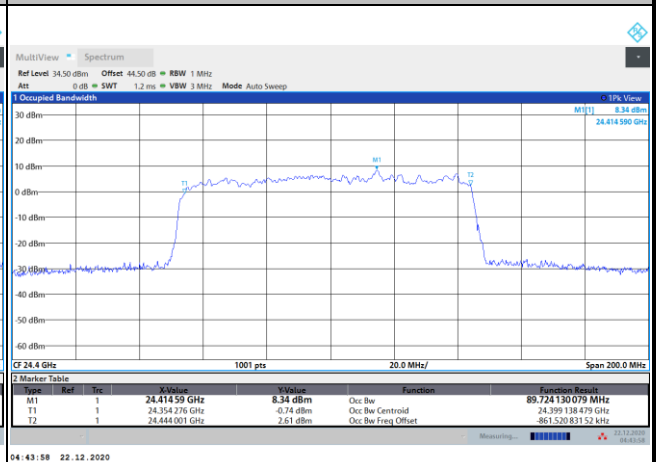
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM

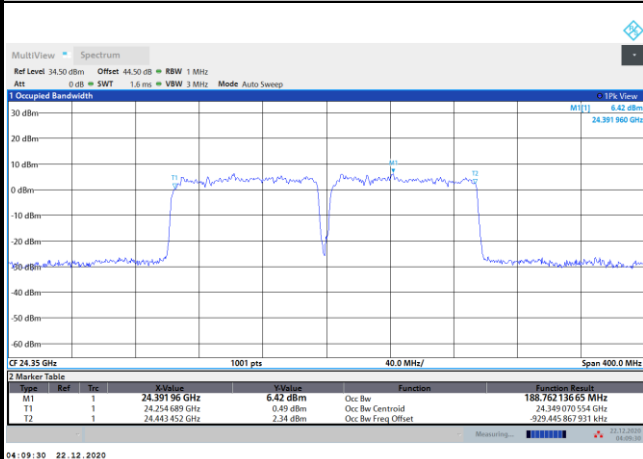




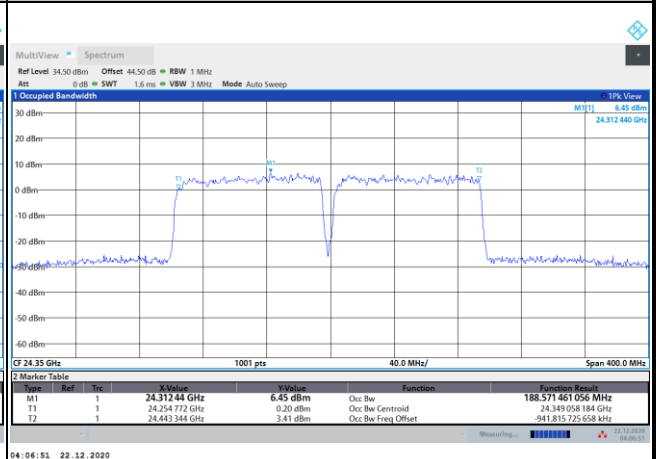
DFT-s-OFDM Module 1

NR Band n258A

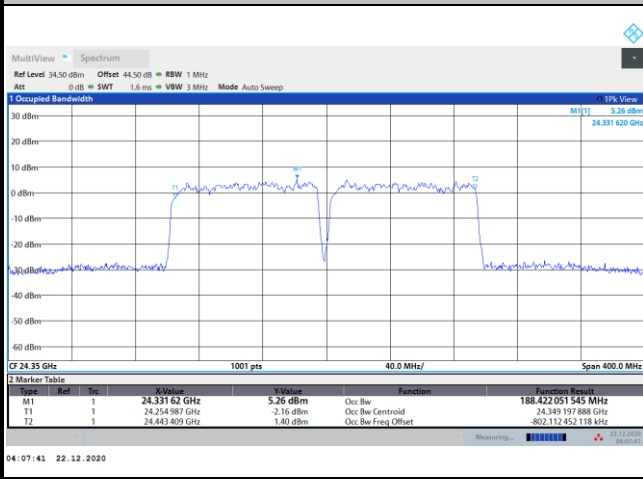
Middle Channel / 200MHz / BPSK



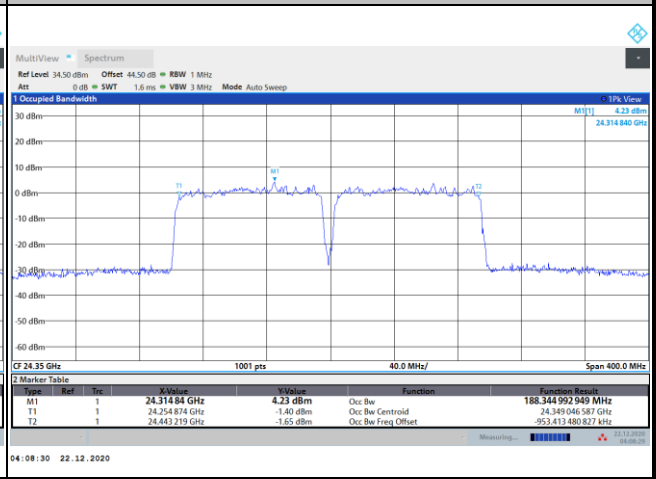
Middle Channel / 200MHz / QPSK



Middle Channel / 200MHz / 16QAM



Middle Channel / 200MHz / 64QAM





AG0+1

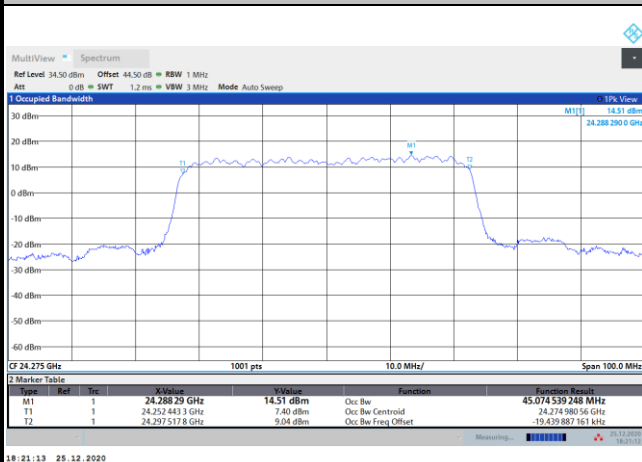
Mode	DFT-s-OFDM Module 1 NR Band n258A : 99%OBW(MHz)											
BW	50MHz				100MHz				200MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	45.07	45.50	45.08	45.12	90.01	90.30	90.18	89.86	-	-	-	-
Middle CH	45.06	45.59	45.08	45.09	90.23	90.56	90.32	90.14	188.65	188.94	188.96	188.63
Highest CH	45.22	45.22	45.39	45.34	90.23	90.57	90.24	90.20	-	-	-	-



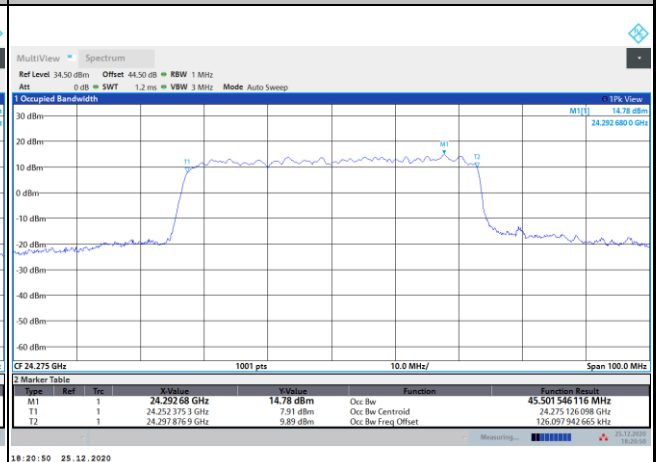
DFT-s-OFDM Module 1

NR Band n258A

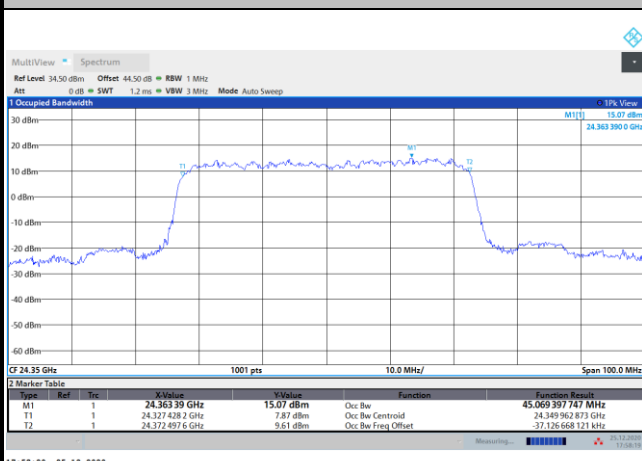
Lowest Channel / 50MHz / BPSK



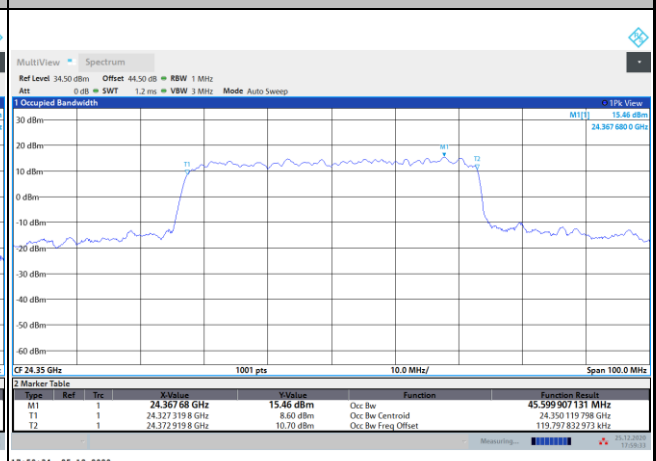
Lowest Channel / 50MHz / QPSK



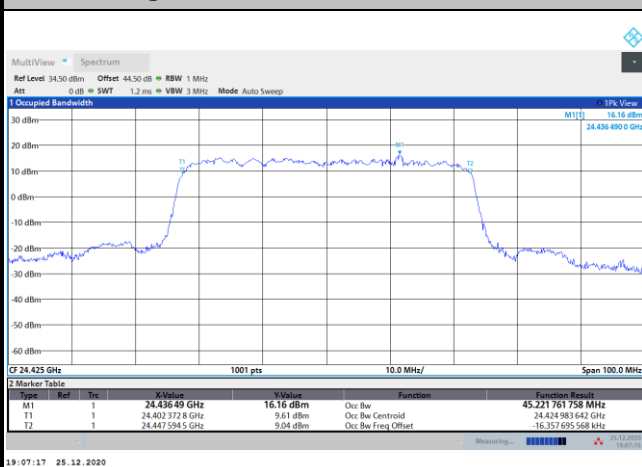
Middle Channel / 50MHz / BPSK



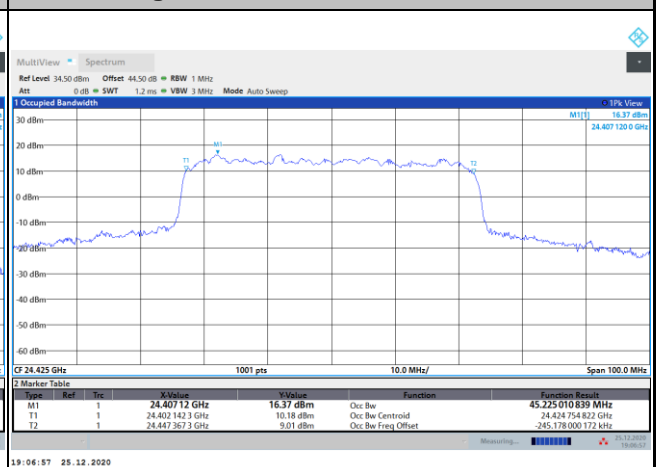
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

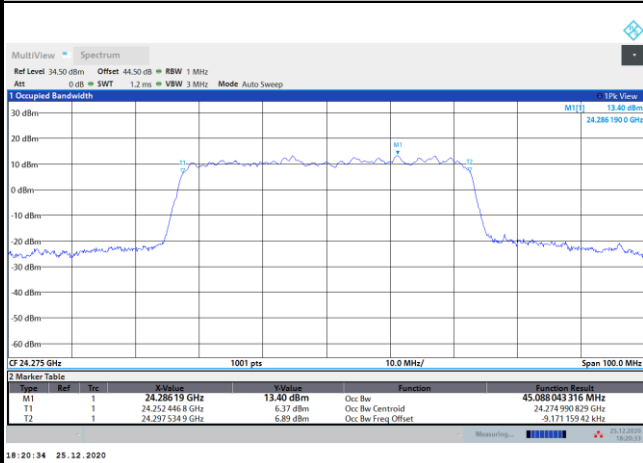




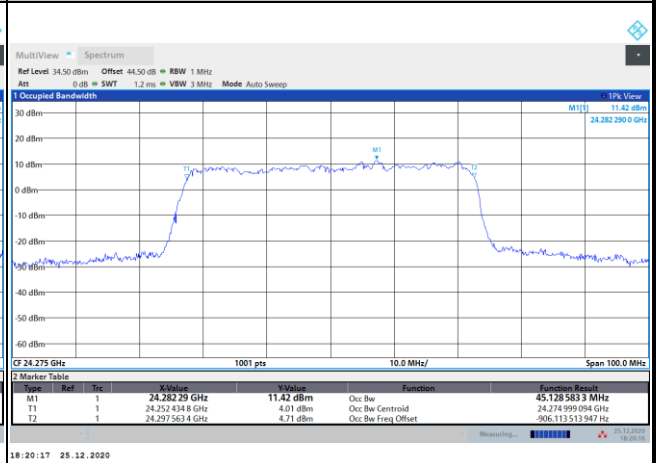
DFT-s-OFDM Module 1

NR Band n258A

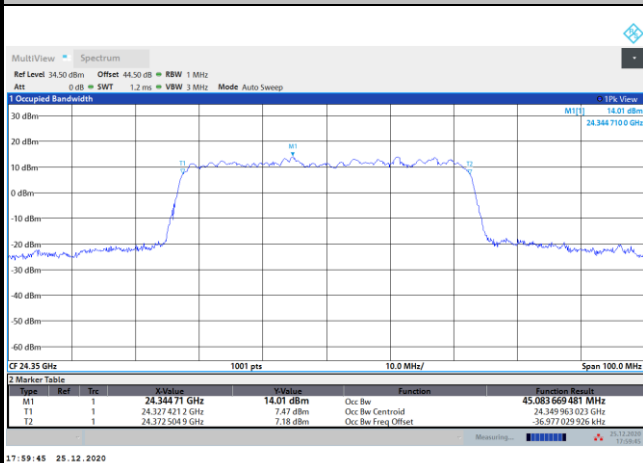
Lowest Channel / 50MHz / 16QAM



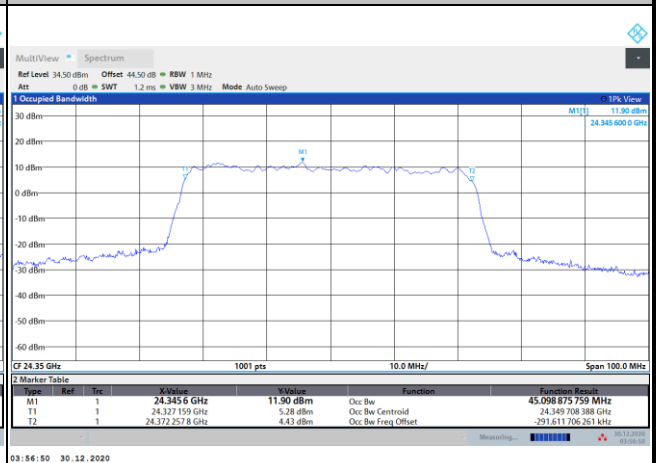
Lowest Channel / 50MHz / 64QAM



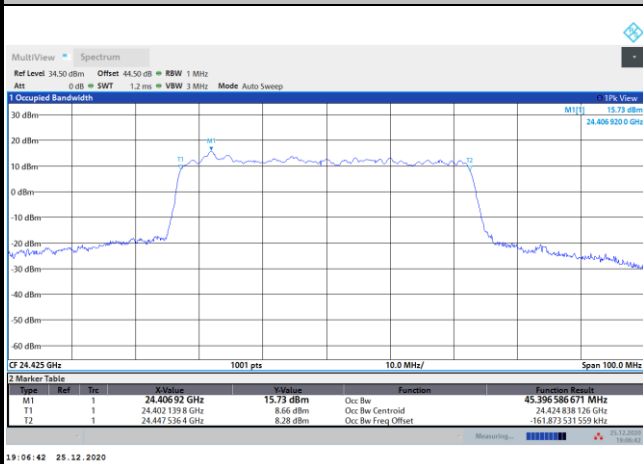
Middle Channel / 50MHz / 16QAM



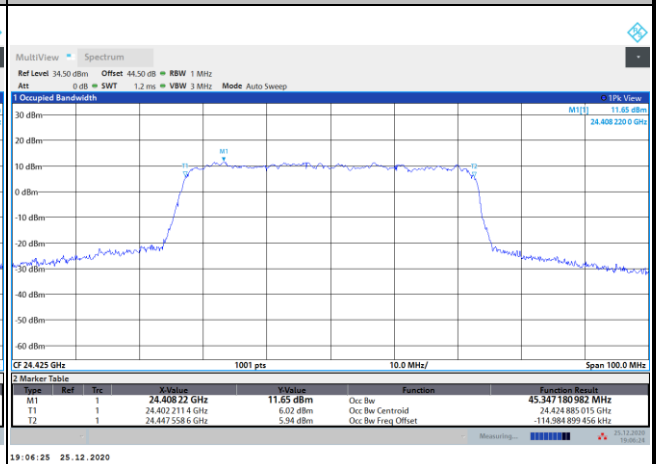
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

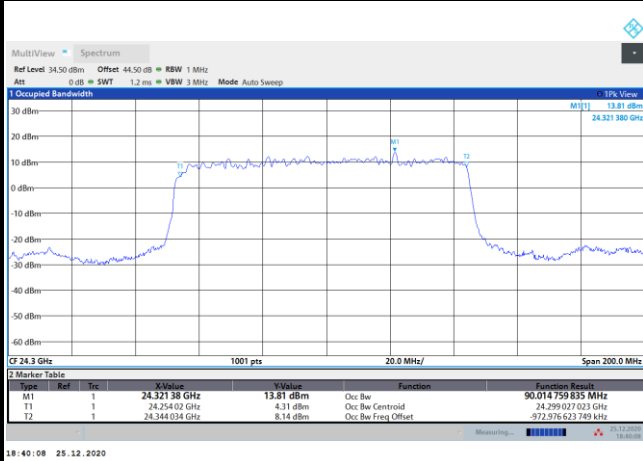




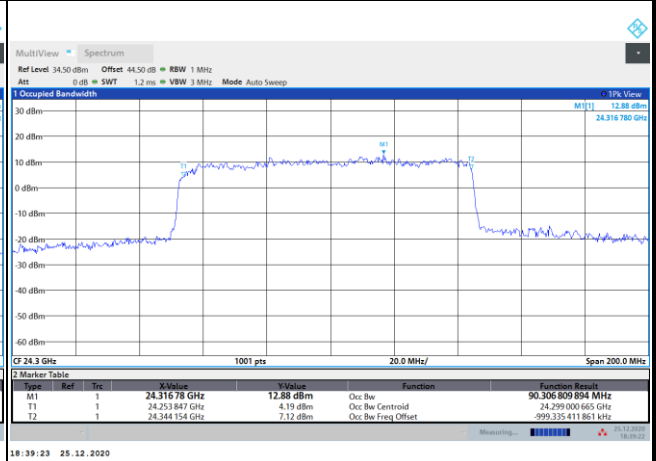
DFT-s-OFDM Module 1

NR Band n258A

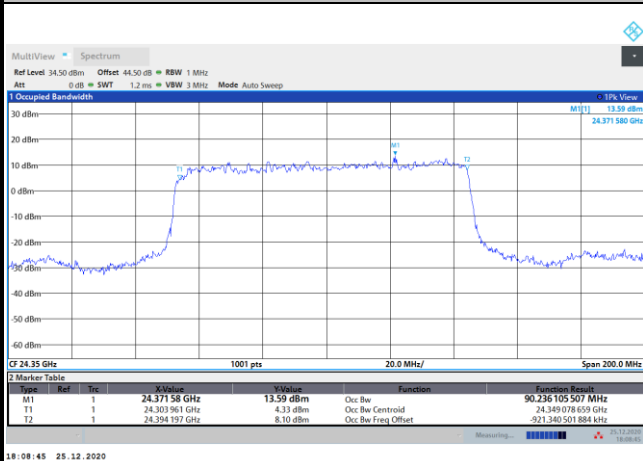
Lowest Channel / 100MHz / BPSK



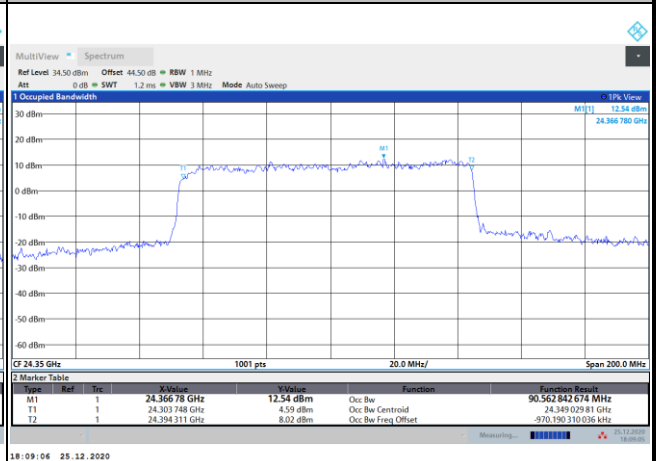
Lowest Channel / 100MHz / QPSK



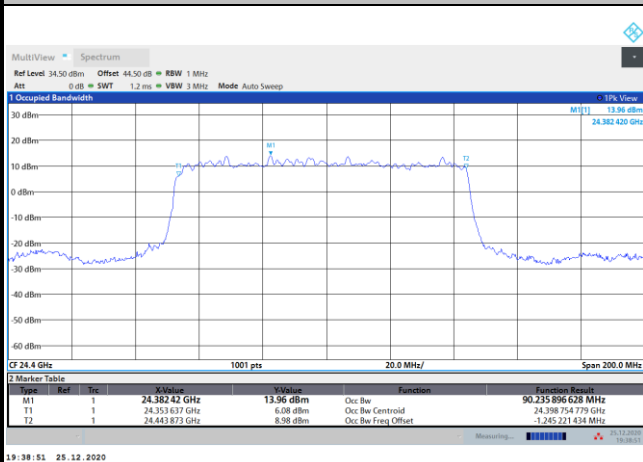
Middle Channel / 100MHz / BPSK



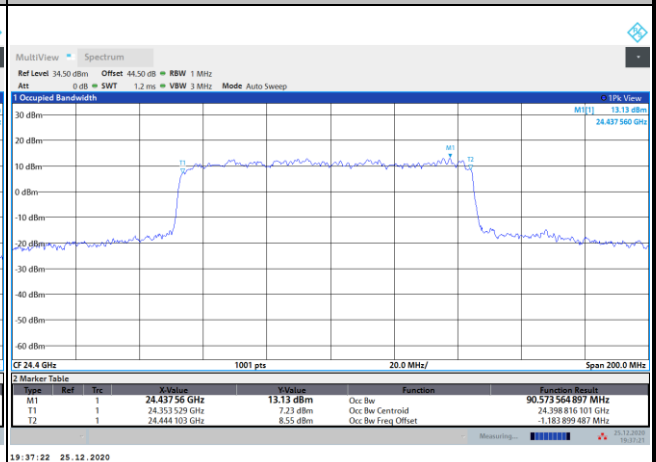
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

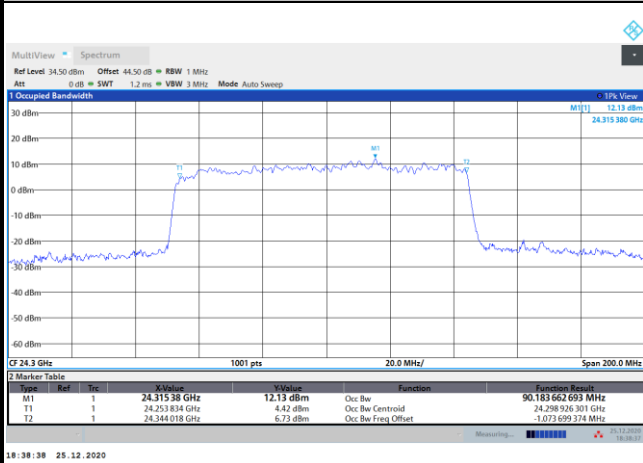




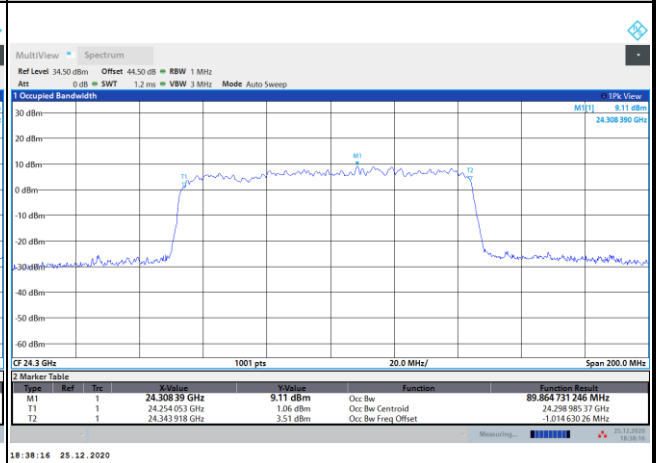
DFT-s-OFDM Module 1

NR Band n258A

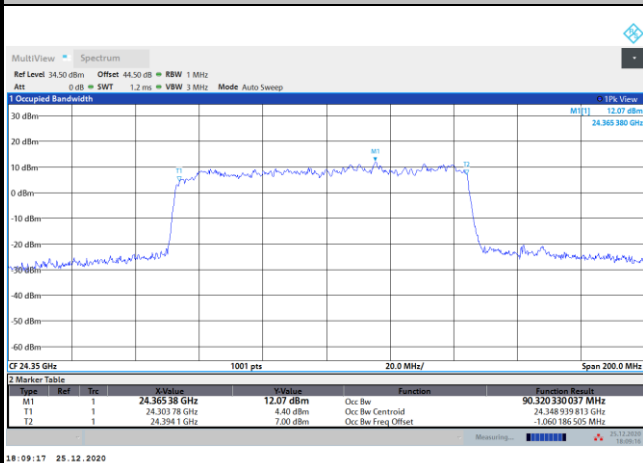
Lowest Channel / 100MHz / 16QAM



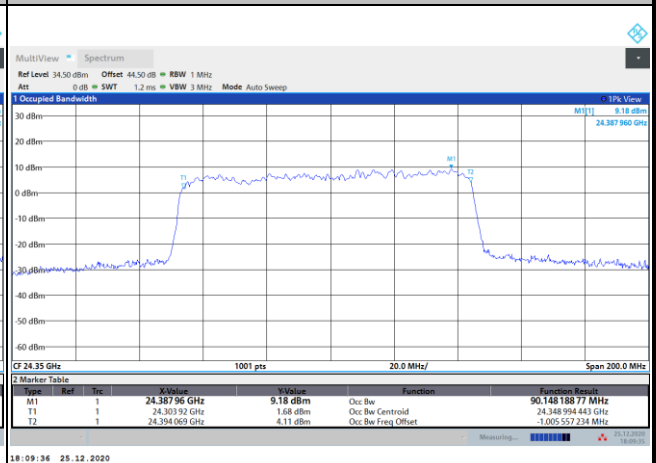
Lowest Channel / 100MHz / 64QAM



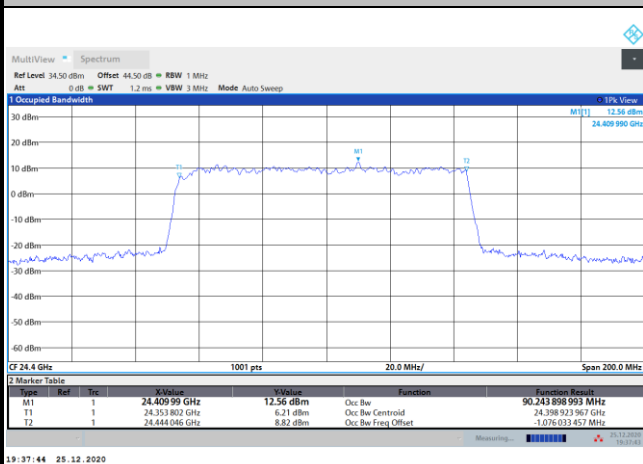
Middle Channel / 100MHz / 16QAM



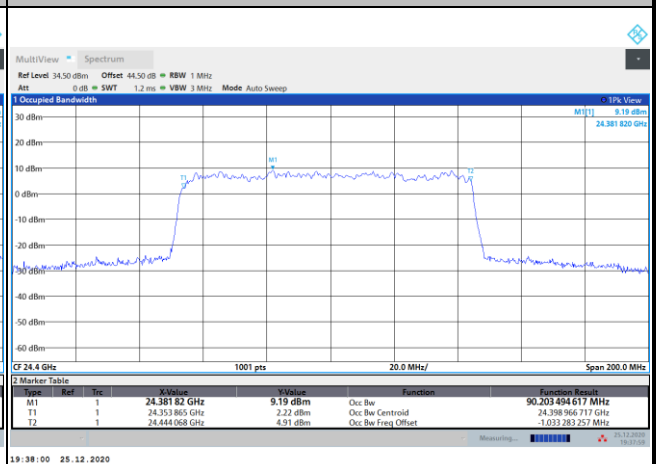
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM

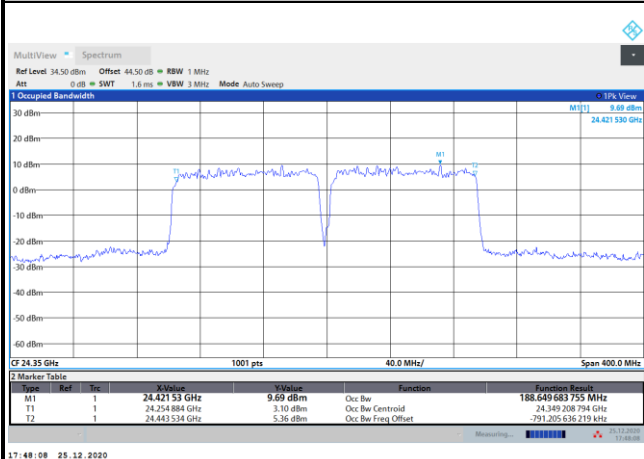




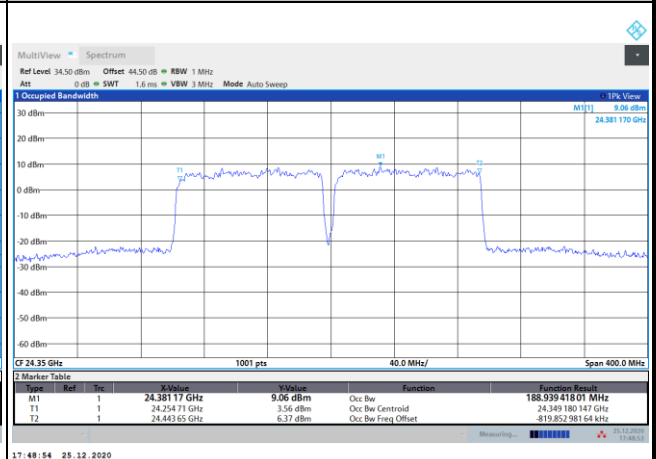
DFT-s-OFDM Module 1

NR Band n258A

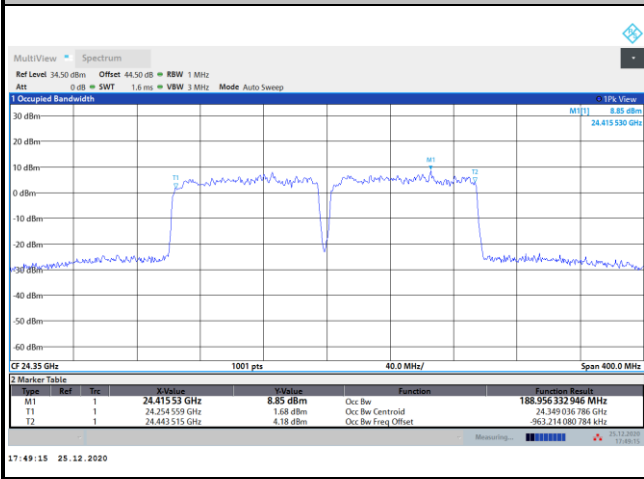
Middle Channel / 200MHz / BPSK



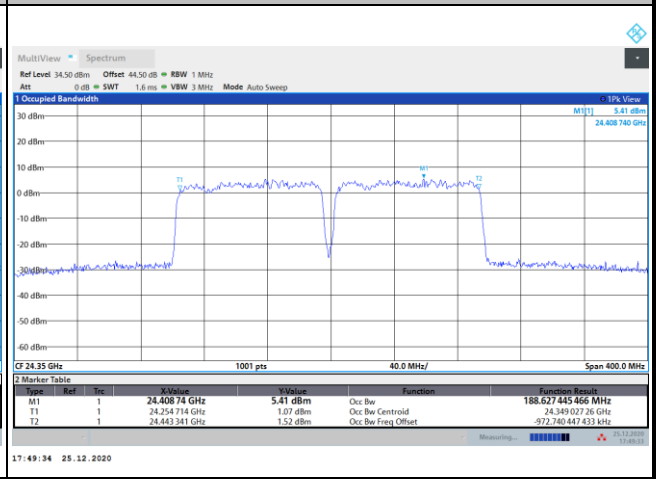
Middle Channel / 200MHz / QPSK



Middle Channel / 200MHz / 16QAM



Middle Channel / 200MHz / 64QAM





Radiated Out of Band Emissions

AG0

Mode			DFT-s-OFDM Module 1 NR Band n258A : BE (dBm) 1 RB											
BW			50MHz				100MHz				200MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-15.68	-14.70	-17.62	-20.22	-18.41	-16.76	-20.14	-22.41	-	-	-	-
	>10%OB	≤-13	-31.85	-31.24	-33.20	-35.76	-38.34	-38.21	-39.83	-41.15	-	-	-	-
Middle CH	0~10%OB	≤-5	-	-	-	-	-	-	-	-	-25.78	-24.24	-24.59	-23.46
	>10%OB	≤-13	-	-	-	-	-	-	-	-	-27.32	-26.63	-26.45	-25.35
High CH	0~10%OB	≤-5	-18.46	-19.77	-19.87	-22.36	-18.72	-18.00	-20.65	-22.58	-	-	-	-
	>10%OB	≤-13	-33.27	-32.97	-34.14	-36.58	-37.58	-37.28	-38.62	-39.78	-	-	-	-
Result			Compliance											

Mode			DFT-s-OFDM Module 1 NR Band n258A : 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	-27.24	-25.52	-28.83	-31.63	-33.81	-30.53	-33.77	-34.63	-	-	-	-
	>10%OB	≤-13	-32.71	-26.99	-31.50	-34.36	-36.63	-32.05	-35.35	-37.62	-	-	-	-
Middle CH	0~10%OB	≤-5	-	-	-	-	-	-	-	-	-35.80	-34.22	-36.11	-37.77
	>10%OB	≤-13	-	-	-	-	-	-	-	-	-36.79	-35.94	-37.59	-39.42
High CH	0~10%OB	≤-5	-28.31	-23.71	-30.15	-32.35	-31.64	-26.57	-32.25	-35.74	-	-	-	-
	>10%OB	≤-13	-30.83	-24.46	-30.88	-34.47	-34.30	-28.01	-33.08	-37.00	-	-	-	-
Result			Compliance											

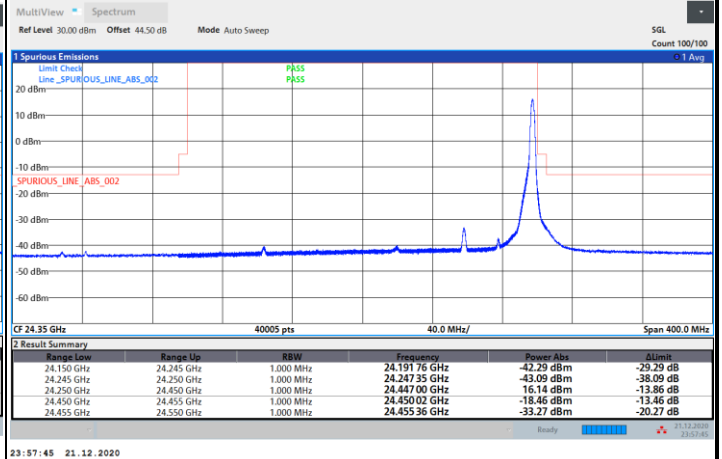
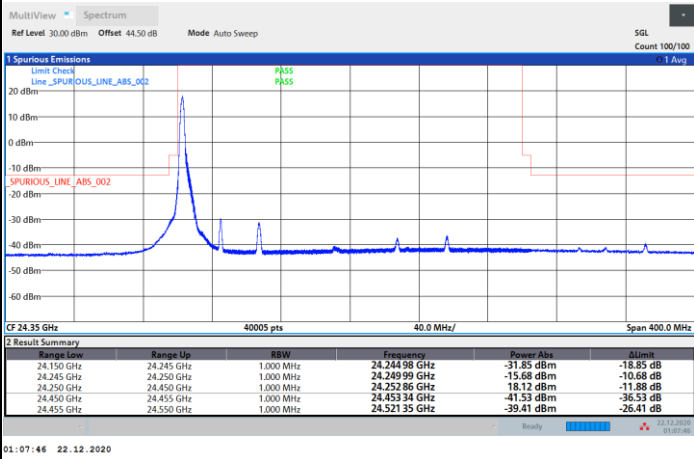


DFT-s-OFDM Module 1

NR Band n258A / 50MHz / BPSK

Lowest Band Edge / 1 RB

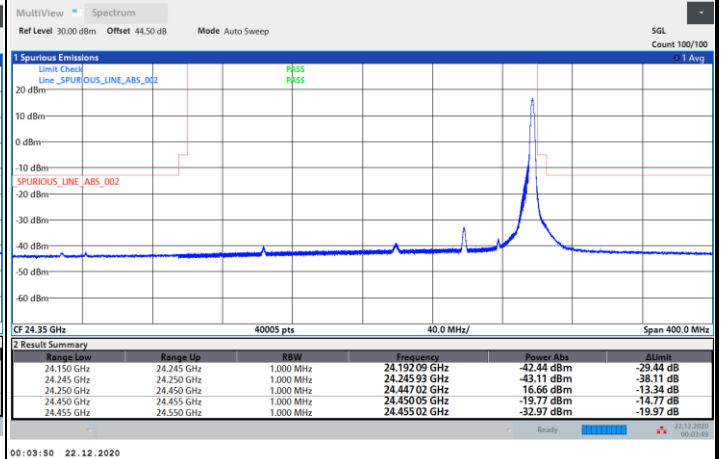
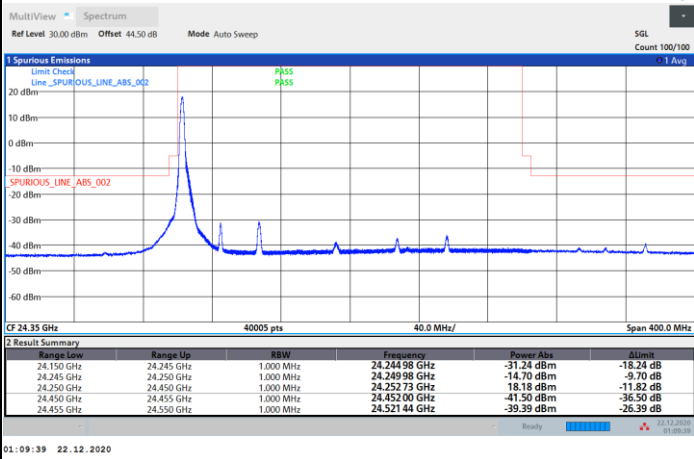
Highest Band Edge / 1 RB



NR Band n258A / 50MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



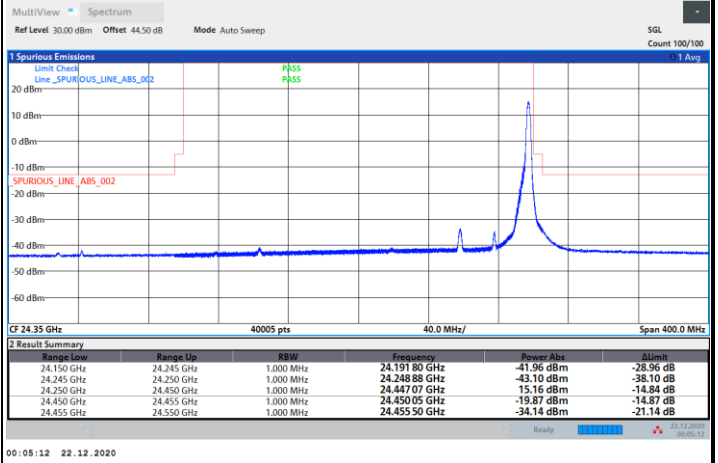
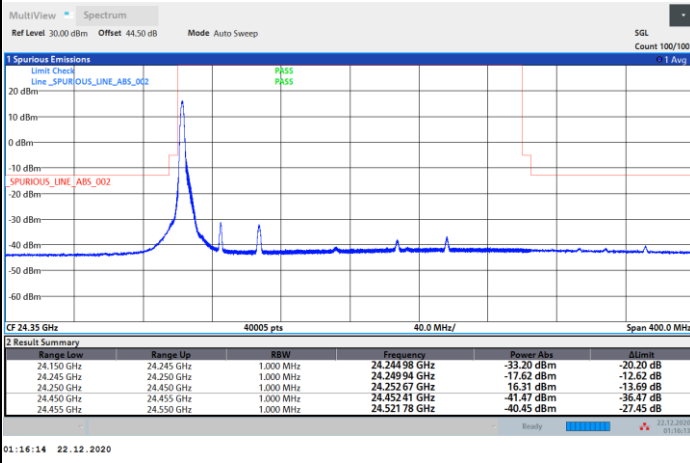


DFT-s-OFDM Module 1

NR Band n258A / 50MHz / 16QAM

Lowest Band Edge / 1 RB

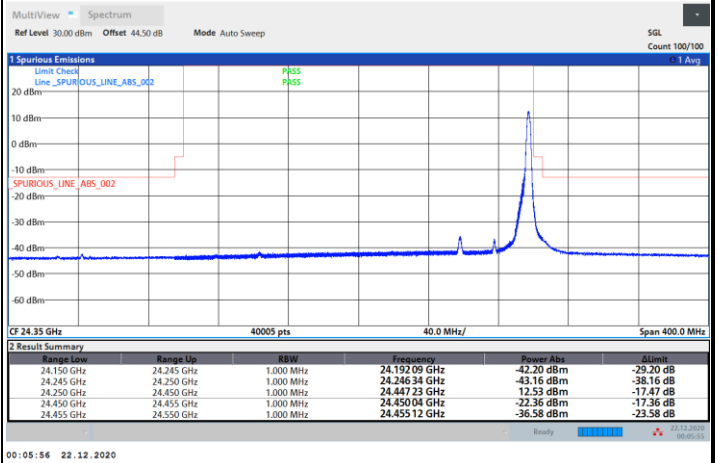
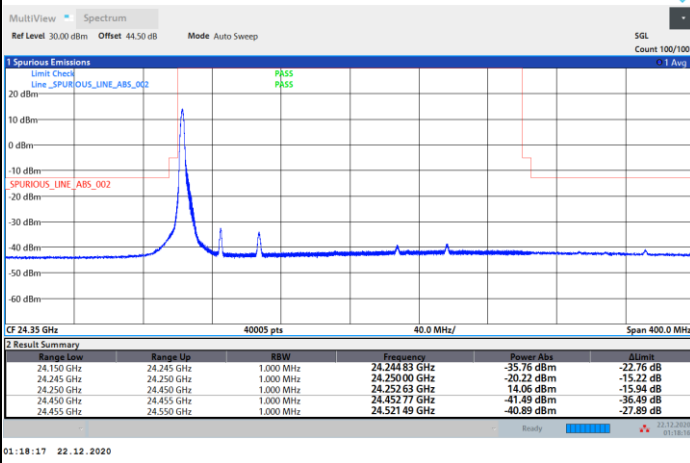
Highest Band Edge / 1 RB



NR Band n258A / 50MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



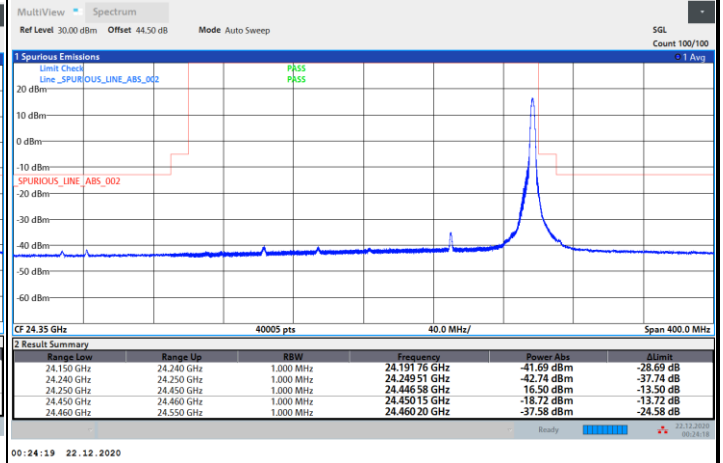
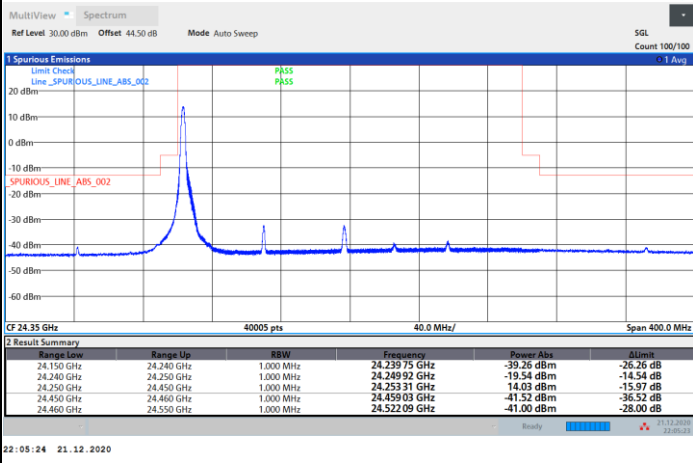


DFT-s-OFDM Module 1

NR Band n258A / 100MHz / BPSK

Lowest Band Edge / 1 RB

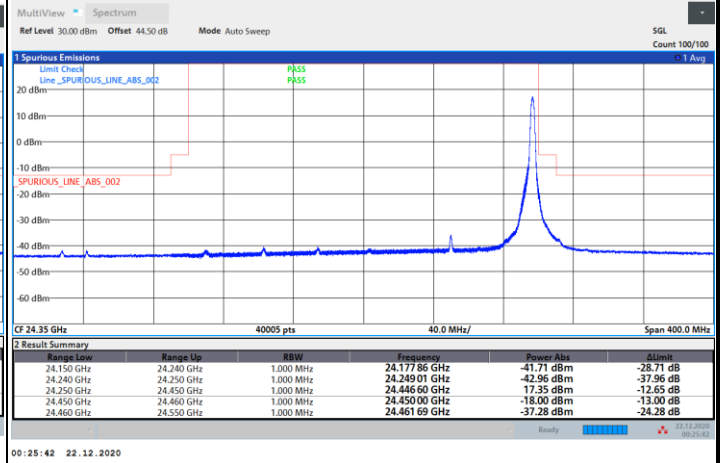
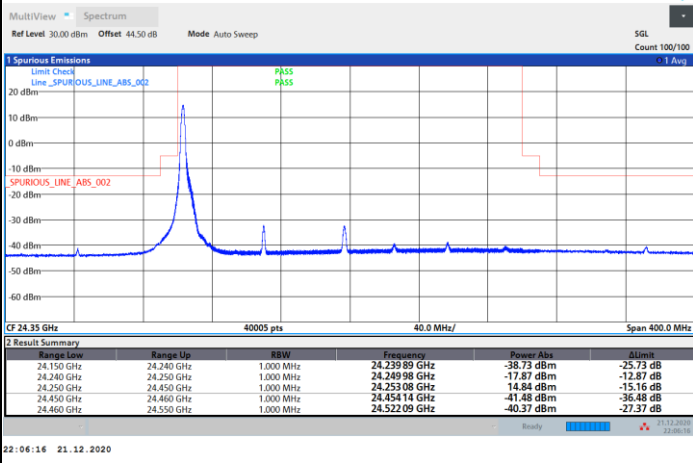
Highest Band Edge / 1 RB



NR Band n258A / 100MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



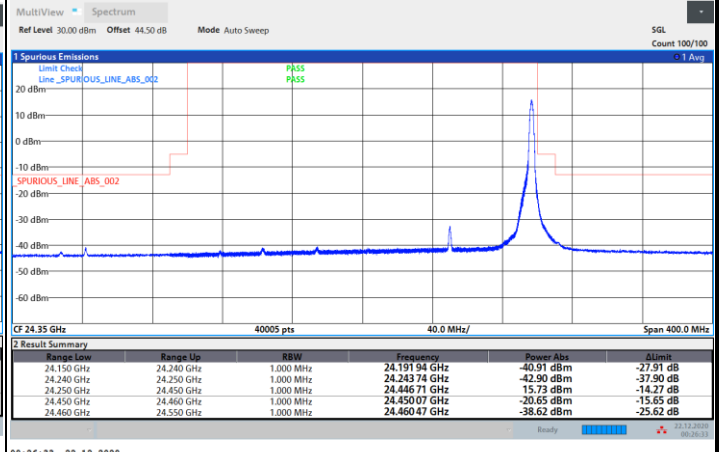
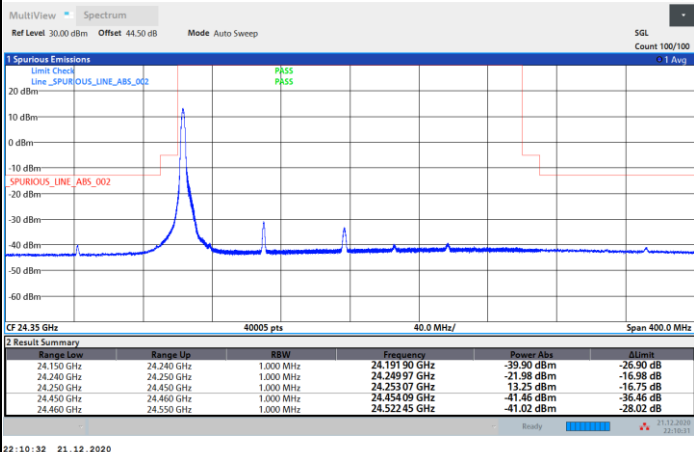


DFT-s-OFDM Module 1

NR Band n258A / 100MHz / 16QAM

Lowest Band Edge / 1 RB

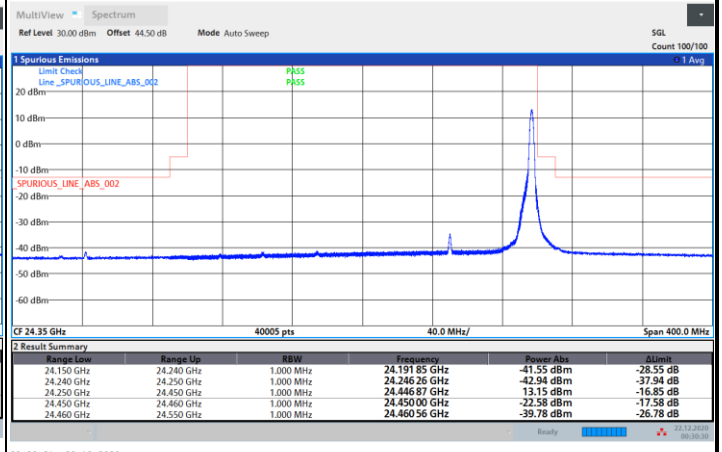
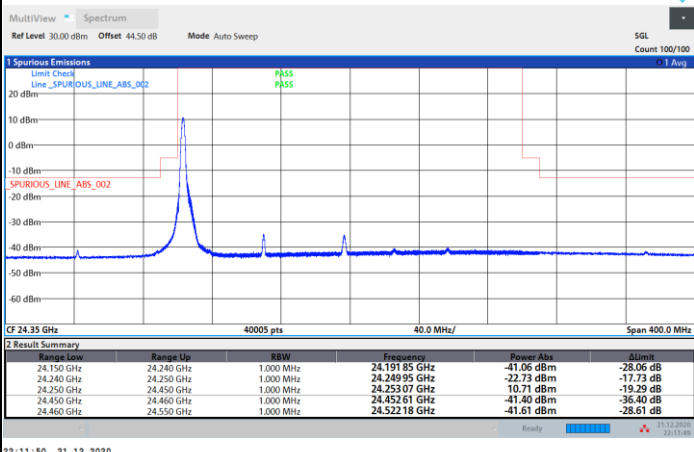
Highest Band Edge / 1 RB



NR Band n258A / 100MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

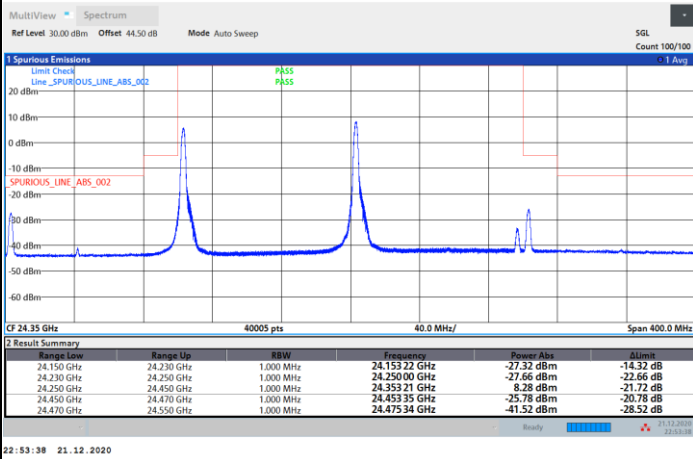




DFT-s-OFDM Module 1

NR Band n258A / 200MHz / BPSK

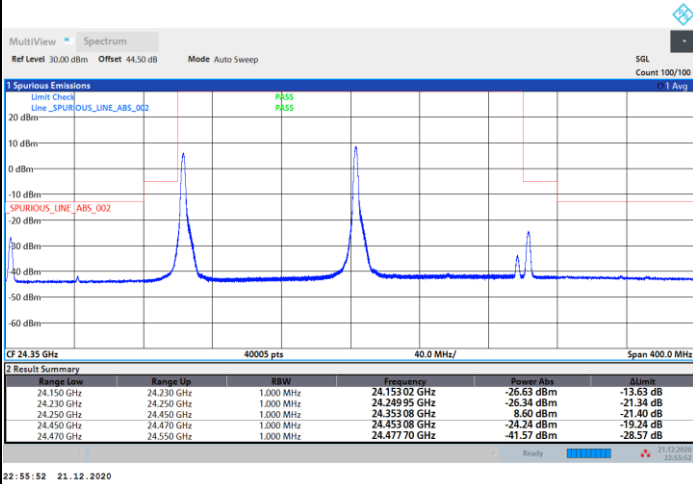
Middle Band Edge / 1 RB



intentionally blank

NR Band n258A / 200MHz / QPSK

Middle Band Edge / 1 RB



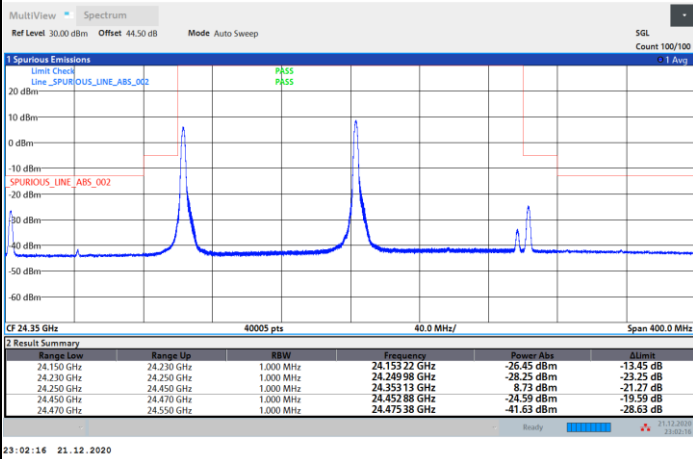
intentionally blank



DFT-s-OFDM Module 1

NR Band n258A / 200MHz / 16QAM

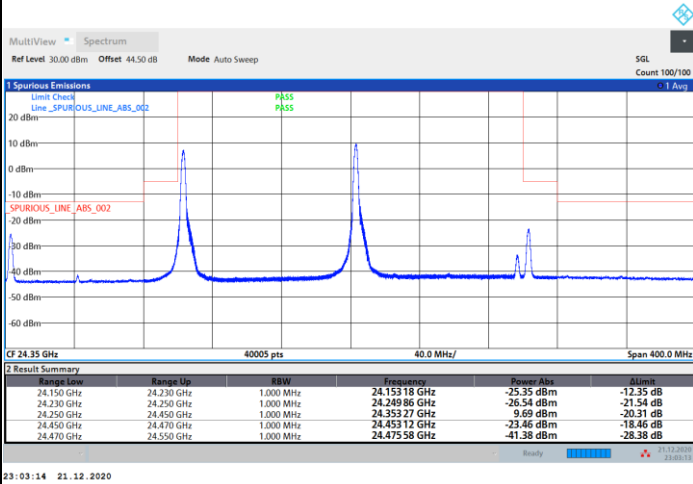
Middle Band Edge / 1 RB



intentionally blank

NR Band n258A / 200MHz / 64QAM

Middle Band Edge / 1 RB



intentionally blank