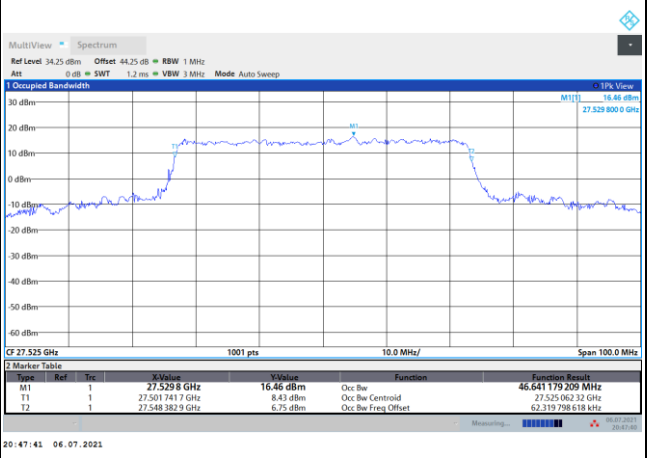
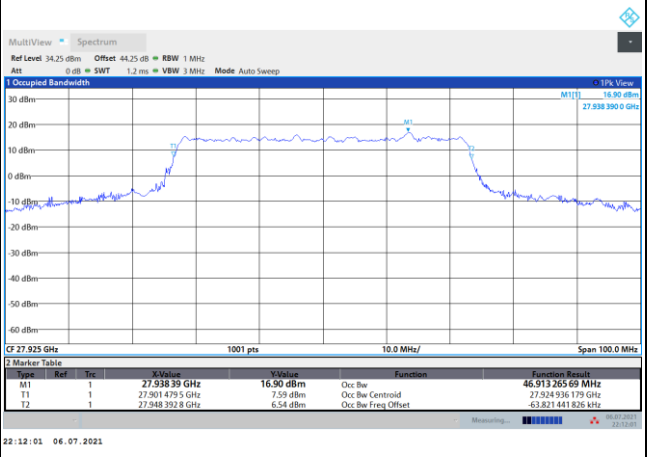
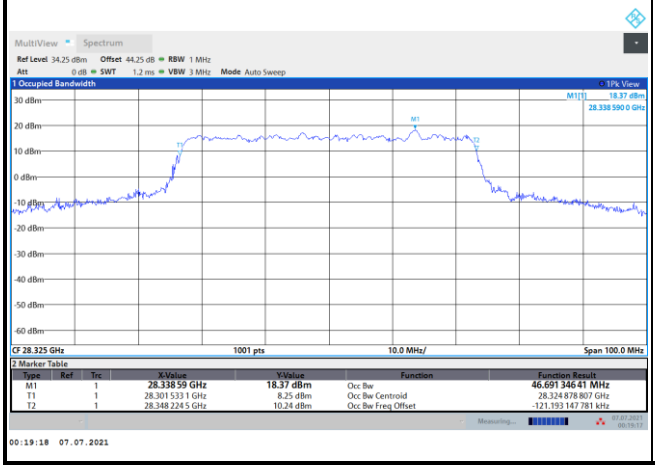
CP-OFDM Module B

NR Band n261	
Lowest Channel / 50MHz / QPSK	
	**intentionally blank**
Middle Channel / 50MHz / QPSK	
	**intentionally blank**
Highest Channel / 50MHz / QPSK	
	**intentionally blank**

Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module B NR Band n261 : BE (dBm) 1 RB		
BW			50MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-22.54	-5.97	-7.08
	>10%OB	≦-13	-26.67	-18.28	-19.35
HighCH	0~10%OB	≦-5	-19.55	-5.90	-7.61
	>10%OB	≦-13	-25.28	-17.31	-19.46
Result			Compliance		

Mode			CP-OFDM Module B NR Band n261 : BE (dBm) 1 RB
BW			50MHz
Limit (dBm)			QPSK
Low CH	0~10%OB	≦-5	-7.04
	>10%OB	≦-13	-18.68
High CH	0~10%OB	≦-5	-20.26
	>10%OB	≦-13	-24.71
Result			Compliance

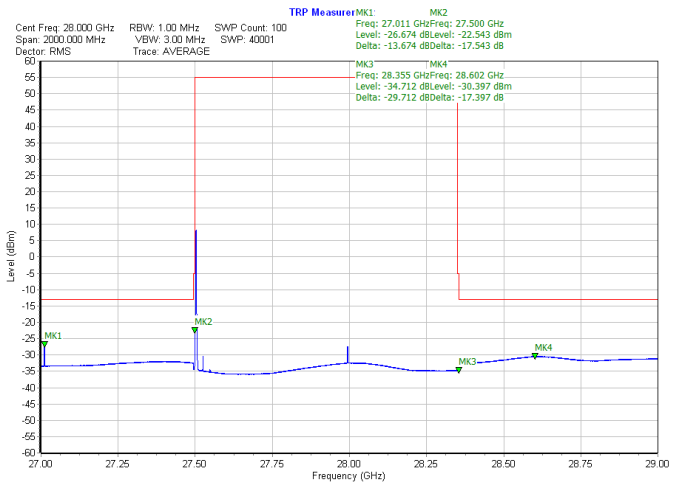
Mode			DFT-s-OFDM Module B NR Band n261 : BE (dBm) Full RB		
BW			50MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-13.32	-16.30	-19.11
	>10%OB	≦-13	-16.16	-20.38	-26.60
HighCH	0~10%OB	≦-5	-13.75	-14.91	-17.56
	>10%OB	≦-13	-17.12	-20.81	-28.17
Result			Compliance		

Mode			CP-OFDM Module B NR Band n261 : BE (dBm) Full RB
BW			50MHz
Limit (dBm)			QPSK
Low CH	0~10%OB	≦-5	-15.57
	>10%OB	≦-13	-18.21
High CH	0~10%OB	≦-5	-13.97
	>10%OB	≦-13	-18.14
Result			Compliance

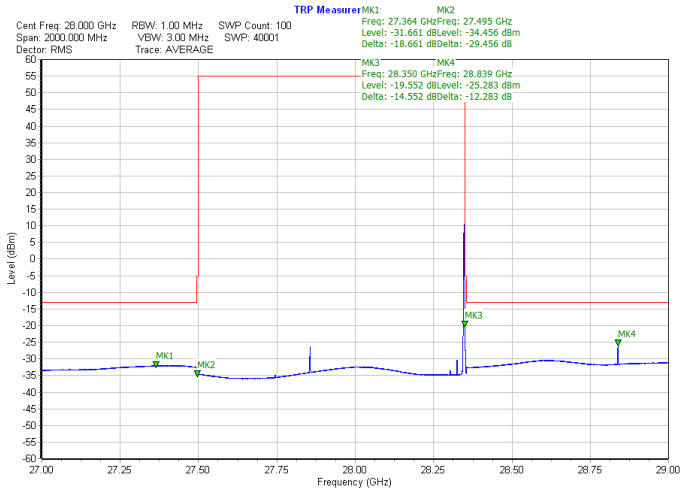
DFT-s-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

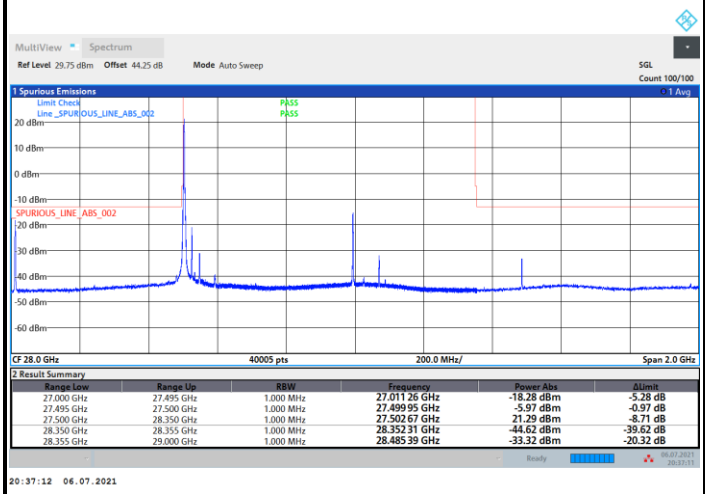


Highest Band Edge / 1 RB

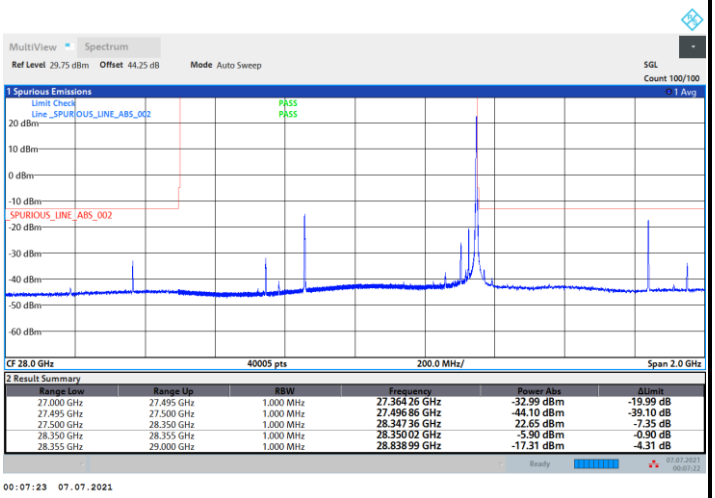


NR Band n261 / 50MHz / 16QAM

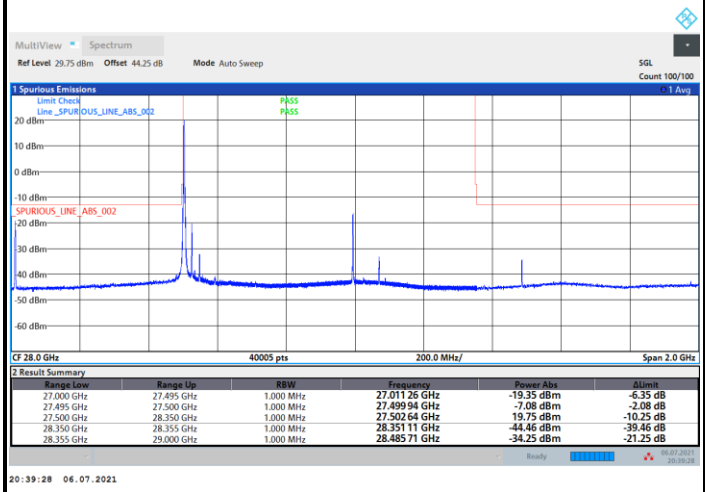
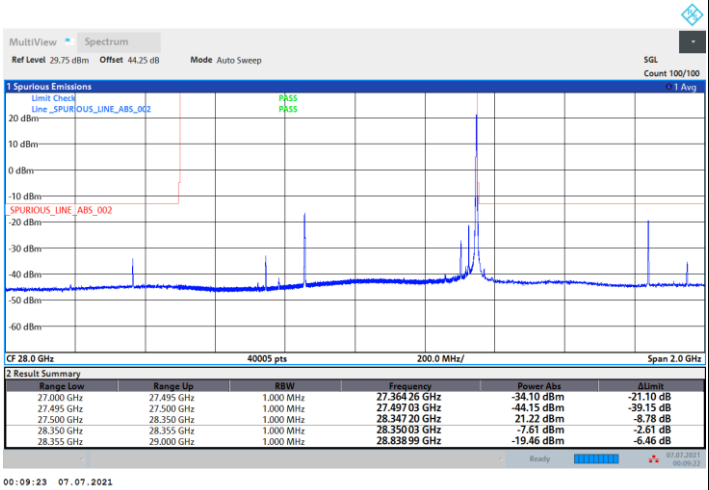
Lowest Band Edge / 1 RB



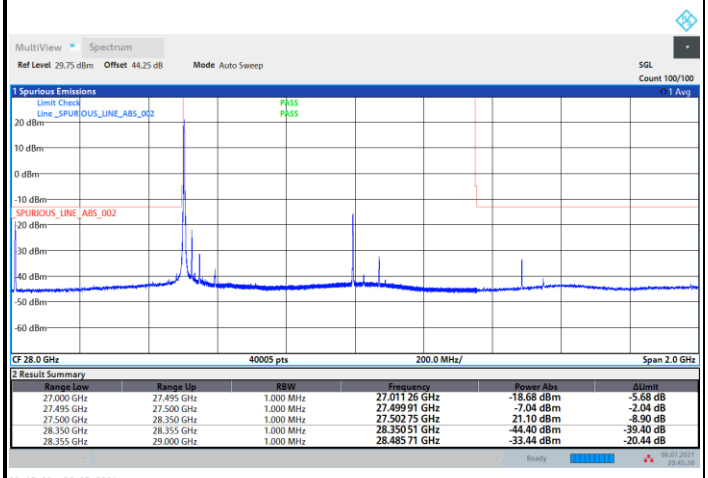
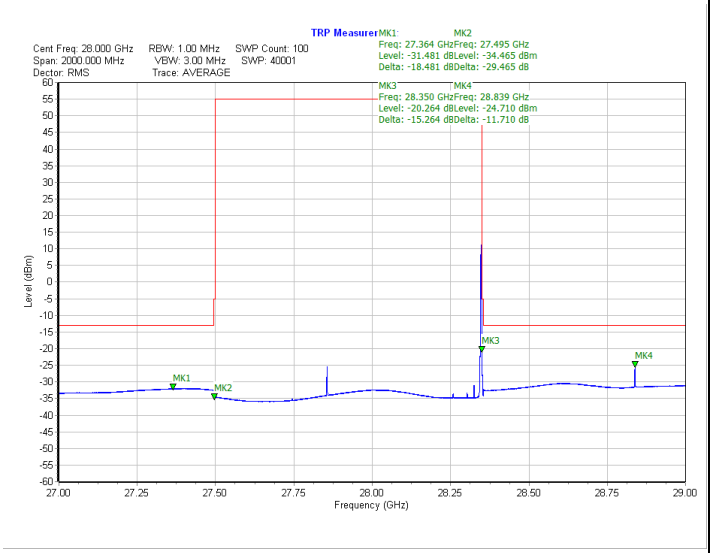
Highest Band Edge / 1 RB



DFT-s-OFDM Module B

NR Band n261 / 50MHz / 64QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

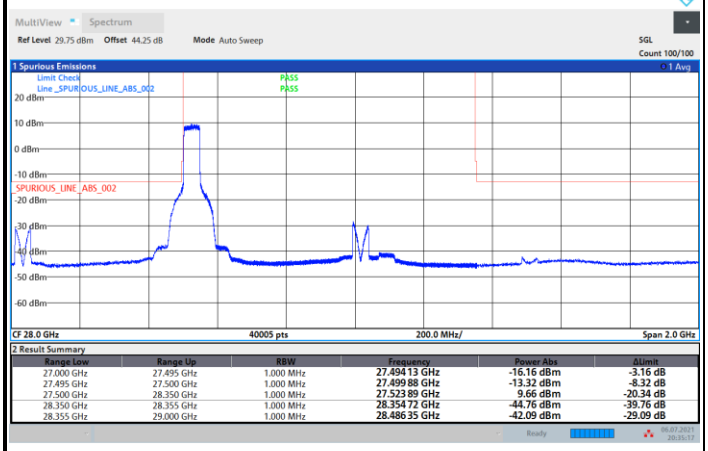
CP-OFDM Module B

NR Band n261 / 50MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

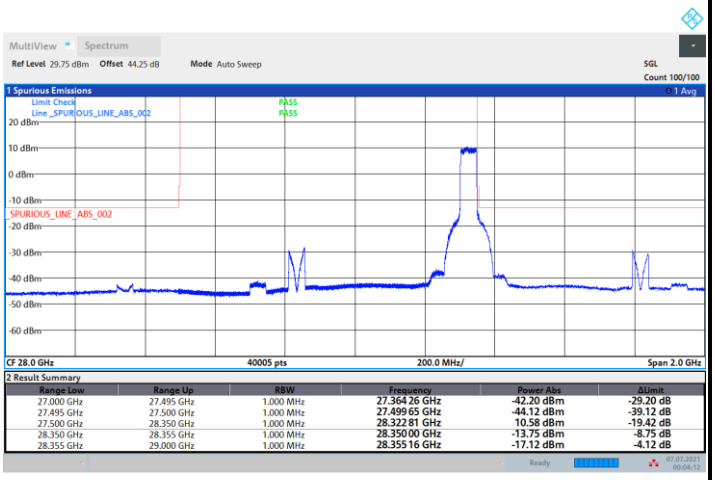
DFT-s-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

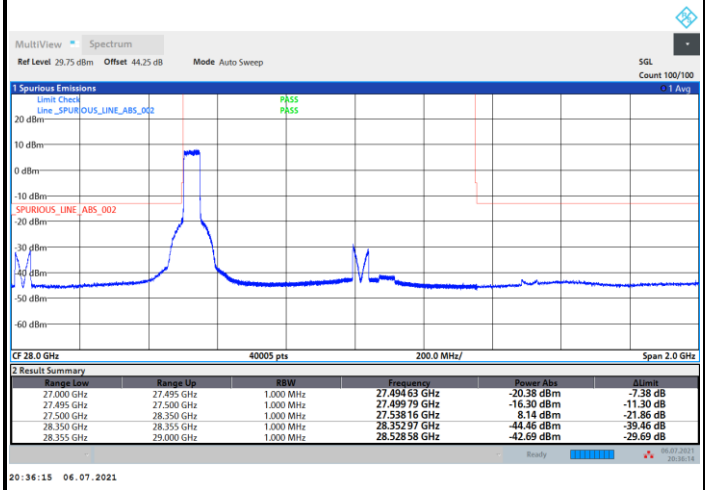


Highest Band Edge / Full RB

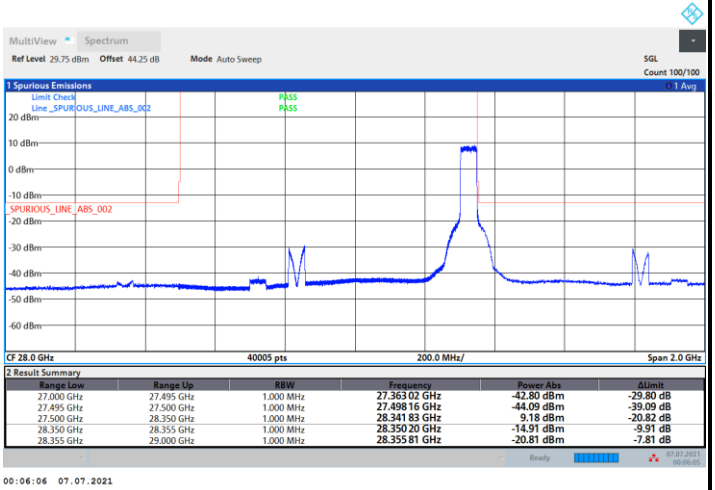


NR Band n261 / 50MHz / 16QAM

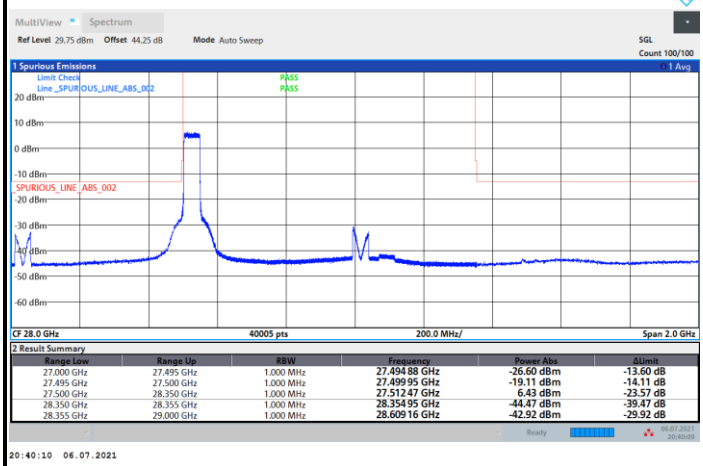
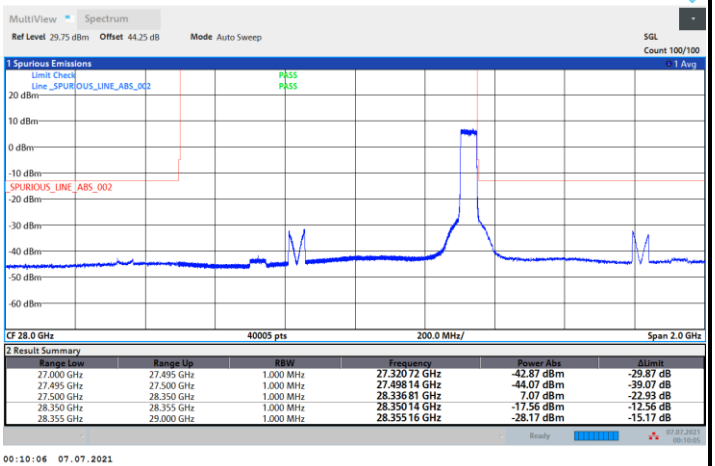
Lowest Band Edge / Full RB



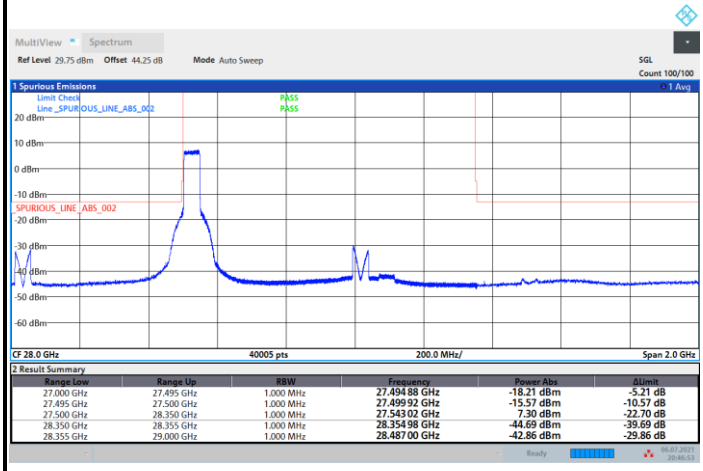
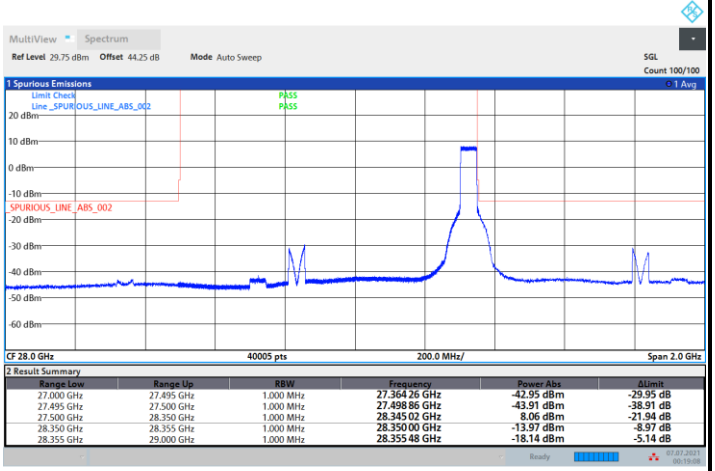
Highest Band Edge / Full RB



DFT-s-OFDM Module B

NR Band n261 / 50MHz / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

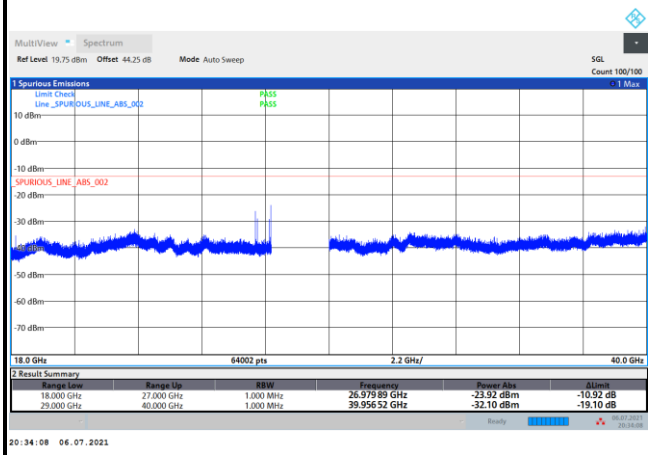
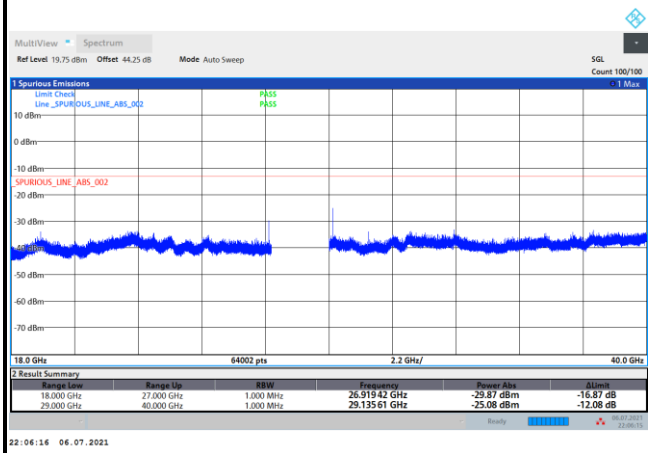
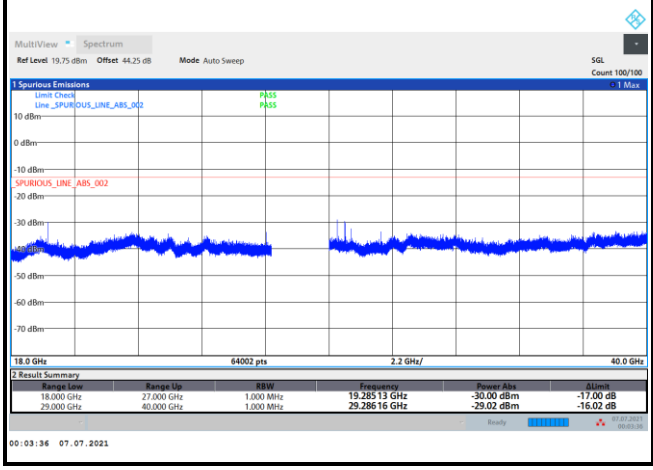
CP-OFDM Module B

NR Band n261 / 50MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

Spurious Emission

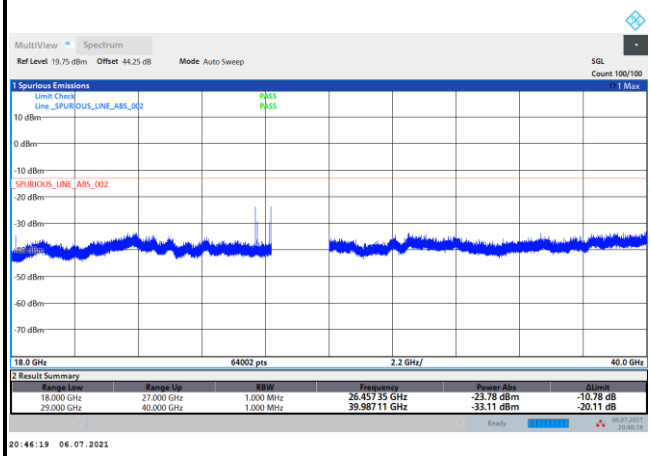
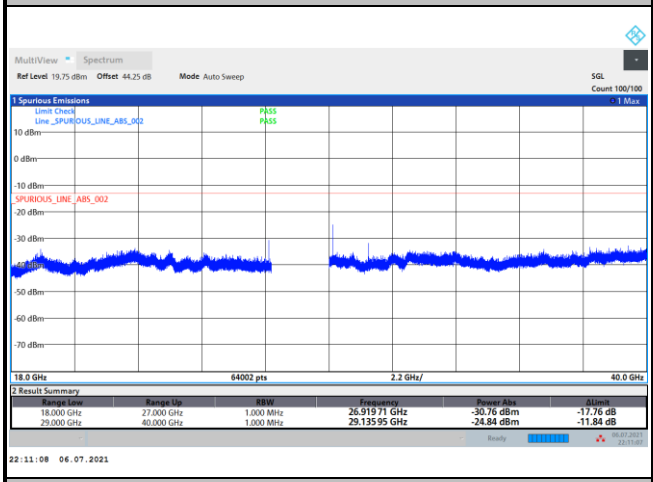
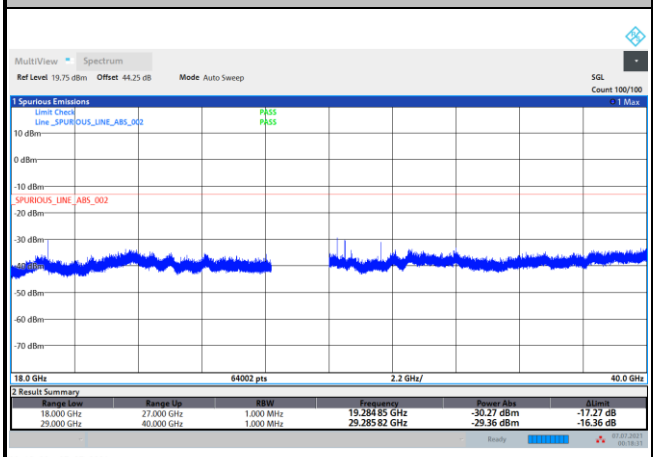
Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM Module B

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 50MHz	
	**intentionally blank**
Middle Channel / 50MHz	
	**intentionally blank**
Highest Channel / 50MHz	
	**intentionally blank**

Remark: In band and out of band frequencies that has reported in previous results are omitted.

CP-OFDM Module B

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 50MHz	
	**intentionally blank**
Middle Channel / 50MHz	
	**intentionally blank**
Highest Channel / 50MHz	
	**intentionally blank**

Remark: In band and out of band frequencies that has reported in previous results are omitted.

NR Band n261 Module B Beam V

Occupied Bandwidth

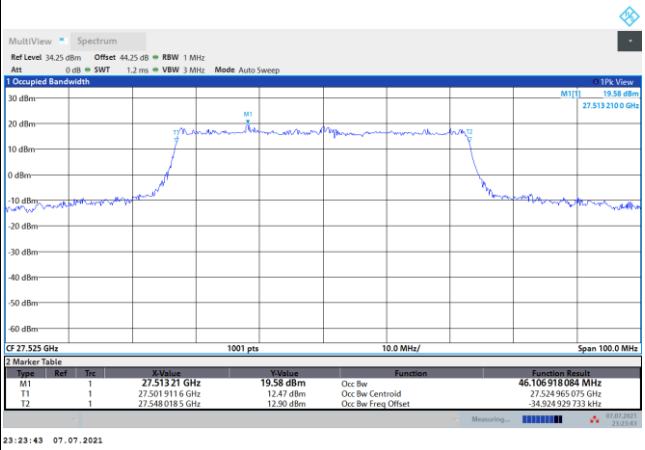
Mode	DFT-s-OFDM Module B NR Band n261 : 99%OBW(MHz)		
BW	50MHz		
Mod.	QPSK	16QAM	64QAM
Lowest CH	46.10	46.44	46.12
Middle CH	46.07	46.39	46.01
Highest CH	45.99	46.13	46.05

Mode	CP-OFDM Module B NR Band n261 : 99%OBW(MHz)
BW	50MHz
Mod.	QPSK
Lowest CH	46.35
Middle CH	46.28
Highest CH	46.42

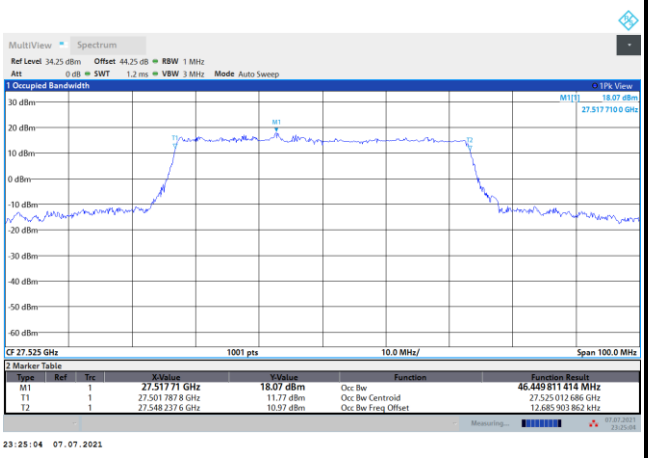
DFT-s-OFDM Module B

NR Band n261

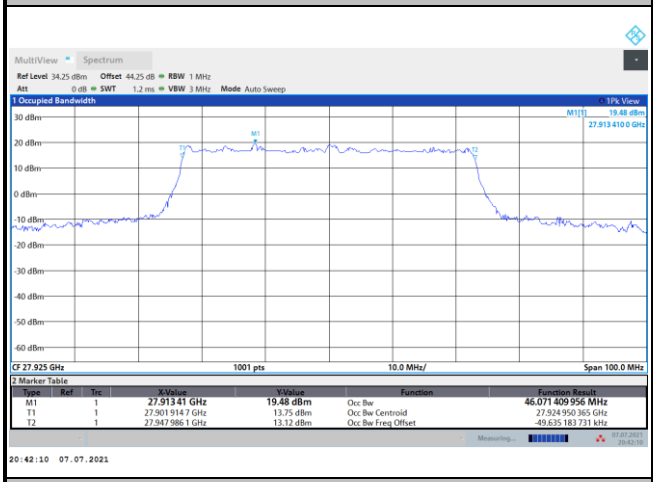
Lowest Channel / 50MHz / QPSK



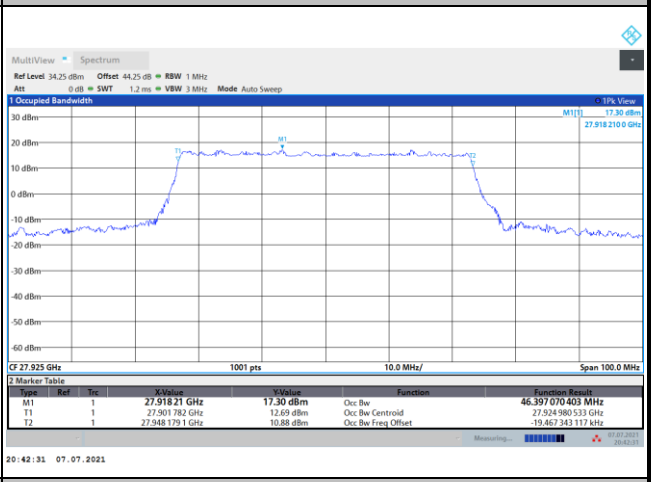
Lowest Channel / 50MHz / 16QAM



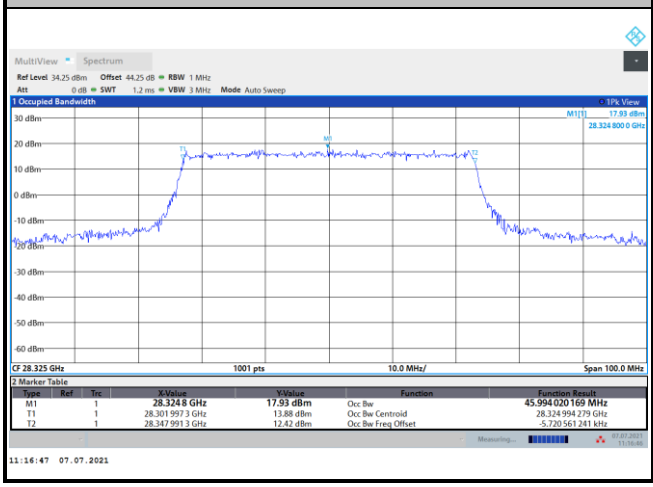
Middle Channel / 50MHz / QPSK



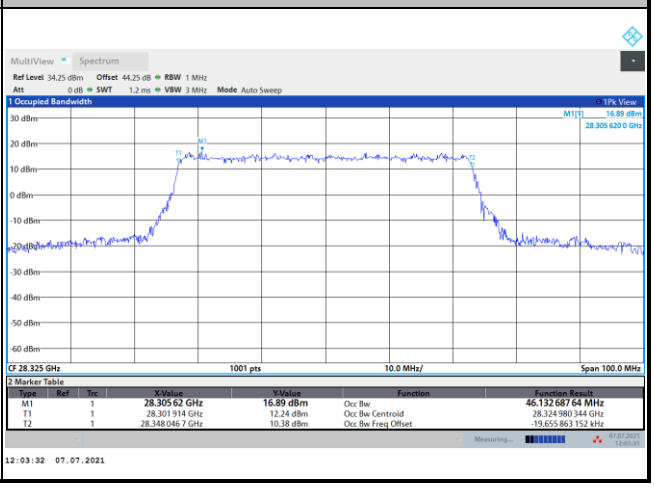
Middle Channel / 50MHz / 16QAM



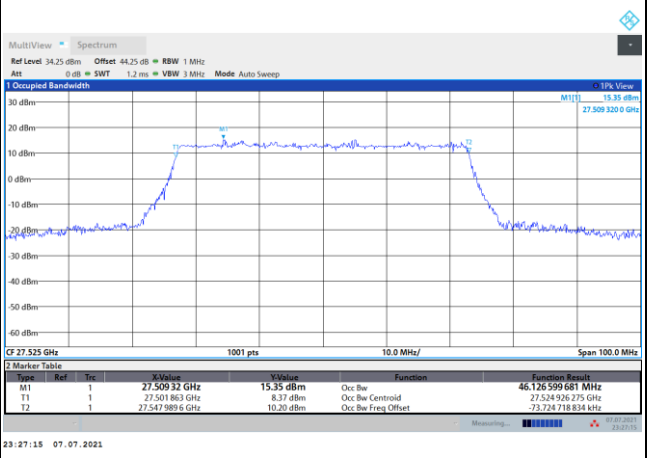
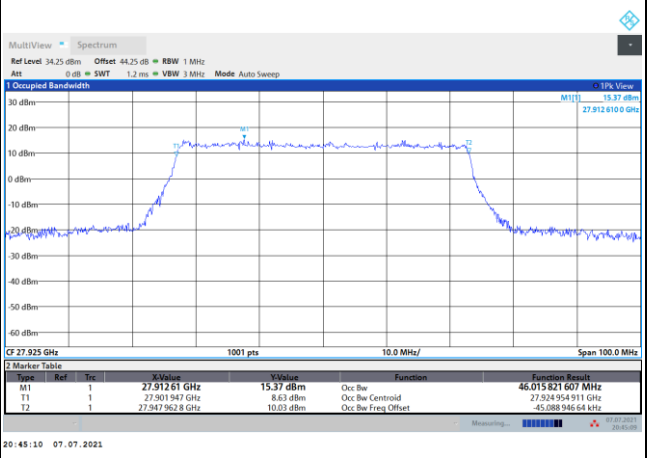
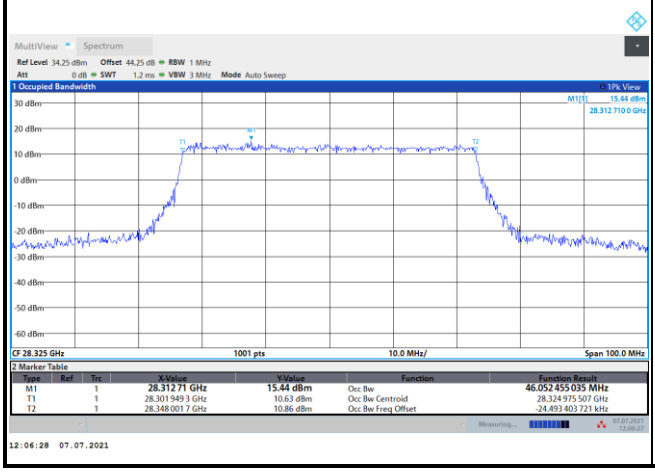
Highest Channel / 50MHz / QPSK



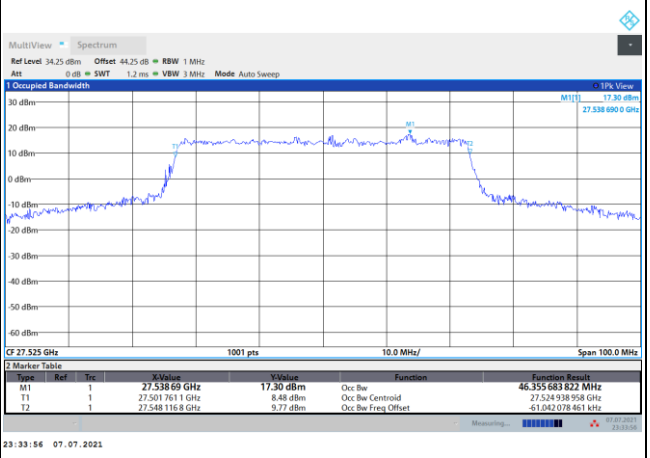
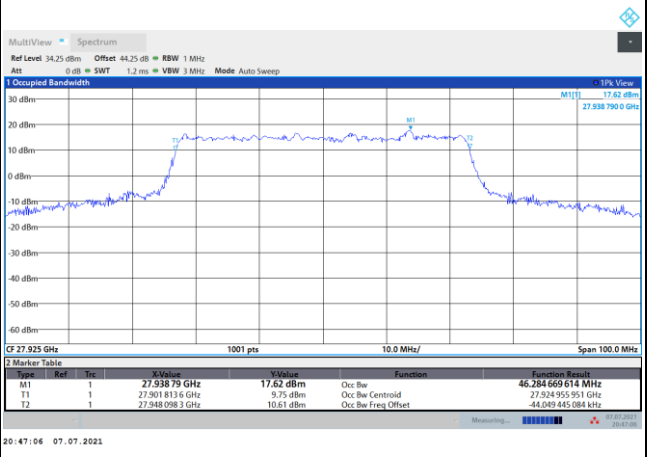
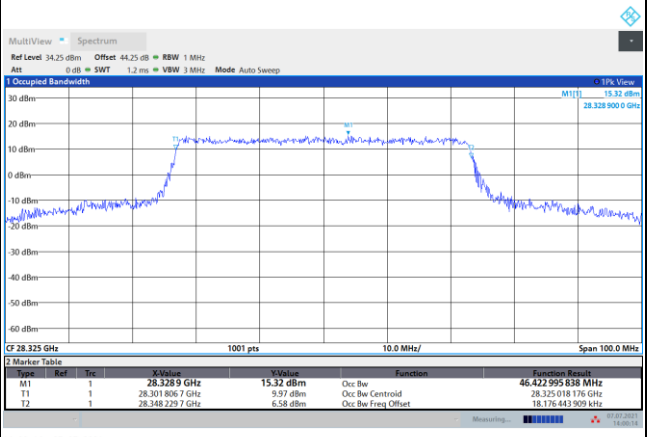
Highest Channel / 50MHz / 16QAM



DFT-s-OFDM Module B

NR Band n261	
Lowest Channel / 50MHz / 64QAM	
	intentionally blank
Middle Channel / 50MHz / 64QAM	
	intentionally blank
Highest Channel / 50MHz / 64QAM	
	intentionally blank

CP-OFDM Module B

NR Band n261	
Lowest Channel / 50MHz / QPSK	
	intentionally blank
Middle Channel / 50MHz / QPSK	
	intentionally blank
Highest Channel / 50MHz / QPSK	
	intentionally blank

Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module B NR Band n261 : BE (dBm) 1 RB		
BW			50MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-17.79	-7.78	-7.97
	>10%OB	≦-13	-23.07	-18.68	-20.08
HighCH	0~10%OB	≦-5	-6.51	-9.14	-10.01
	>10%OB	≦-13	-17.00	-19.80	-21.34
Result			Compliance		

Mode			CP-OFDM Module B NR Band n261 : BE (dBm) 1 RB
BW			50MHz
Limit (dBm)			QPSK
Low CH	0~10%OB	≦-5	-7.45
	>10%OB	≦-13	-17.84
High CH	0~10%OB	≦-5	-8.21
	>10%OB	≦-13	-20.23
Result			Compliance

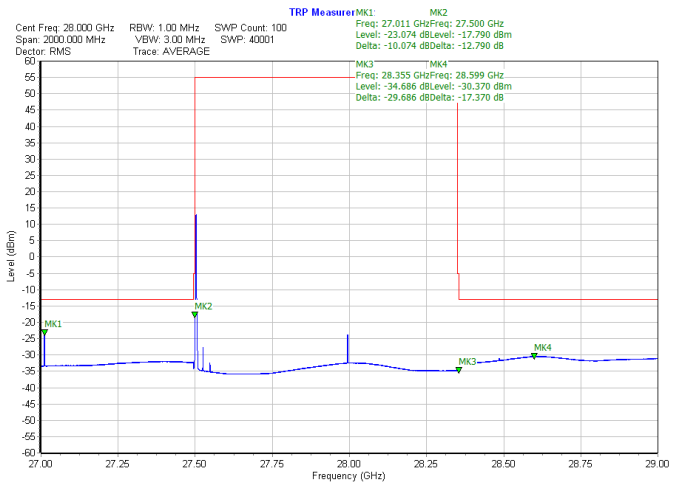
Mode			DFT-s-OFDM Module B NR Band n261 : BE (dBm) Full RB		
BW			50MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-12.85	-16.17	-18.06
	>10%OB	≦-13	-17.68	-19.46	-26.73
HighCH	0~10%OB	≦-5	-16.04	-17.67	-19.20
	>10%OB	≦-13	-22.49	-25.77	-30.36
Result			Compliance		

Mode			CP-OFDM Module B NR Band n261 : BE (dBm) Full RB
BW			50MHz
Limit (dBm)			QPSK
Low CH	0~10%OB	≦-5	-15.41
	>10%OB	≦-13	-17.34
High CH	0~10%OB	≦-5	-15.54
	>10%OB	≦-13	-19.85
Result			Compliance

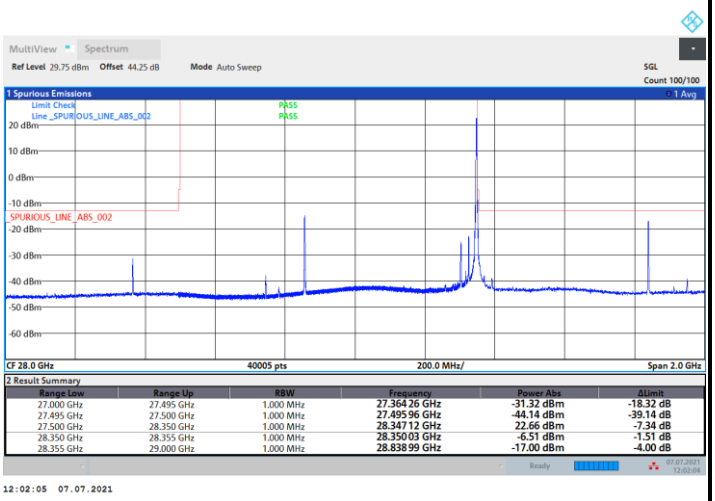
DFT-s-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

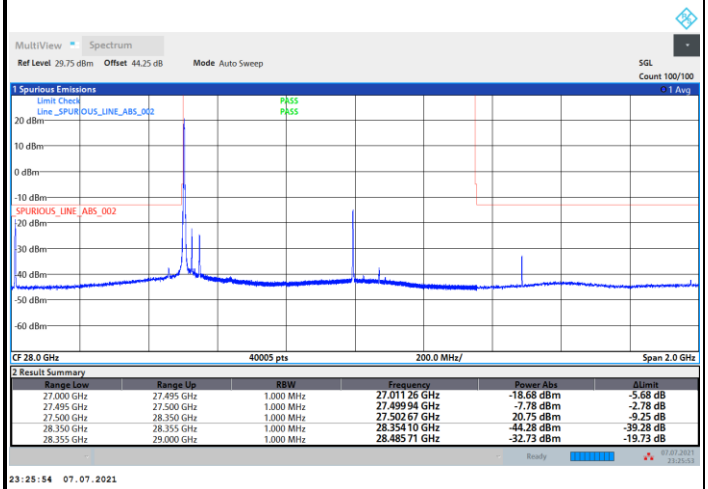


Highest Band Edge / 1 RB

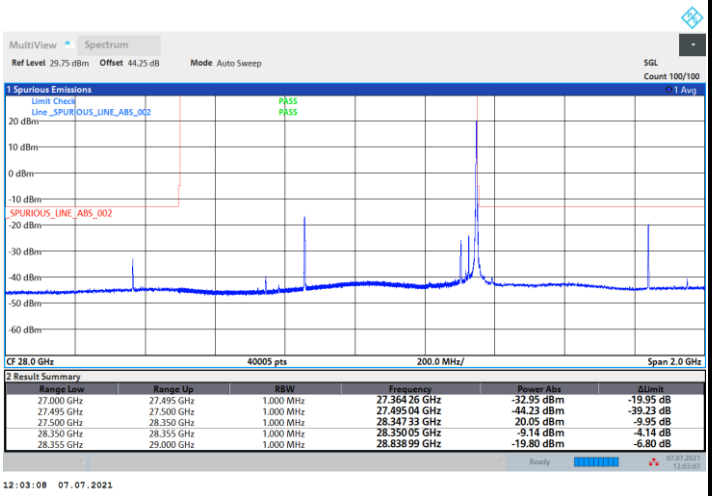


NR Band n261 / 50MHz / 16QAM

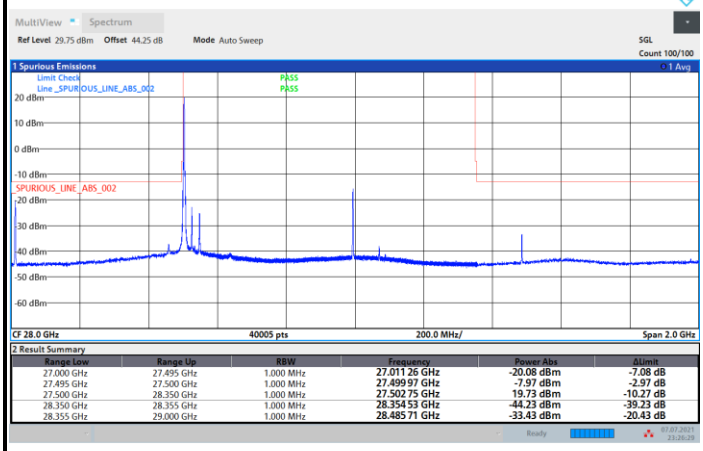
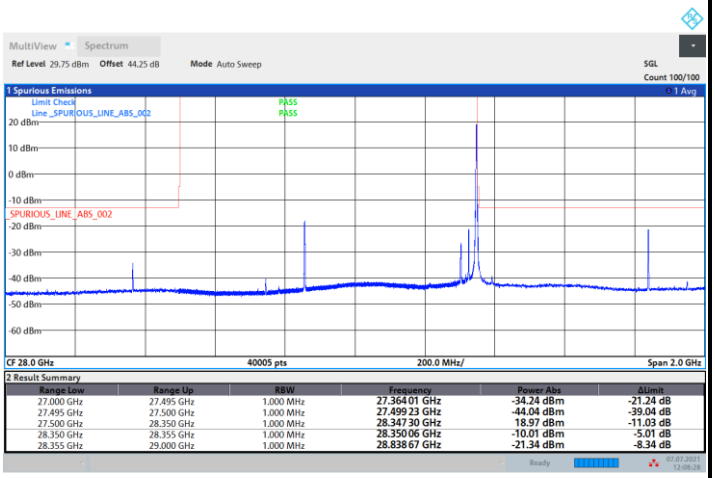
Lowest Band Edge / 1 RB



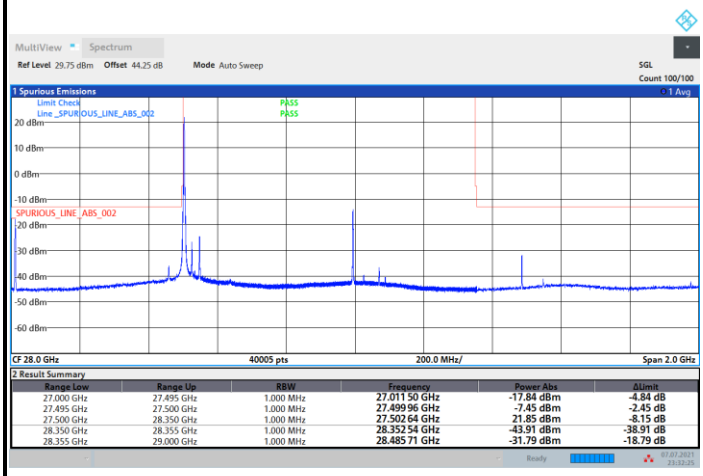
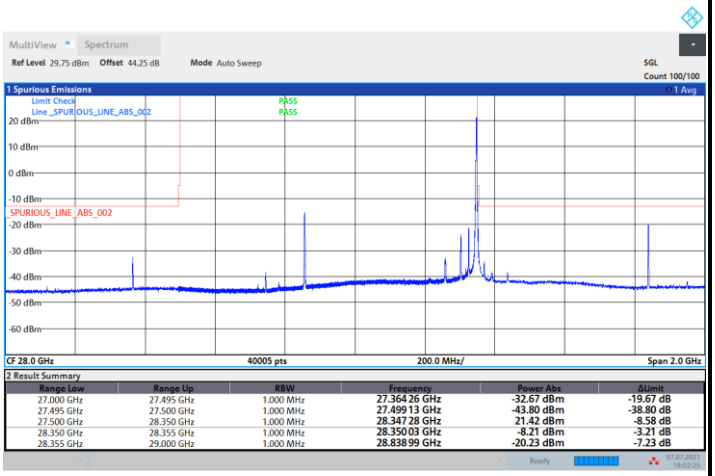
Highest Band Edge / 1 RB



DFT-s-OFDM Module B

NR Band n261 / 50MHz / 64QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

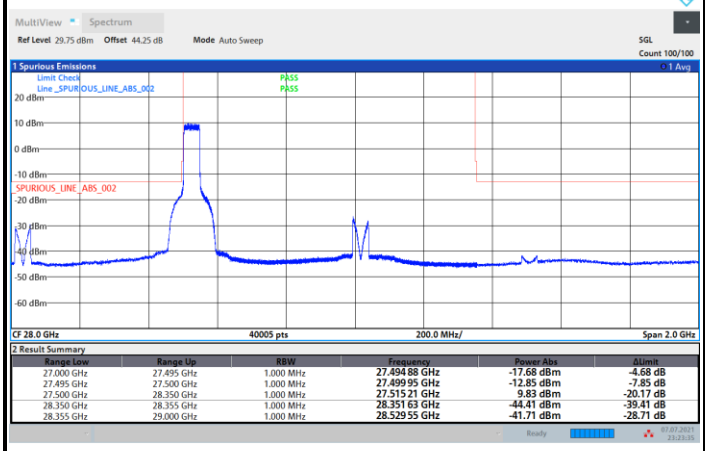
CP-OFDM Module B

NR Band n261 / 50MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

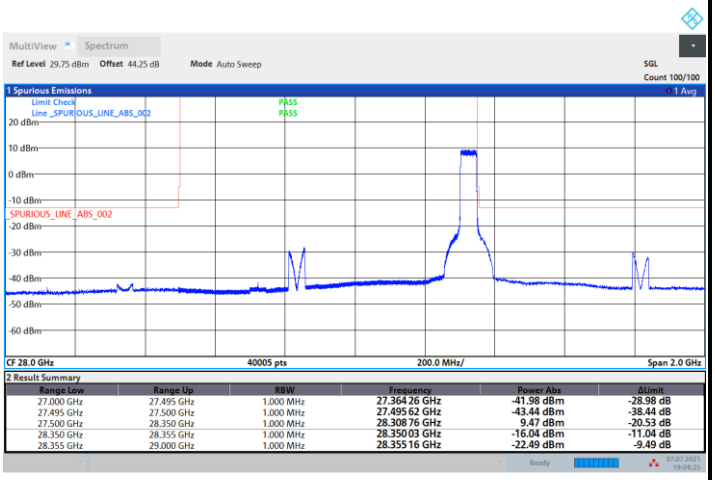
DFT-s-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

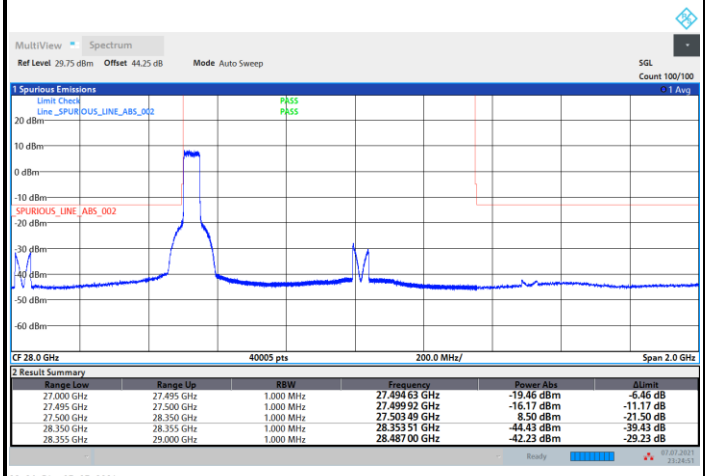


Highest Band Edge / Full RB

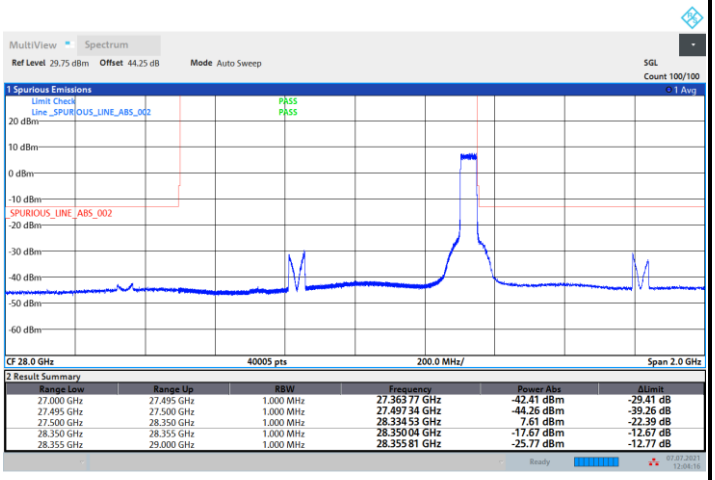


NR Band n261 / 50MHz / 16QAM

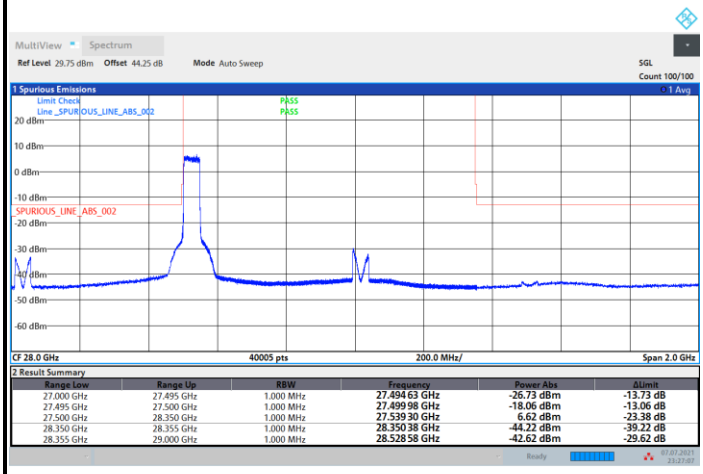
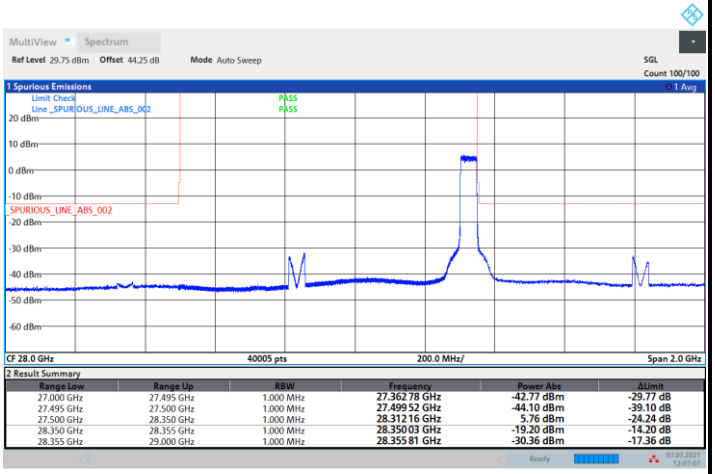
Lowest Band Edge / Full RB



Highest Band Edge / Full RB



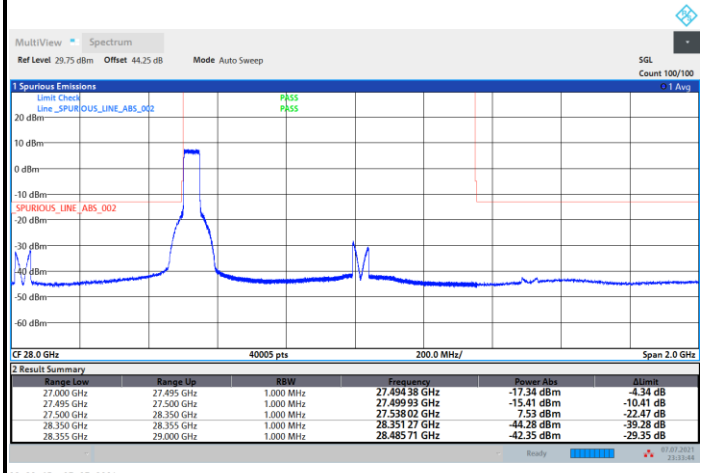
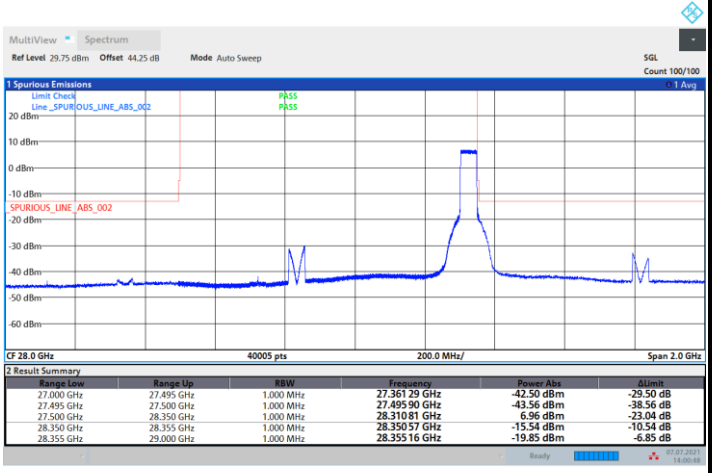
DFT-s-OFDM Module B

NR Band n261 / 50MHz / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
27.000 GHz	27.495 GHz	1.000 MHz	27.494 63 GHz	-26.73 dBm	-13.73 dB
27.495 GHz	27.500 GHz	1.000 MHz	27.499 98 GHz	-18.06 dBm	-13.06 dB
27.500 GHz	28.350 GHz	1.000 MHz	27.539 30 GHz	6.62 dBm	-23.38 dB
28.350 GHz	28.355 GHz	1.000 MHz	28.350 38 GHz	-44.22 dBm	-39.22 dB
28.355 GHz	29.000 GHz	1.000 MHz	28.528 58 GHz	-42.62 dBm	-29.62 dB

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
27.000 GHz	27.495 GHz	1.000 MHz	27.362 78 GHz	-42.77 dBm	-29.77 dB
27.495 GHz	27.500 GHz	1.000 MHz	27.499 52 GHz	-44.10 dBm	-39.10 dB
27.500 GHz	28.350 GHz	1.000 MHz	28.312 16 GHz	5.76 dBm	-24.24 dB
28.350 GHz	28.355 GHz	1.000 MHz	28.350 03 GHz	-19.20 dBm	-14.20 dB
28.355 GHz	29.000 GHz	1.000 MHz	28.355 81 GHz	-30.36 dBm	-17.36 dB

CP-OFDM Module B

NR Band n261 / 50MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

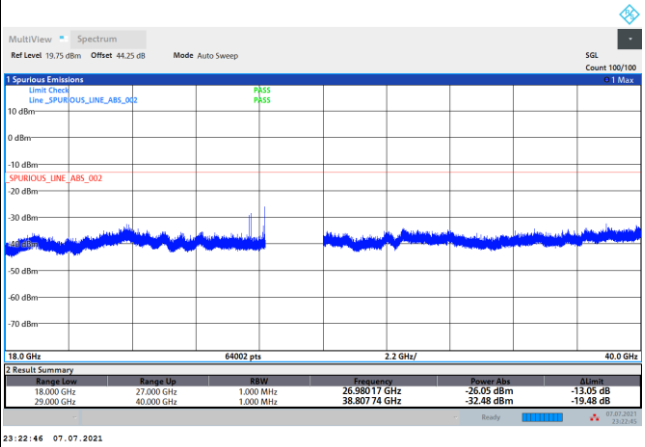
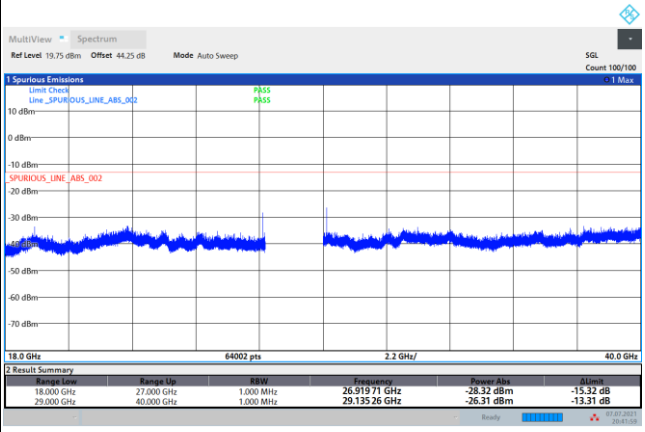
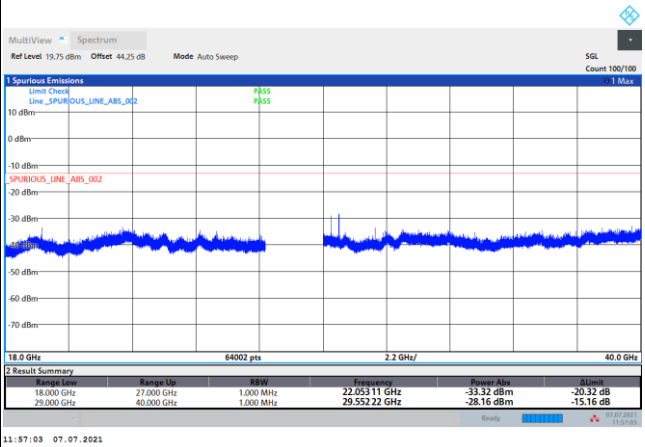
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
27.000 GHz	27.495 GHz	1.000 MHz	27.494 38 GHz	-17.34 dBm	-4.34 dB
27.495 GHz	27.500 GHz	1.000 MHz	27.499 93 GHz	-15.41 dBm	-10.41 dB
27.500 GHz	28.350 GHz	1.000 MHz	27.538 02 GHz	7.53 dBm	-22.47 dB
28.350 GHz	28.355 GHz	1.000 MHz	28.351 27 GHz	-44.28 dBm	-39.28 dB
28.355 GHz	29.000 GHz	1.000 MHz	28.485 71 GHz	-42.35 dBm	-29.35 dB

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
27.000 GHz	27.495 GHz	1.000 MHz	27.361 29 GHz	-42.50 dBm	-29.50 dB
27.495 GHz	27.500 GHz	1.000 MHz	27.495 90 GHz	-43.56 dBm	-38.56 dB
27.500 GHz	28.350 GHz	1.000 MHz	28.310 81 GHz	6.96 dBm	-23.04 dB
28.350 GHz	28.355 GHz	1.000 MHz	28.350 57 GHz	-15.54 dBm	-10.54 dB
28.355 GHz	29.000 GHz	1.000 MHz	28.355 16 GHz	-19.85 dBm	-6.85 dB

Spurious Emission

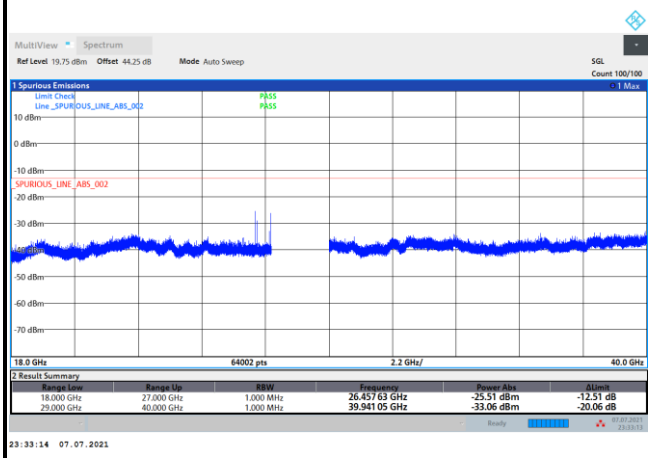
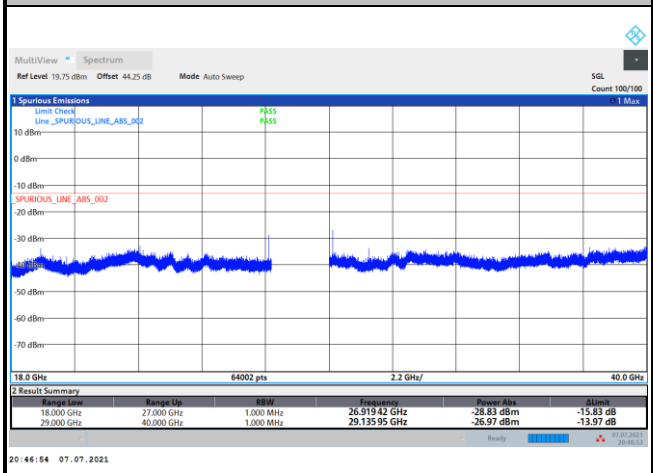
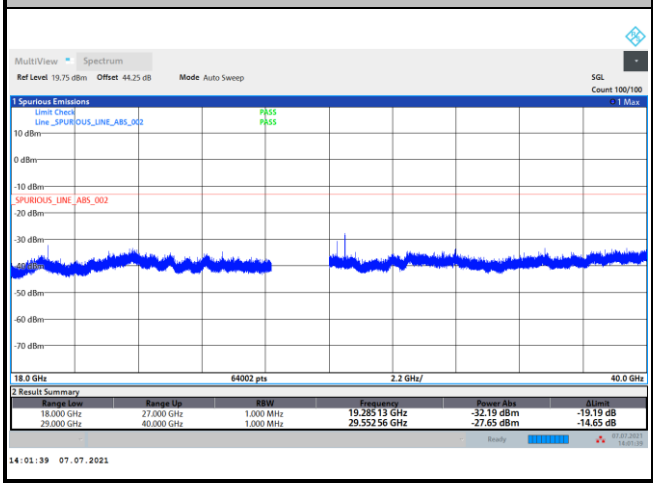
Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM Module B

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 50MHz	
	**intentionally blank**
Middle Channel / 50MHz	
	**intentionally blank**
Highest Channel / 50MHz	
	**intentionally blank**

Remark: In band and out of band frequencies that has reported in previous results are omitted.

CP-OFDM Module B

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 50MHz	
	**intentionally blank**
Middle Channel / 50MHz	
	**intentionally blank**
Highest Channel / 50MHz	
	**intentionally blank**

Remark: In band and out of band frequencies that has reported in previous results are omitted.

NR Band n261 Module B Beam H+V

Occupied Bandwidth

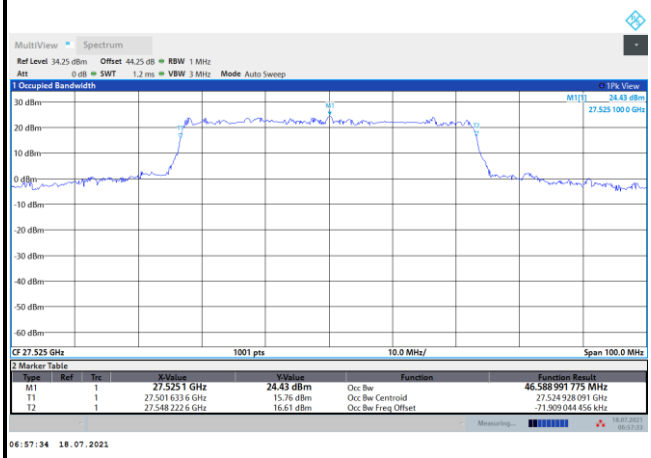
Mode	DFT-s-OFDM Module B NR Band n261 : 99%OBW(MHz)		
BW	50MHz		
Mod.	QPSK	16QAM	64QAM
Lowest CH	46.58	46.54	46.16
Middle CH	46.41	46.60	46.33
Highest CH	46.53	46.45	46.15

Mode	CP-OFDM Module B NR Band n261 : 99%OBW(MHz)
BW	50MHz
Mod.	QPSK
Lowest CH	46.78
Middle CH	47.01
Highest CH	46.57

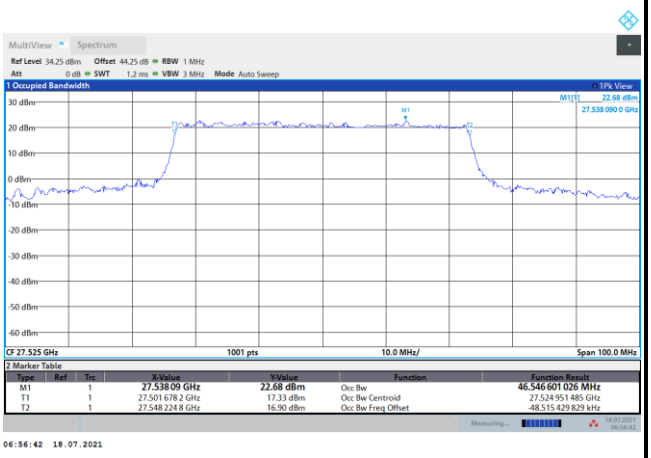
DFT-s-OFDM Module B

NR Band n261

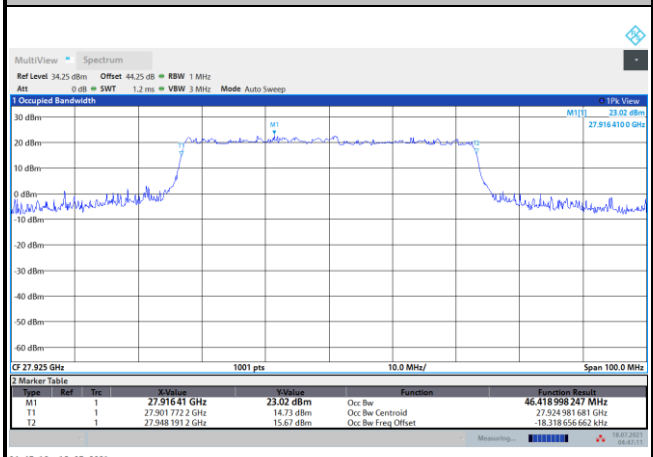
Lowest Channel / 50MHz / QPSK



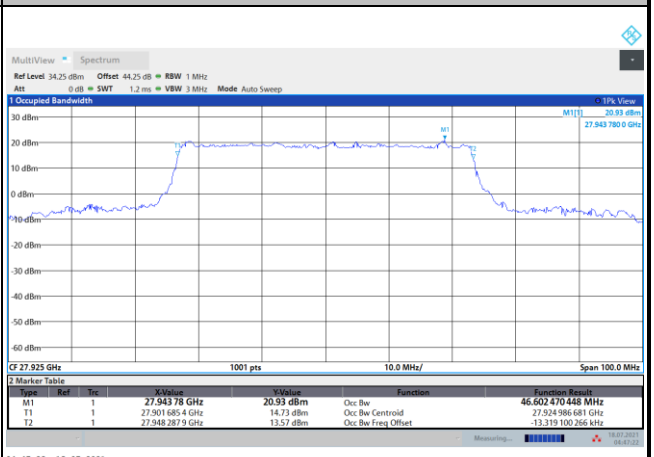
Lowest Channel / 50MHz / 16QAM



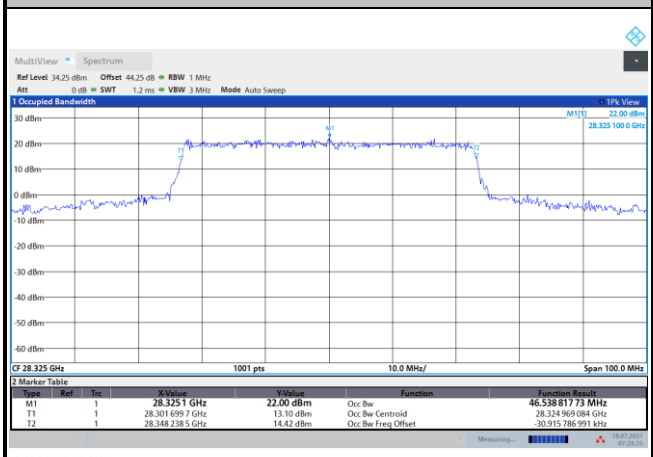
Middle Channel / 50MHz / QPSK



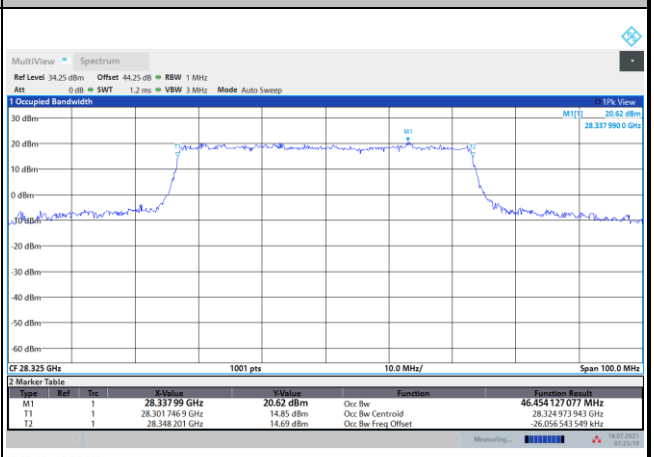
Middle Channel / 50MHz / 16QAM



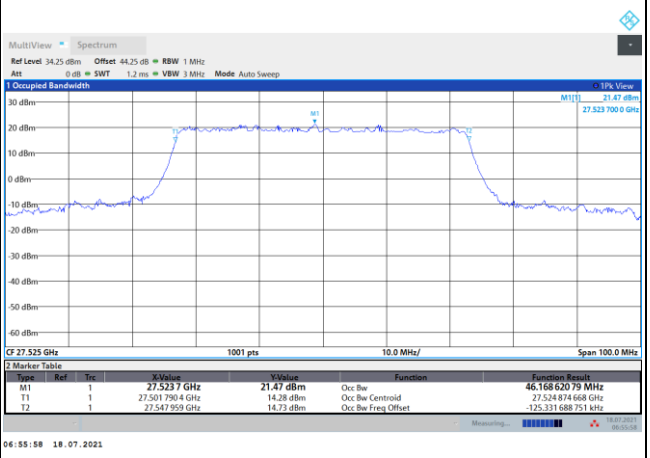
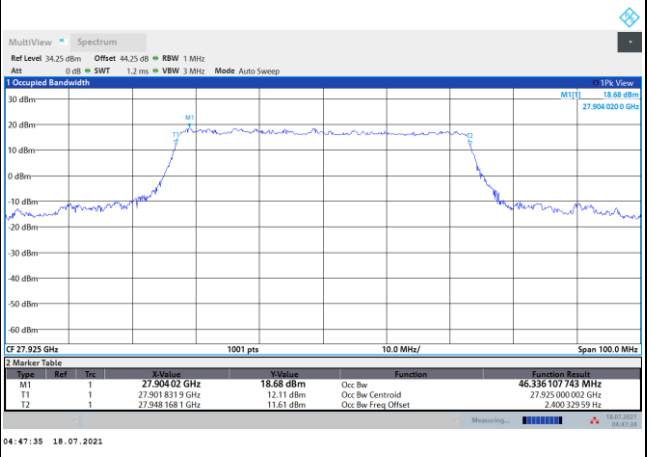
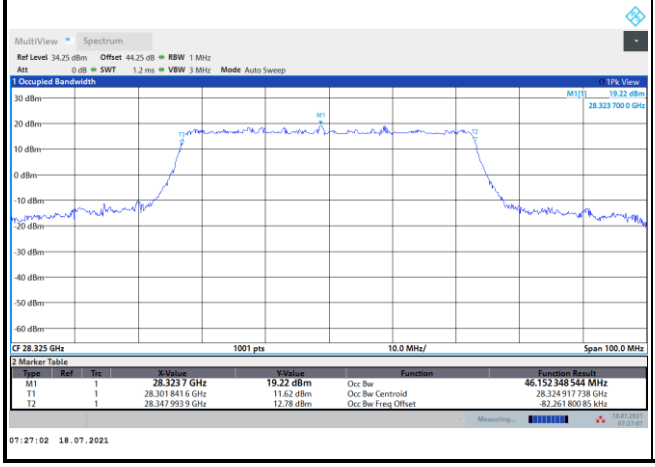
Highest Channel / 50MHz / QPSK



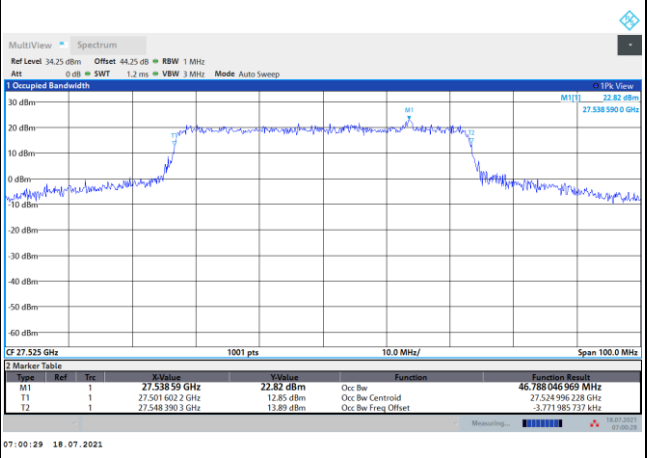
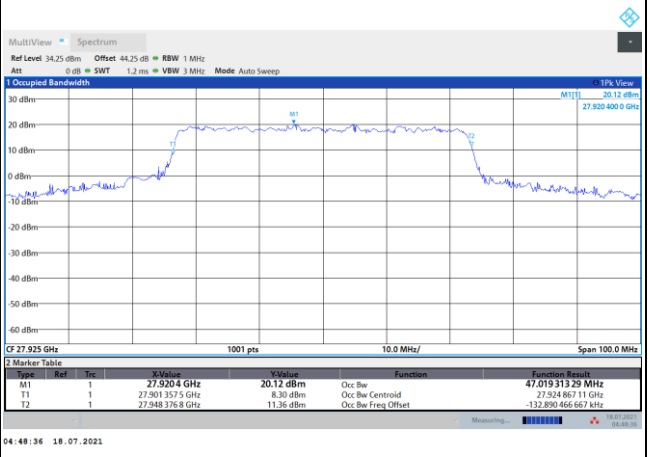
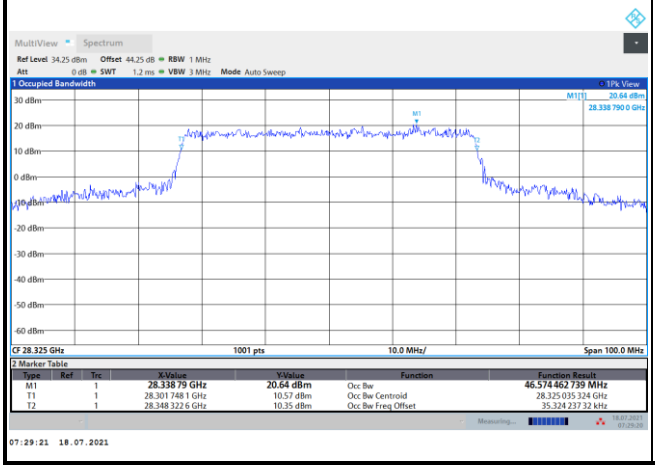
Highest Channel / 50MHz / 16QAM



DFT-s-OFDM Module B

NR Band n261	
Lowest Channel / 50MHz / 64QAM	
	**intentionally blank**
Middle Channel / 50MHz / 64QAM	
	**intentionally blank**
Highest Channel / 50MHz / 64QAM	
	**intentionally blank**

CP-OFDM Module B

NR Band n261	
Lowest Channel / 50MHz / QPSK	
	**intentionally blank**
Middle Channel / 50MHz / QPSK	
	**intentionally blank**
Highest Channel / 50MHz / QPSK	
	**intentionally blank**

Radiated Out of Band Emissions

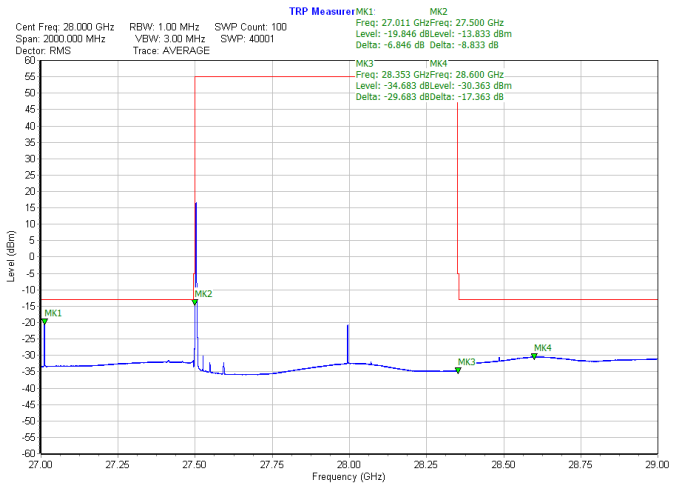
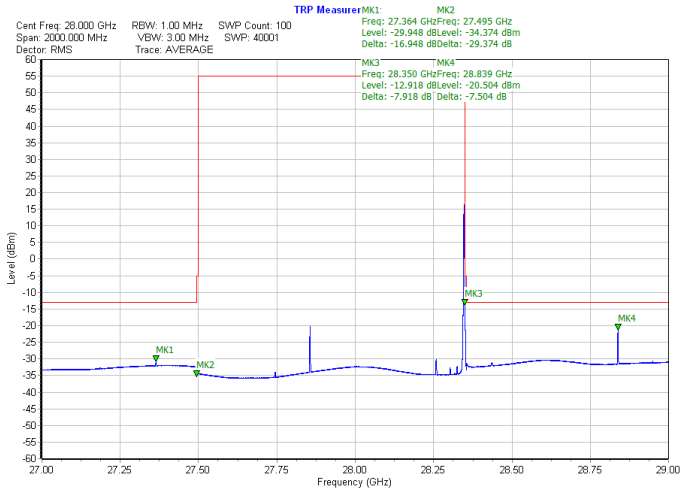
Mode			DFT-s-OFDM Module B NR Band n261 : BE (dBm) 1 RB		
BW			50MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-13.83	-13.46	-13.95
	>10%OB	≦-13	-19.84	-19.95	-20.71
HighCH	0~10%OB	≦-5	-12.91	-15.79	-19.30
	>10%OB	≦-13	-20.50	-22.46	-24.25
Result			Compliance		

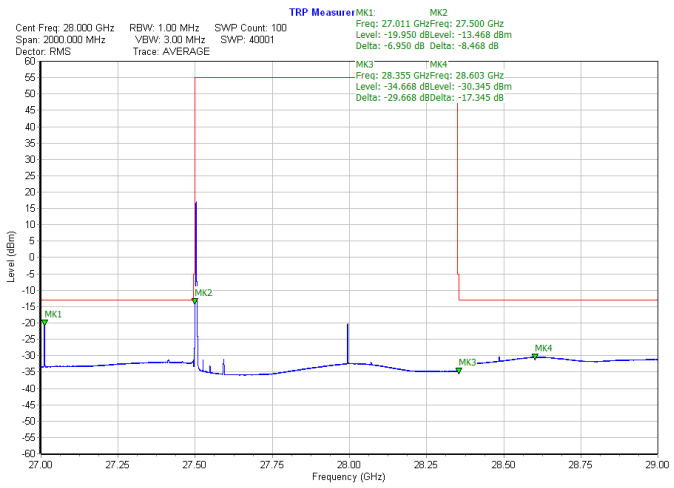
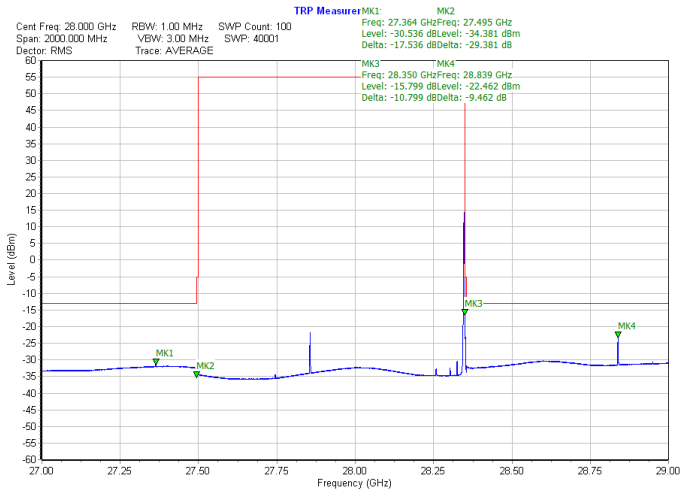
Mode			CP-OFDM Module B NR Band n261 : BE (dBm) 1 RB
BW			50MHz
Limit (dBm)			QPSK
Low CH	0~10%OB	≦-5	-13.60
	>10%OB	≦-13	-20.36
High CH	0~10%OB	≦-5	-17.82
	>10%OB	≦-13	-22.12
Result			Compliance

Mode			DFT-s-OFDM Module B NR Band n261 : BE (dBm) Full RB		
BW			50MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-20.15	-20.06	-12.70
	>10%OB	≦-13	-19.63	-19.45	-18.07
HighCH	0~10%OB	≦-5	-19.68	-11.32	-14.85
	>10%OB	≦-13	-19.86	-15.47	-23.05
Result			Compliance		

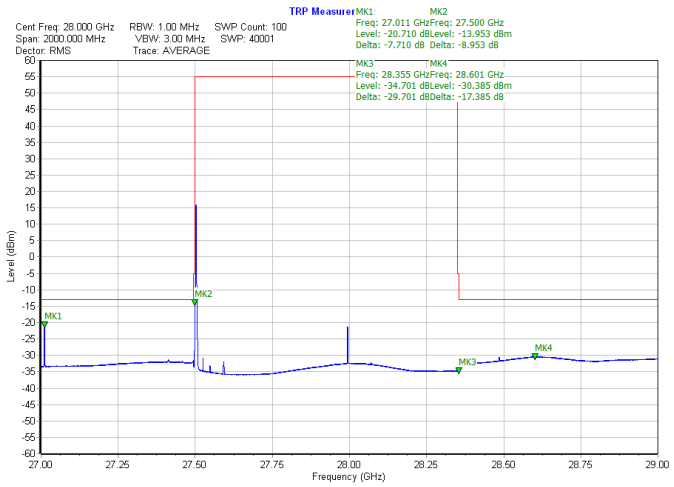
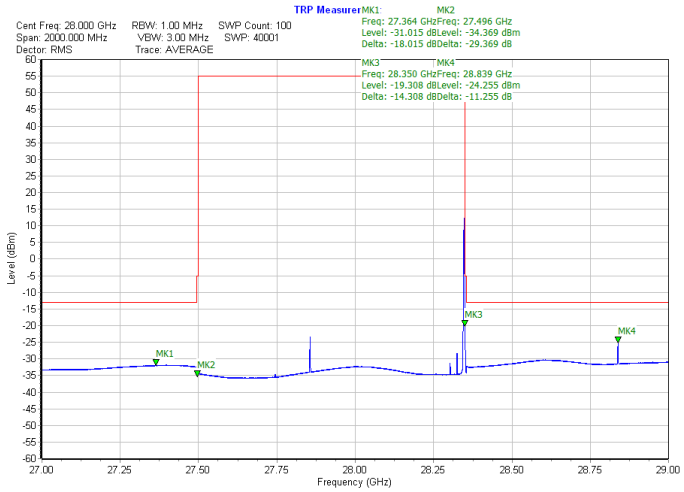
Mode			CP-OFDM Module B NR Band n261 : BE (dBm) Full RB
BW			50MHz
Limit (dBm)			QPSK
Low CH	0~10%OB	≦-5	-19.03
	>10%OB	≦-13	-17.94
High CH	0~10%OB	≦-5	-18.48
	>10%OB	≦-13	-17.99
Result			Compliance

DFT-s-OFDM Module B

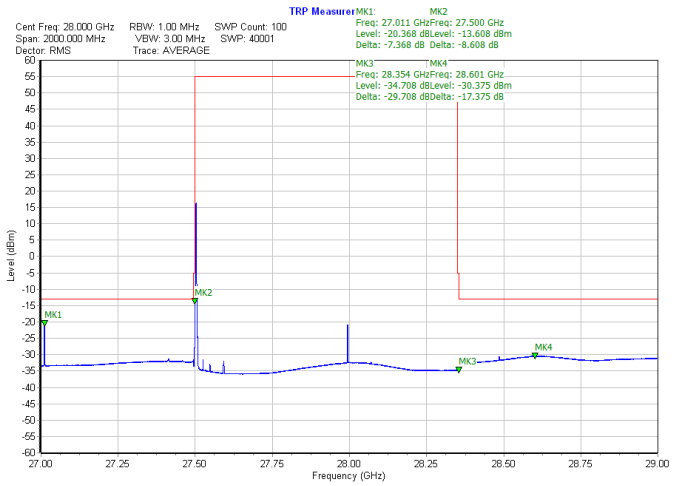
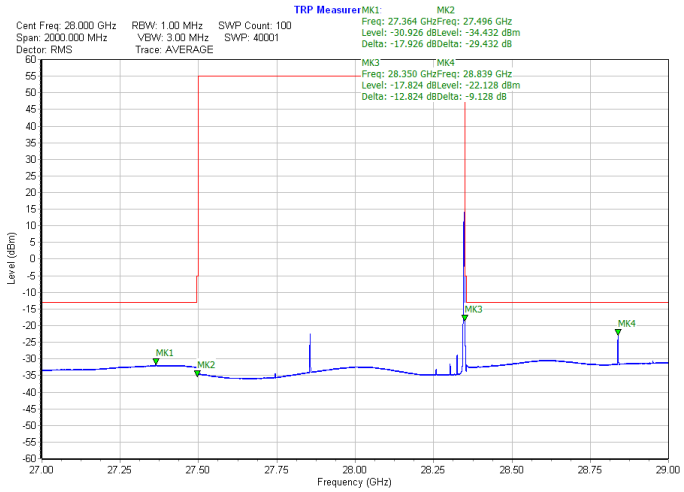
NR Band n261 / 50MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

NR Band n261 / 50MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

DFT-s-OFDM Module B

NR Band n261 / 50MHz / 64QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

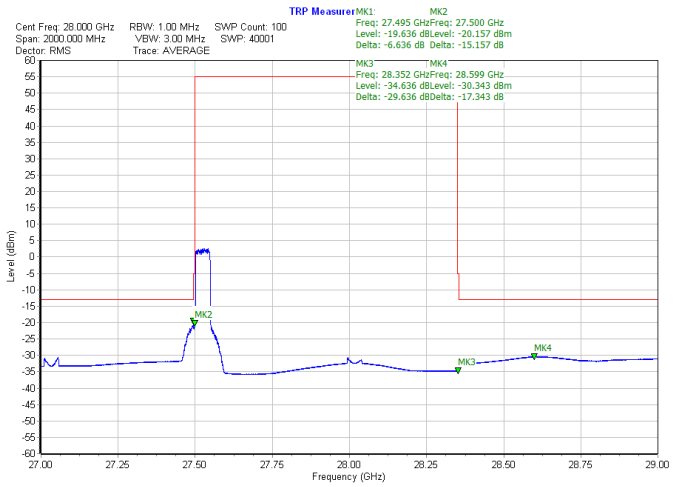
CP-OFDM Module B

NR Band n261 / 50MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

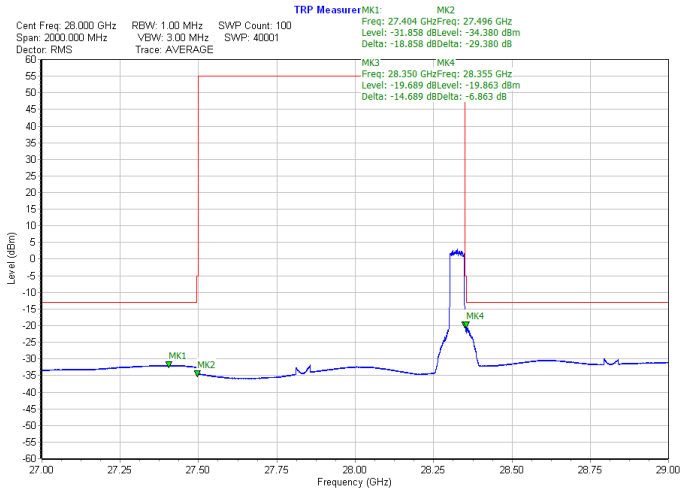
DFT-s-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

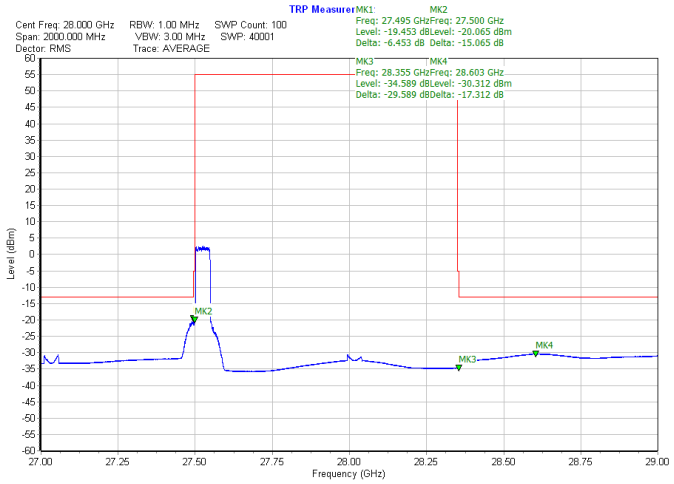


Highest Band Edge / Full RB

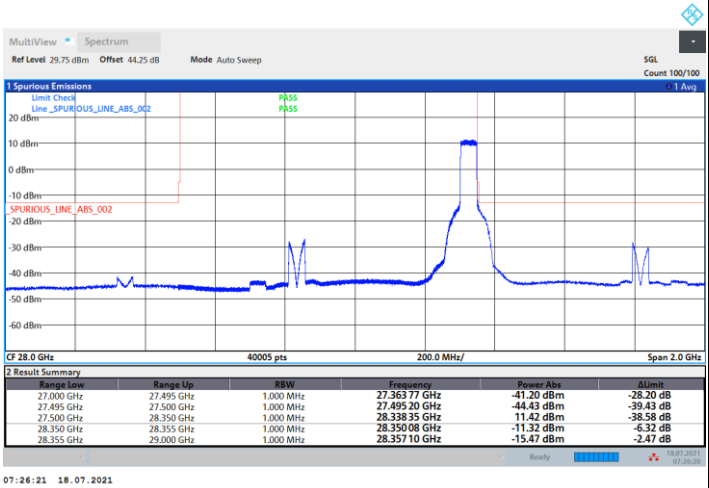


NR Band n261 / 50MHz / 16QAM

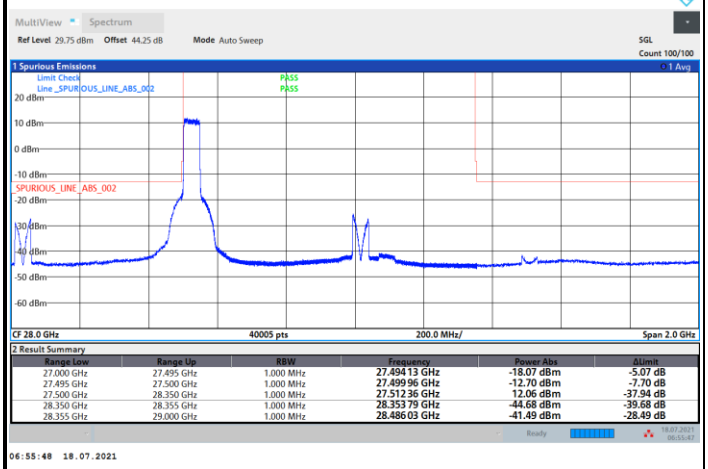
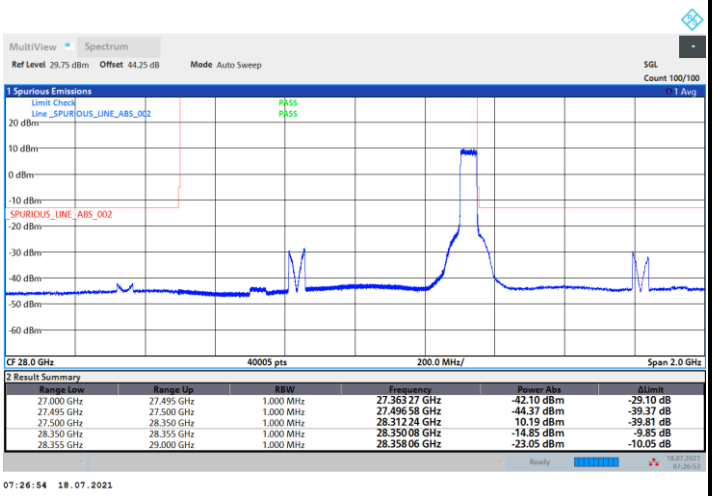
Lowest Band Edge / Full RB



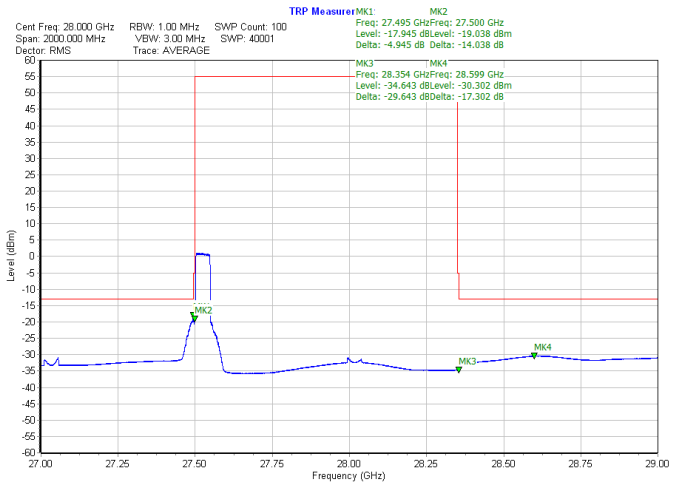
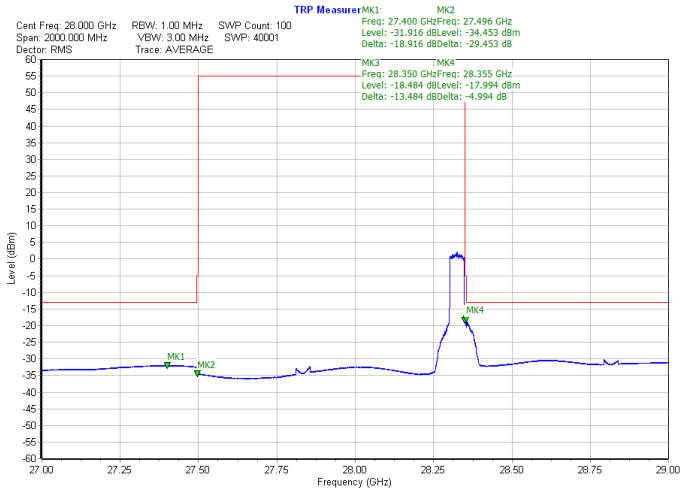
Highest Band Edge / Full RB



DFT-s-OFDM Module B

NR Band n261 / 50MHz / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

CP-OFDM Module B

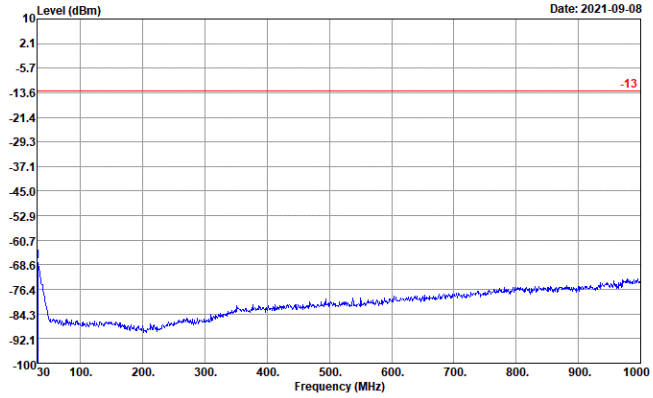
NR Band n261 / 50MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

Spurious Emission

There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz.

NR Band n261 (30MHz-1GHz)

Horizontal

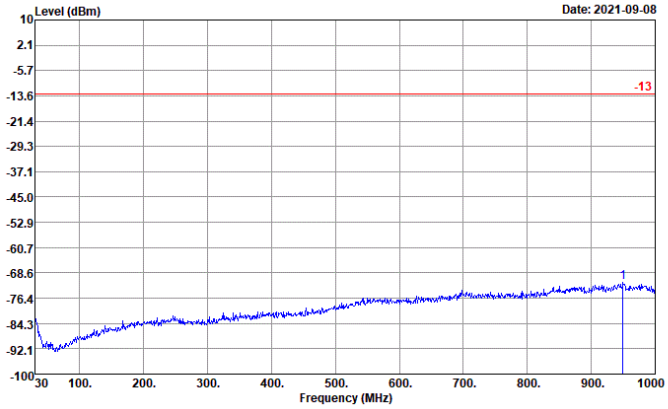


Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 HORIZONTAL

: n261

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1	30.97	-67.53	-54.53	-13.00	-78.41	46.61	0.00	35.73	---	---	Peak

Vertical



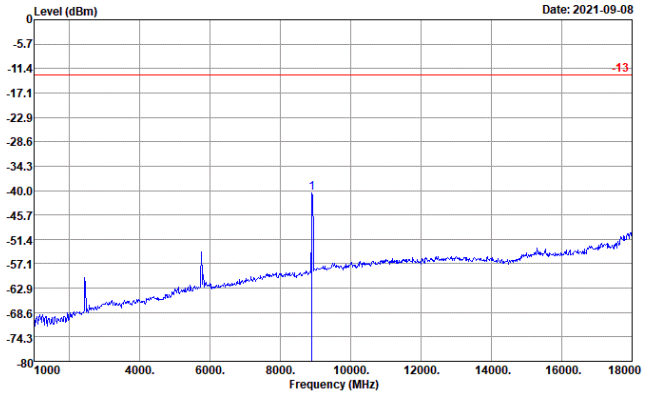
Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 VERTICAL

: n261

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1	949.56	-71.52	-58.52	-13.00	-81.31	42.96	0.00	33.17	---	---	Peak

NR Band n261 (1GHz-18GHz)

Horizontal

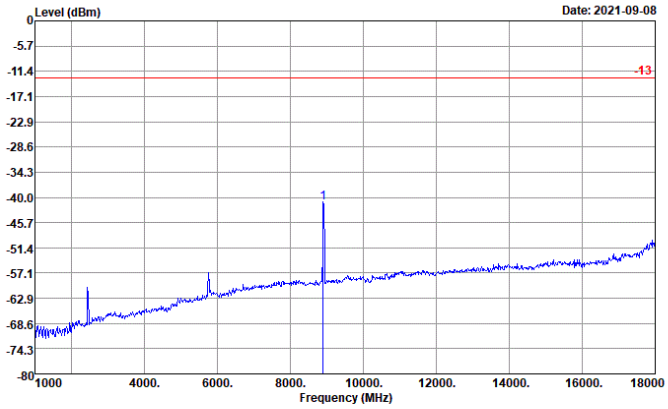


Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 HORIZONTAL

: n261

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1	8905.00	-40.55	-27.55	-13.00	-66.19	66.46	0.00	40.82	---	---	Peak

Vertical



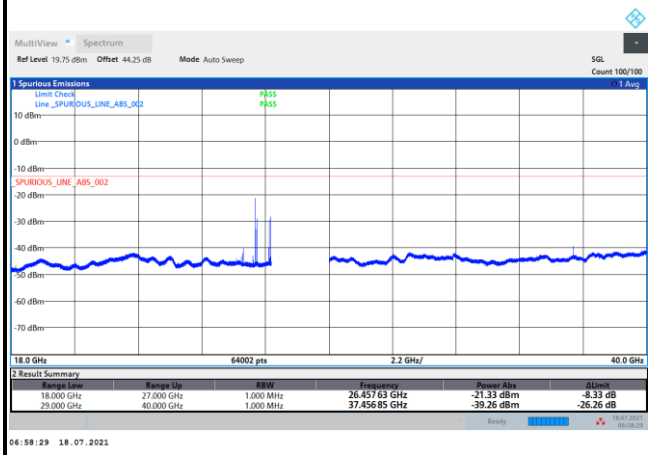
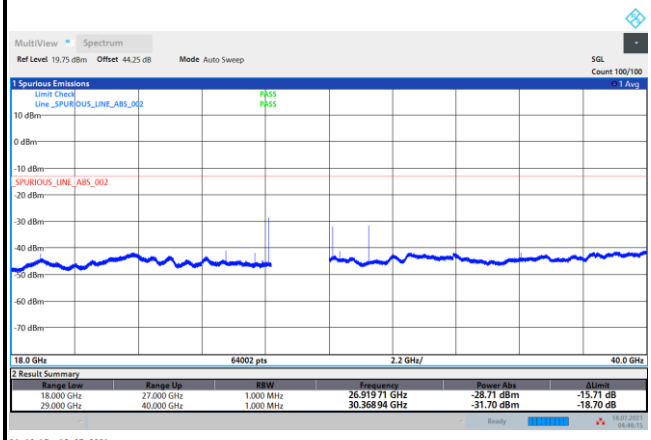
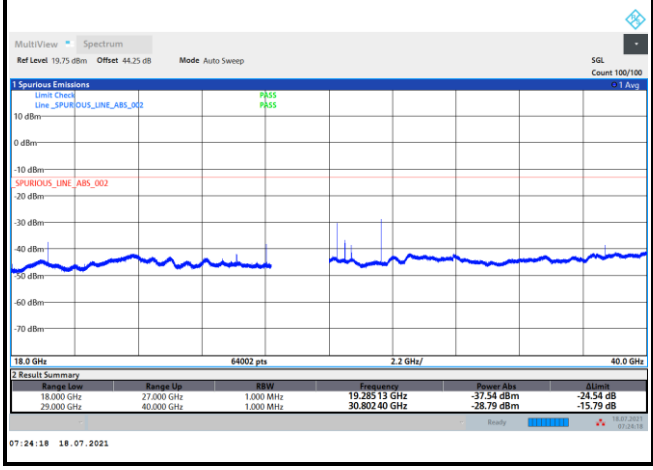
Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 VERTICAL

: n261

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1	8905.00	-41.21	-28.21	-13.00	-66.31	65.92	0.00	40.82	---	---	Peak

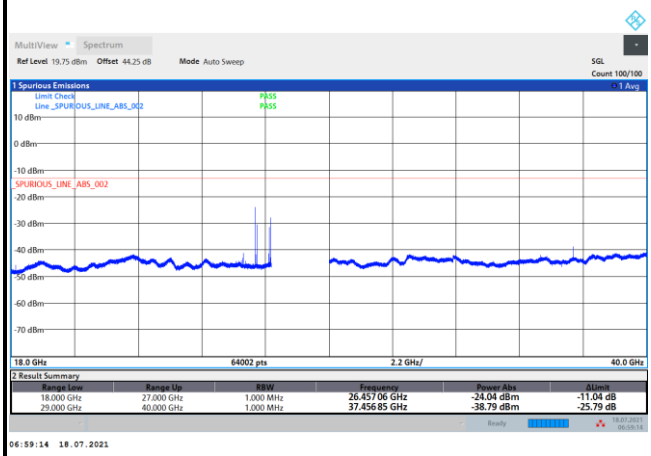
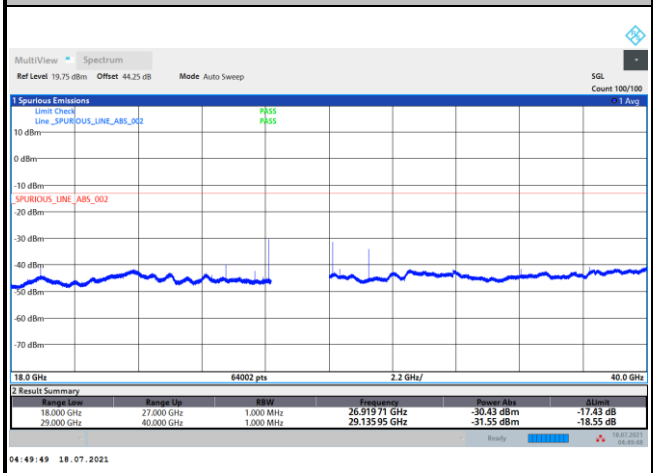
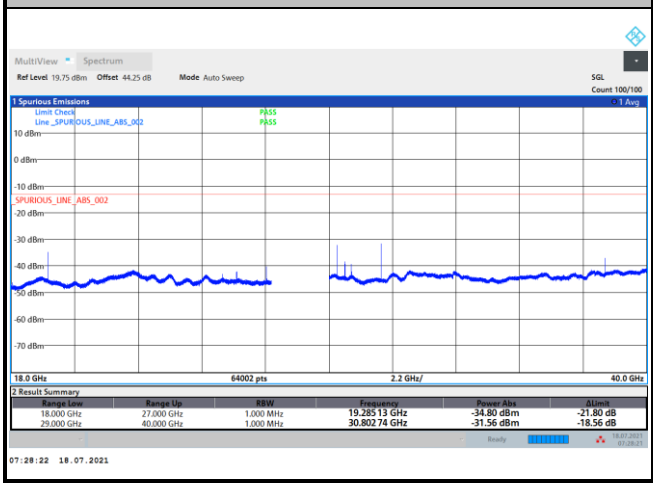
Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM Module B

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 50MHz	
	**intentionally blank**
Middle Channel / 50MHz	
	**intentionally blank**
Highest Channel / 50MHz	
	**intentionally blank**

Remark: In band and out of band frequencies that has reported in previous results are omitted.

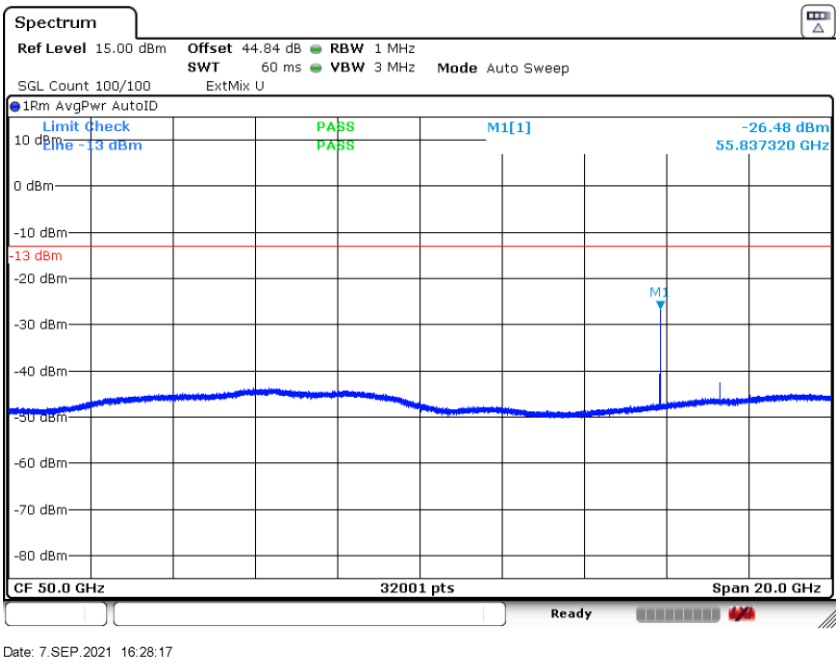
CP-OFDM Module B

NR Band n261 QPSK (18-40GHz)	
Lowest Channel / 50MHz	
	**intentionally blank**
Middle Channel / 50MHz	
	**intentionally blank**
Highest Channel / 50MHz	
	**intentionally blank**

Remark: In band and out of band frequencies that has reported in previous results are omitted.

There is no significant spurious emission signal found for frequency started from 40GHz up to 100GHz.

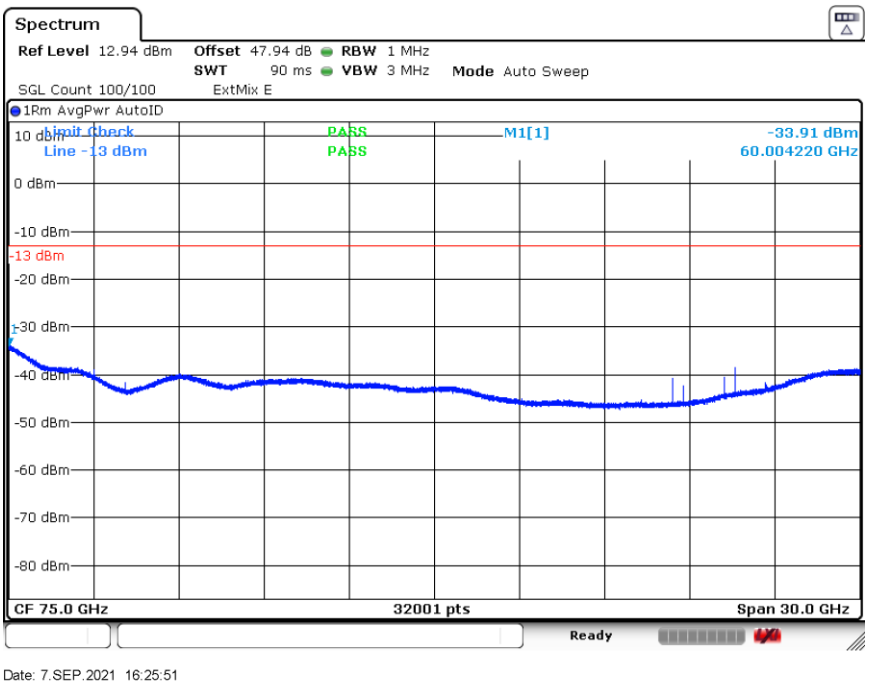
NR Band n261
(40GHz-60GHz)



Note: Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 42.3 + 0.34 + 107 + 20log(1) – 104.8 = 44.84 (dB)

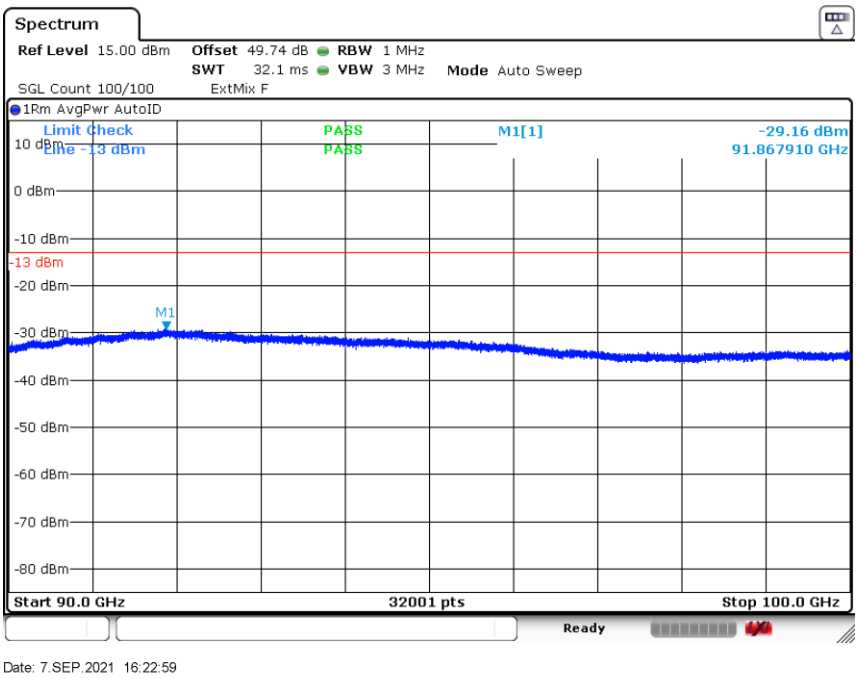
NR Band n261
(60GHz-90GHz)



Note: Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 45.4 + 0.34 + 107 + 20log(1) – 104.8 = 47.94 (dB)

NR Band n261
(90GHz-100GHz)



Note: Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 47.2 + 0.34 + 107 + 20log(1) – 104.8 = 49.74 (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	27.9260345	-0.500	0.018	Pass
40	Normal Voltage	27.9260345	-0.500	0.018	
30	Normal Voltage	27.9260345	-0.500	0.018	
20(Ref.)	Normal Voltage	27.926034	0.000	0.000	
10	Normal Voltage	27.9260345	-0.500	0.018	
0	Normal Voltage	27.9260345	-0.500	0.018	
-10	Normal Voltage	27.9260345	-0.500	0.018	
-20	Normal Voltage	27.926035	-1.000	0.036	
-30	Normal Voltage	27.926035	-1.000	0.036	
20	Maximum Voltage	27.926034	0.000	0.000	
20	Normal Voltage	27.926034	0.000	0.000	
20	Battery End Point	27.9260345	-0.500	0.018	

Note:

1. Normal Voltage =3.85 V.；Battery End Point (BEP) =3.60 V.；Maximum Voltage =4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

———THE END———

Appendix B. R&S Mixer and Horn Antenna Calibration Reports