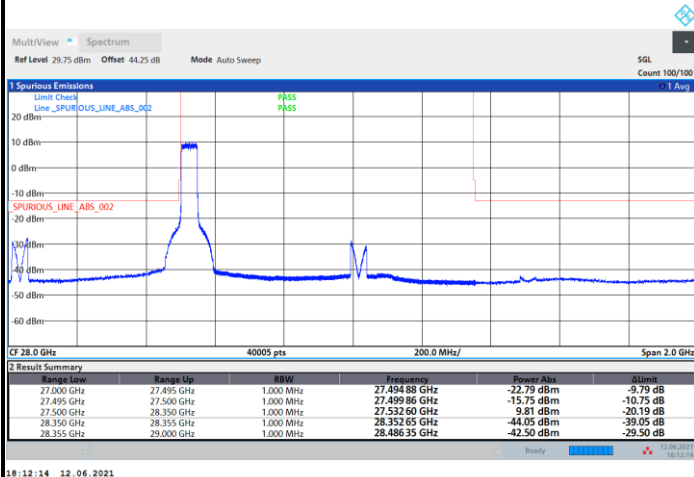




DFT-s-OFDM Module A

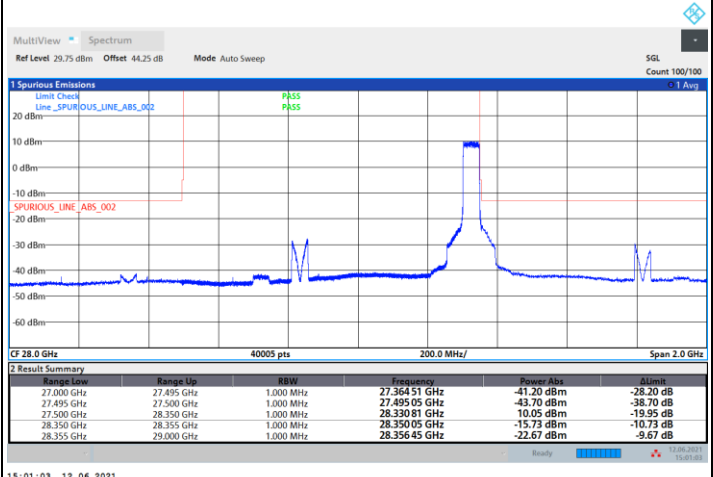
NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB



18:12:14 12.06.2021

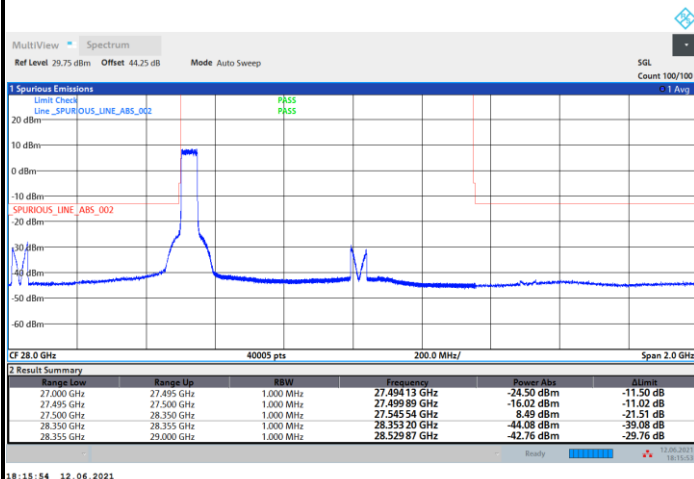
Highest Band Edge / Full RB



15:01:03 12.06.2021

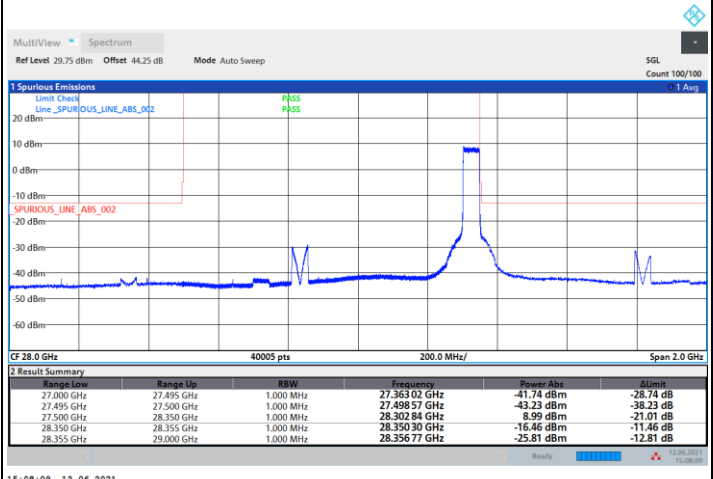
NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / Full RB



18:15:54 12.06.2021

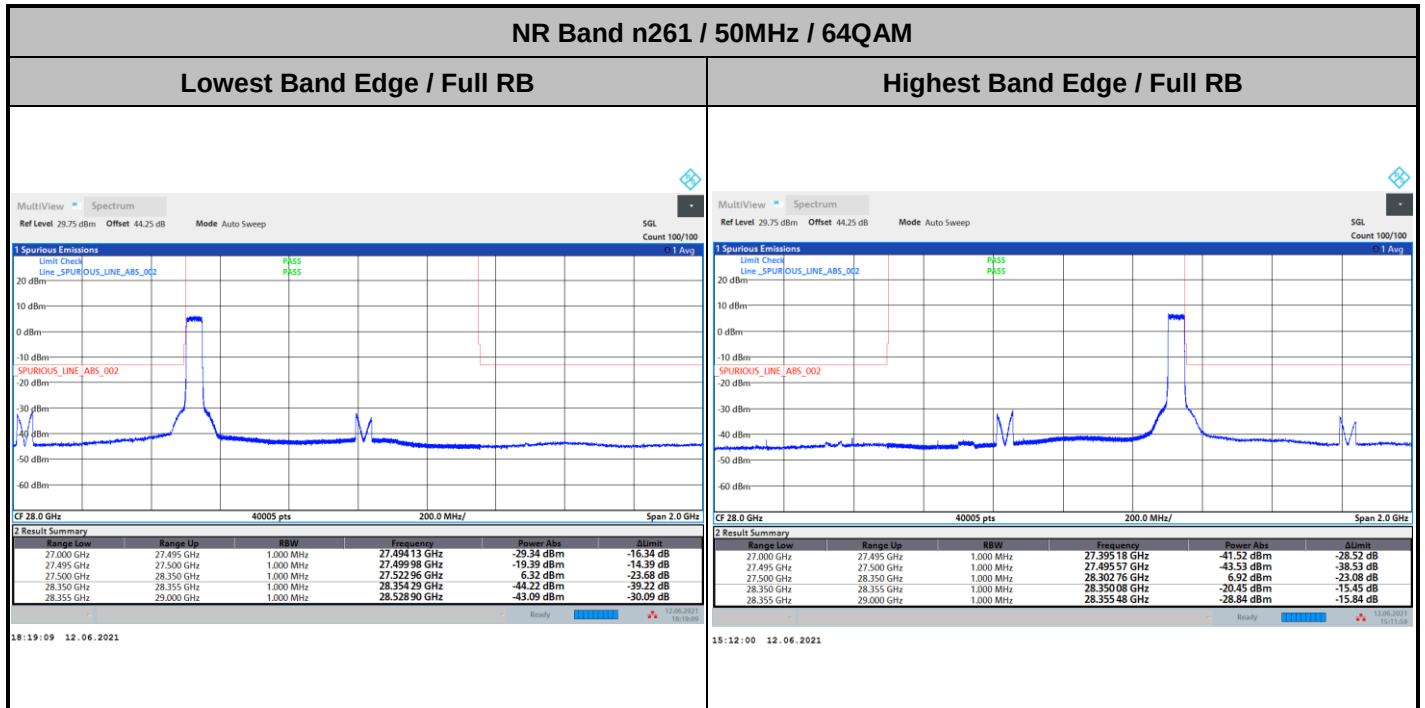
Highest Band Edge / Full RB



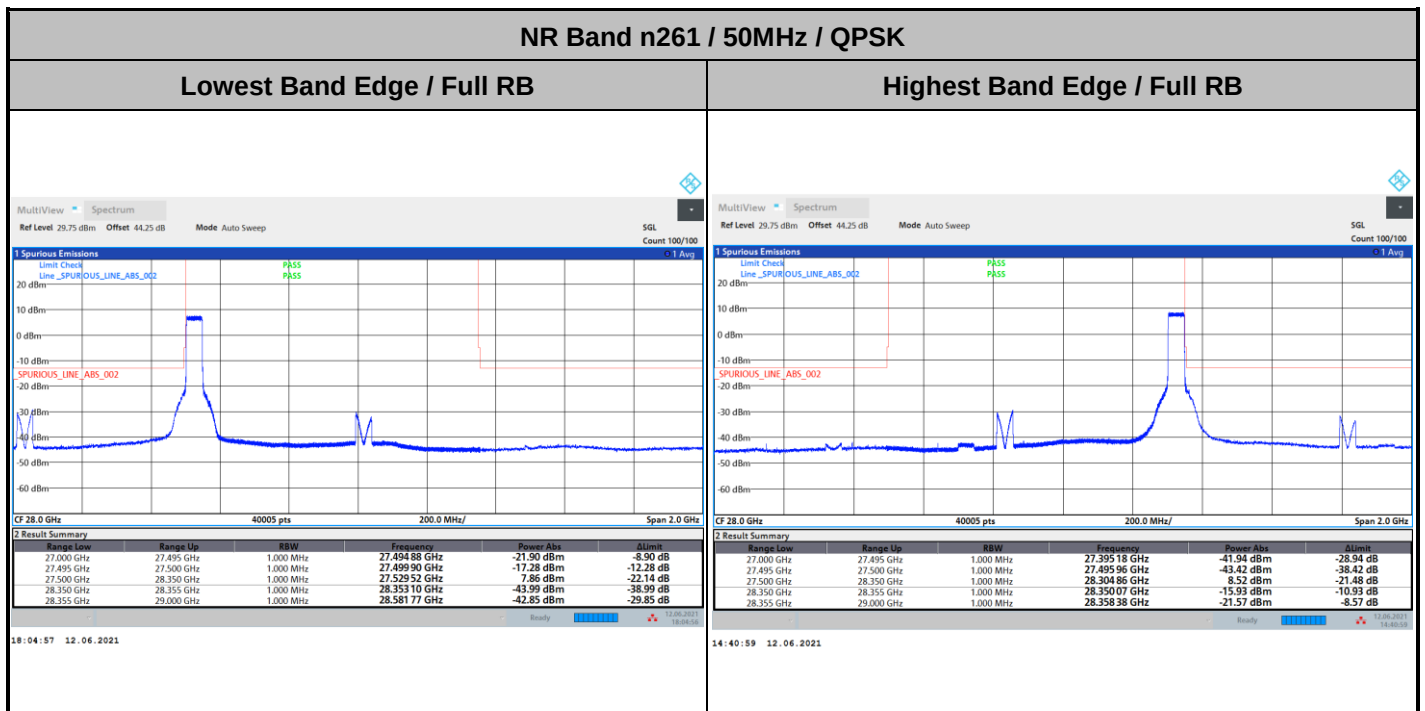
15:08:09 12.06.2021



DFT-s-OFDM Module A



CP-OFDM Module A



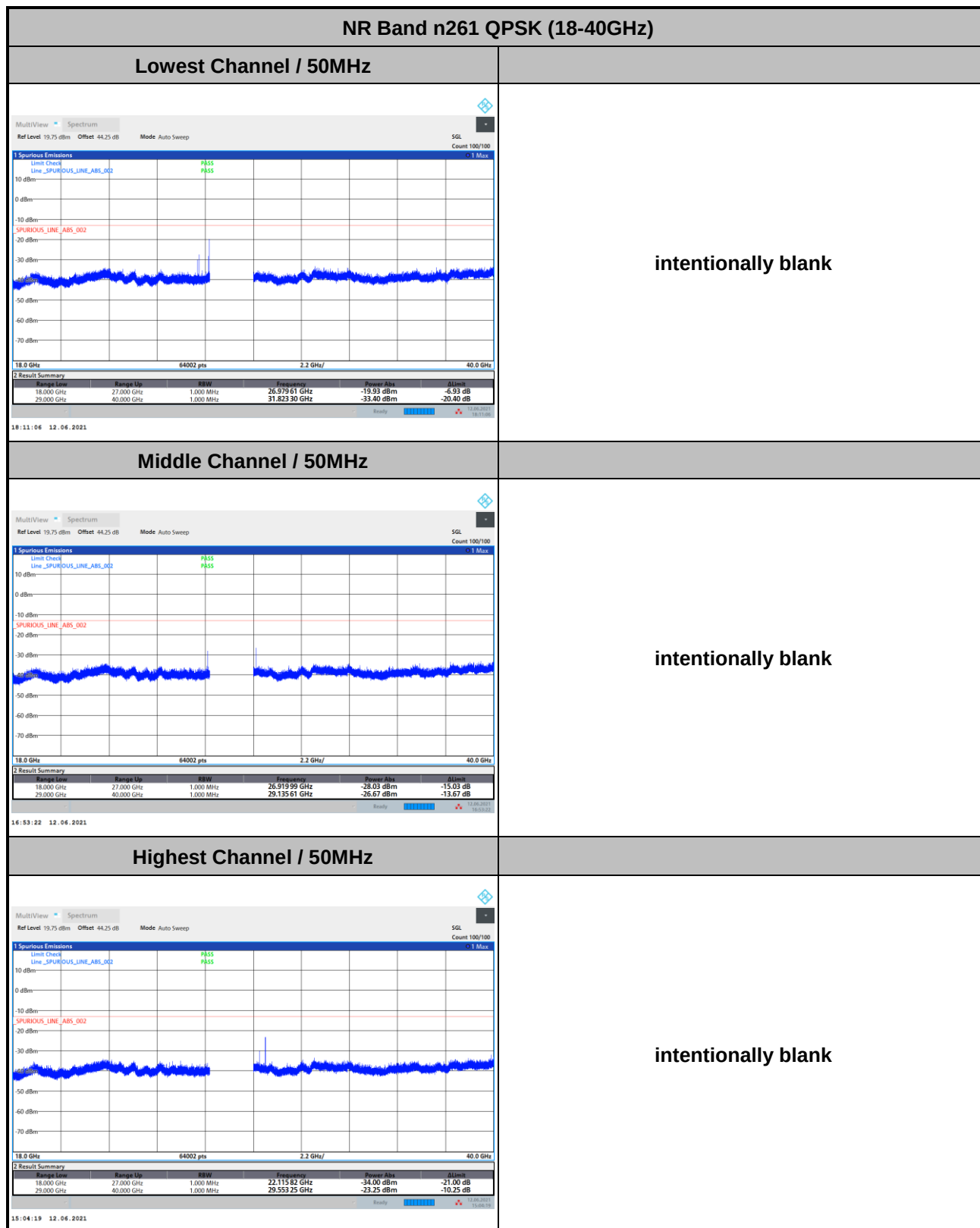


Spurious Emission



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

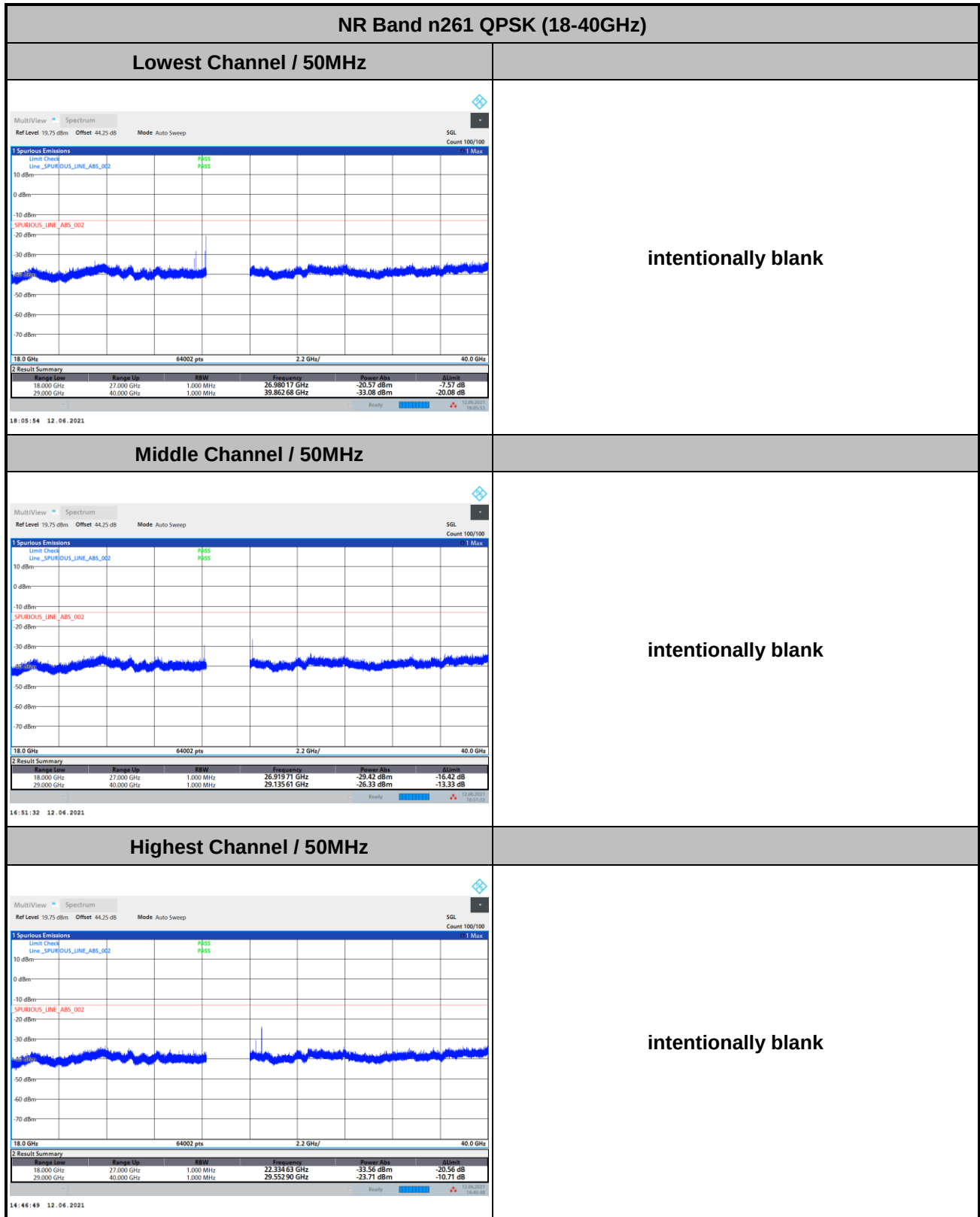
DFT-s-OFDM Module A



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



CP-OFDM Module A



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

NR Band n261 Module A Beam H+V

Occupied Bandwidth

Mode	DFT-s-OFDM Module A NR Band n261 : 99%OBW(MHz)		
BW	50MHz		
Mod.	QPSK	16QAM	64QAM
Lowest CH	46.03	46.17	46.25
Middle CH	46.03	46.10	46.29
Highest CH	46.03	46.26	46.25

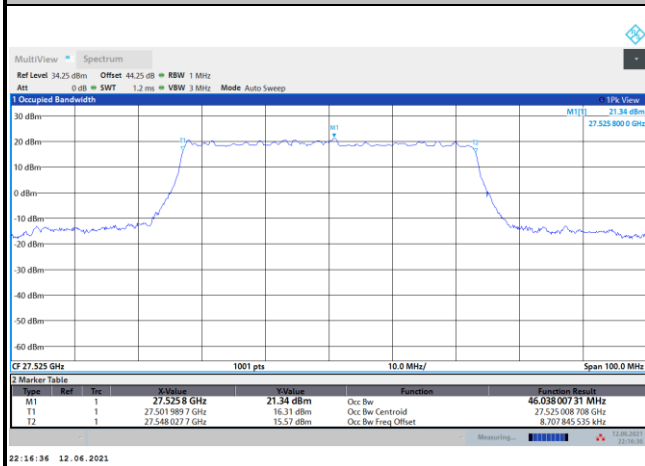
Mode	CP-OFDM Module A NR Band n261 : 99%OBW(MHz)	
BW	50MHz	
Mod.	QPSK	
Lowest CH	46.02	
Middle CH	46.21	
Highest CH	46.10	



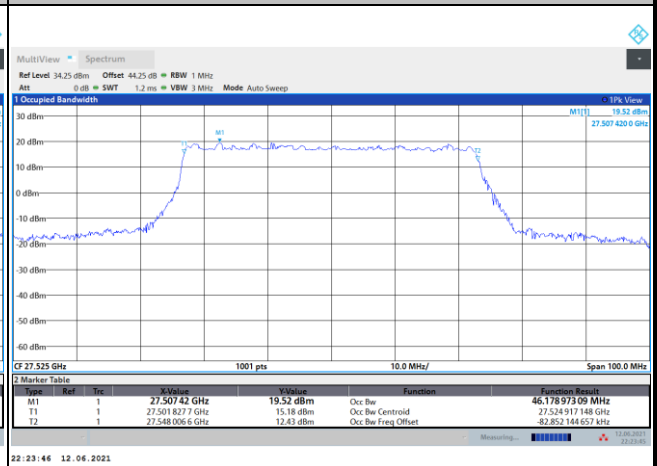
DFT-s-OFDM Module A

NR Band n261

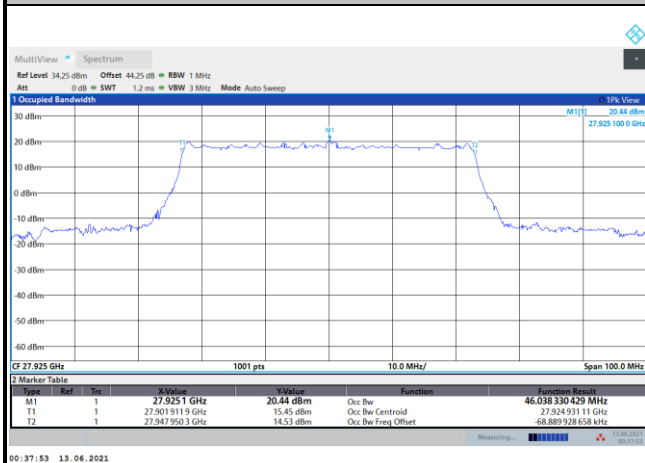
Lowest Channel / 50MHz / QPSK



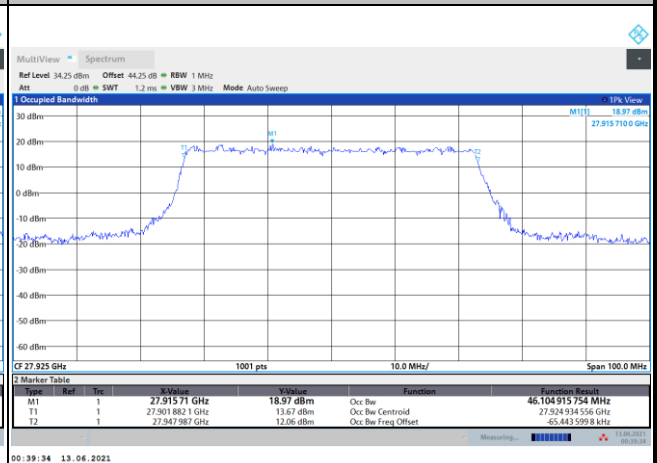
Lowest Channel / 50MHz / 16QAM



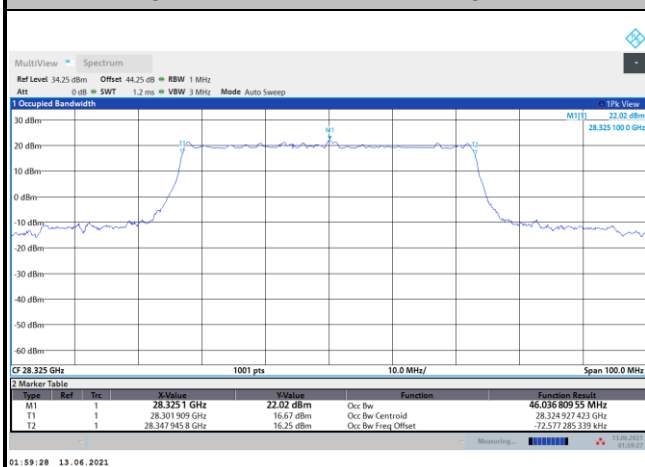
Middle Channel / 50MHz / QPSK



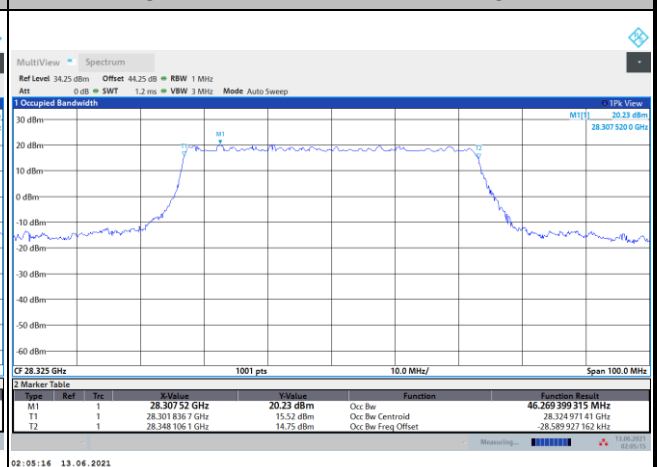
Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

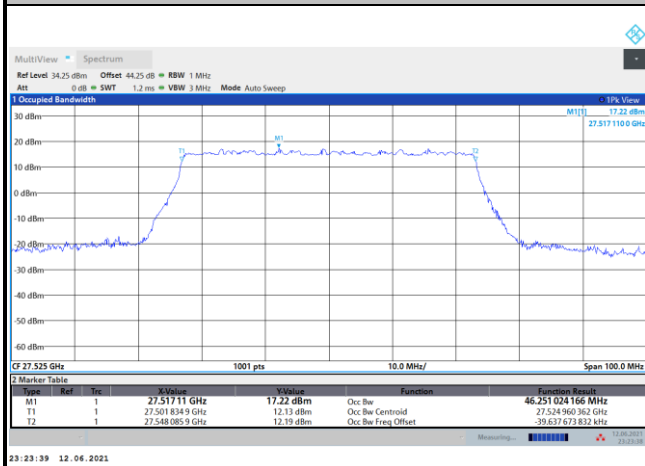




DFT-s-OFDM Module A

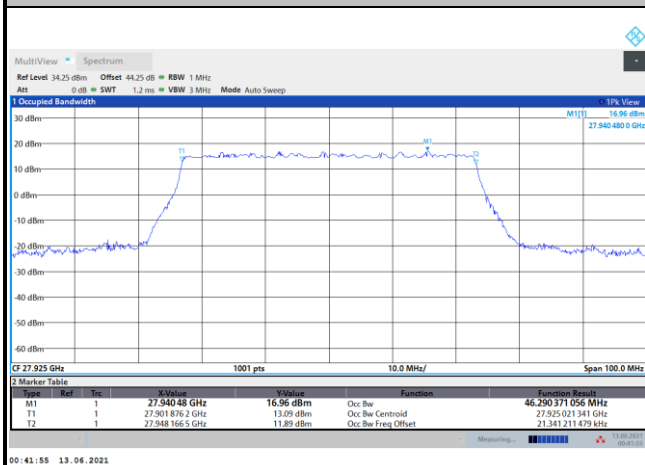
NR Band n261

Lowest Channel / 50MHz / 64QAM



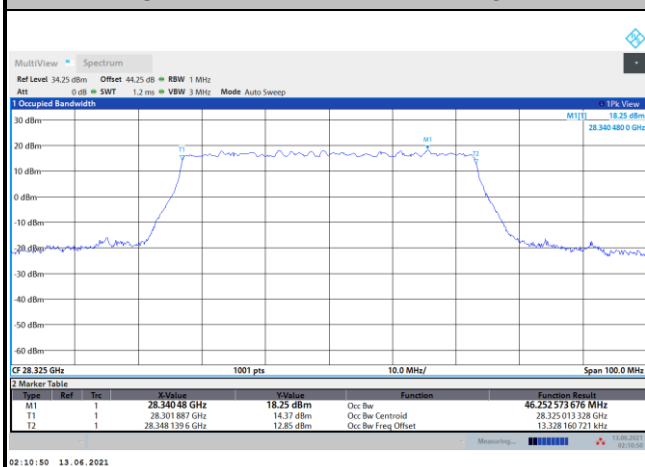
intentionally blank

Middle Channel / 50MHz / 64QAM



intentionally blank

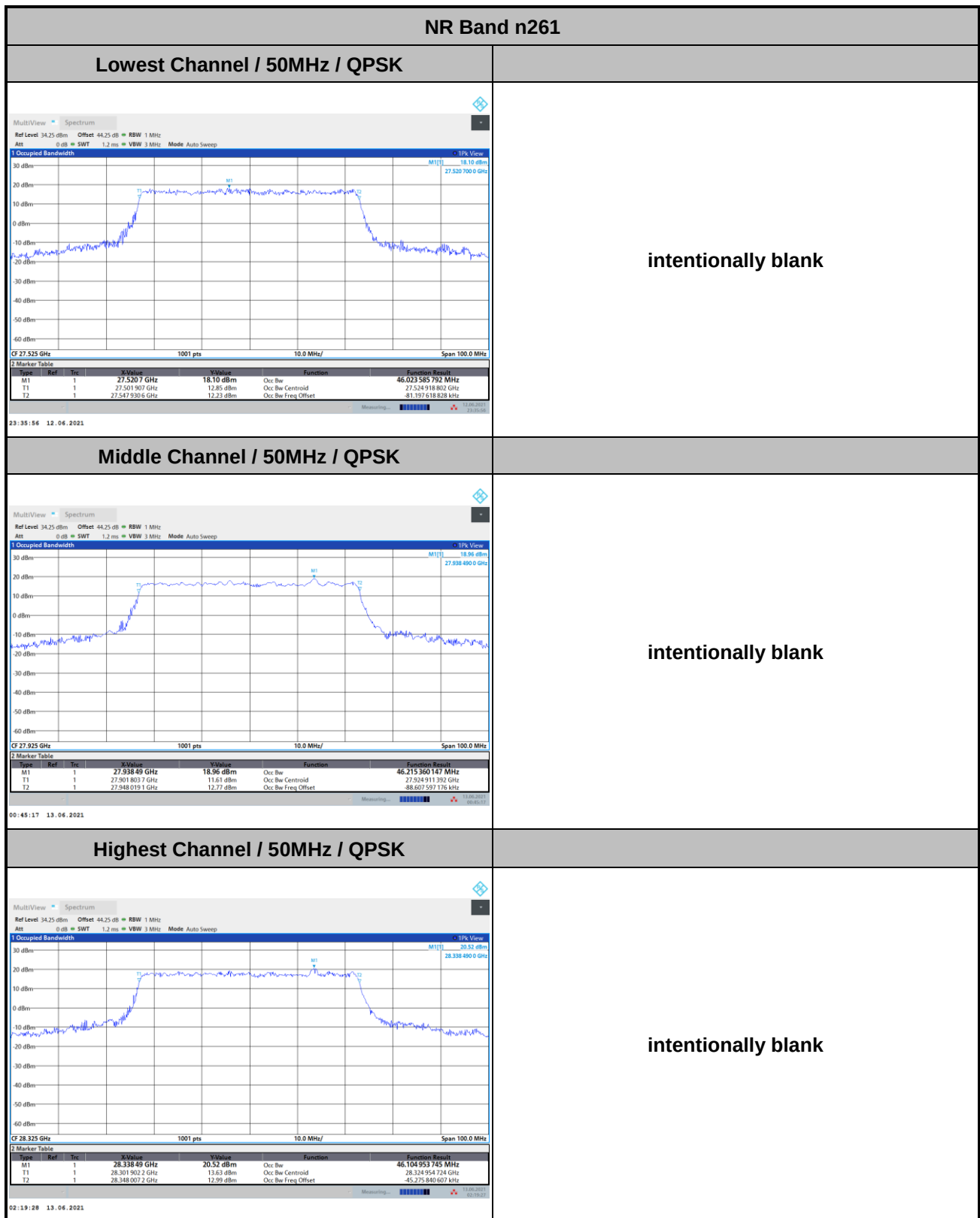
Highest Channel / 50MHz / 64QAM



intentionally blank



CP-OFDM Module A



Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module A NR Band n261 : BE (dBm) 1 RB		
BW			50MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-16.84	-18.54	-7.09
	>10%OB	≤ -13	-22.52	-24.56	-16.60
High CH	0~10%OB	≤ -5	-16.11	-16.49	-6.67
	>10%OB	≤ -13	-23.50	-23.24	-20.80
Result			Compliance		

Mode			CP-OFDM Module A NR Band n261 : BE (dBm) 1 RB		
BW			50MHz		
Limit (dBm)			QPSK		
Low CH	0~10%OB	≤ -5	-18.17		
	>10%OB	≤ -13	-24.76		
High CH	0~10%OB	≤ -5	-27.88		
	>10%OB	≤ -13	-30.18		
Result			Compliance		

Mode			DFT-s-OFDM Module A NR Band n261 : BE (dBm) Full RB		
BW			50MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-14.62	-15.98	-16.35
	>10%OB	≤ -13	-21.62	-23.63	-27.92
High CH	0~10%OB	≤ -5	-13.64	-14.04	-17.16
	>10%OB	≤ -13	-19.42	-22.88	-27.66
Result			Compliance		

Mode			CP-OFDM Module A NR Band n261 : BE (dBm) Full RB		
BW			50MHz		
Limit (dBm)			QPSK		
Low CH	0~10%OB	≤ -5	-14.19		
	>10%OB	≤ -13	-20.68		
High CH	0~10%OB	≤ -5	-13.80		
	>10%OB	≤ -13	-19.06		
Result			Compliance		

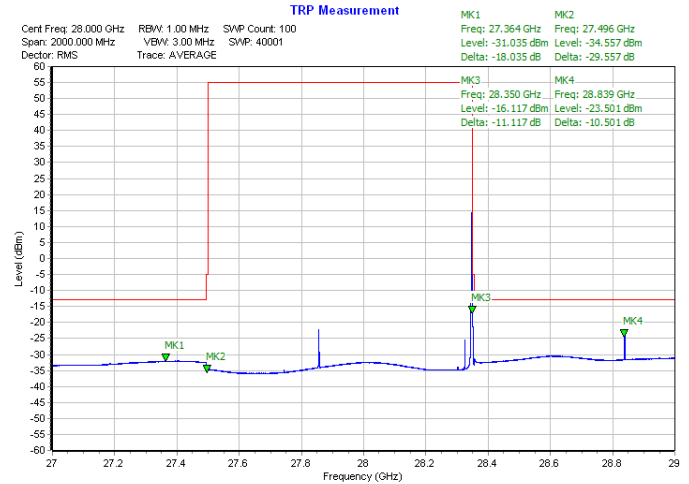
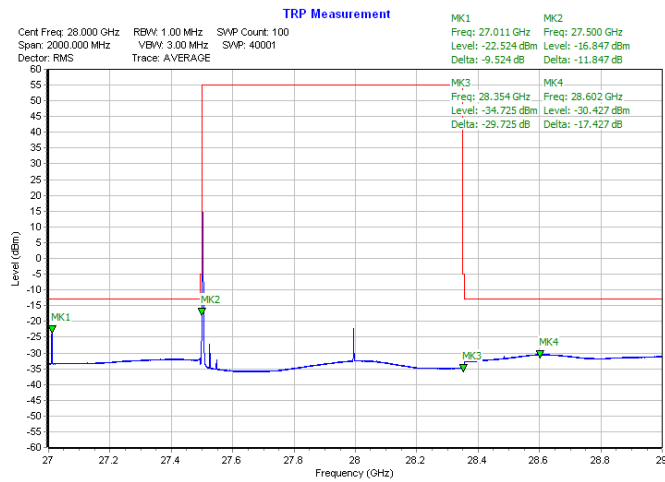


DFT-s-OFDM Module A

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

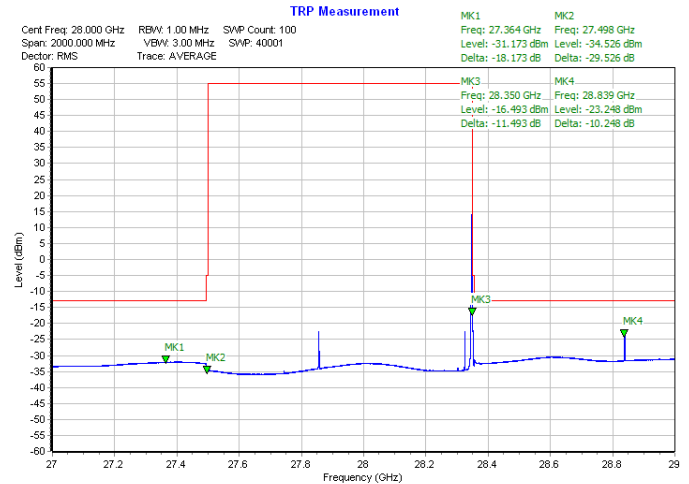
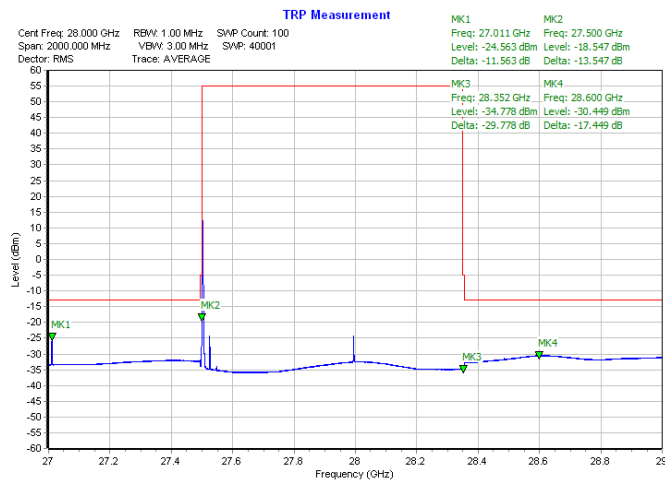
Highest Band Edge / 1 RB



NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

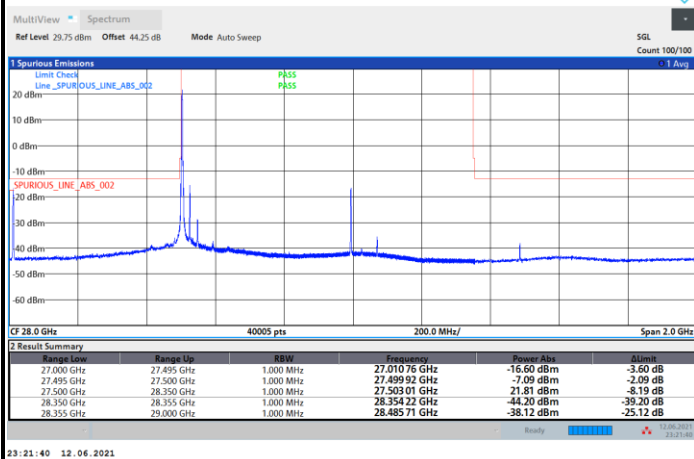




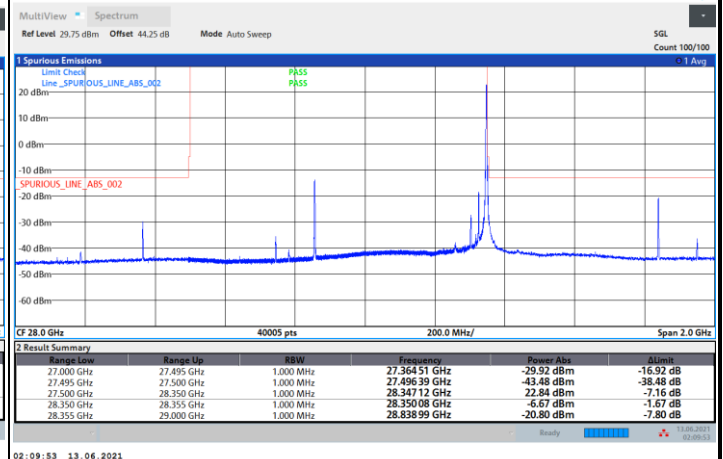
DFT-s-OFDM Module A

NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / 1 RB



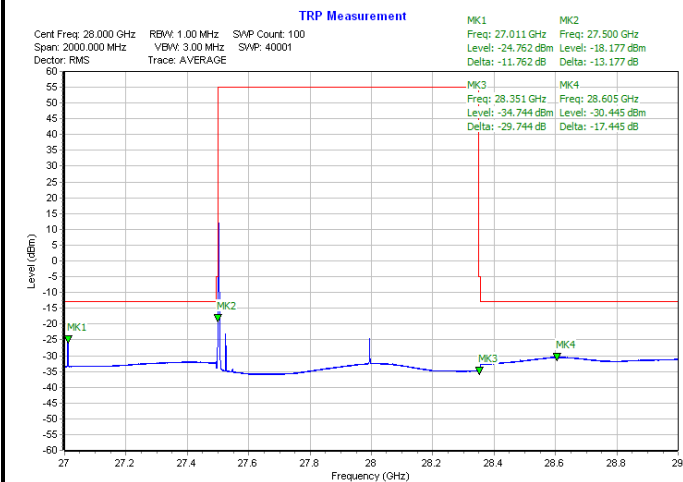
Highest Band Edge / 1 RB



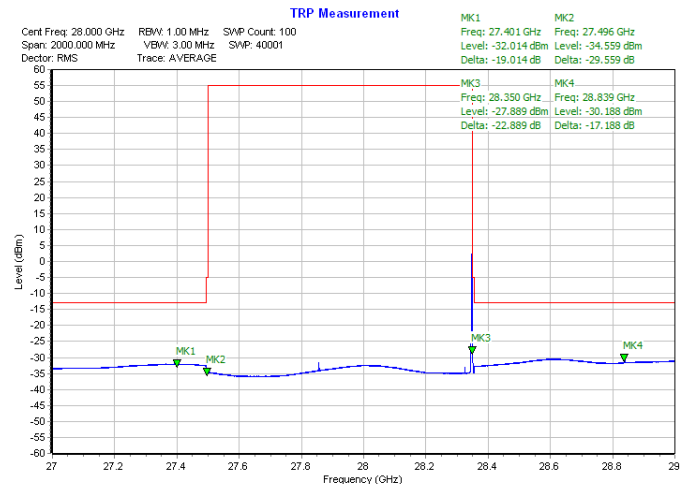
CP-OFDM Module A

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

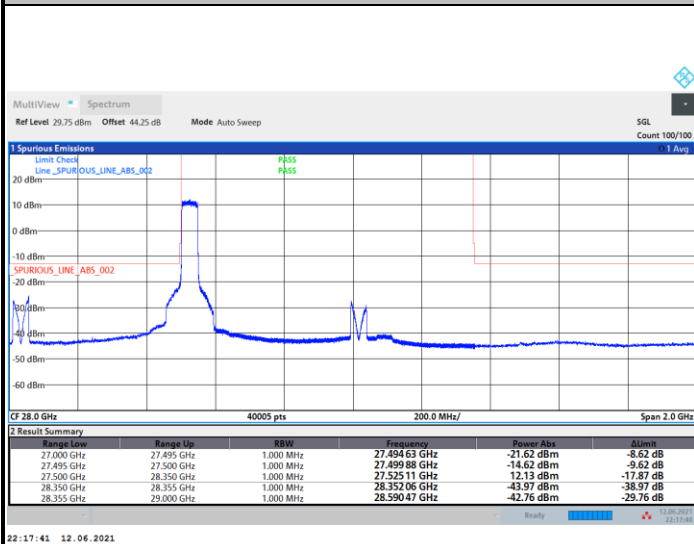




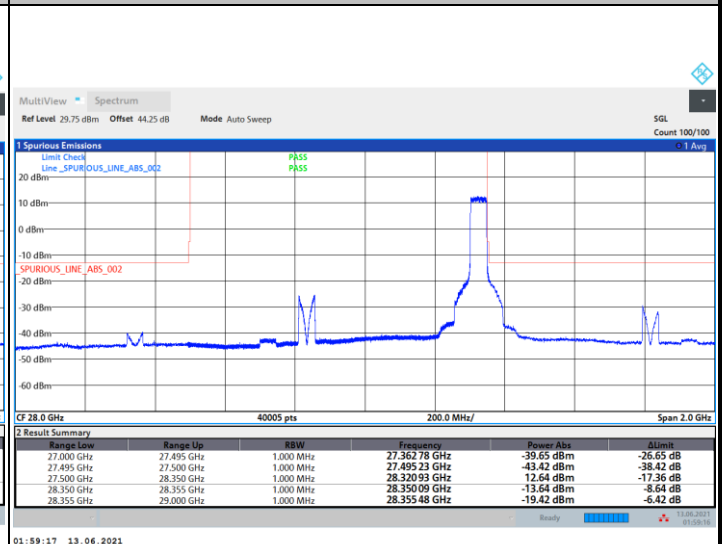
DFT-s-OFDM Module A

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

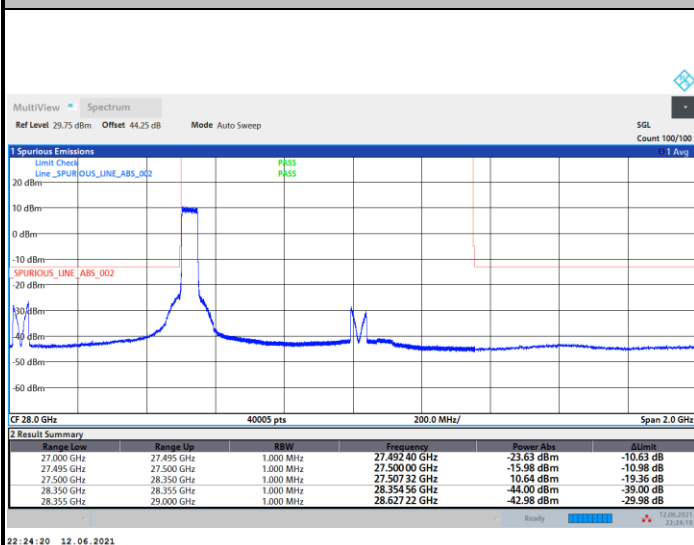


Highest Band Edge / Full RB

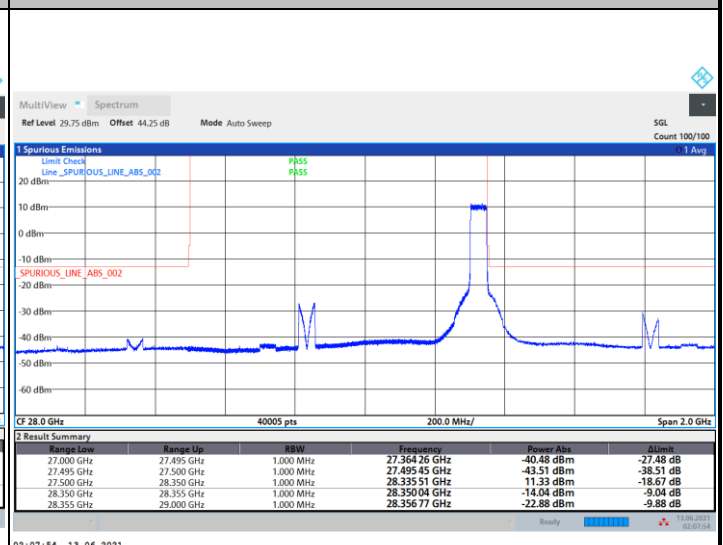


NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

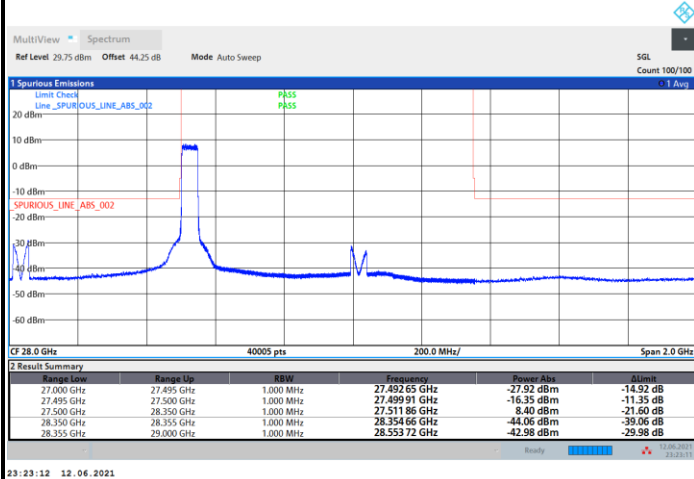




DFT-s-OFDM Module A

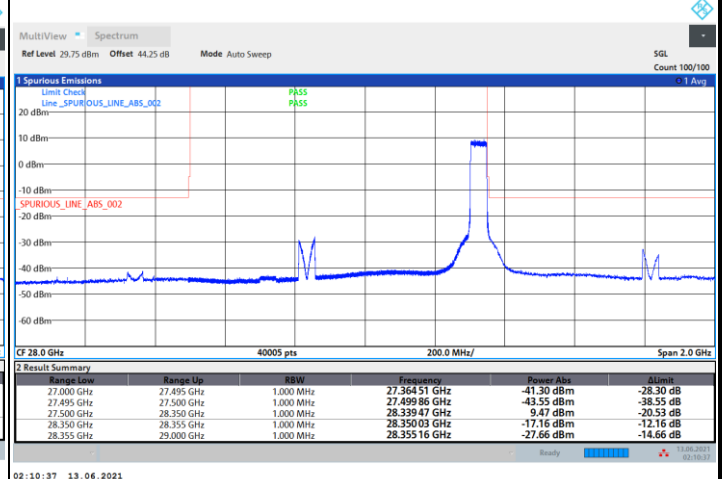
NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / Full RB



23:23:12 12.06.2021

Highest Band Edge / Full RB

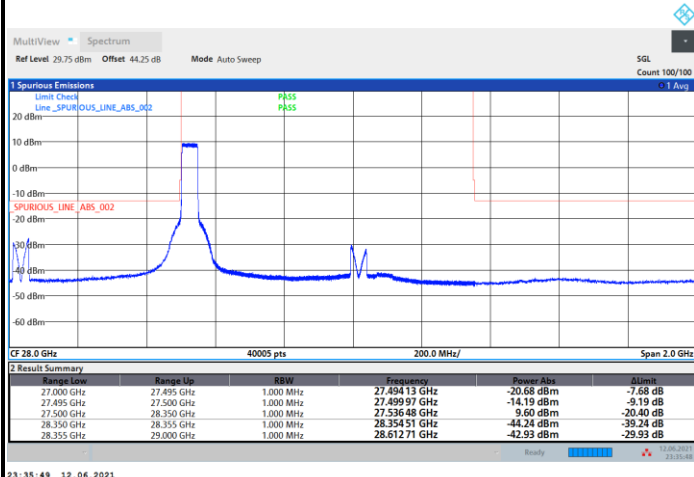


02:10:37 13.06.2021

CP-OFDM Module A

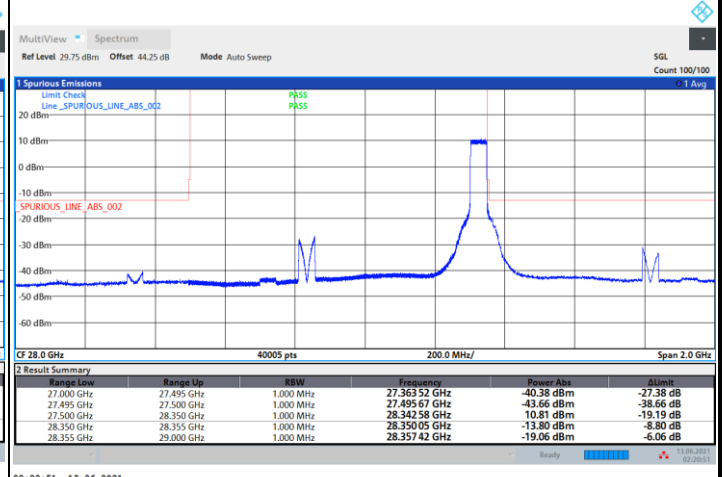
NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB



23:35:49 12.06.2021

Highest Band Edge / Full RB



02:20:51 13.06.2021

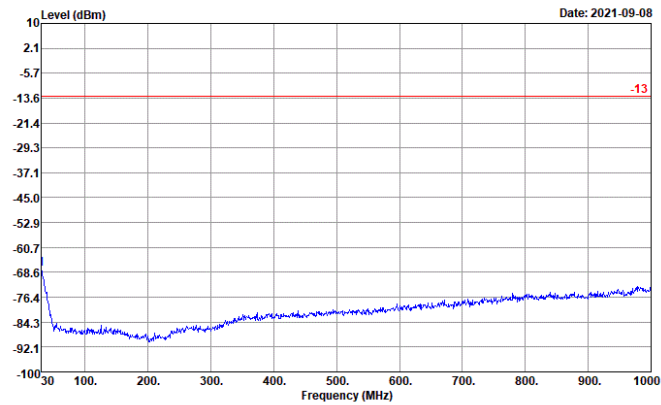


Spurious Emission

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

NR Band n261 (30MHz-1GHz)

Horizontal

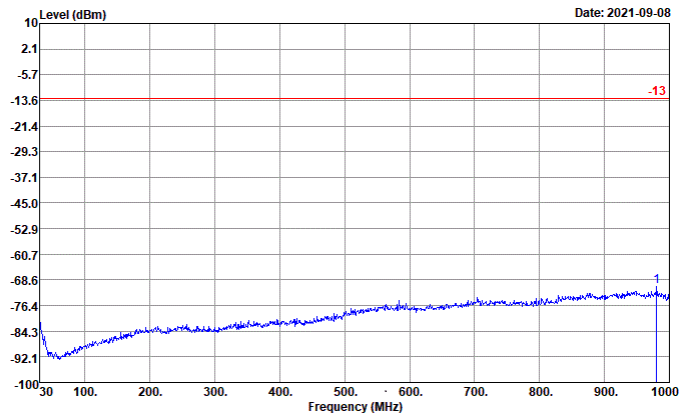


Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 HORIZONTAL

: 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	30.00	-67.55	-54.55	-13.00	-79.26	47.44	0.00	35.73	---	---	Peak

Vertical



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

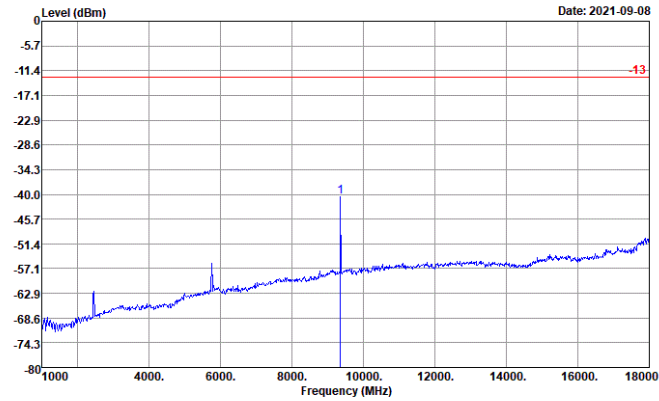
: n261

	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	980.60	-70.58	-57.58	-13.00	-80.01	42.47	0.00	33.04	---	---	Peak



NR Band n261 (1GHz-18GHz)

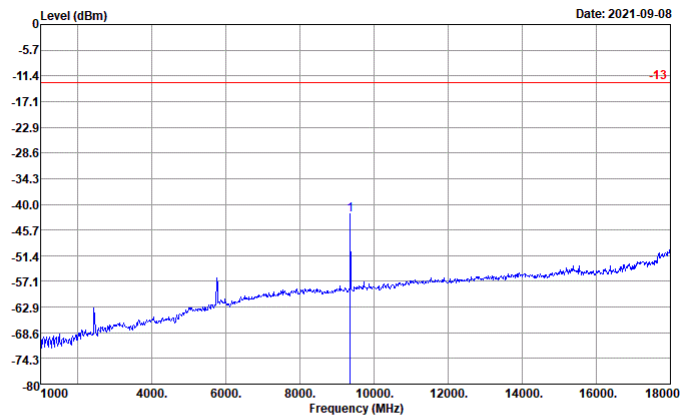
Horizontal



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

: n261										
Freq	Level	Over	Limit	Read	LISN	Cable	Preamp	A/Pos	T/Pos	Remark
MHz	dBm	Limit	Line	Level	Factor	Loss	Factor	cm	deg	
1	9364.00	-40.55	-27.55	-13.00	-66.88	67.65	0.00	41.32	---	--- Peak

Vertical



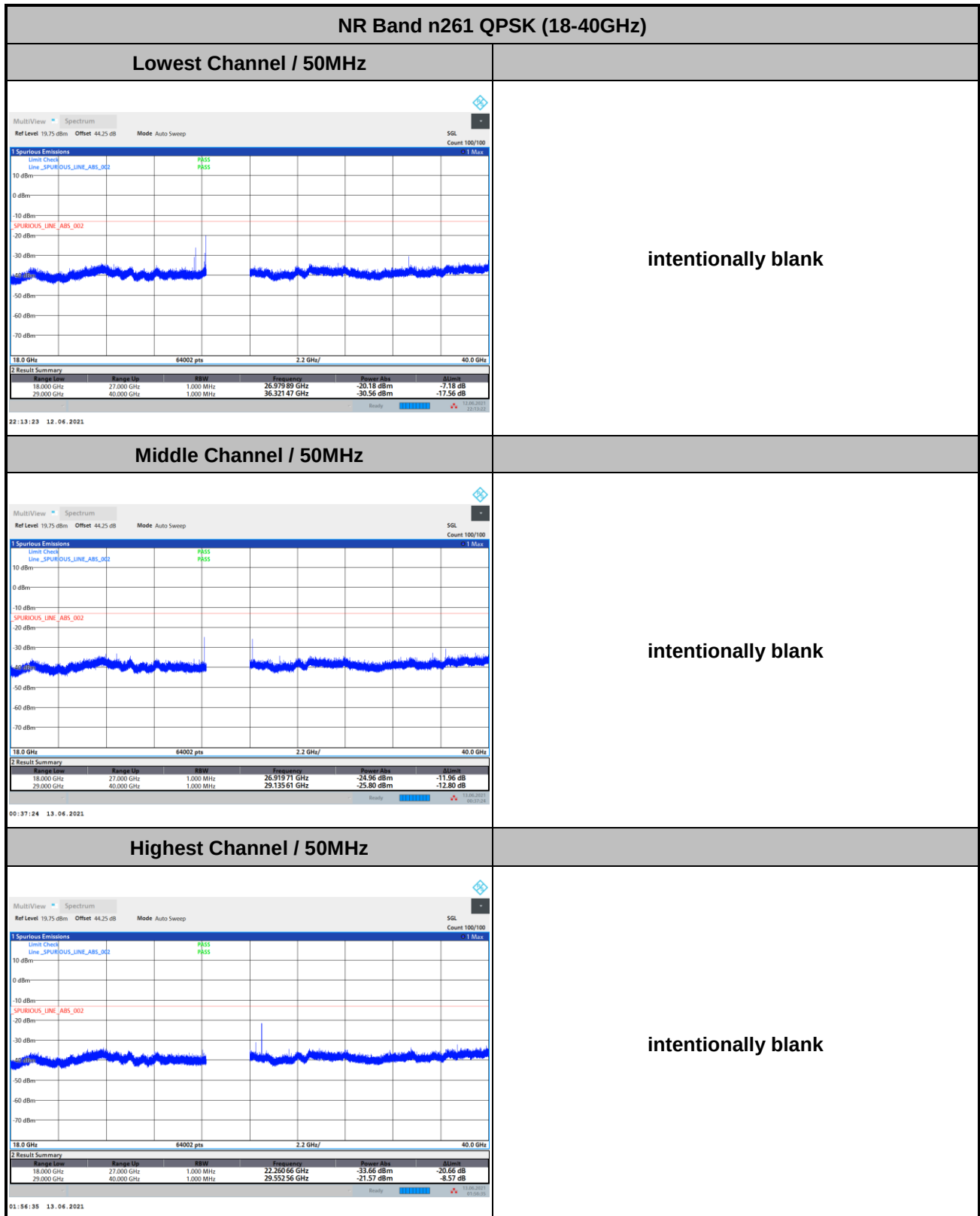
Site : 03CH19-HY
Condition : -13 ERP EIRP_20210305 VERTICAL

: n261										
Freq	Level	Over	Limit	Read	LISN	Cable	Preamp	A/Pos	T/Pos	Remark
MHz	dBm	Limit	Line	Level	Factor	Loss	Factor	cm	deg	
1	9364.00	-42.33	-29.33	-13.00	-67.72	66.71	0.00	41.32	---	--- Peak



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

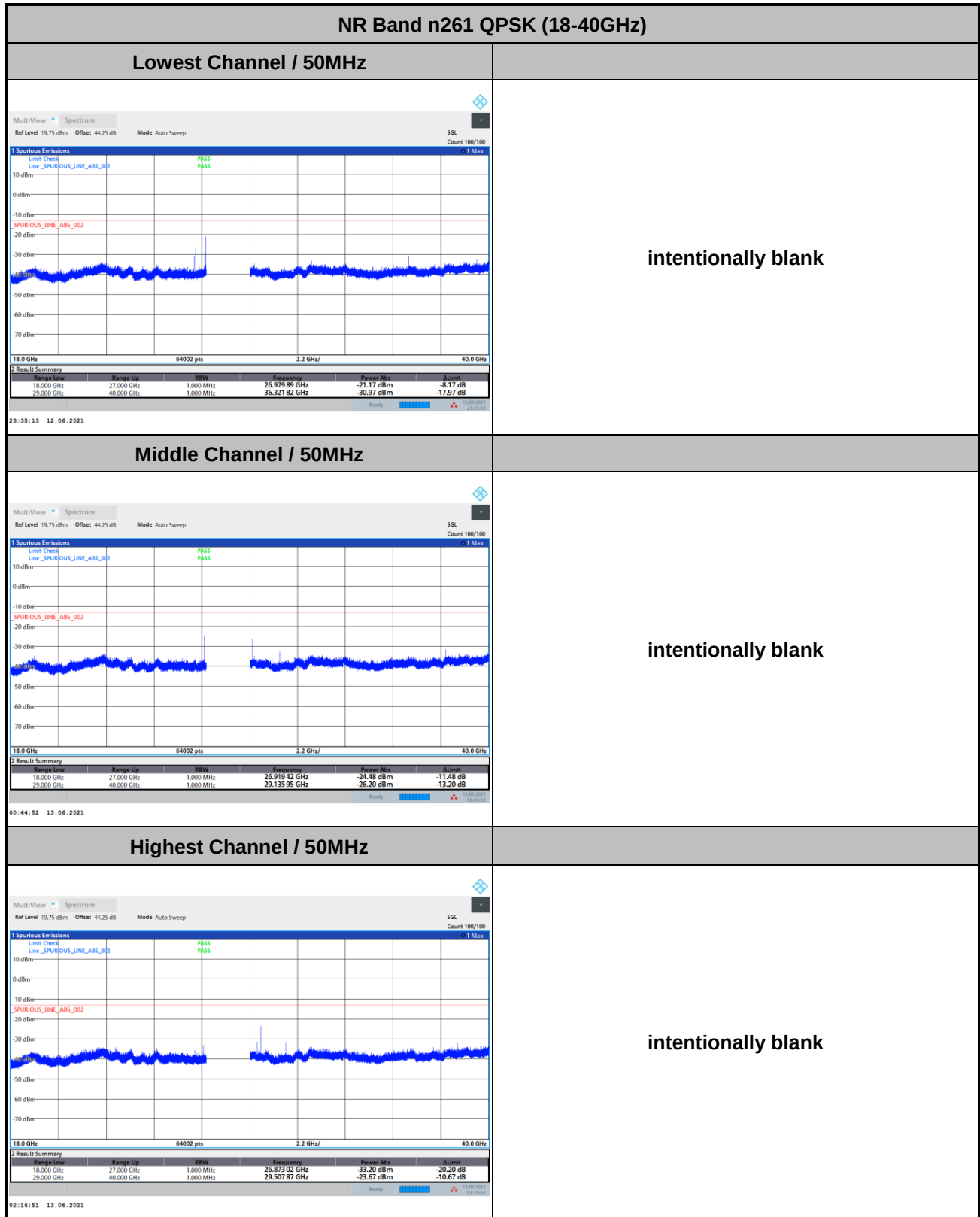
DFT-s-OFDM Module A



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



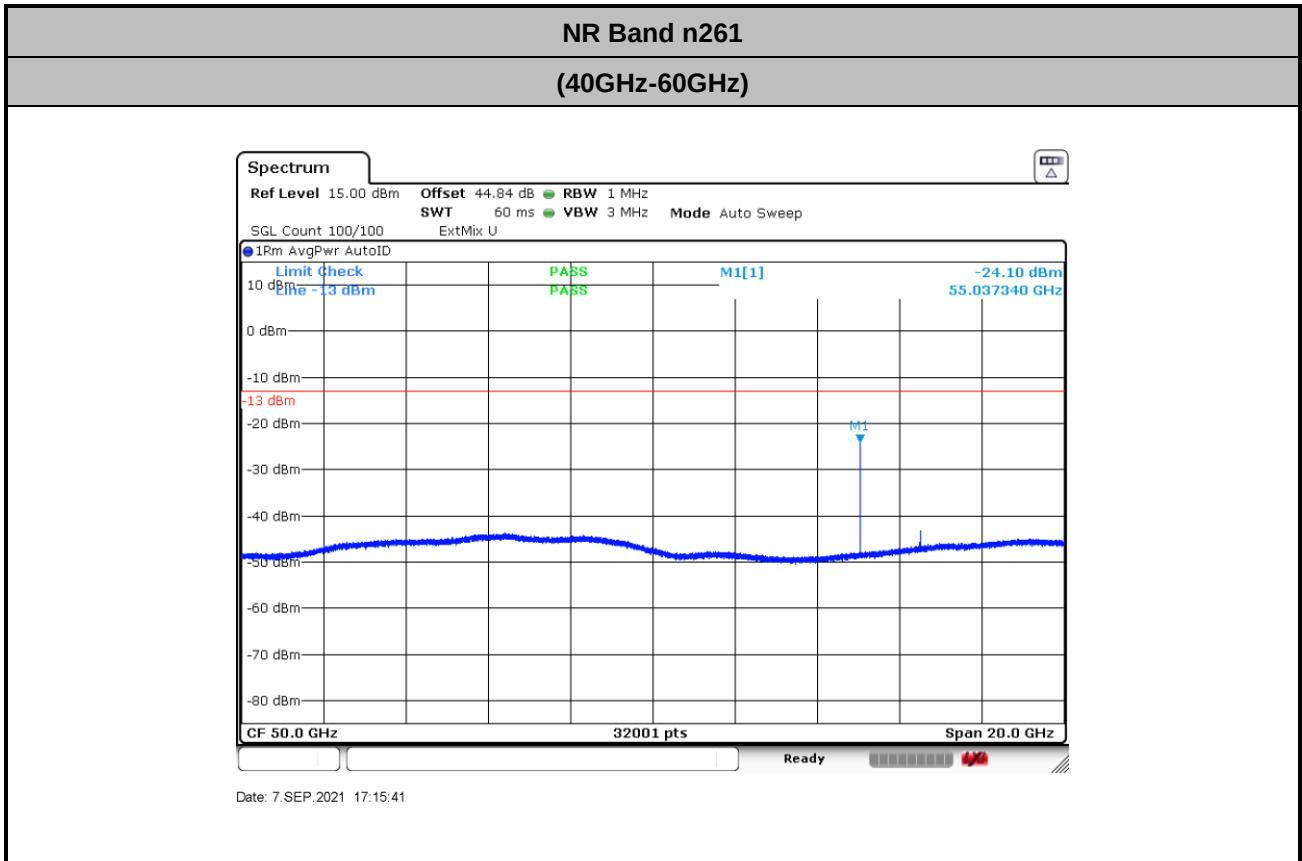
CP-OFDM Module A



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.

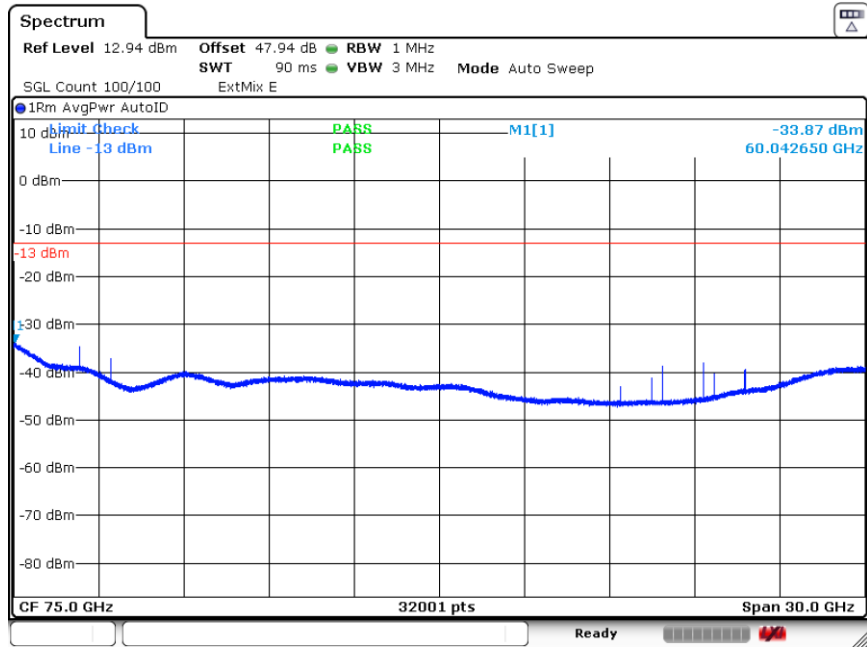


Note: Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8
= 42.3 + 0.34 + 107 + 20log(1) – 104.8 = 44.84 (dB)



NR Band n261

(60GHz-90GHz)



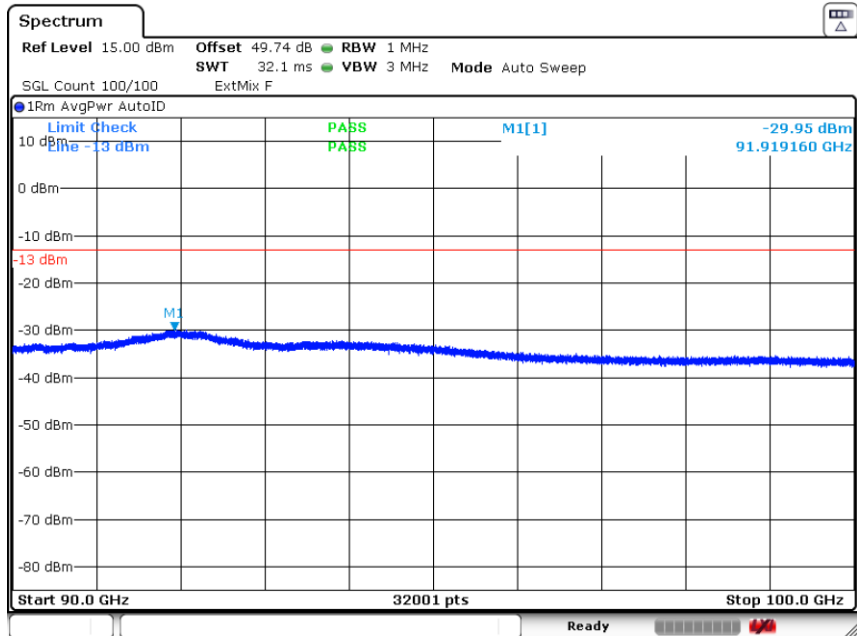
Date: 7.SEP.2021 17:09:51

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)



Date: 7.SEP.2021 16:44:35

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	27.925006	6.000	0.215	Pass
40	Normal Voltage	27.925006	6.000	0.215	
30	Normal Voltage	27.925007	5.000	0.179	
20(Ref.)	Normal Voltage	27.925012	0.000	0.000	
10	Normal Voltage	27.925035	-23.000	0.824	
0	Normal Voltage	27.925017	-5.000	0.179	
-10	Normal Voltage	27.925035	-23.000	0.824	
-20	Normal Voltage	27.925016	-4.000	0.143	
-30	Normal Voltage	27.925011	1.000	0.036	
20	Maximum Voltage	27.925012	0.000	0.000	
20	Normal Voltage	27.925006	6.000	0.215	
20	Battery End Point	27.925009	3.000	0.107	

Note:

1. Normal Voltage = 3.86V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.45 V
2. The frequency fundamental emissions stay within the operation band.



NR Band n261 Module B Beam H

Occupied Bandwidth

Mode	DFT-s-OFDM Module B NR Band n261 : 99%OBW(MHz)		
BW	50MHz		
Mod.	QPSK	16QAM	64QAM
Lowest CH	46.11	46.40	46.28
Middle CH	46.27	46.22	46.36
Highest CH	46.20	46.24	46.32

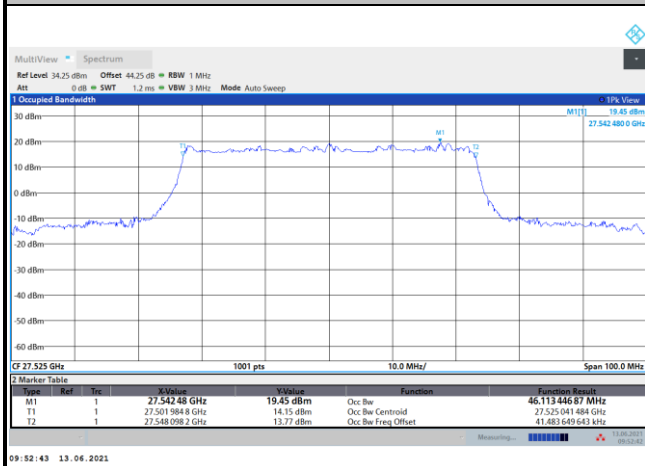
Mode	CP-OFDM Module B NR Band n261 : 99%OBW(MHz)	
BW	50MHz	
Mod.	QPSK	
Lowest CH	46.29	
Middle CH	46.75	
Highest CH	46.08	



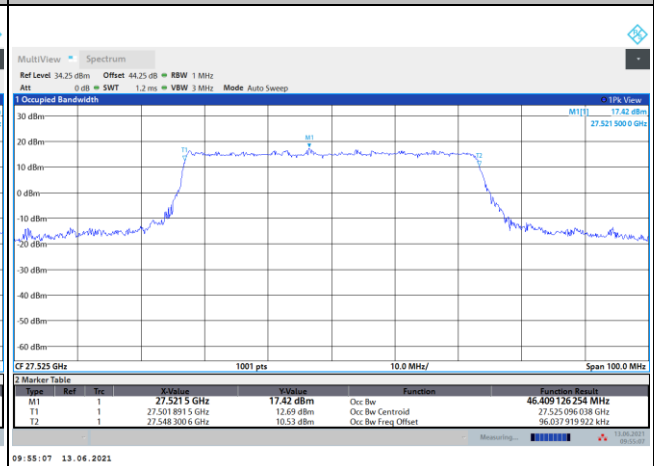
DFT-s-OFDM Module B

NR Band n261

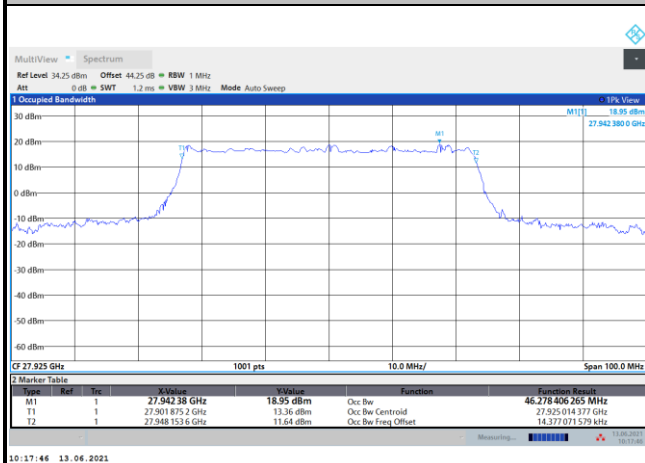
Lowest Channel / 50MHz / QPSK



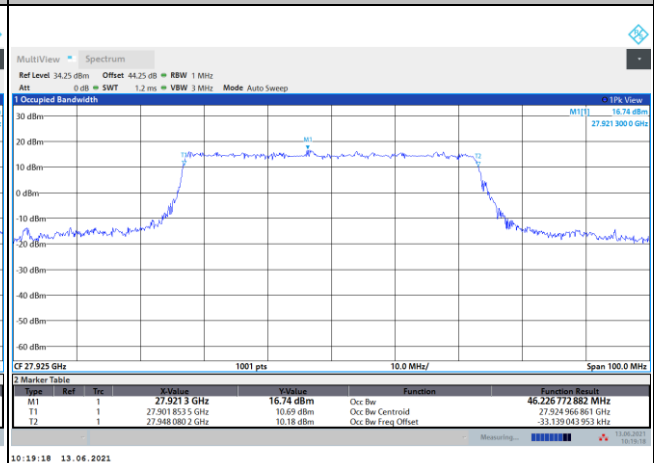
Lowest Channel / 50MHz / 16QAM



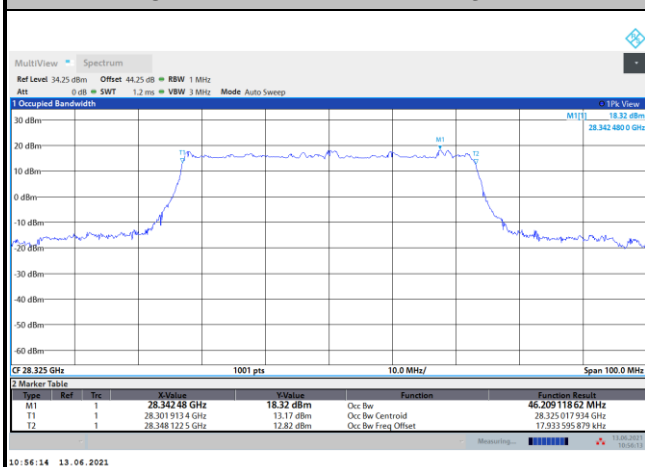
Middle Channel / 50MHz / QPSK



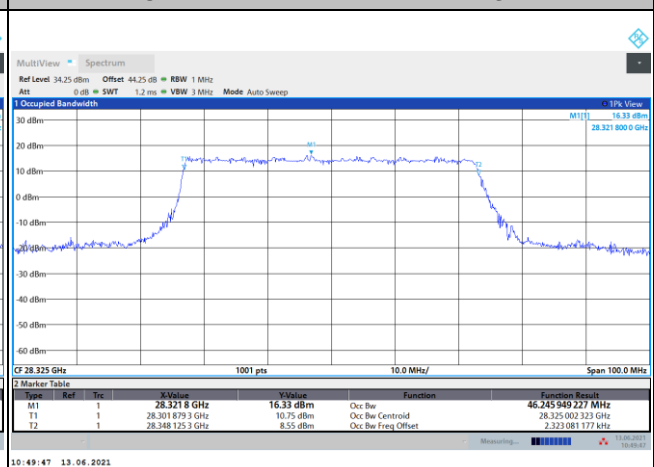
Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

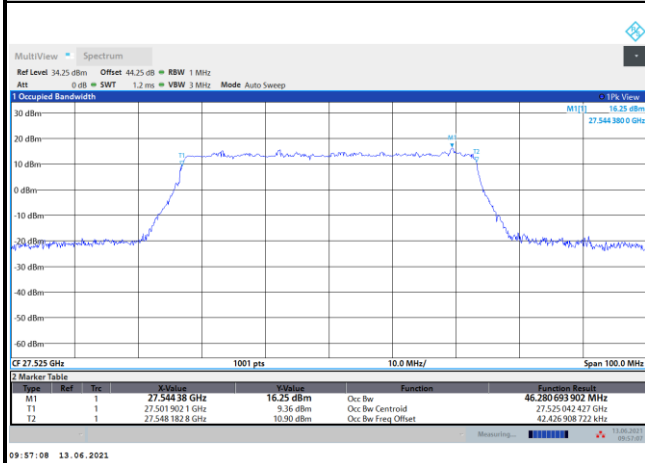




DFT-s-OFDM Module B

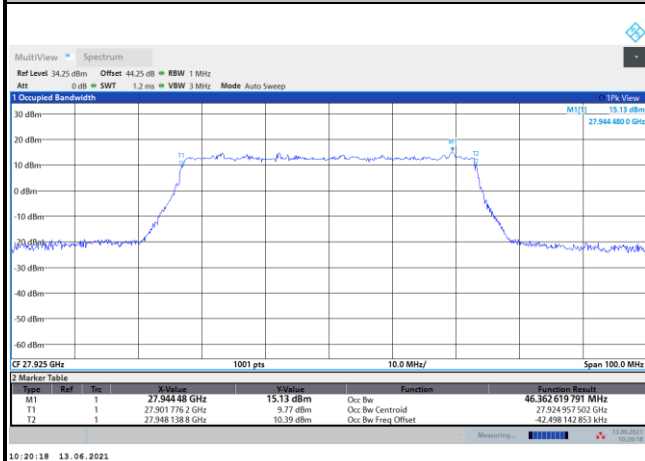
NR Band n261

Lowest Channel / 50MHz / 64QAM



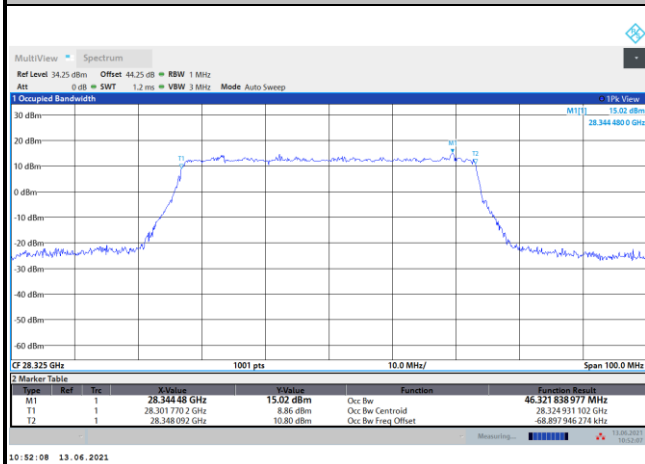
intentionally blank

Middle Channel / 50MHz / 64QAM



intentionally blank

Highest Channel / 50MHz / 64QAM



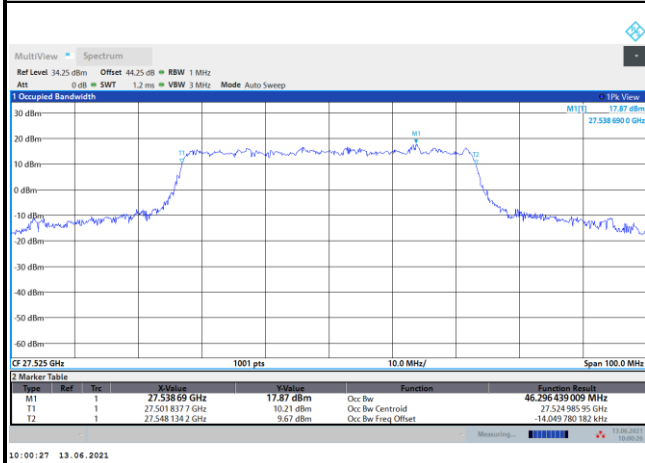
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CP-OFDM Module B

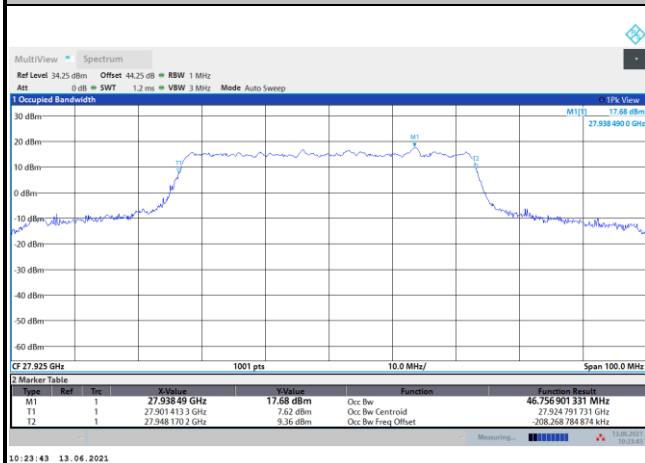
NR Band n261

Lowest Channel / 50MHz / QPSK



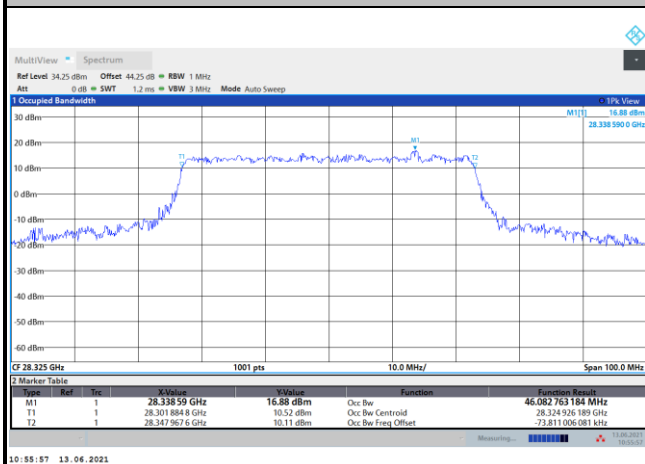
intentionally blank

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	-16.91	-6.76	-7.81
	>10%OB	≤-13	-21.96	-18.25	-19.45
High CH	0~10%OB	≤-5	-7.16	-8.41	-9.76
	>10%OB	≤-13	-17.29	-19.82	-21.31
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	-6.88		
	>10%OB	≤-13	-16.56		
High CH	0~10%OB	≤-5	-6.92		
	>10%OB	≤-13	-18.91		
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	-13.31	-17.62	-18.14
	>10%OB	≤-13	-20.08	-22.76	-28.19
High CH	0~10%OB	≤-5	-16.67	-16.95	-20.77
	>10%OB	≤-13	-23.09	-26.15	-31.63
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	-14.85		
	>10%OB	≤-13	-19.86		
High CH	0~10%OB	≤-5	-17.00		
	>10%OB	≤-13	-22.73		
Result			Compliance		

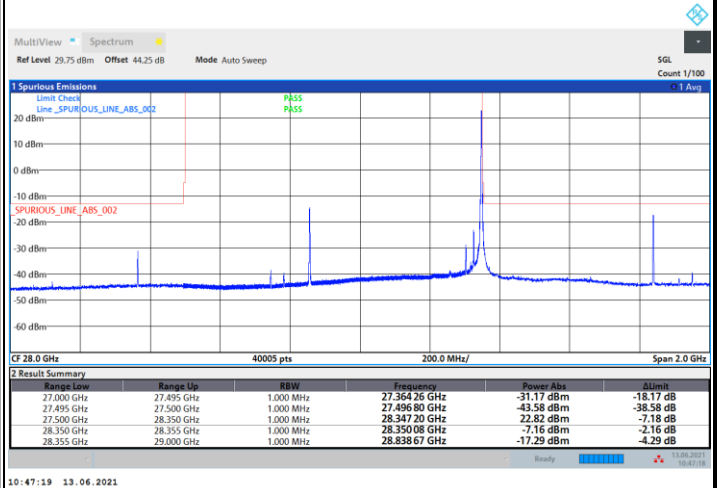
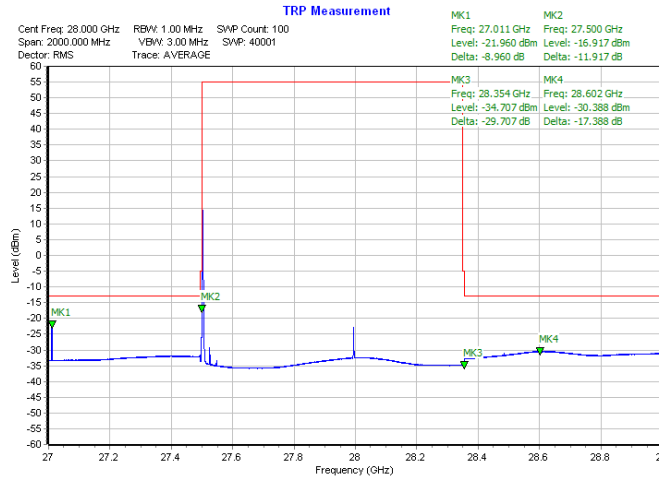


DFT-s-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

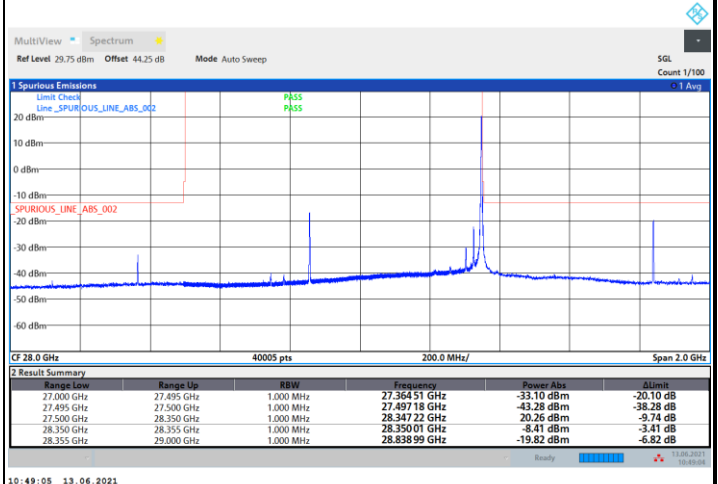
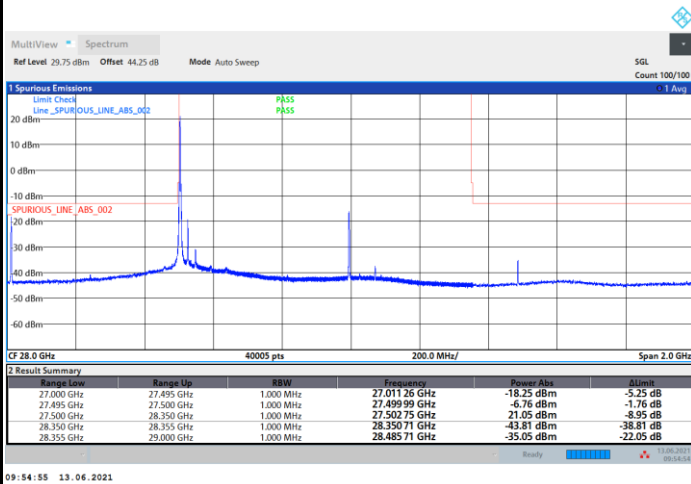
Highest Band Edge / 1 RB



NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

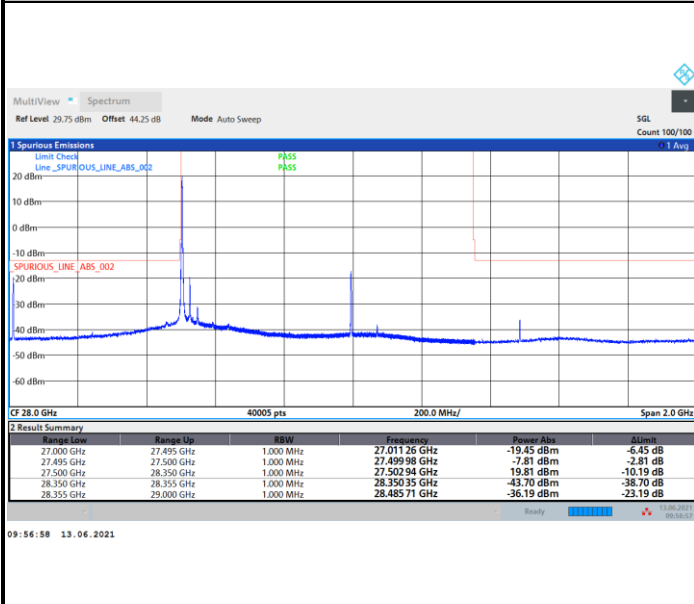




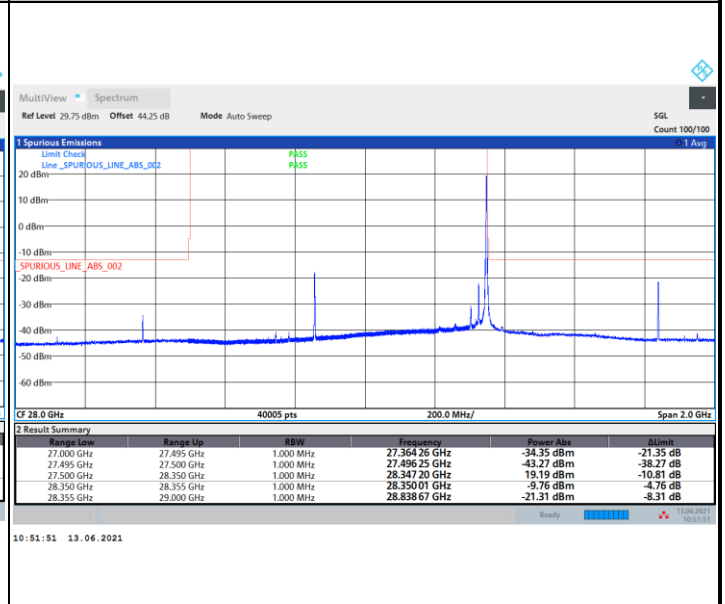
DFT-s-OFDM Module B

NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / 1 RB



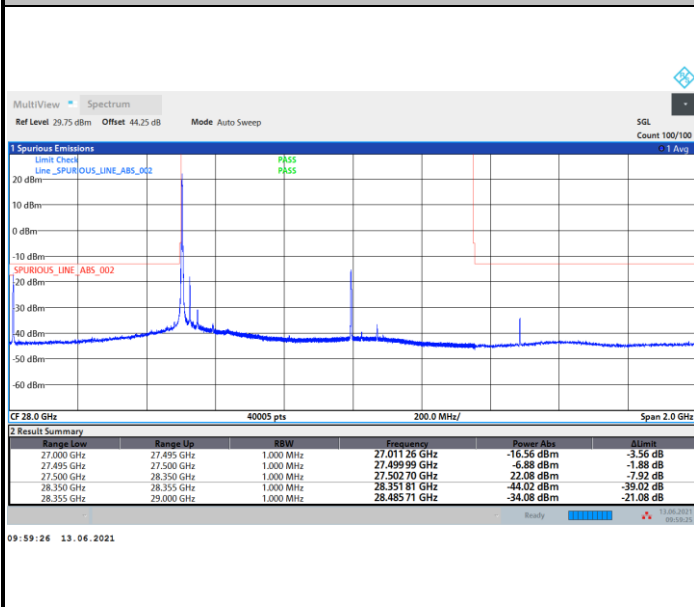
Highest Band Edge / 1 RB



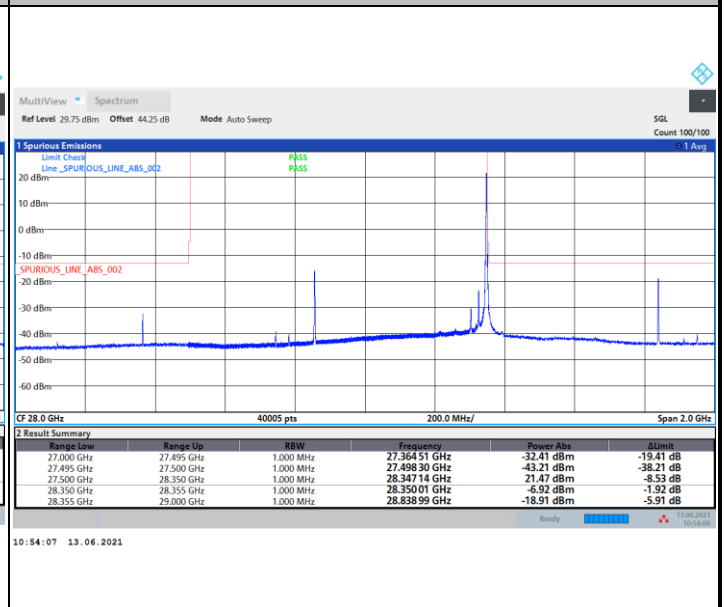
CP-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

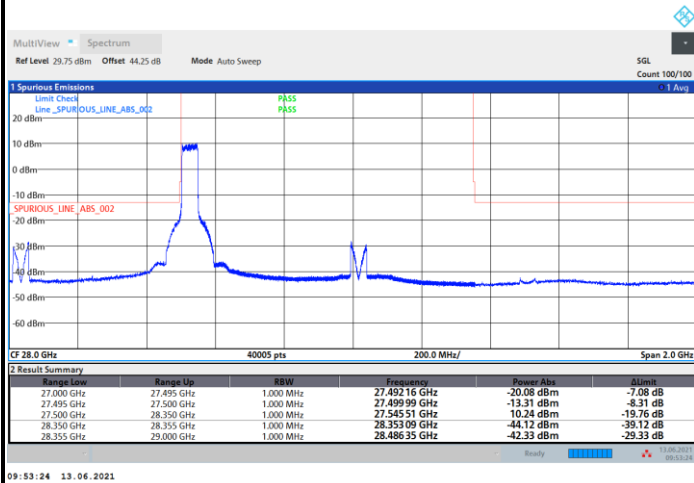




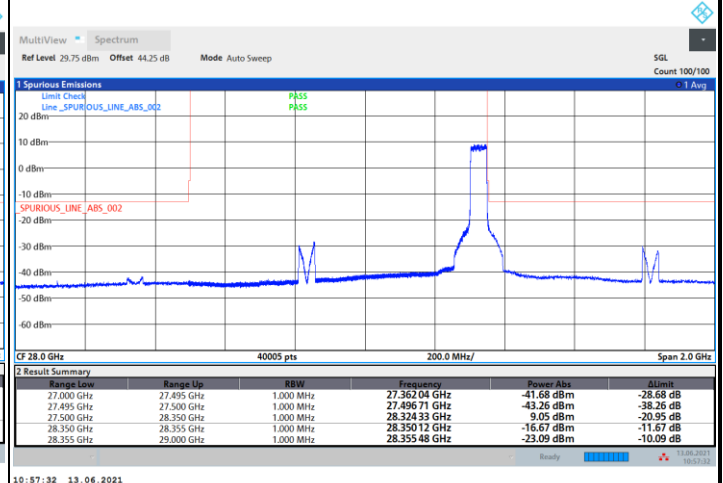
DFT-s-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

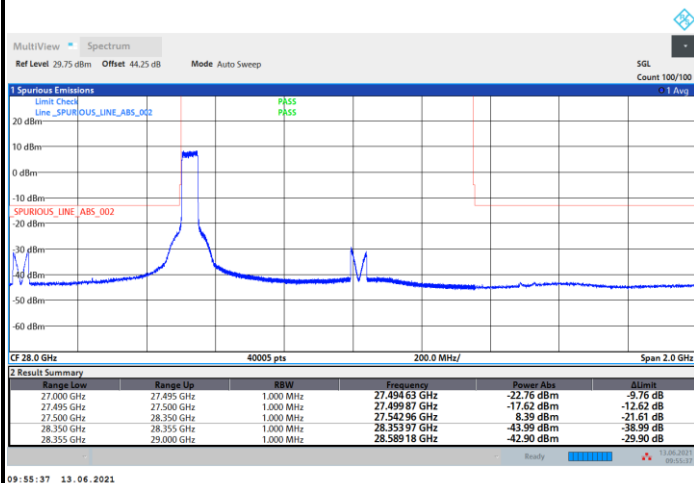


Highest Band Edge / Full RB

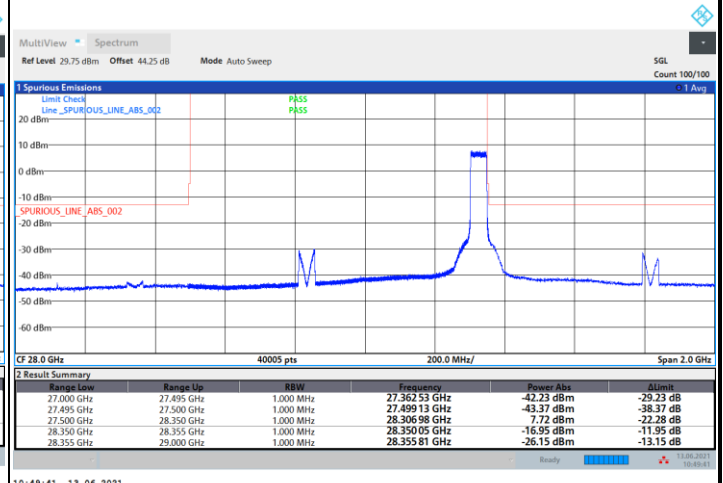


NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

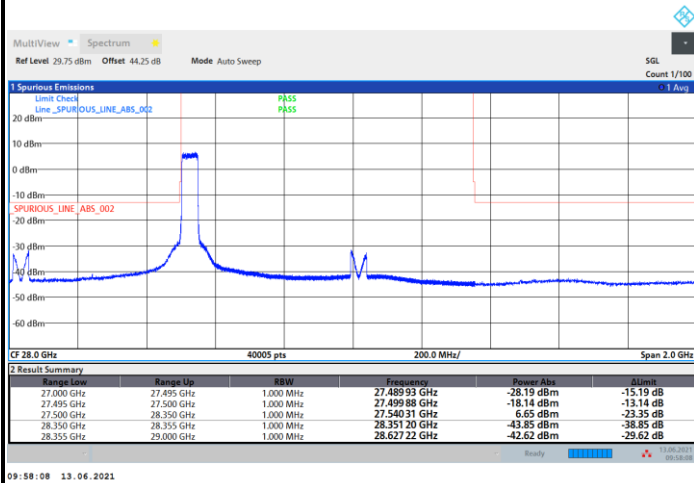




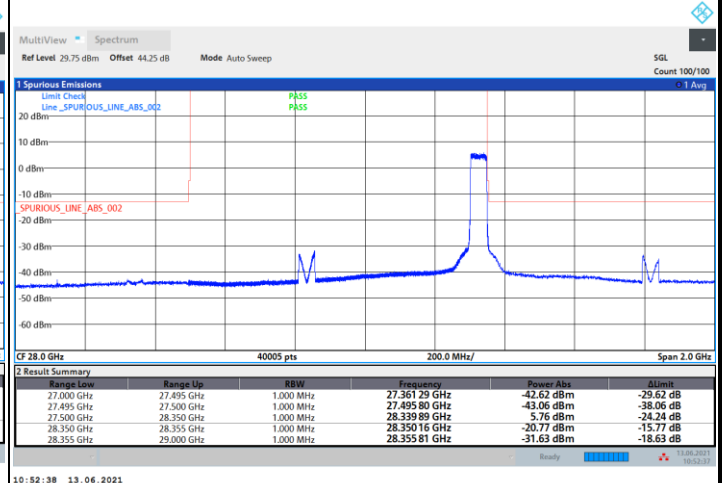
DFT-s-OFDM Module B

NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / Full RB



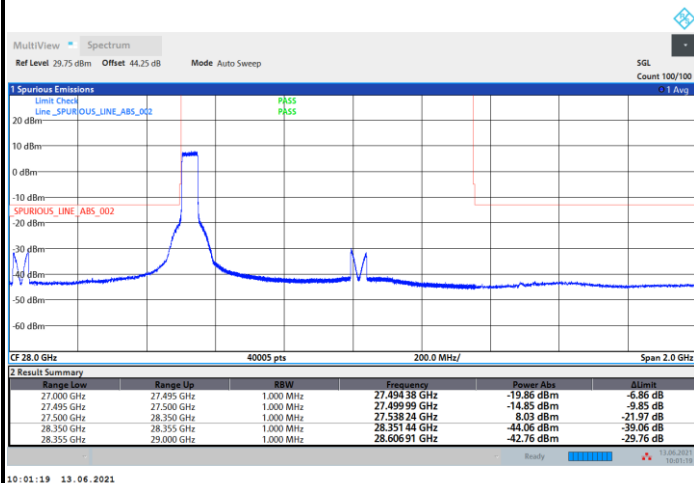
Highest Band Edge / Full RB



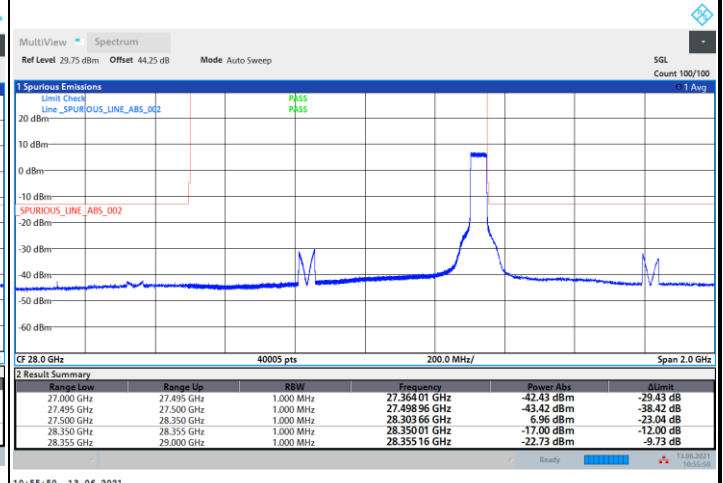
CP-OFDM Module B

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



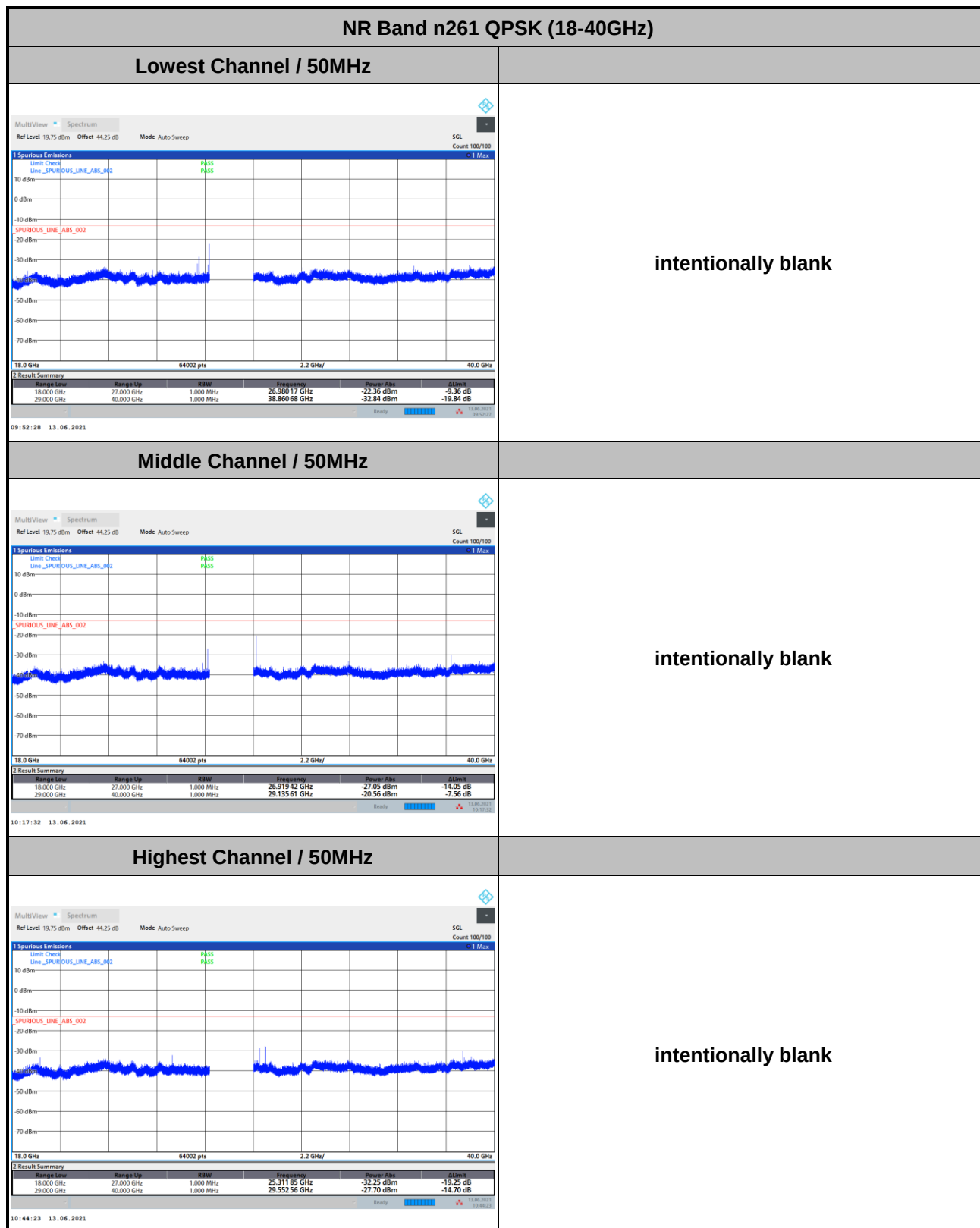


Spurious Emission



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

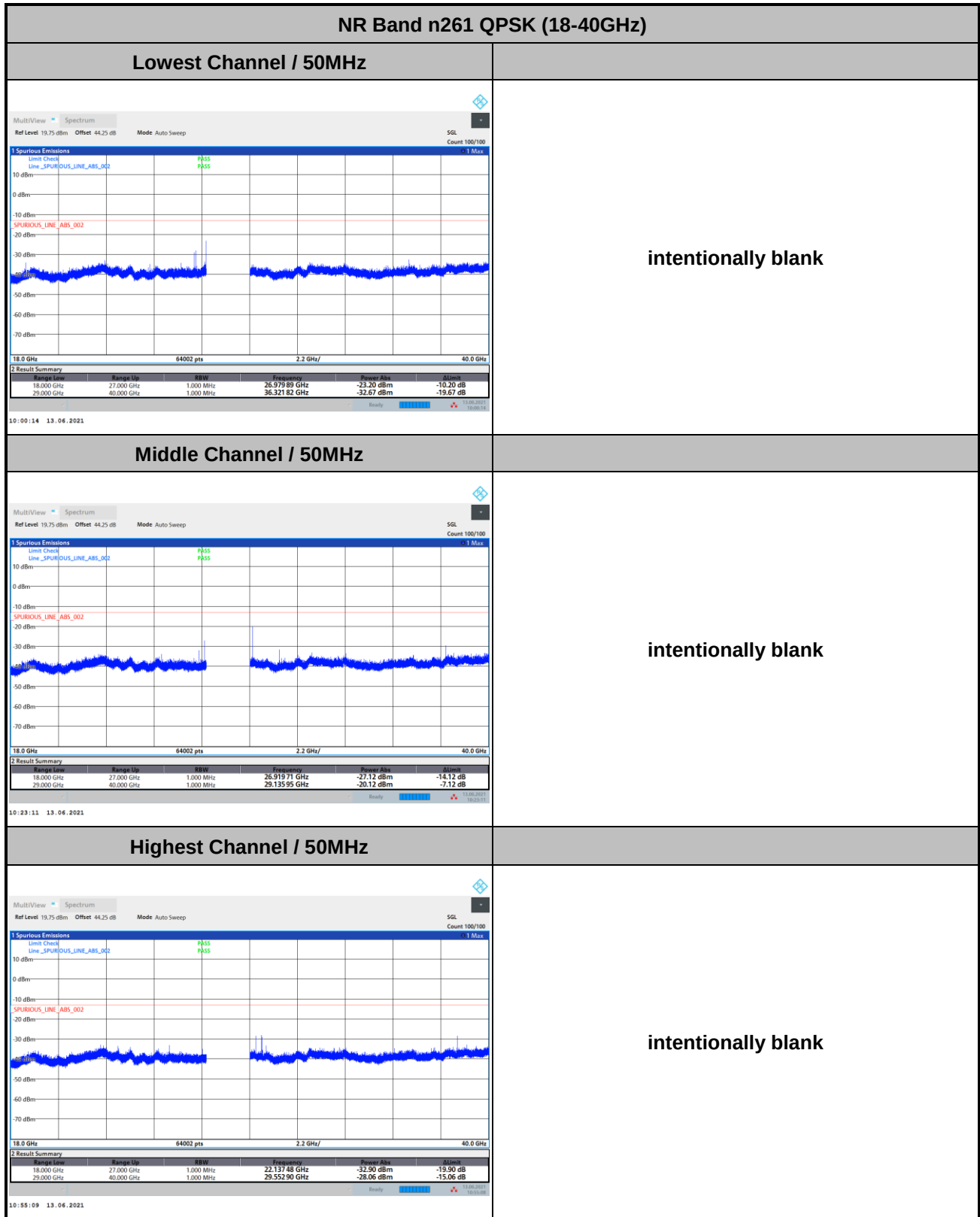
DFT-s-OFDM Module B



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



CP-OFDM Module B



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

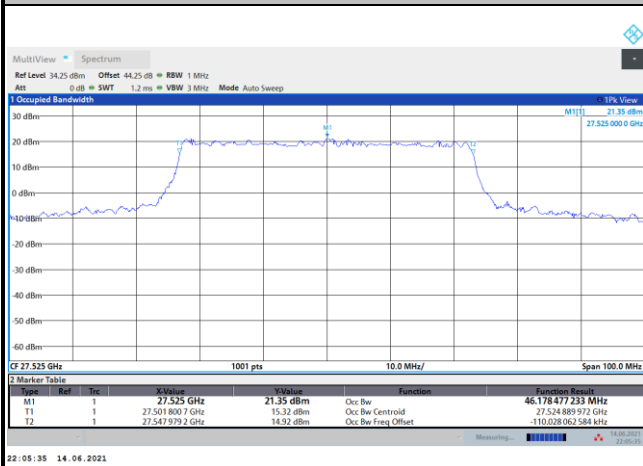
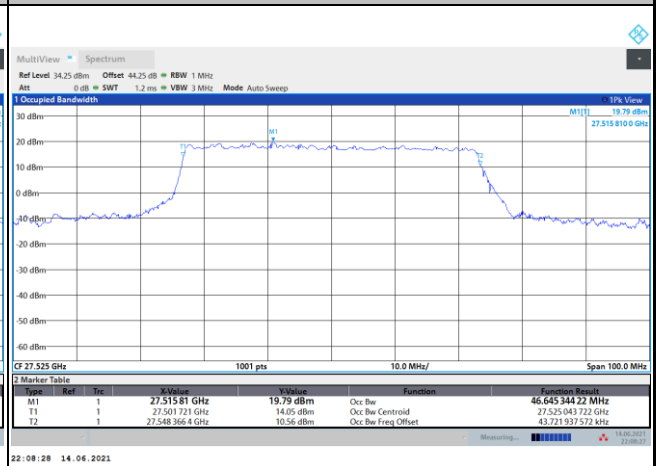
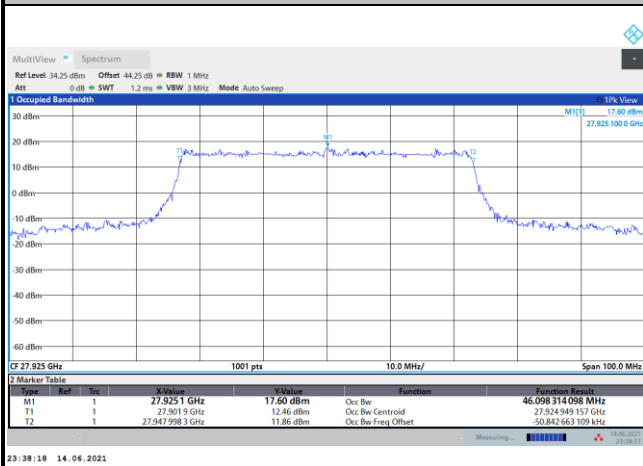
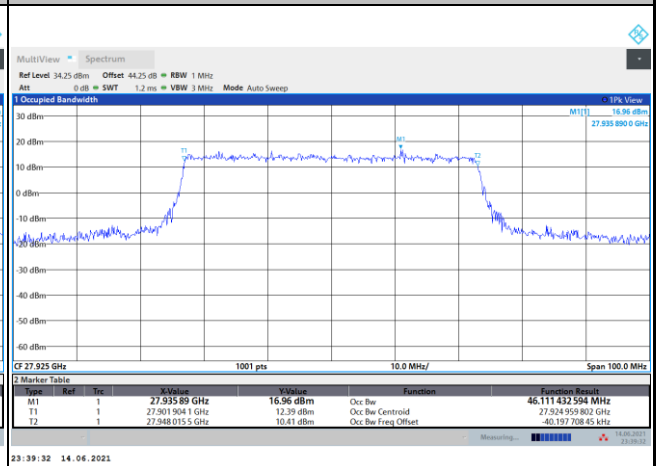
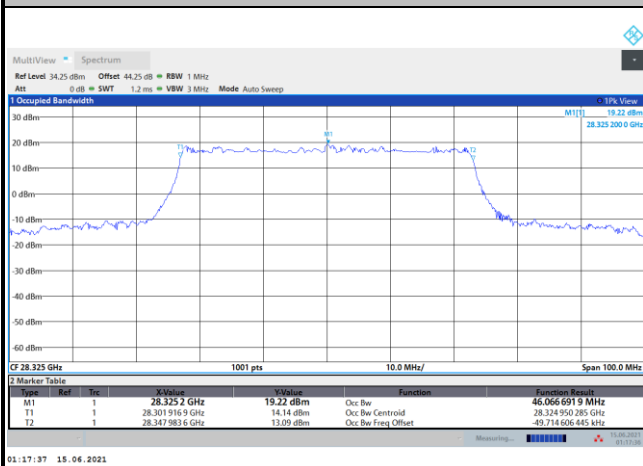


NR Band n261 Module B Beam V

Occupied Bandwidth

Mode	DFT-s-OFDM Module B NR Band n261 : 99%OBW(MHz)		
BW	50MHz		
Mod.	QPSK	16QAM	64QAM
Lowest CH	46.17	46.64	46.07
Middle CH	46.09	46.11	46.29
Highest CH	46.06	46.25	46.21

Mode	CP-OFDM Module B NR Band n261 : 99%OBW(MHz)	
BW	50MHz	
Mod.	QPSK	
Lowest CH	46.67	
Middle CH	46.47	
Highest CH	46.33	

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
