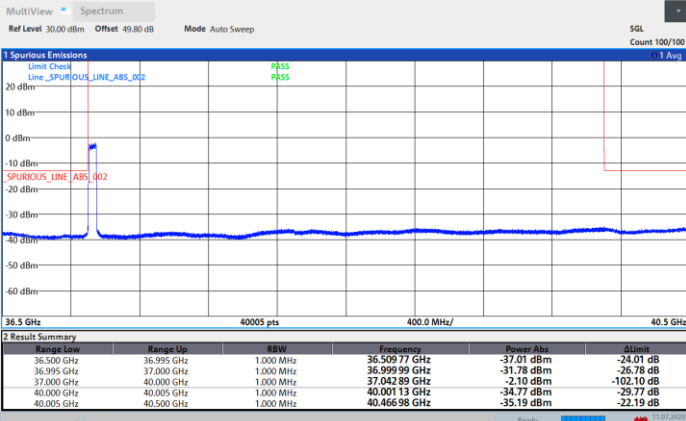




CP-OFDM Module 0

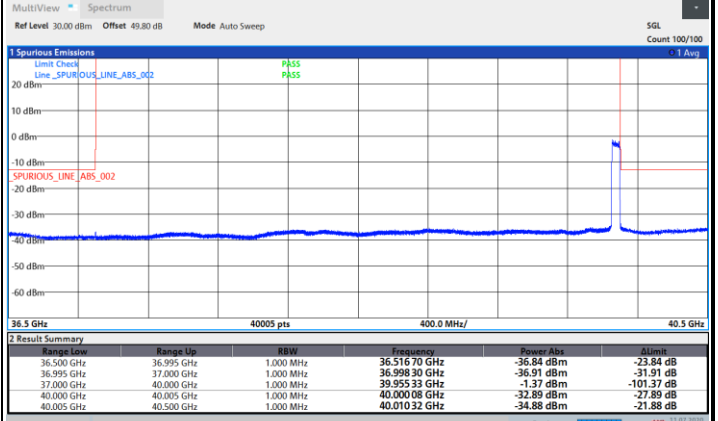
NR Band n260 / 50MHz / 64QAM

Lowest Band Edge / Full RB



04:36:45 11.07.2020

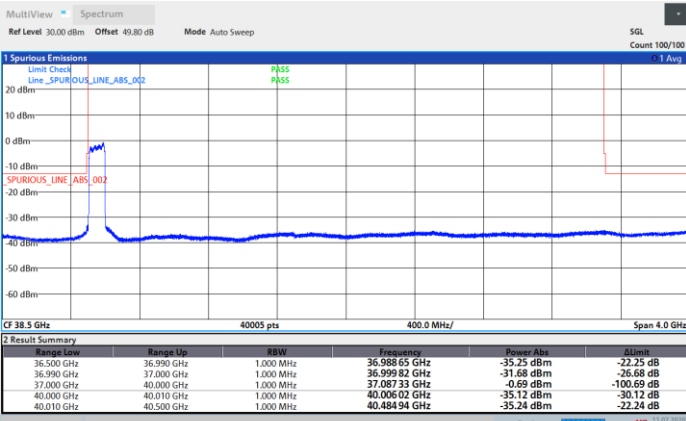
Highest Band Edge / Full RB



07:19:41 11.07.2020

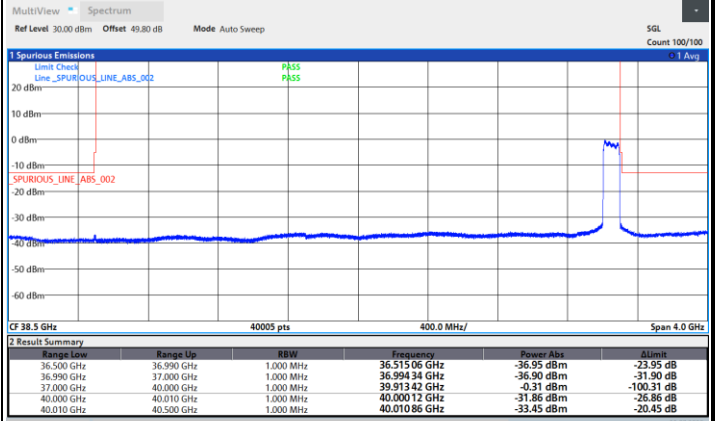
NR Band n260 / 100MHz / QPSK

Lowest Band Edge / Full RB



05:29:41 11.07.2020

Highest Band Edge / Full RB



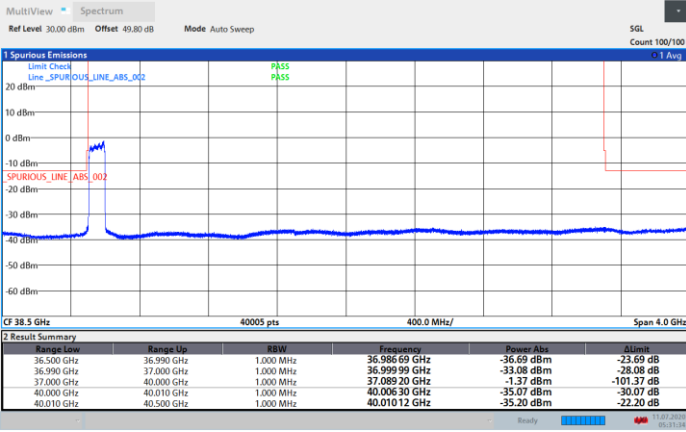
08:01:11 11.07.2020



CP-OFDM Module 0

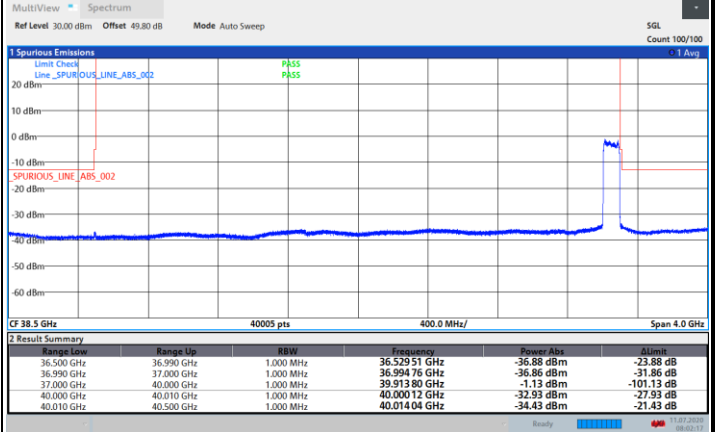
NR Band n260 / 100MHz / 16QAM

Lowest Band Edge / Full RB



05:31:35 11.07.2020

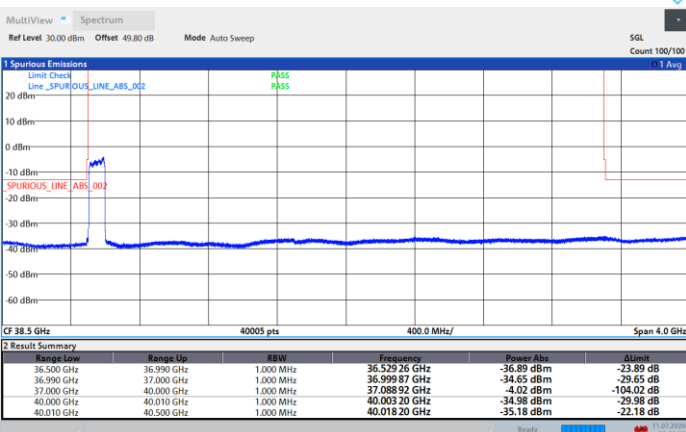
Highest Band Edge / Full RB



08:02:18 11.07.2020

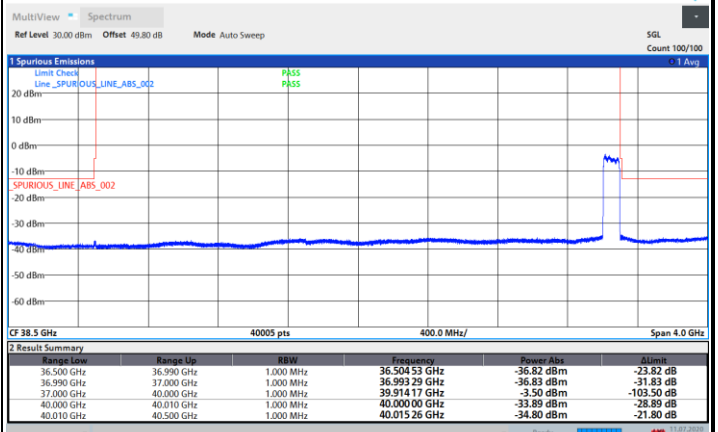
NR Band n260 / 100MHz / 64QAM

Lowest Band Edge / Full RB



05:33:01 11.07.2020

Highest Band Edge / Full RB



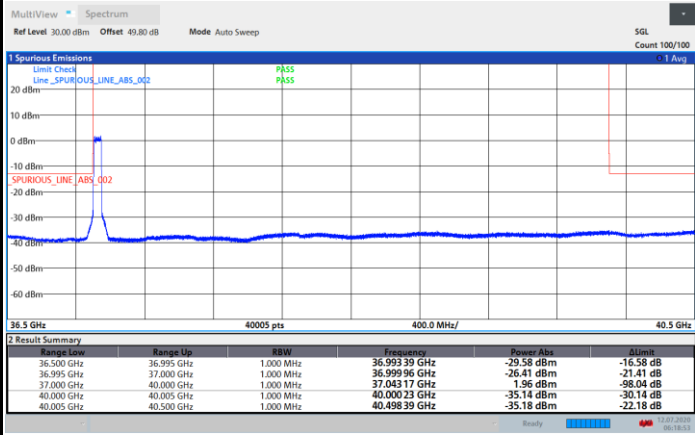
08:03:30 11.07.2020



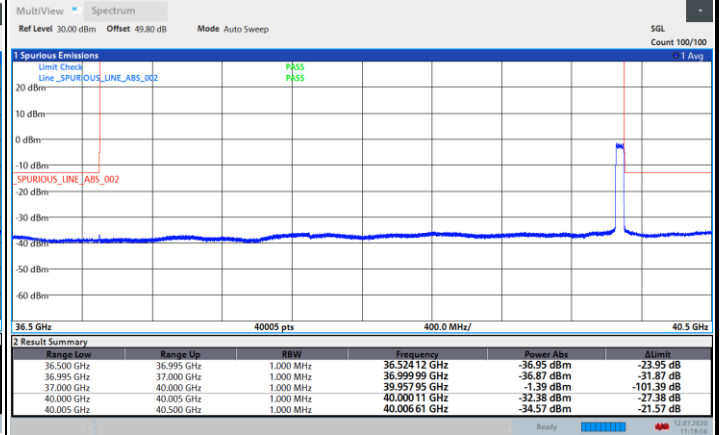
CP-OFDM Module 1

NR Band n260 / 50MHz / QPSK

Lowest Band Edge / Full RB

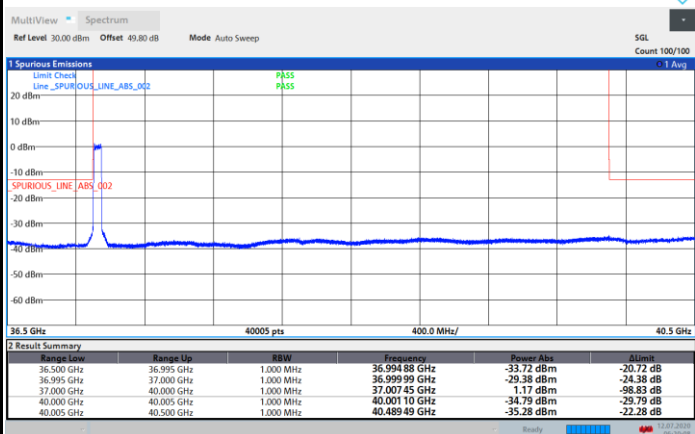


Highest Band Edge / Full RB

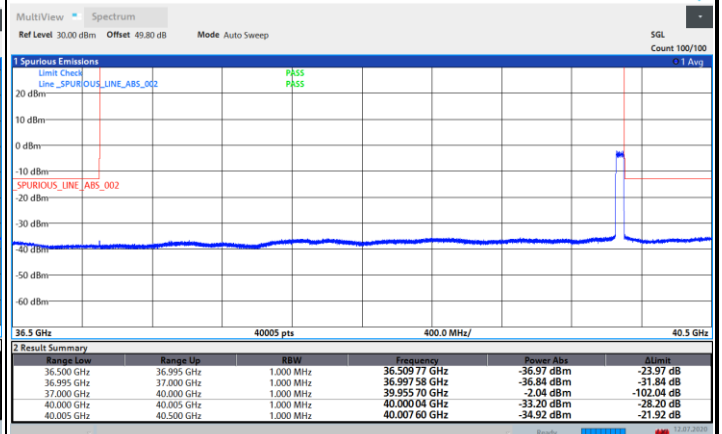


NR Band n260 / 50MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

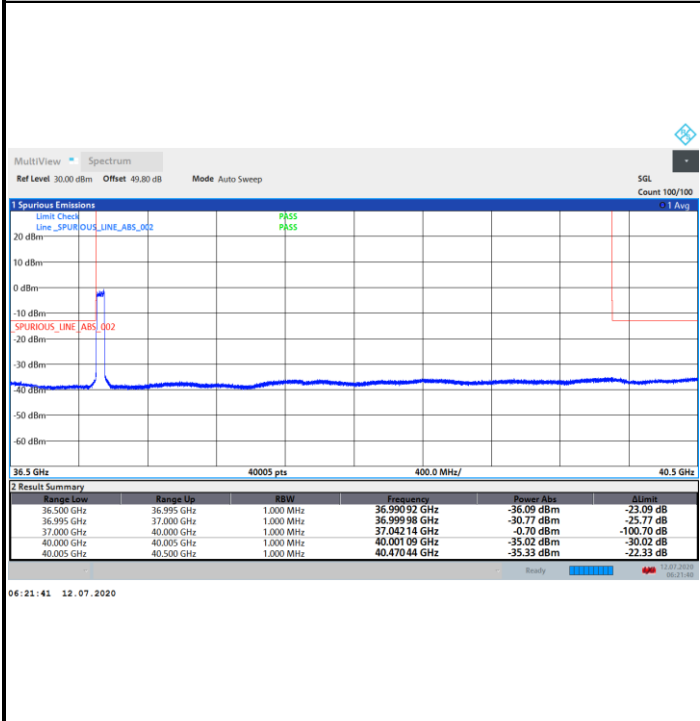




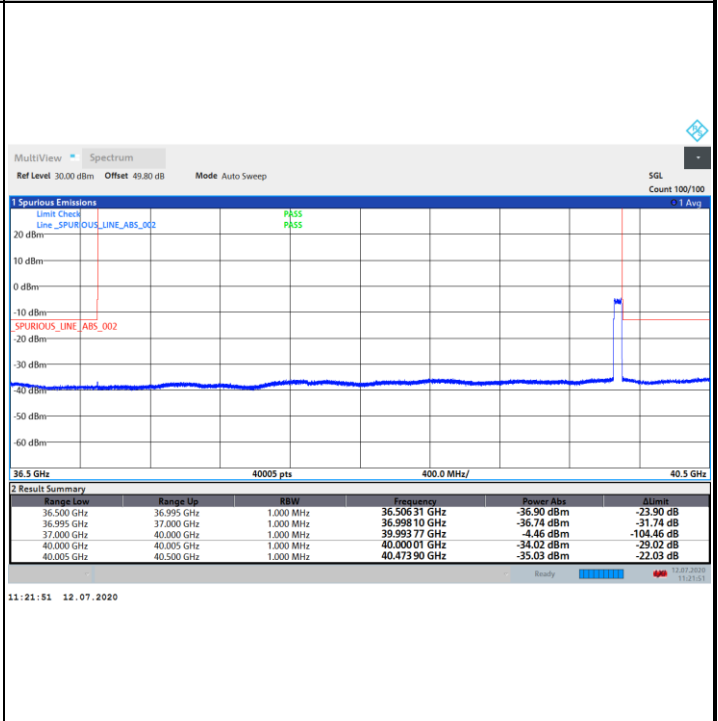
CP-OFDM Module 1

NR Band n260 / 50MHz / 64QAM

Lowest Band Edge / Full RB

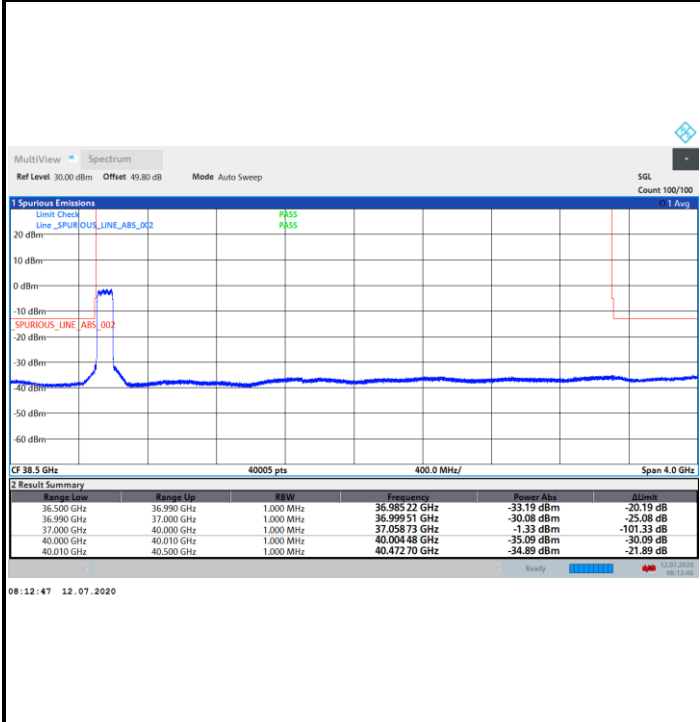


Highest Band Edge / Full RB

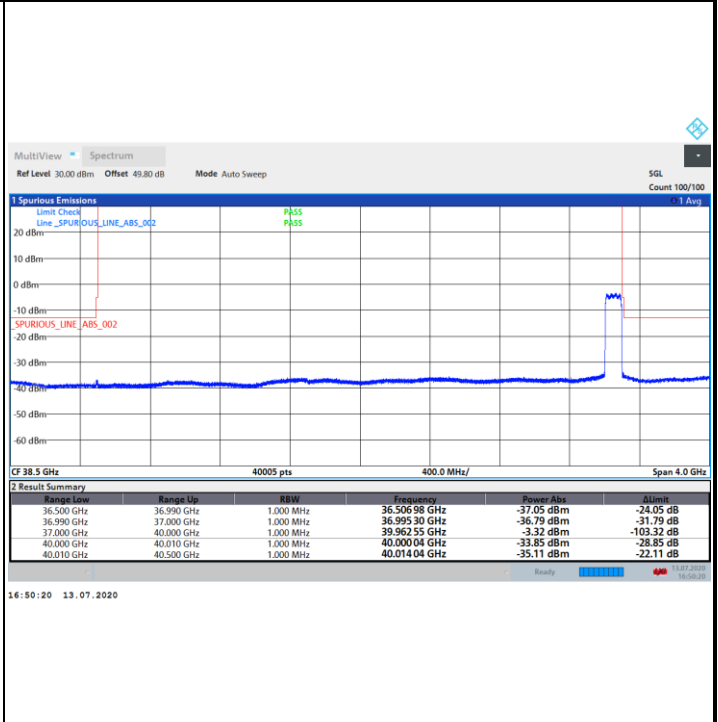


NR Band n260 / 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



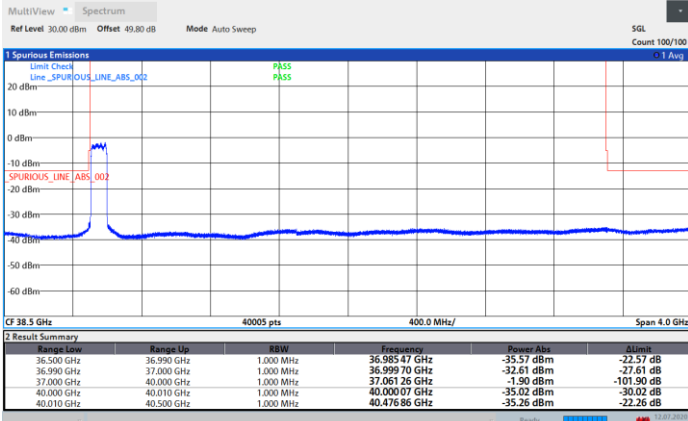


CP-OFDM Module 1

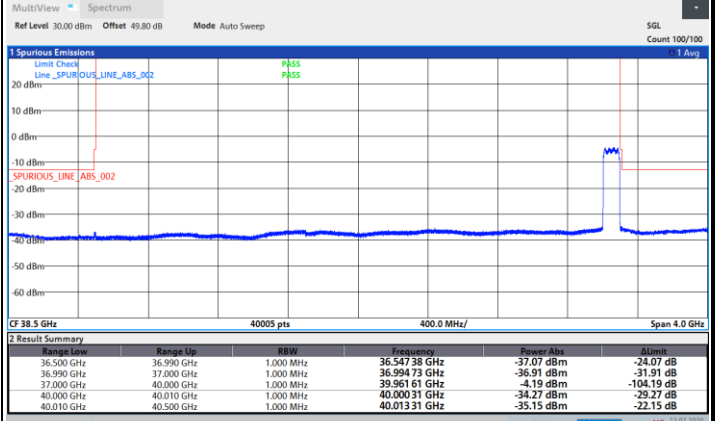
NR Band n260 / 100MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



08:13:51 12.07.2020

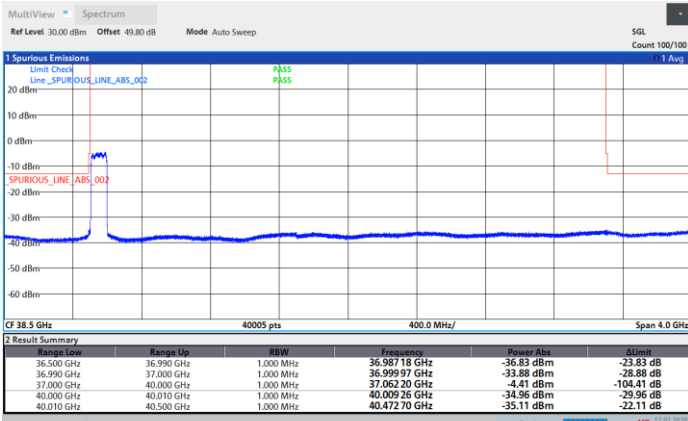


16:53:52 13.07.2020

NR Band n260 / 100MHz / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



08:15:15 12.07.2020



16:55:17 13.07.2020

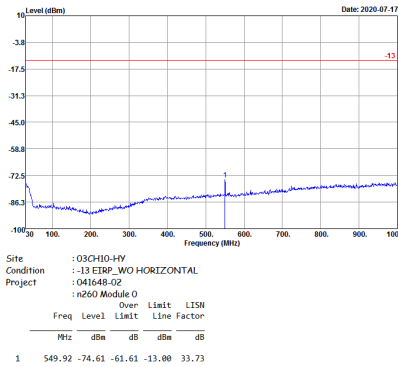


Spurious Emission

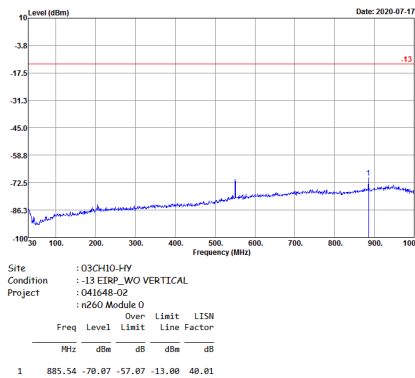
There is no significant spurious emission signal found for frequency started from 9kHz up to 18GHz. Only the noise floor is reported.

NR Band n260 (30MHz-1GHz)

Horizontal



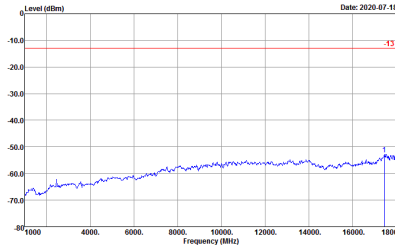
Vertical





NR Band n260 (1GHz-18GHz)

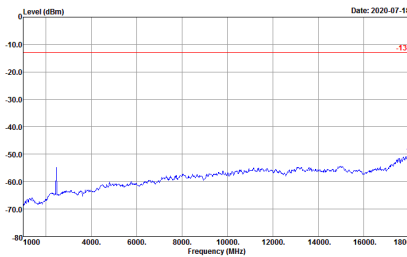
Horizontal



Site : 03CH10-HY
 Condition : -13 EIRP_WO HORIZONTAL
 Project : 041648-02
 : n260 Module 0

Freq	Level	Over	Limit	L15N	
MHz	dBm	dB	dBm	dB	
1	17456.00	-52.85	-39.85	-13.00	72.36

Vertical



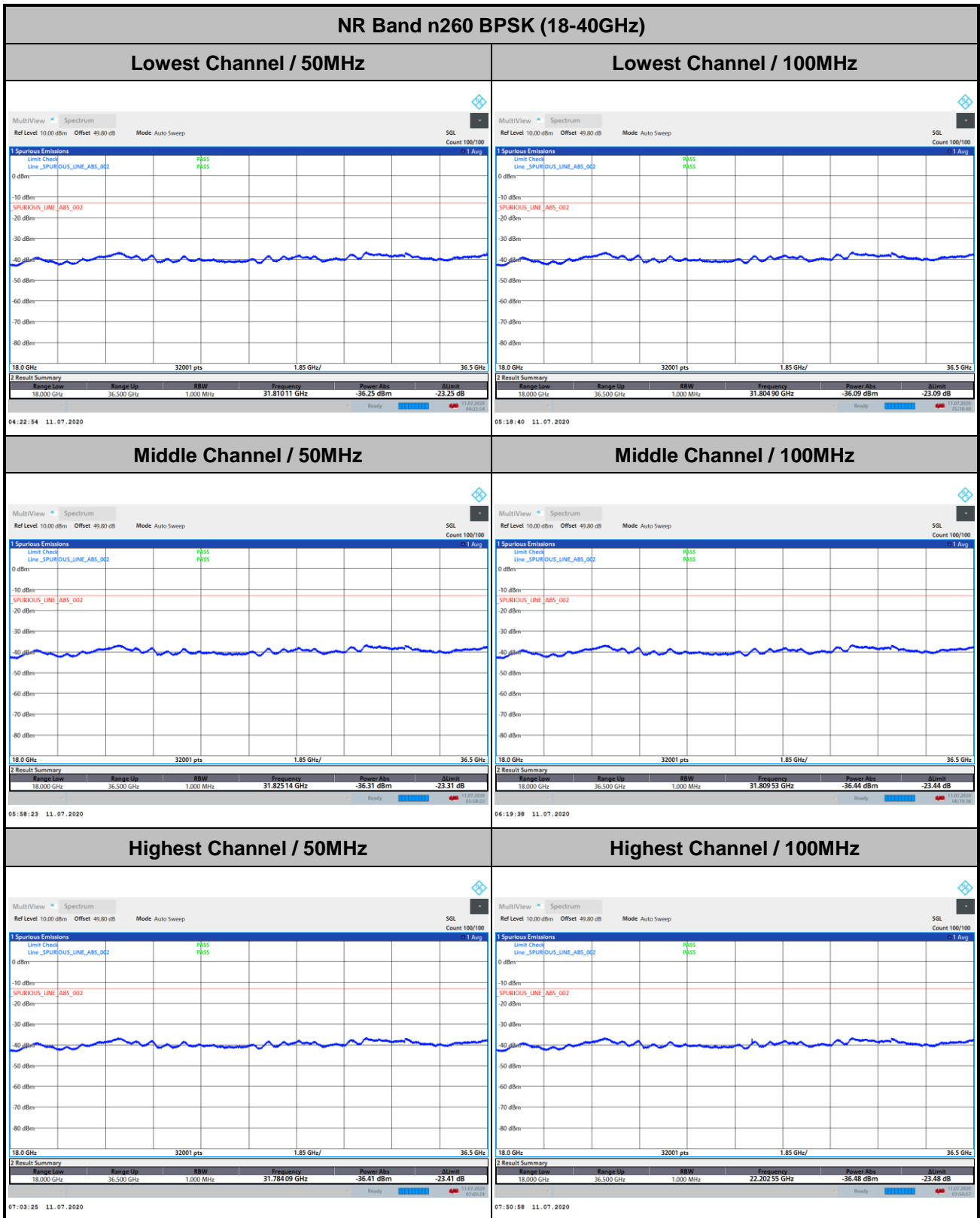
Site : 03CH10-HY
 Condition : -13 EIRP_WO VERTICAL
 Project : 041648-02
 : n260 Module 0

Freq	Level	Over	Limit	L15N	
MHz	dBm	dB	dBm	dB	
1	17949.00	-50.46	-37.46	-13.00	75.63



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

DFT-s-OFDM Module 0

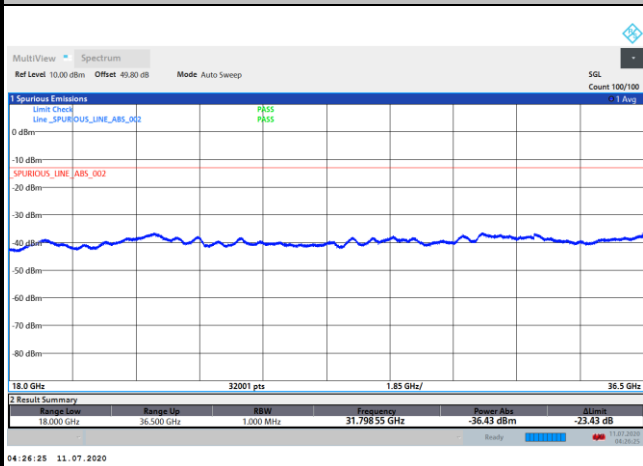




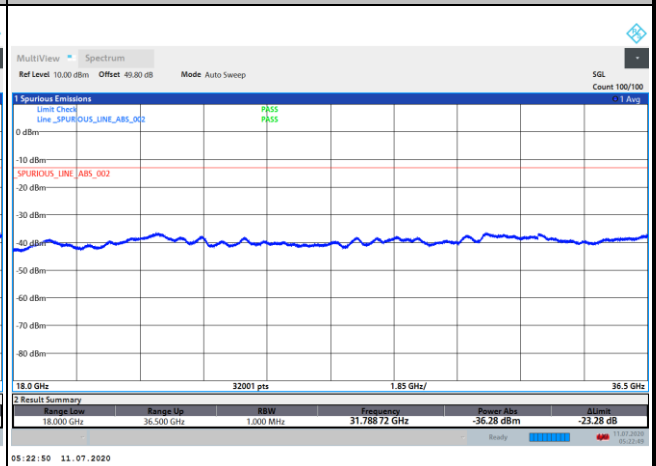
DFT-s-OFDM Module 0

NR Band n260 QPSK (18-40GHz)

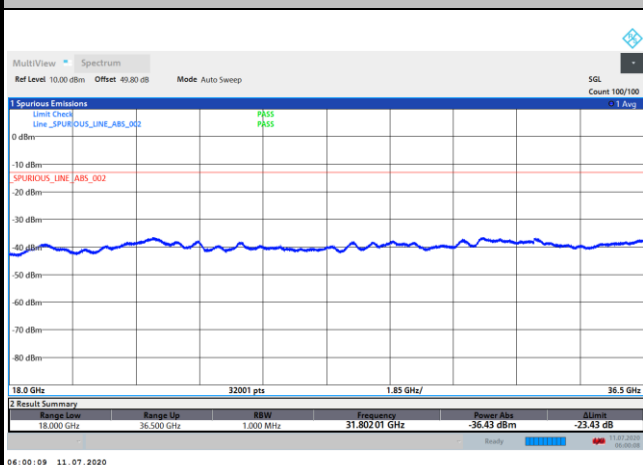
Lowest Channel / 50MHz



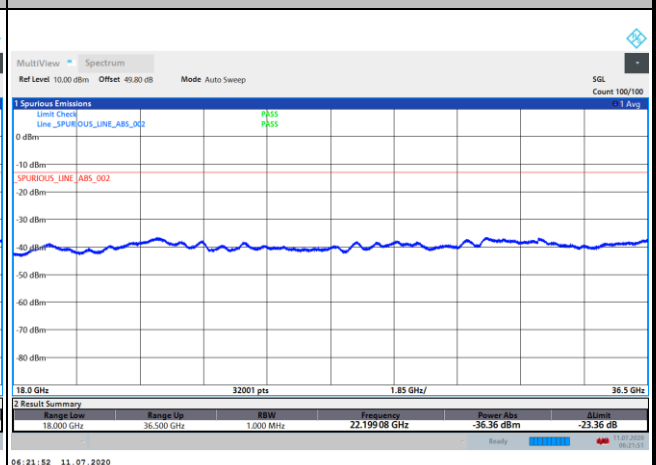
Lowest Channel / 100MHz



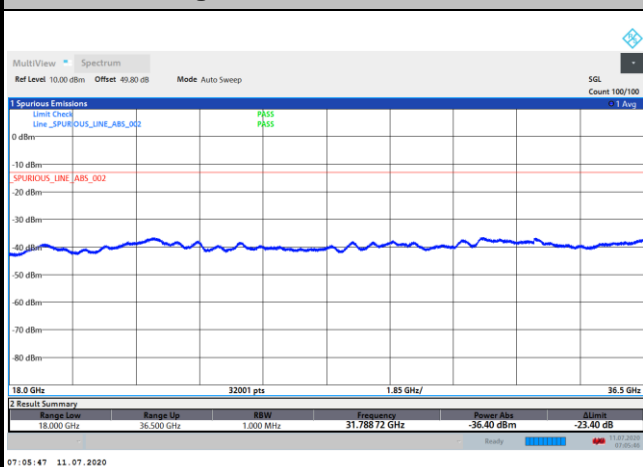
Middle Channel / 50MHz



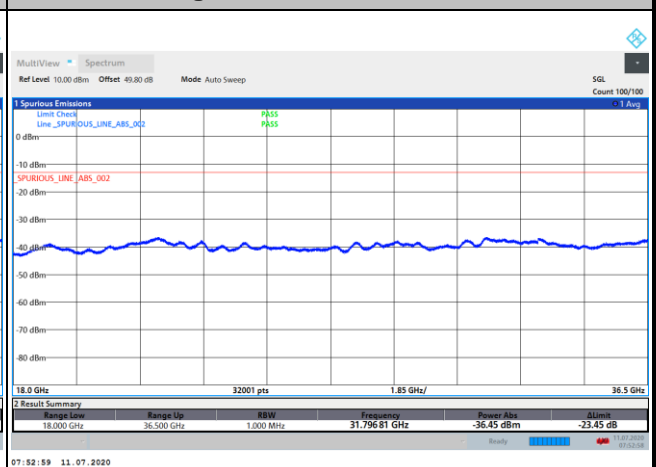
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

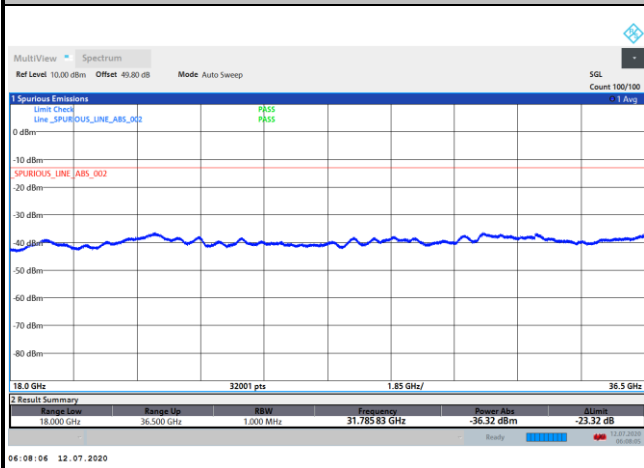




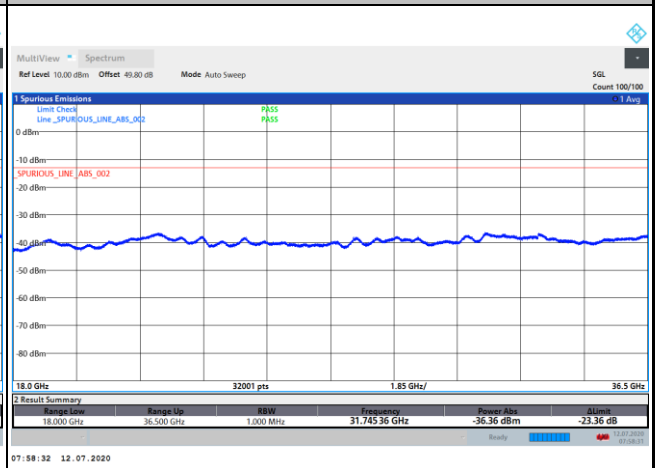
DFT-s-OFDM Module 1

NR Band n260 BPSK (18-40GHz)

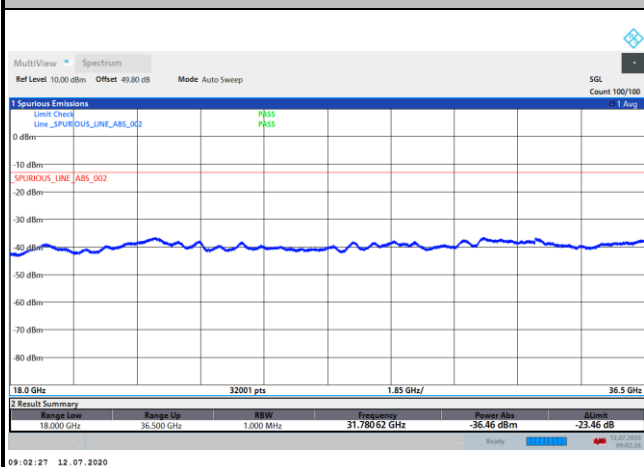
Lowest Channel / 50MHz



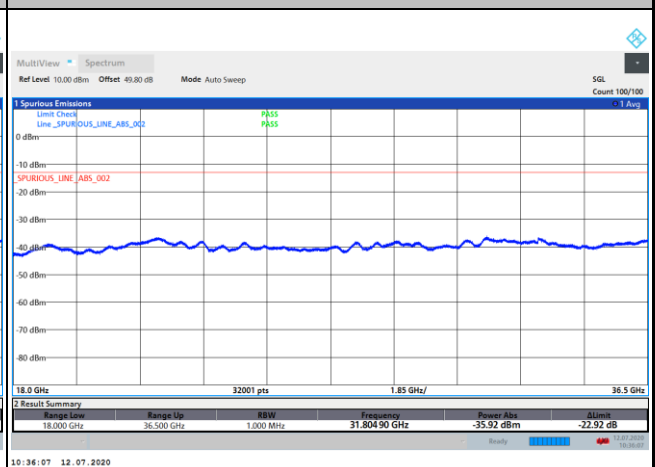
Lowest Channel / 100MHz



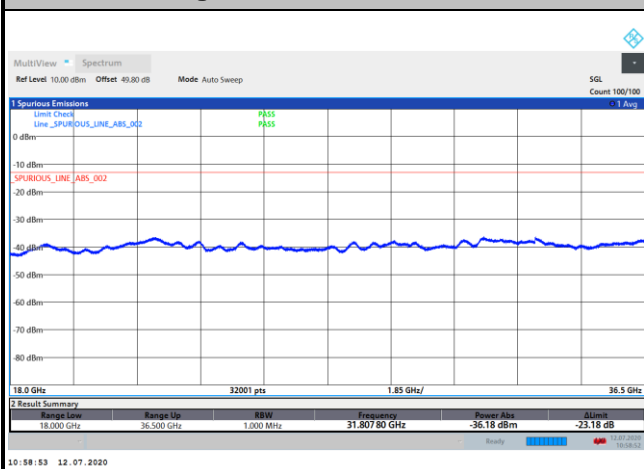
Middle Channel / 50MHz



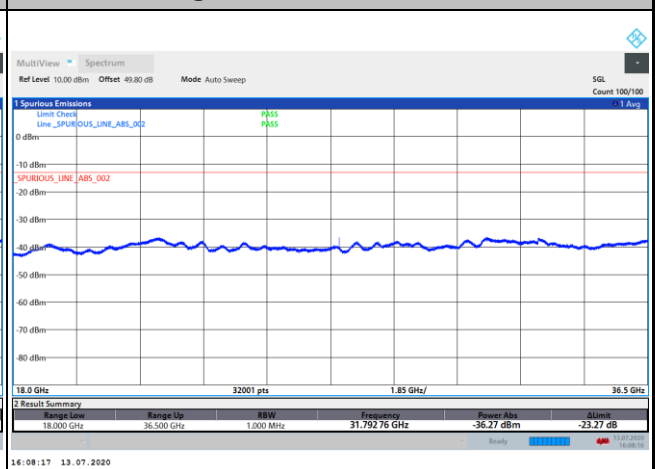
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

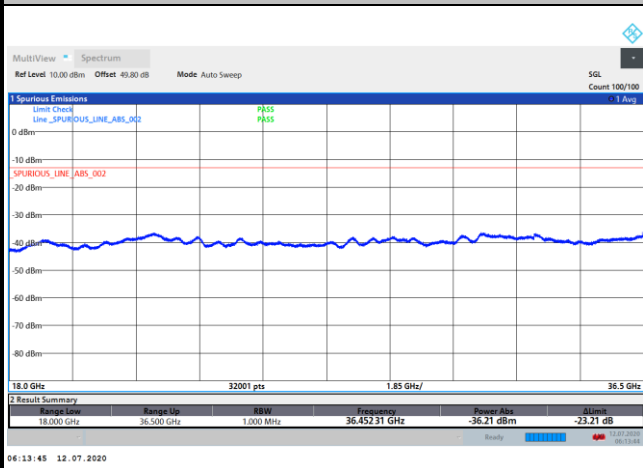




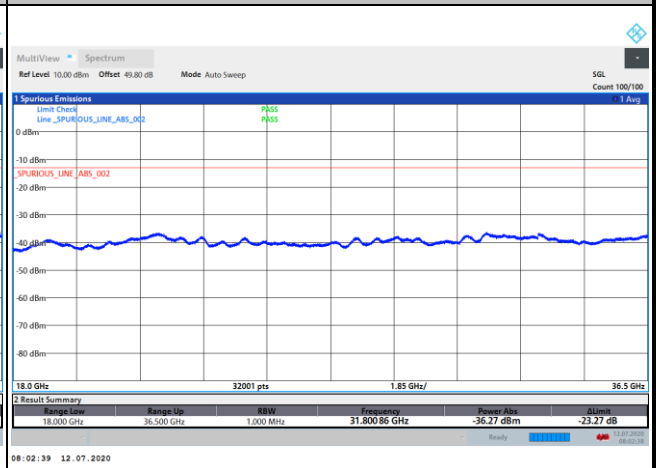
DFT-s-OFDM Module 1

NR Band n260 QPSK (18-40GHz)

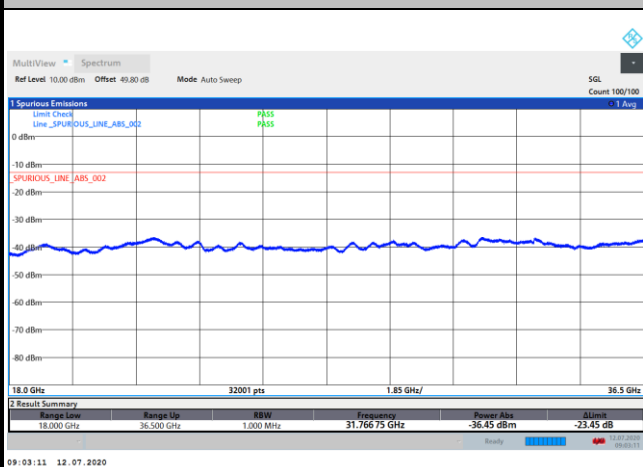
Lowest Channel / 50MHz



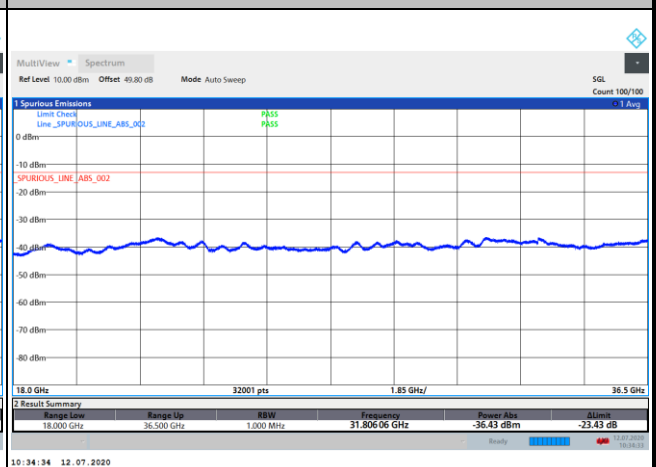
Lowest Channel / 100MHz



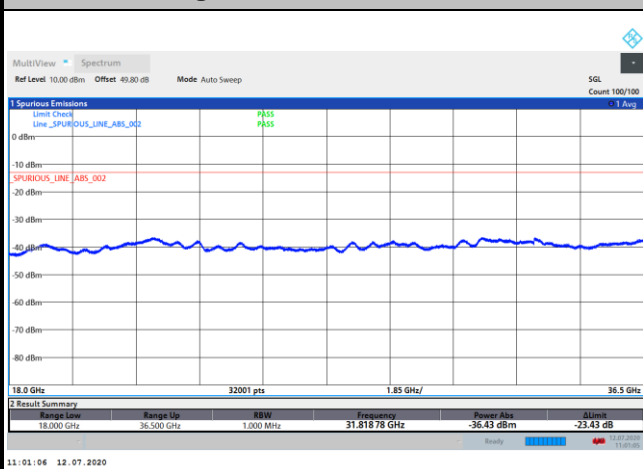
Middle Channel / 50MHz



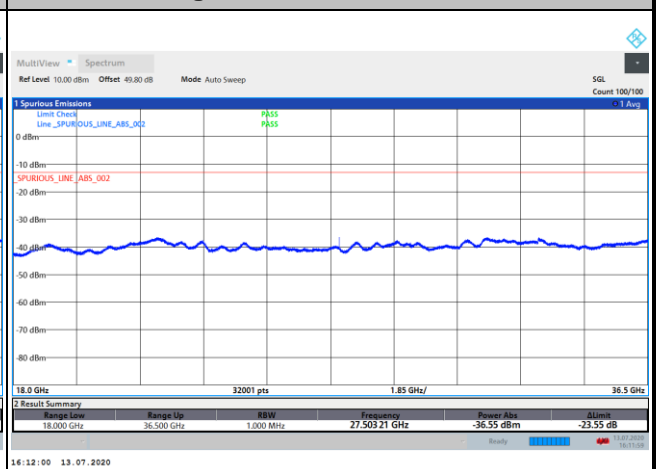
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

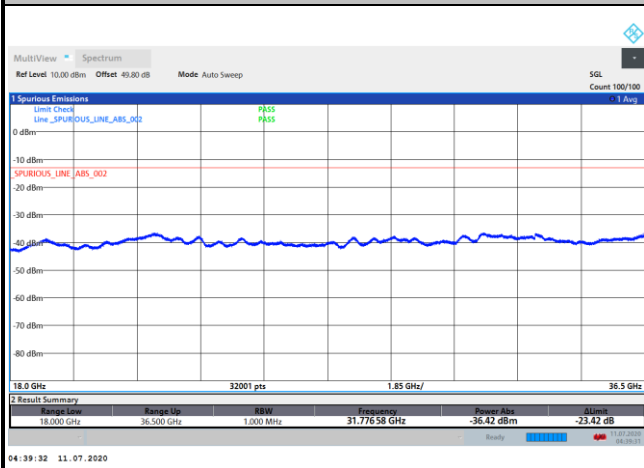




CP-OFDM Module 0

NR Band n260 QPSK (18-40GHz)

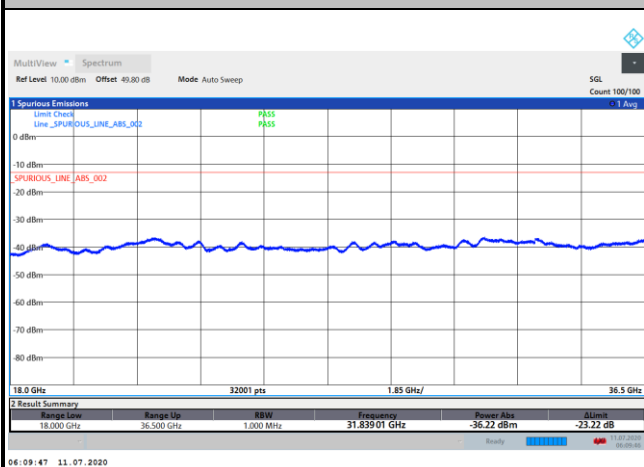
Lowest Channel / 50MHz



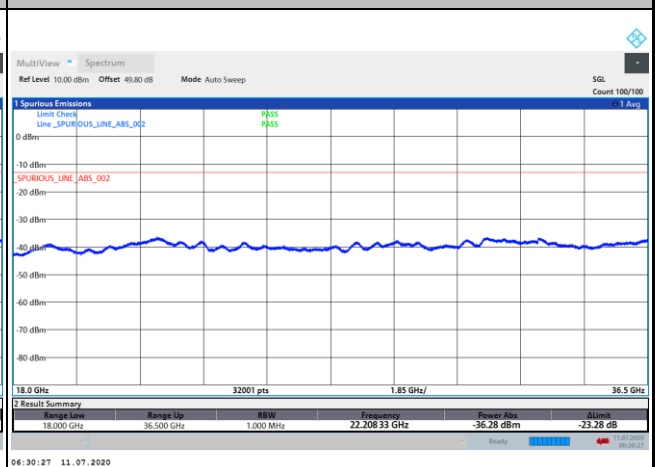
Lowest Channel / 100MHz



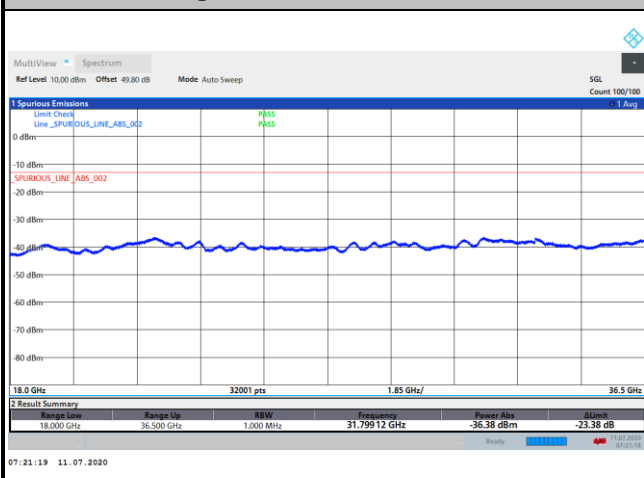
Middle Channel / 50MHz



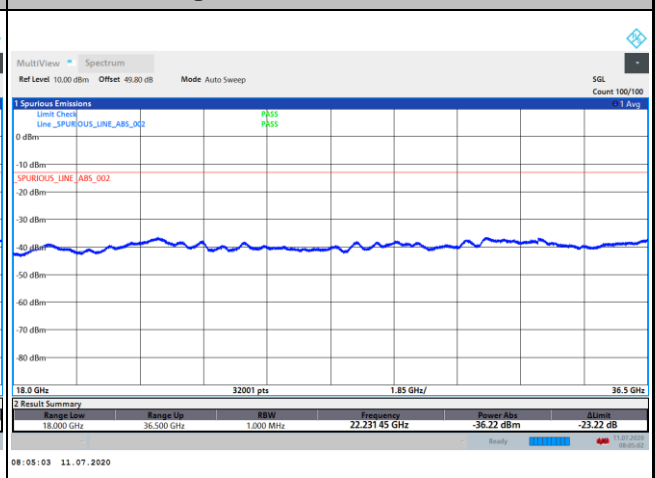
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

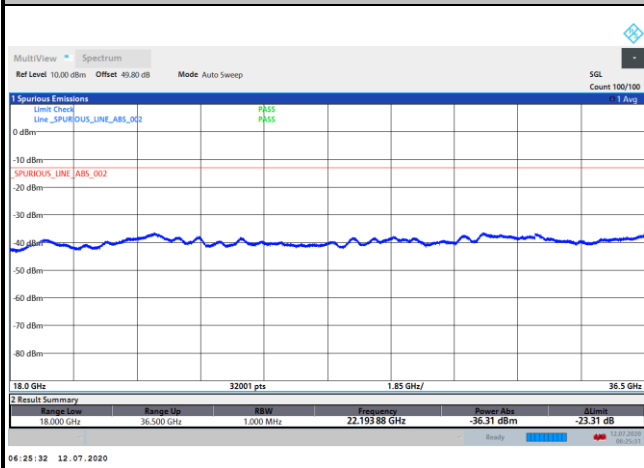




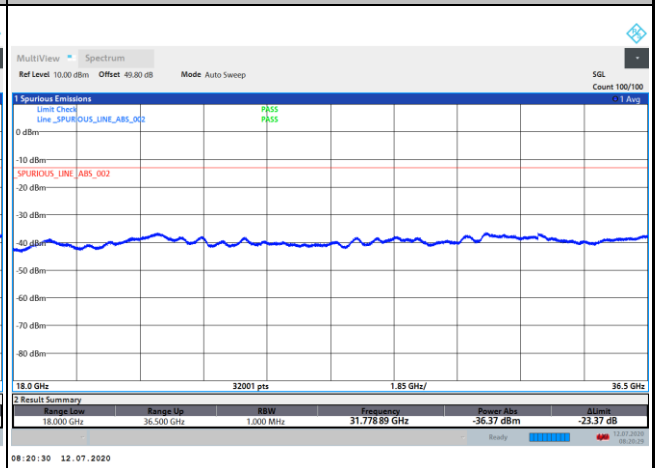
CP-OFDM Module 1

NR Band n260 QPSK (18-40GHz)

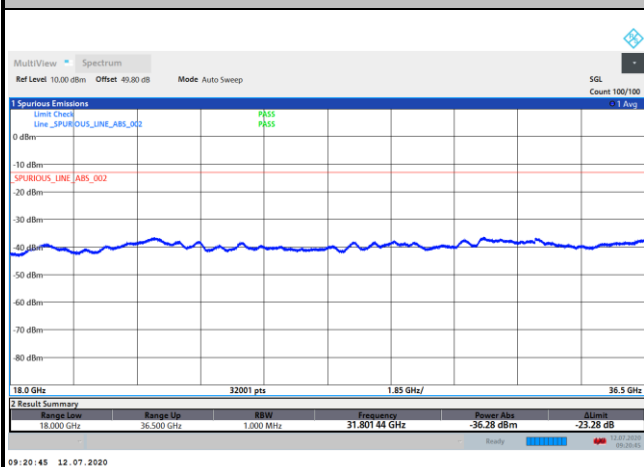
Lowest Channel / 50MHz



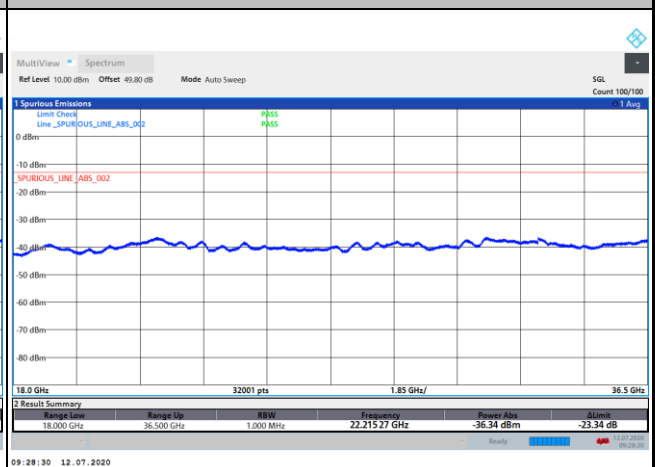
Lowest Channel / 100MHz



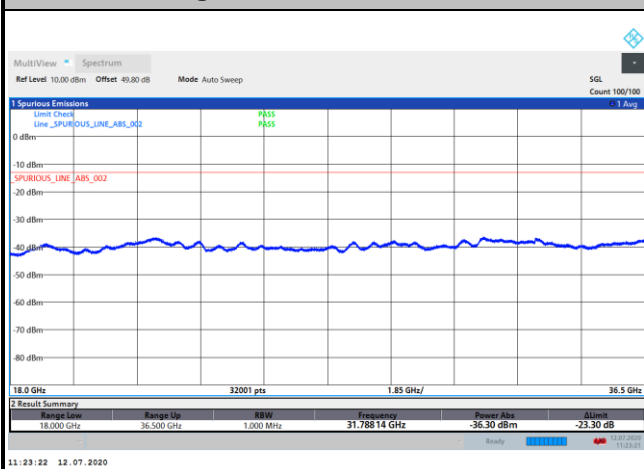
Middle Channel / 50MHz



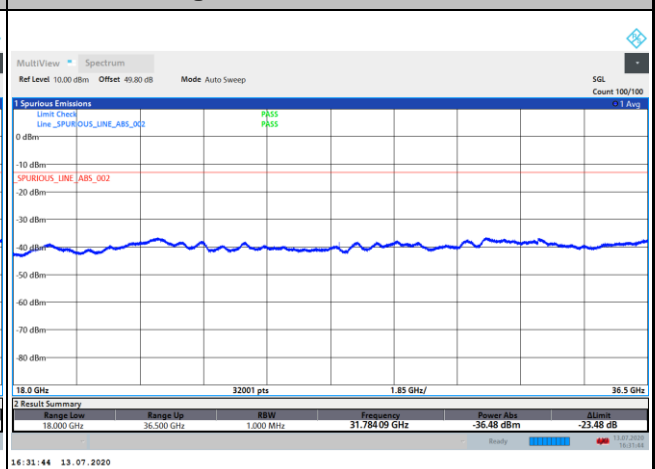
Middle Channel / 100MHz



Highest Channel / 50MHz

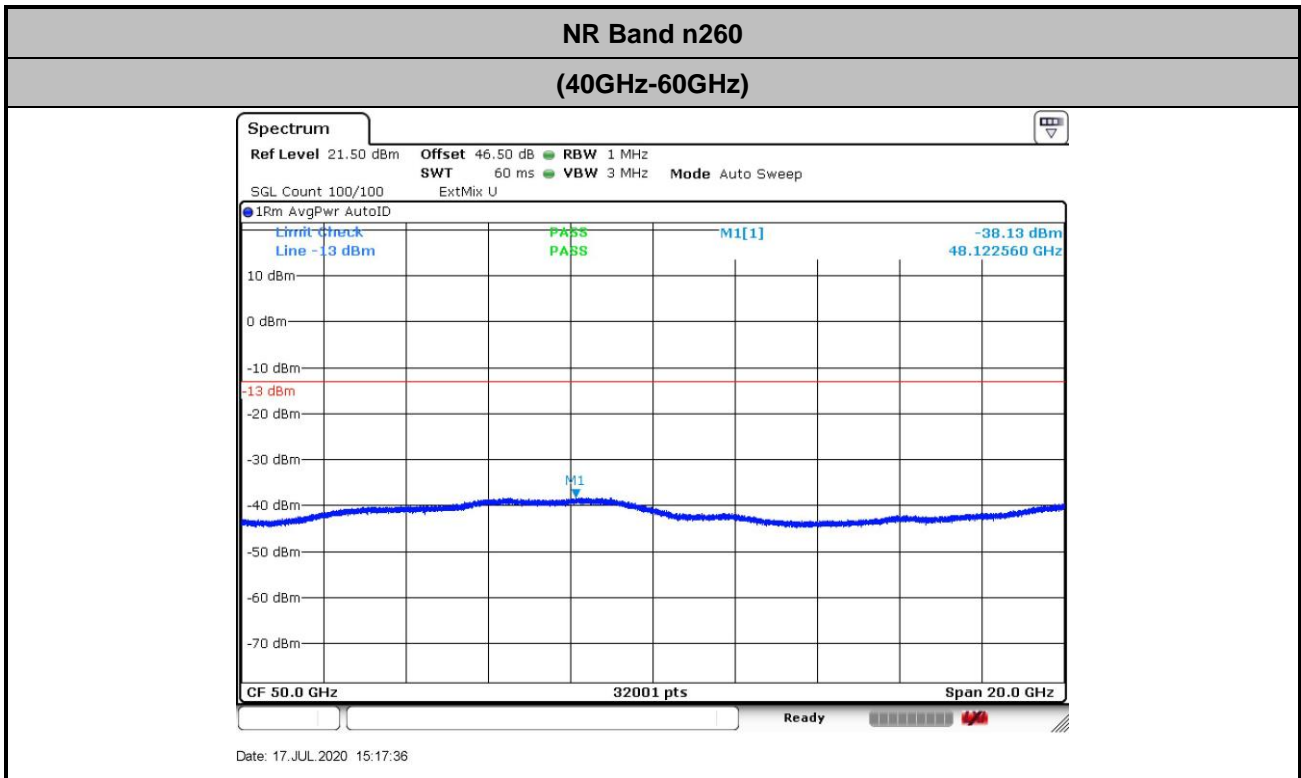


Highest Channel / 100MHz



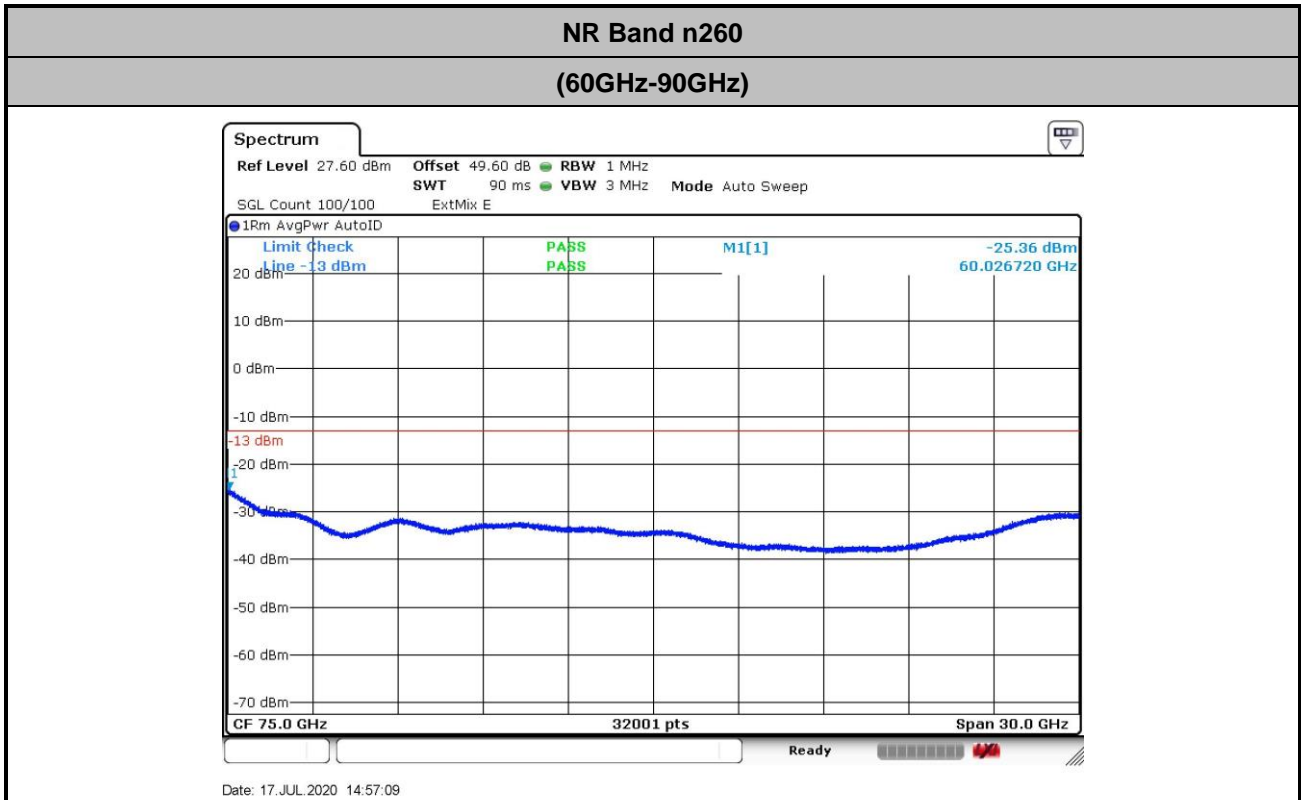


There is no significant spurious emission signal found for frequency started from 40GHz up to 200GHz. Only the noise floor is reported.



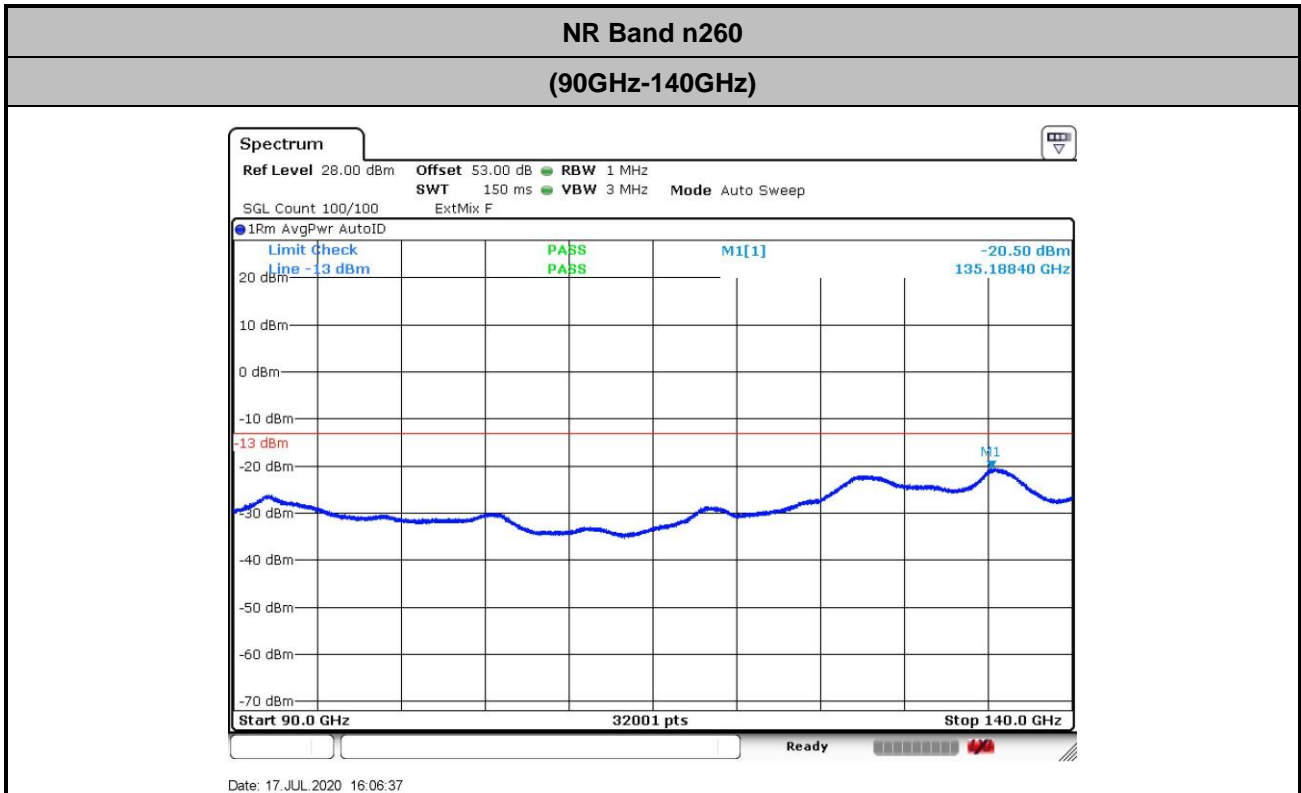
$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8$$

$$= 42.1 + 2.2 + 107 + 20\log(1) - 104.8 = 46.5 \text{ (dB)}$$



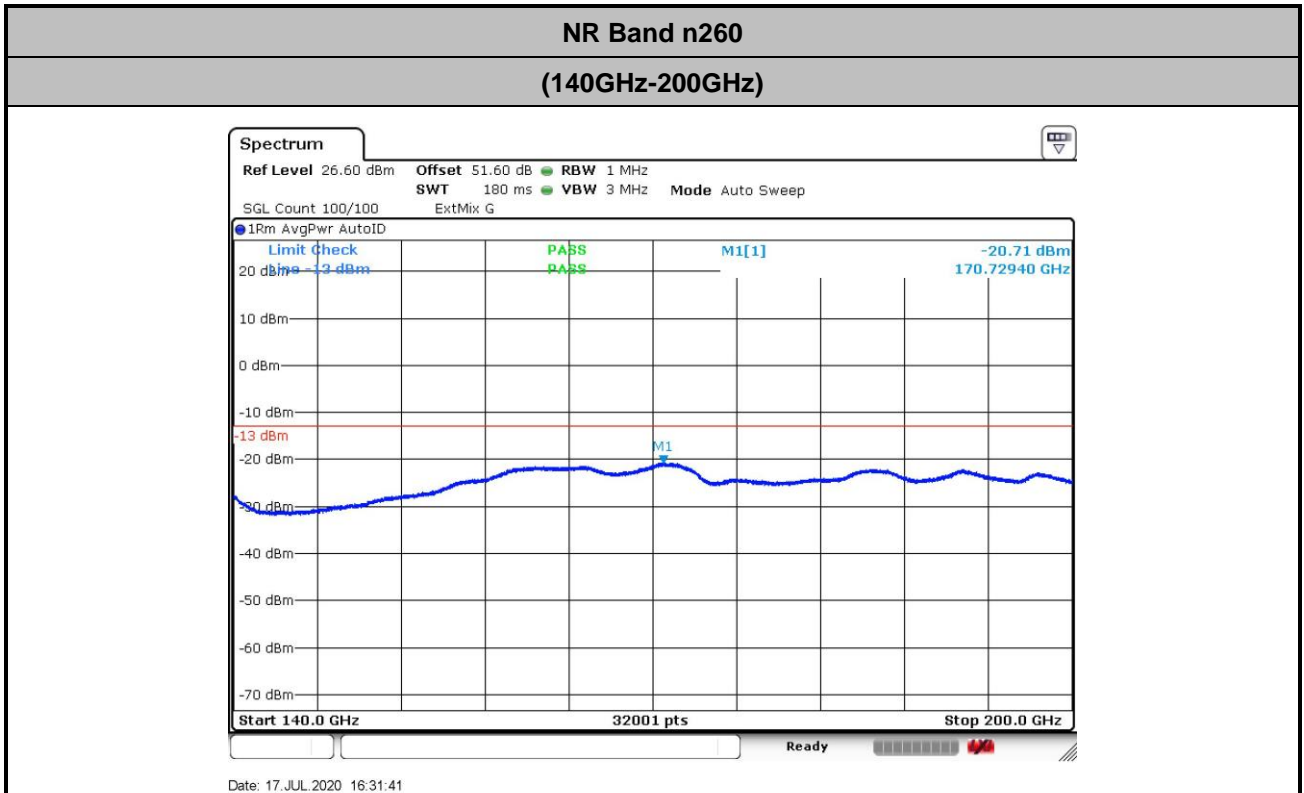
$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8$$

$$= 47.2 + 2.2 + 107 + 20\log(1) - 104.8 = 49.6 \text{ (dB)}$$



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

$$= 48.8 + 2 + 107 + 20\log(1) - 104.8 = 53 \text{ (dB)}$$



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

$$= 53.4 + 2 + 107 + 20\log(0.5) - 104.8 = 51.6 \text{ (dB)}$$



Frequency Stability

Test Conditions		NR Band n260 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	38.50002195	-20.848	0.542	Pass
40	Normal Voltage	38.50008984	-88.741	2.305	
30	Normal Voltage	38.50016543	-164.334	4.268	
20(Ref.)	Normal Voltage	38.5000011	0.000	0.000	
10	Normal Voltage	38.50026647	-265.374	6.893	
0	Normal Voltage	38.50027262	-271.523	7.053	
-10	Normal Voltage	38.50025313	-252.025	6.546	
-20	Normal Voltage	38.50021623	-215.129	5.588	
-30	Normal Voltage	38.50021348	-212.379	5.516	
20	Maximum Voltage	38.50006429	-63.194	1.641	
20	Normal Voltage	38.50005984	-58.744	1.526	
20	Battery End Point	38.50006639	-65.294	1.696	

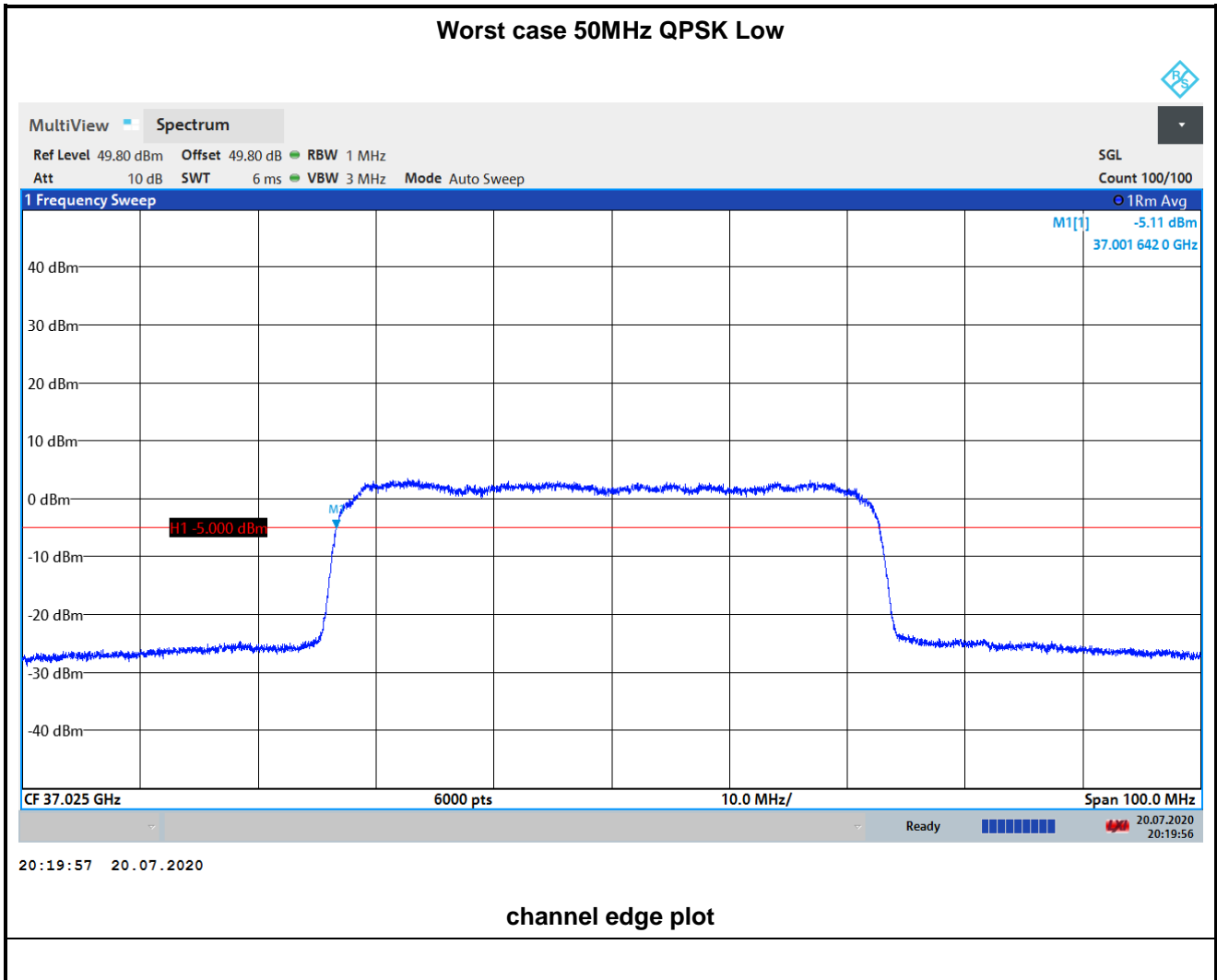
Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.25 V.
2. The frequency fundamental emissions stay within the operation band.
3. The test result at the next page provides confidence that the maximum frequency deviation will not lead to out of band operation during normal and extreme condition.



Channel Bandwidth	Low channel edge frequency close to -5dBm/MHz limit (Hz)	Freq. gap to the lower edge 37,000,000,000Hz (Hz)	Maximum CW tone Deviation (Hz)	Within the band
50MHz	37,001,642,000	1,642,000	271,523	Compliance
100MHz	37,004,483,000	4,483,000	271,523	Compliance

Channel Bandwidth	High channel edge frequency close to -5dBm/MHz limit (Hz)	Freq. gap to the lower edge 40,000,000,000Hz (Hz)	Maximum CW tone Deviation (Hz)	Within the band
50MHz	39,997,942,000	2,058,000	271,523	Compliance
100MHz	39,994,083,000	5,917,000	271,523	Compliance





NR Band n260 MIMO

Occupied Bandwidth

Mode	CP-OFDM Module 0 NR Band n260 : 99%OBW(MHz)					
BW	50MHz			100MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.26	45.08	45.28	92.71	92.79	93.15
Middle CH	45.14	45.07	45.30	92.86	93.08	93.13
Highest CH	45.09	45.25	45.27	92.78	93.03	93.00

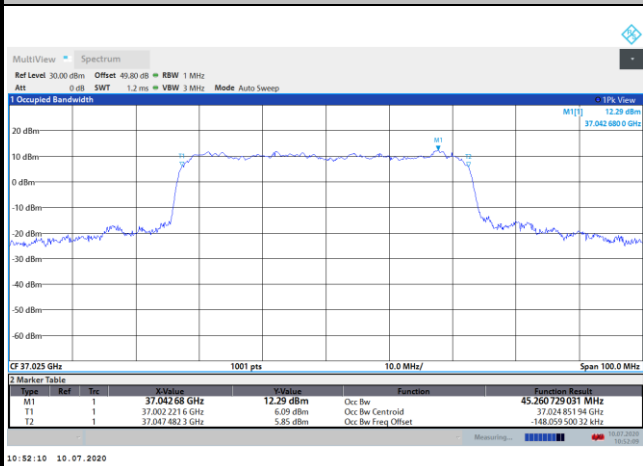
Mode	CP-OFDM Module 1 NR Band n260 : 99%OBW(MHz)					
BW	50MHz			100MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.18	45.34	45.18	92.76	92.69	93.17
Middle CH	45.34	45.41	45.14	92.63	92.87	92.61
Highest CH	45.29	45.25	45.19	92.75	92.91	93.10



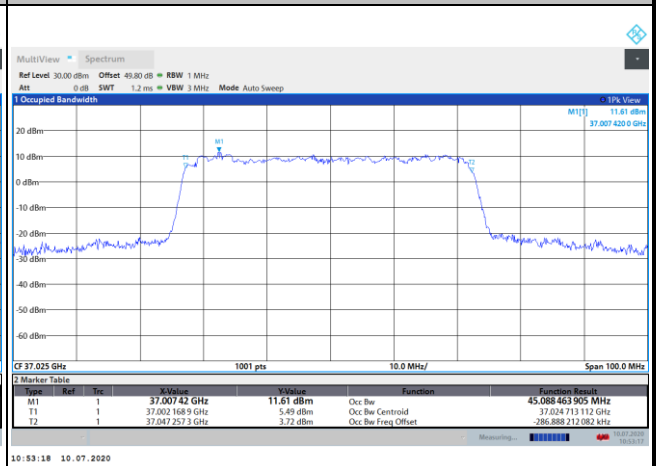
CP-OFDM Module 0

NR Band n260

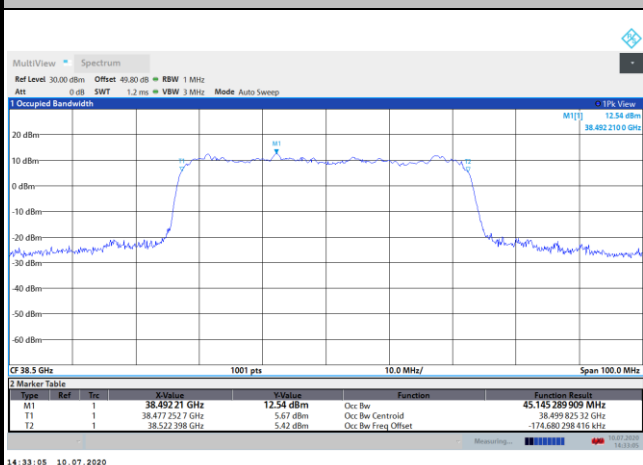
Lowest Channel / 50MHz / QPSK



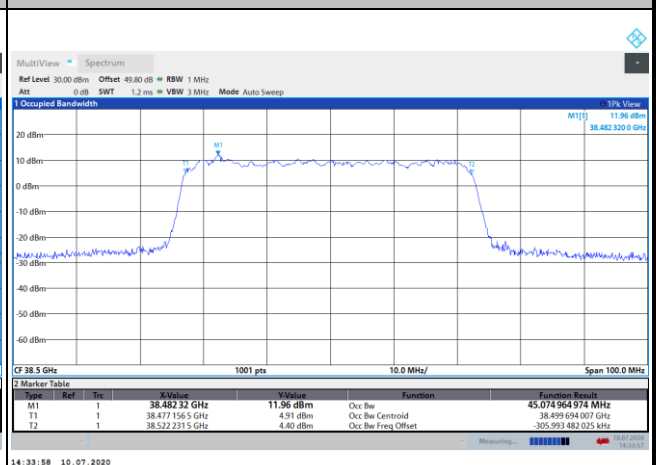
Lowest Channel / 50MHz / 16QAM



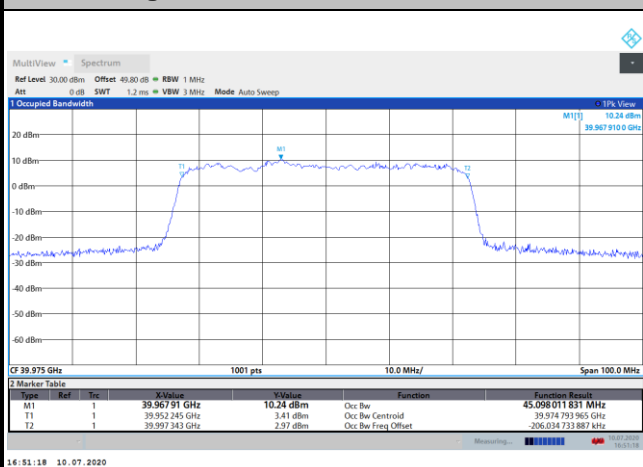
Middle Channel / 50MHz / QPSK



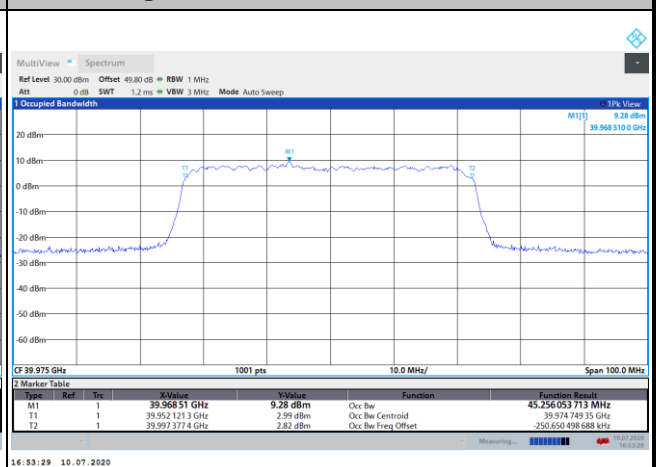
Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

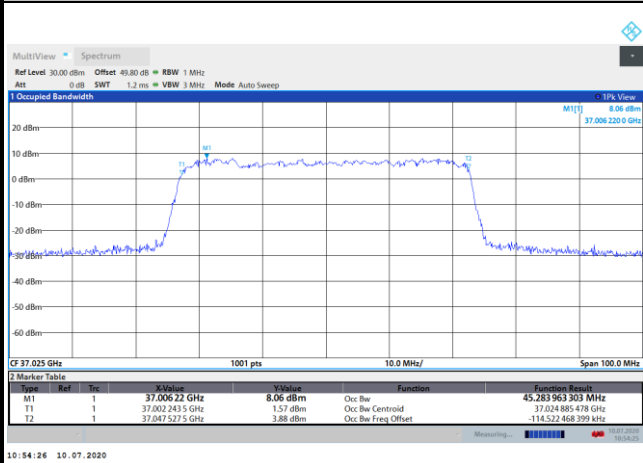




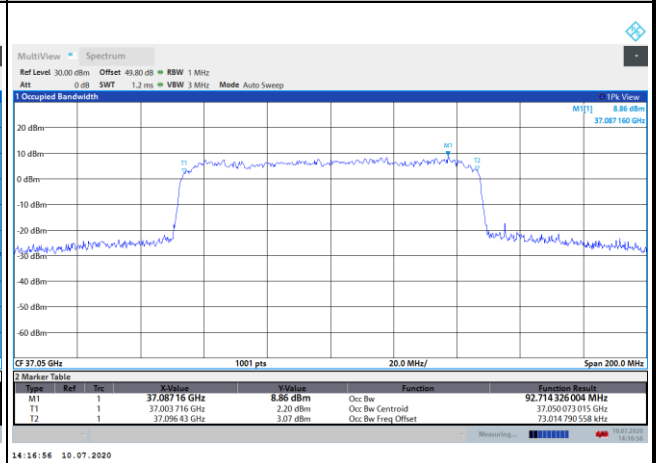
CP-OFDM Module 0

NR Band n260

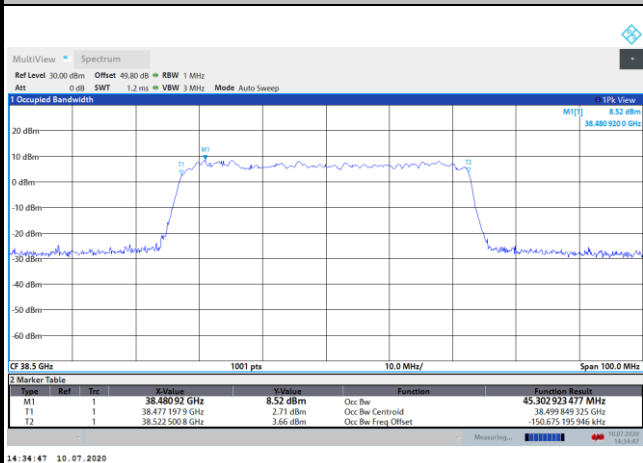
Lowest Channel / 50MHz / 64QAM



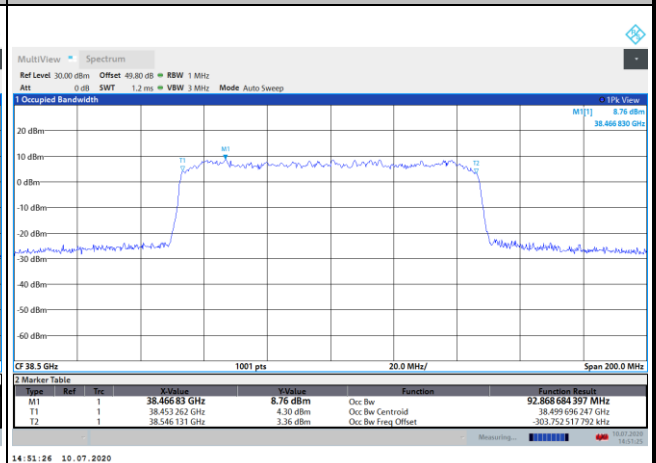
Lowest Channel / 100MHz / QPSK



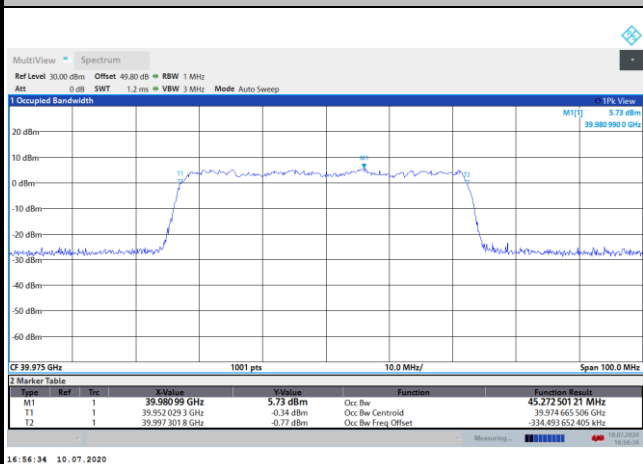
Middle Channel / 50MHz / 64QAM



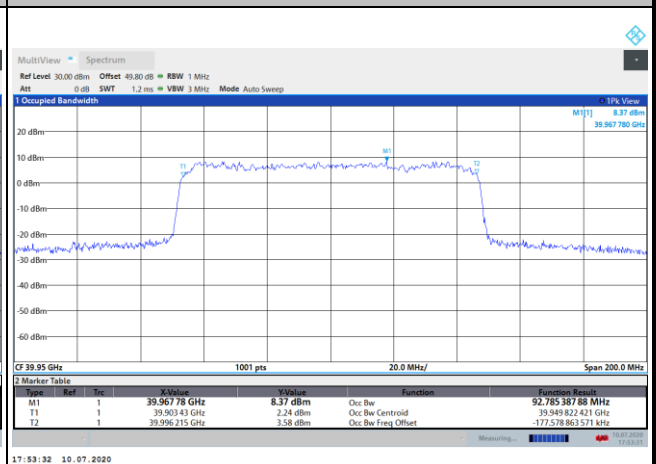
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / 64QAM



Highest Channel / 100MHz / QPSK

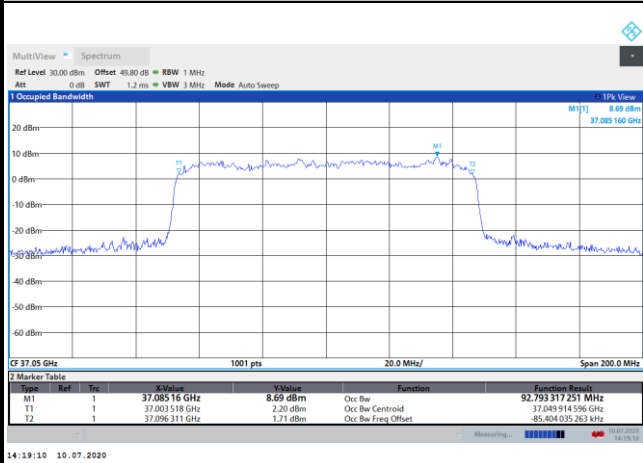




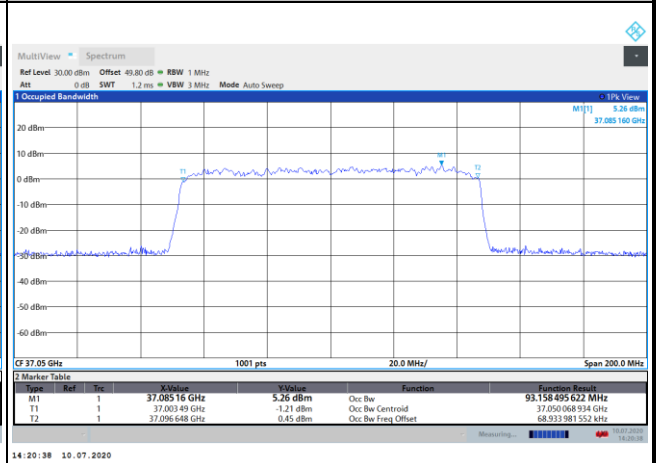
CP-OFDM Module 0

NR Band n260

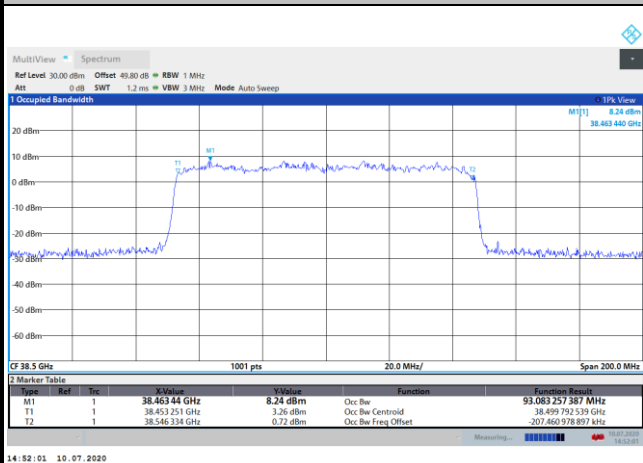
Lowest Channel / 100MHz / 16QAM



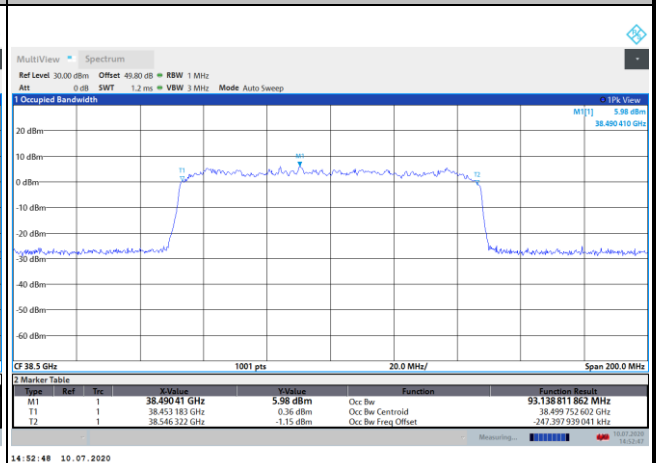
Lowest Channel / 100MHz / 64 QAM



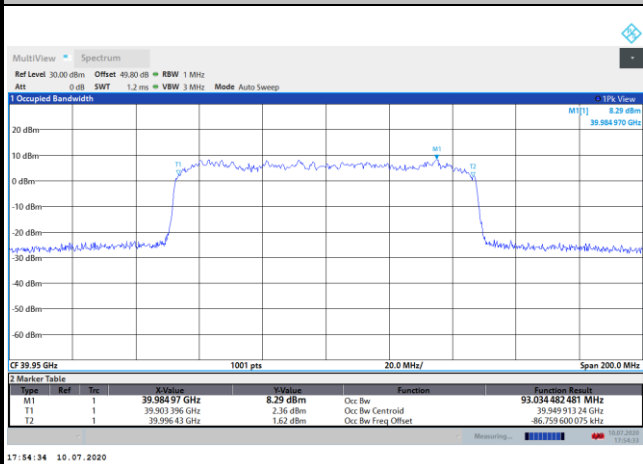
Middle Channel / 100MHz / 16 QAM



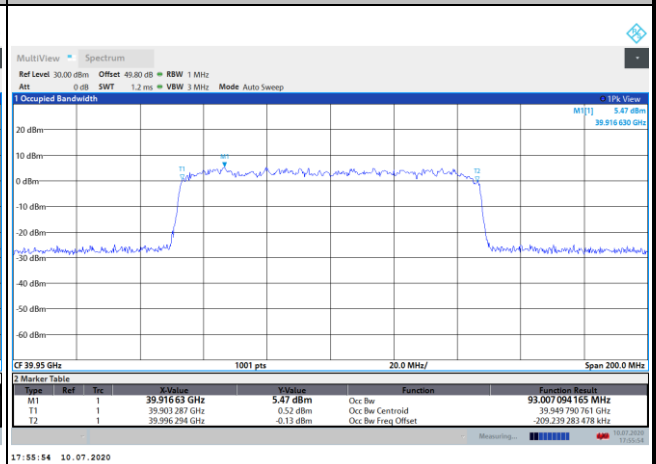
Middle Channel / 100MHz / 64 QAM



Highest Channel / 100MHz / 16 QAM



Highest Channel / 100MHz / 64 QAM

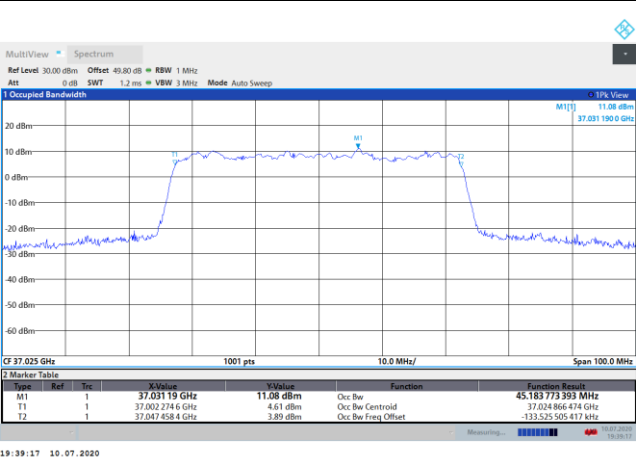




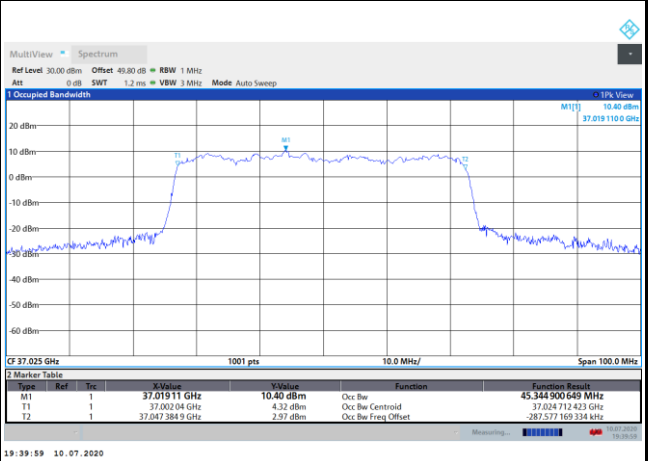
CP-OFDM Module 1

NR Band n260

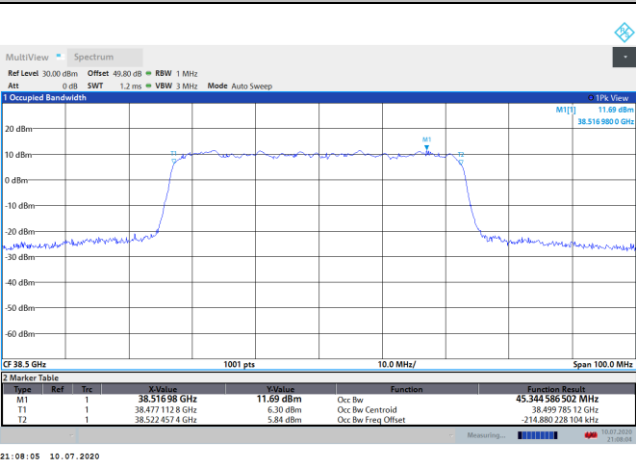
Lowest Channel / 50MHz / QPSK



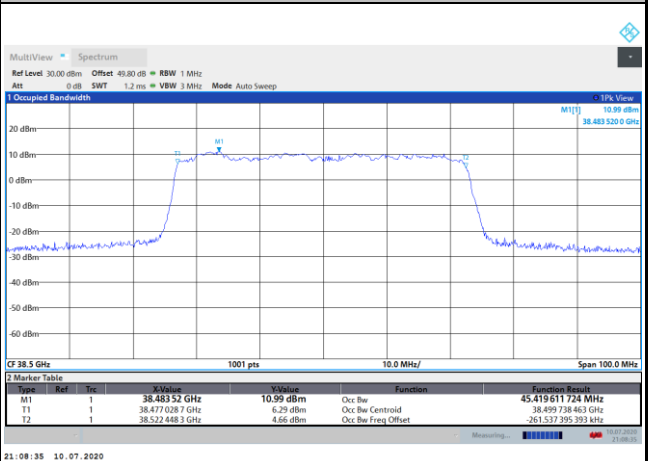
Lowest Channel / 50MHz / 16 QAM



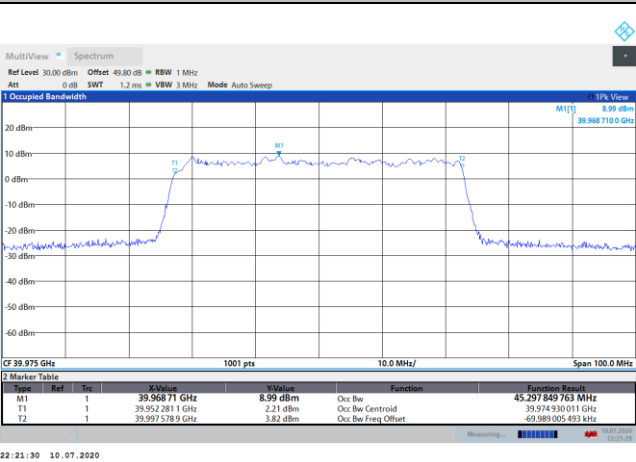
Middle Channel / 50MHz / QPSK



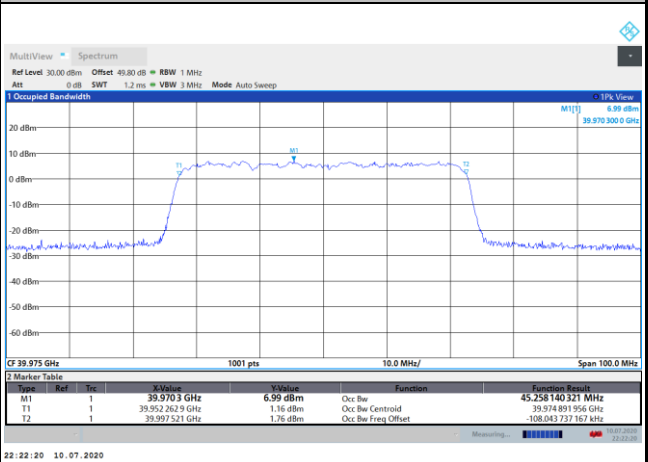
Middle Channel / 50MHz / 16 QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16 QAM

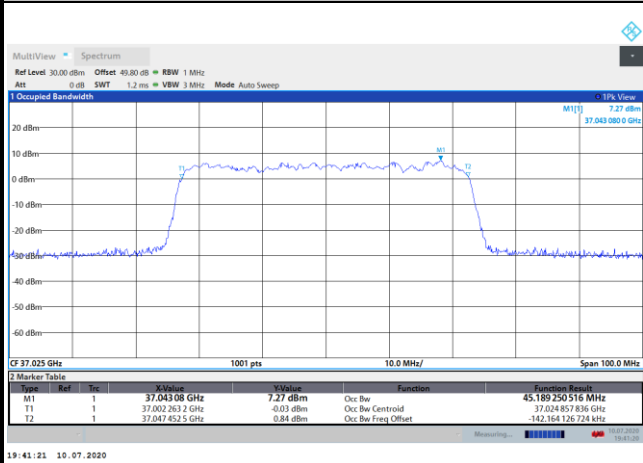




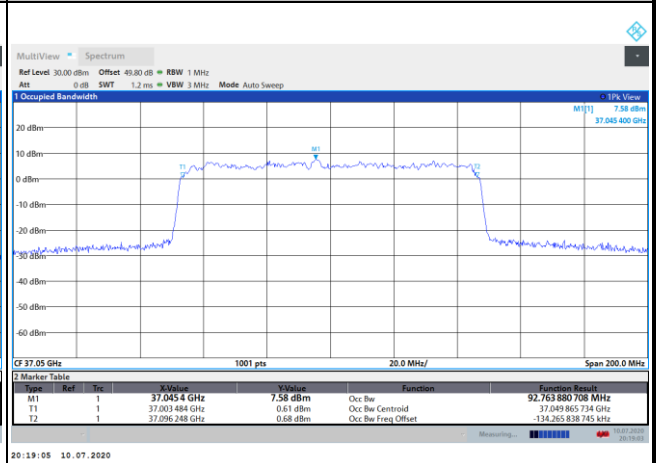
CP-OFDM Module 1

NR Band n260

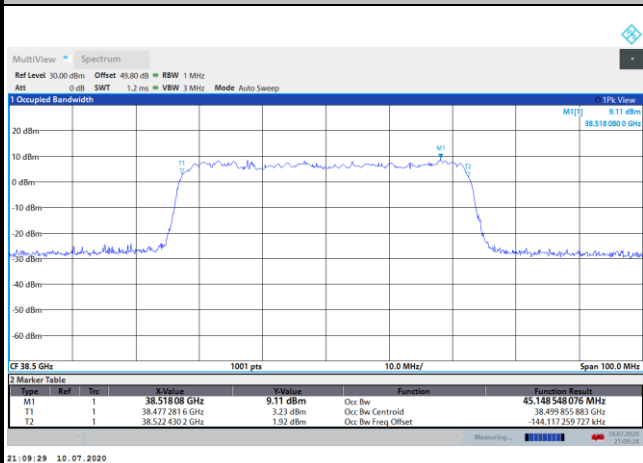
Lowest Channel / 50MHz / 64QAM



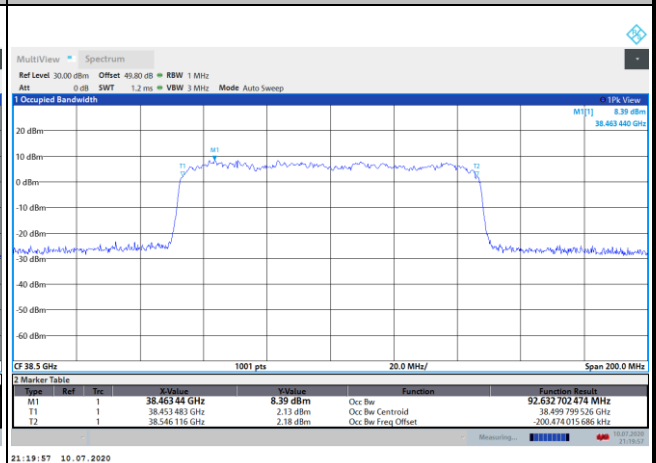
Lowest Channel / 100MHz / QPSK



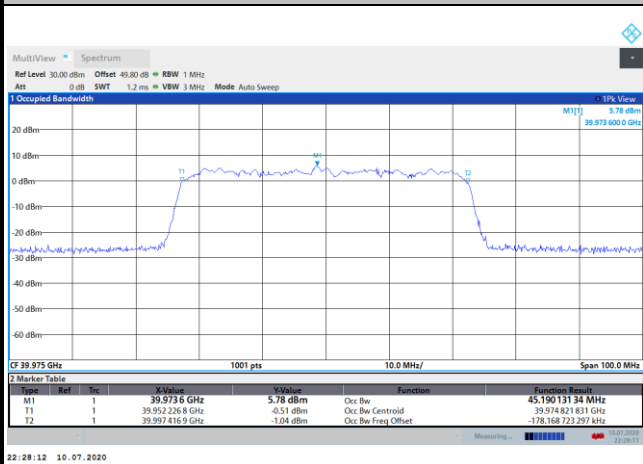
Middle Channel / 50MHz / 64QAM



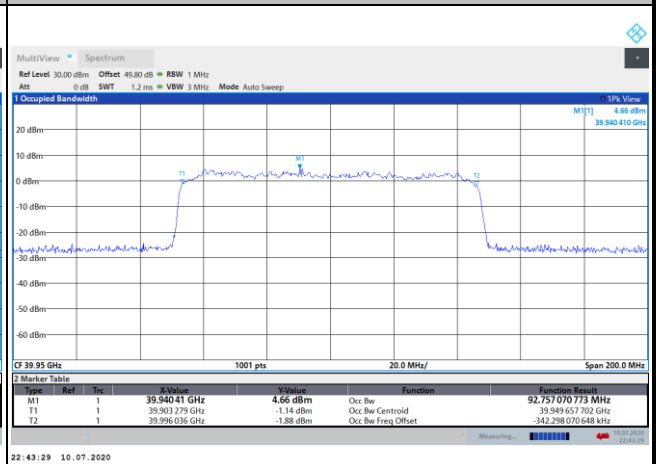
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / 64QAM



Highest Channel / 100MHz / QPSK

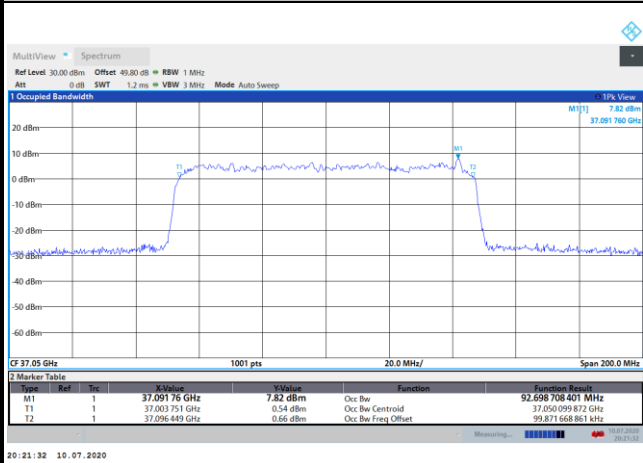




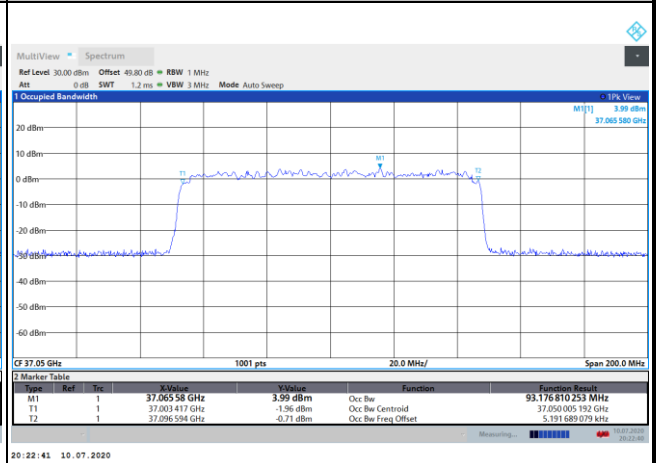
CP-OFDM Module 1

NR Band n260

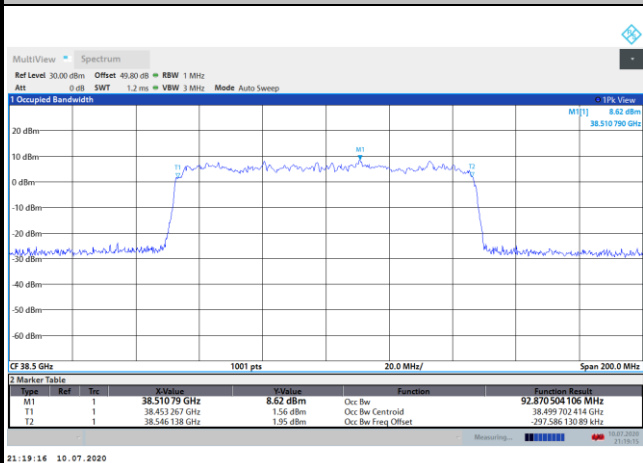
Lowest Channel / 100MHz / 16QAM



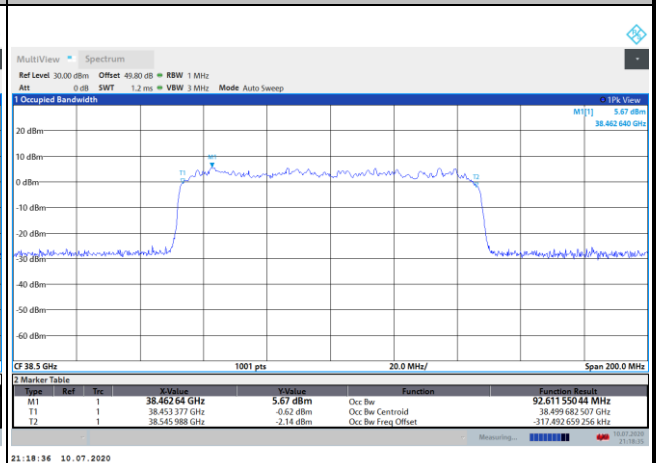
Lowest Channel / 100MHz / 64QAM



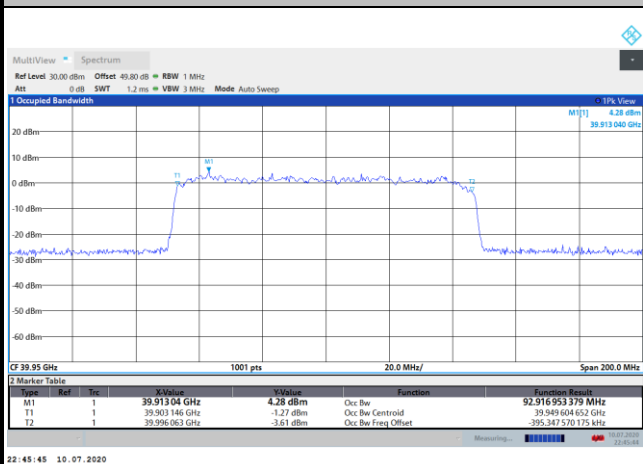
Middle Channel / 100MHz / 16QAM



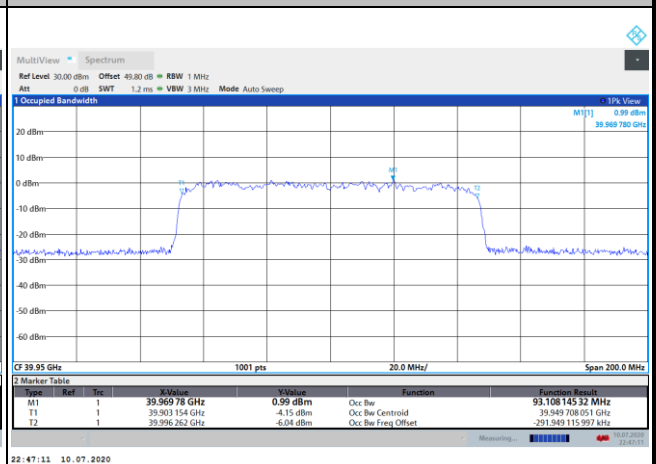
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM





Radiated Out of Band Emissions

Mode			CP-OFDM Module 0 NR Band n260 : BE (dBm) 1 RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-15.35	-16.16	-17.42	-18.74	-19.60	-20.86
	>10%OB	≤ -13	-33.66	-34.29	-35.43	-36.86	-37.00	-36.84
High CH	0~10%OB	≤ -5	-23.52	-22.48	-26.38	-22.84	-22.89	-25.92
	>10%OB	≤ -13	-33.36	-33.82	-34.82	-34.59	-35.08	-35.06
Result			Compliance					

Mode			CP-OFDM Module 1 NR Band n260 : BE (dBm) 1 RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-17.30	-16.85	-20.82	-21.29	-20.39	-22.39
	>10%OB	≤ -13	-35.44	-36.29	-36.97	-36.79	-36.73	-36.84
High CH	0~10%OB	≤ -5	-23.06	-25.17	-26.53	-27.91	-27.30	-28.80
	>10%OB	≤ -13	-33.34	-34.19	-35.09	-35.18	-35.21	-35.12
Result			Compliance					



Radiated Out of Band Emissions

Mode			CP-OFDM Module 0 NR Band n260 : BE (dBm) Full RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-24.85	-27.43	-29.12	-30.73	-31.71	-33.79
	>10%OB	≤ -13	-29.53	-32.72	-35.99	-34.06	-35.52	-36.95
High CH	0~10%OB	≤ -5	-30.31	-31.96	-33.53	-30.42	-32.09	-33.87
	>10%OB	≤ -13	-33.79	-34.87	-35.17	-32.59	-33.74	-34.89
Result			Compliance					

Mode			CP-OFDM Module 1 NR Band n260 : BE (dBm) Full RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-28.76	-28.40	-32.37	-31.87	-33.11	-34.88
	>10%OB	≤ -13	-33.17	-34.86	-36.92	-35.20	-36.25	-36.77
High CH	0~10%OB	≤ -5	-31.85	-32.00	-33.80	-34.25	-34.49	-34.70
	>10%OB	≤ -13	-33.90	-34.40	-35.13	-34.67	-35.21	-35.11
Result			Compliance					