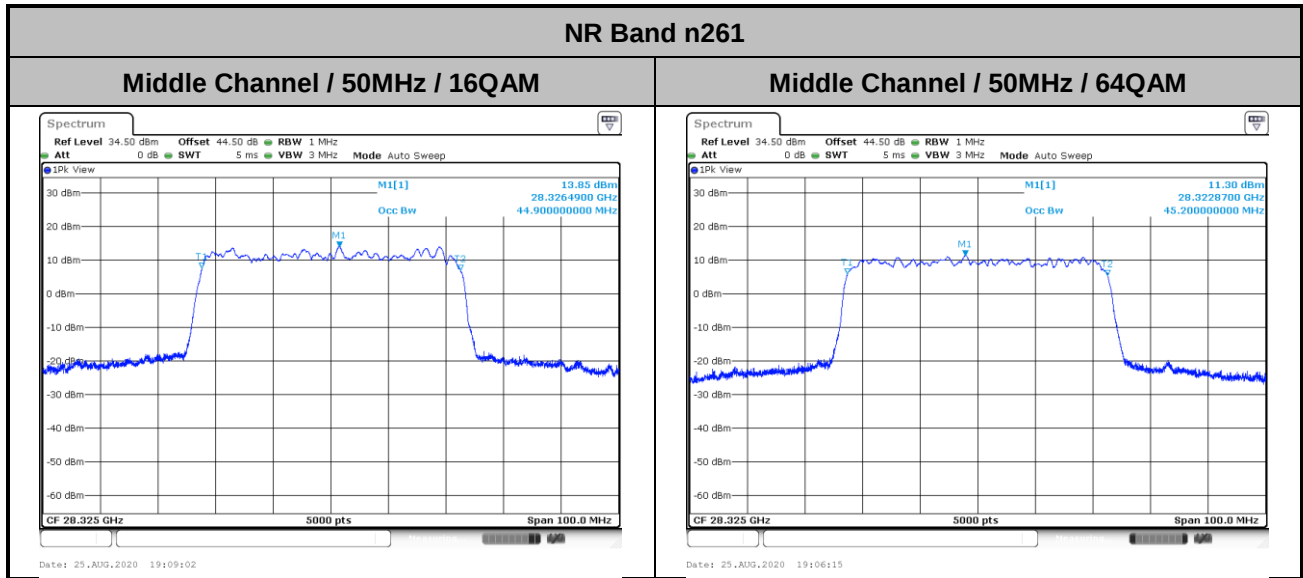




DFT-s-OFDM Module 2

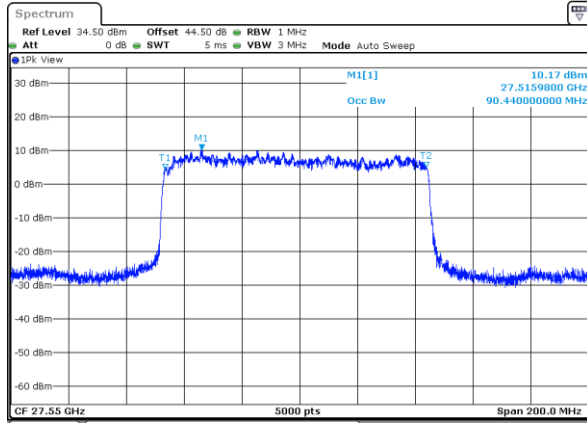




DFT-s-OFDM Module 2

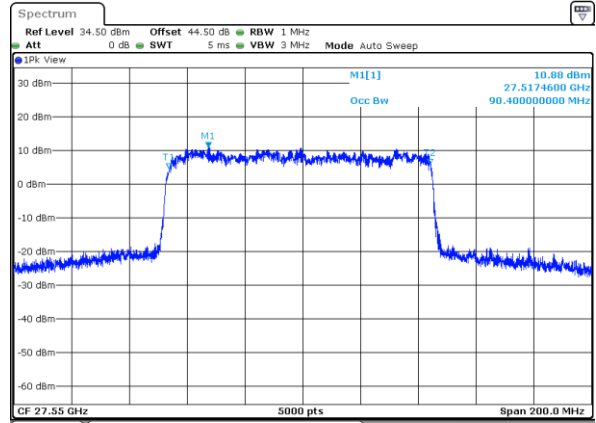
NR Band n261

Lowest Channel / 100MHz / BPSK



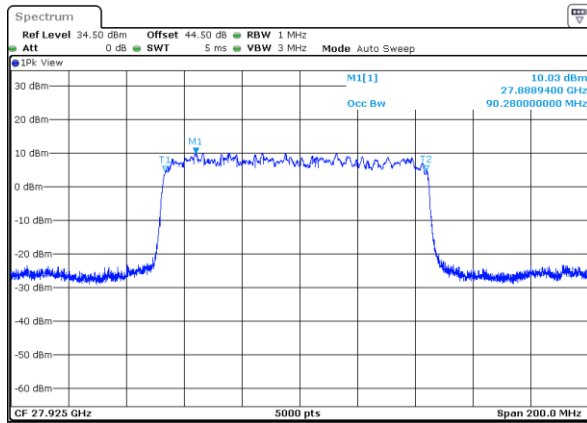
Date: 25.AUG.2020 03:35:10

Lowest Channel / 100MHz / QPSK



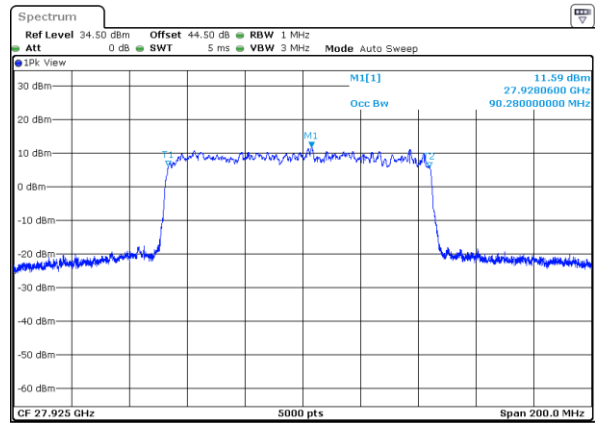
Date: 25.AUG.2020 03:30:01

Middle Channel / 100MHz / BPSK



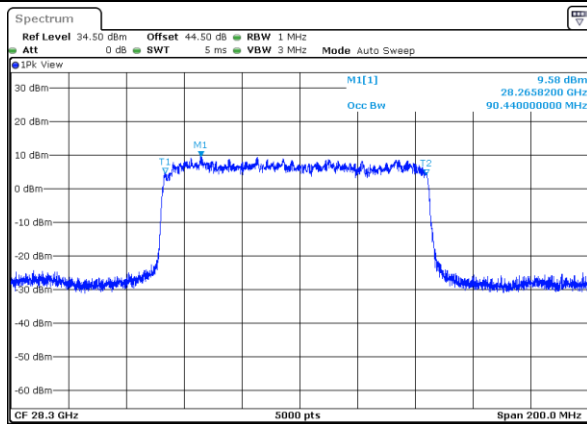
Date: 18.AUG.2020 20:27:04

Middle Channel / 100MHz / QPSK



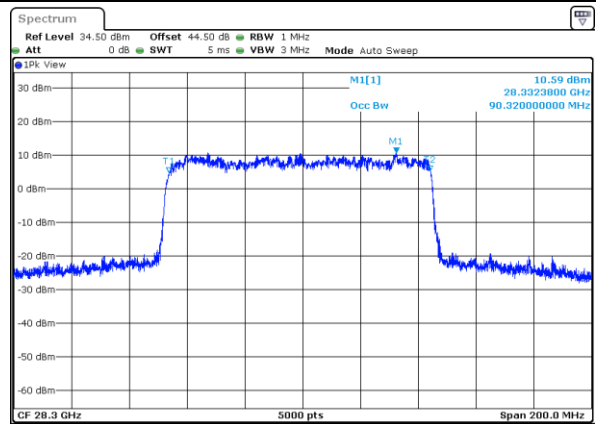
Date: 18.AUG.2020 20:25:29

Highest Channel / 100MHz / BPSK



Date: 25.AUG.2020 06:22:46

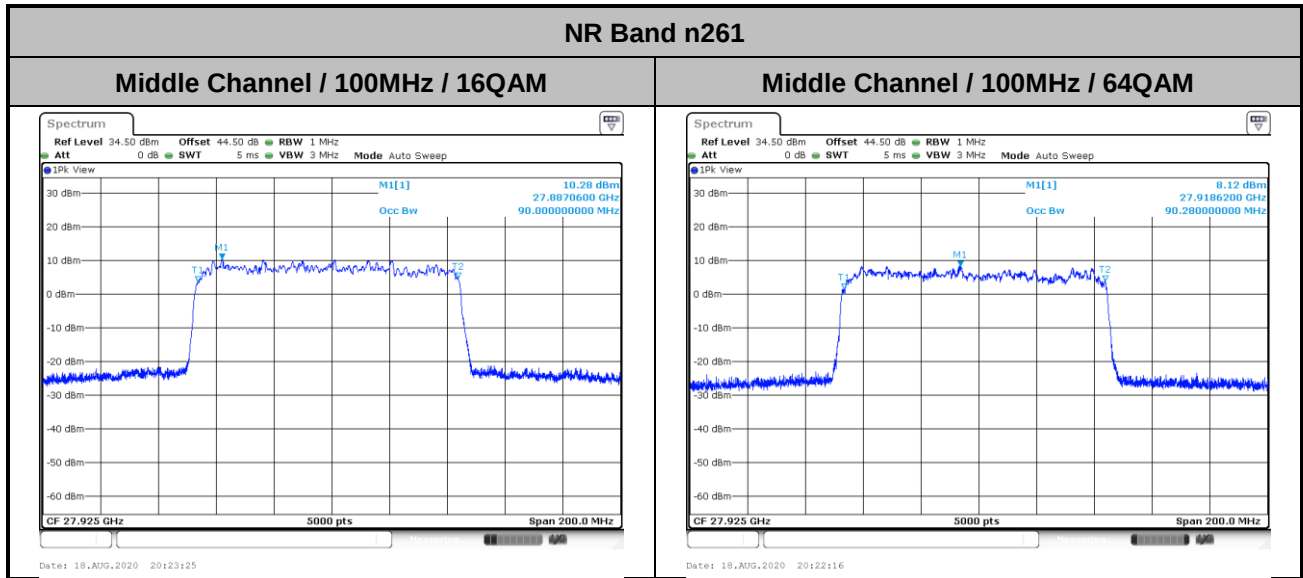
Highest Channel / 100MHz / QPSK



Date: 25.AUG.2020 06:17:30



DFT-s-OFDM Module 2

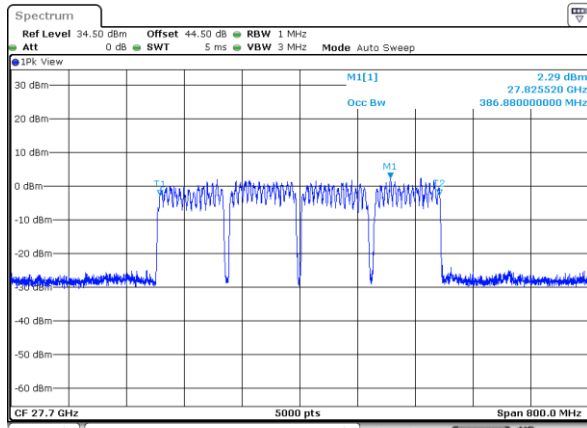




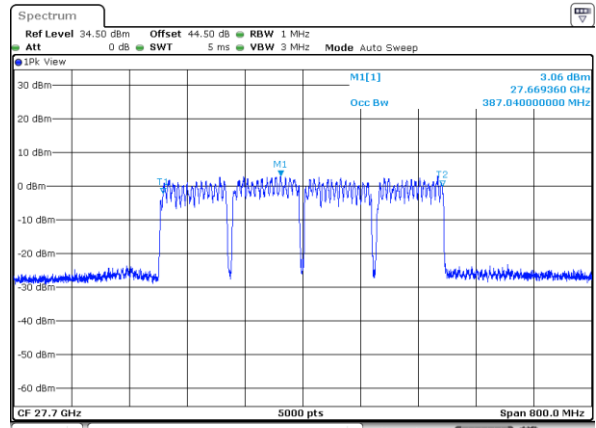
DFT-s-OFDM Module 2

NR Band n261

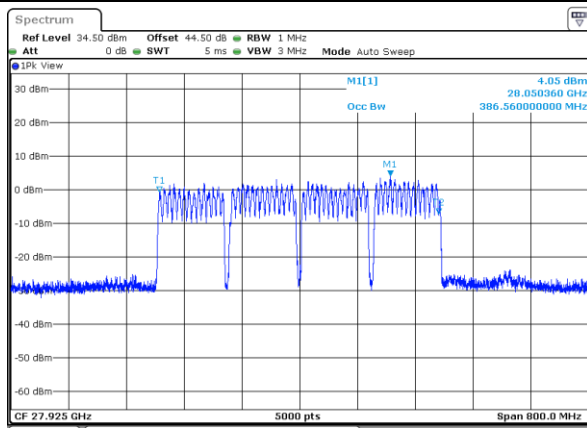
Lowest Channel / 400MHz / BPSK



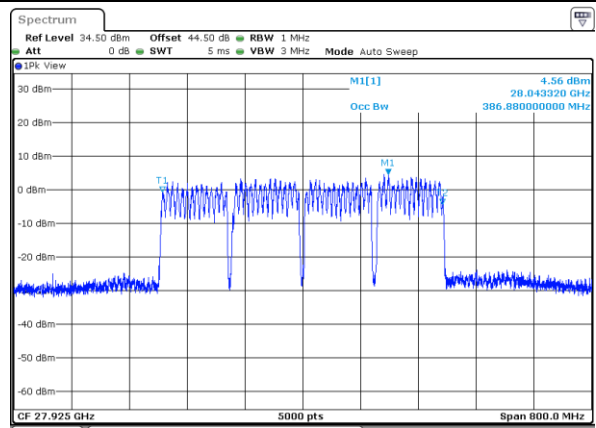
Lowest Channel / 400MHz / QPSK



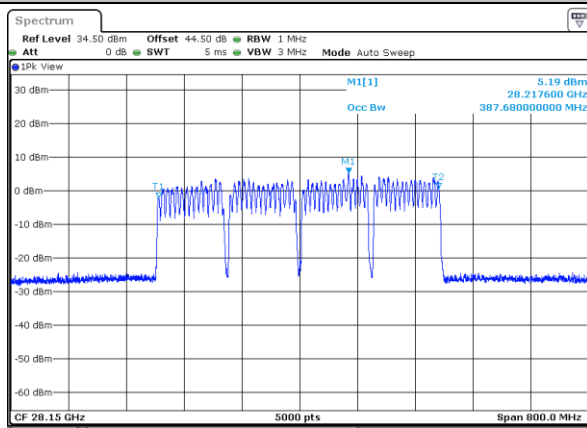
Middle Channel / 400MHz / BPSK



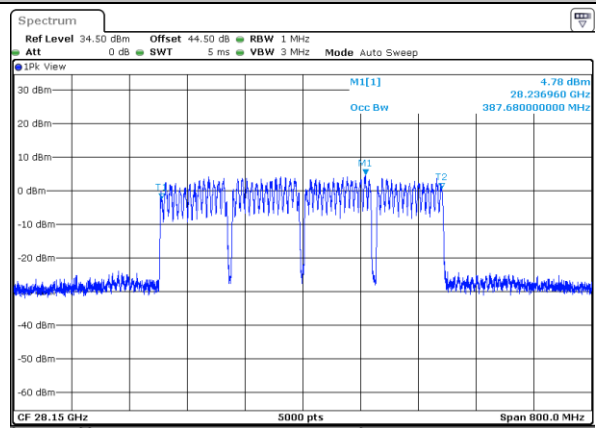
Middle Channel / 400MHz / QPSK



Highest Channel / 400MHz / BPSK

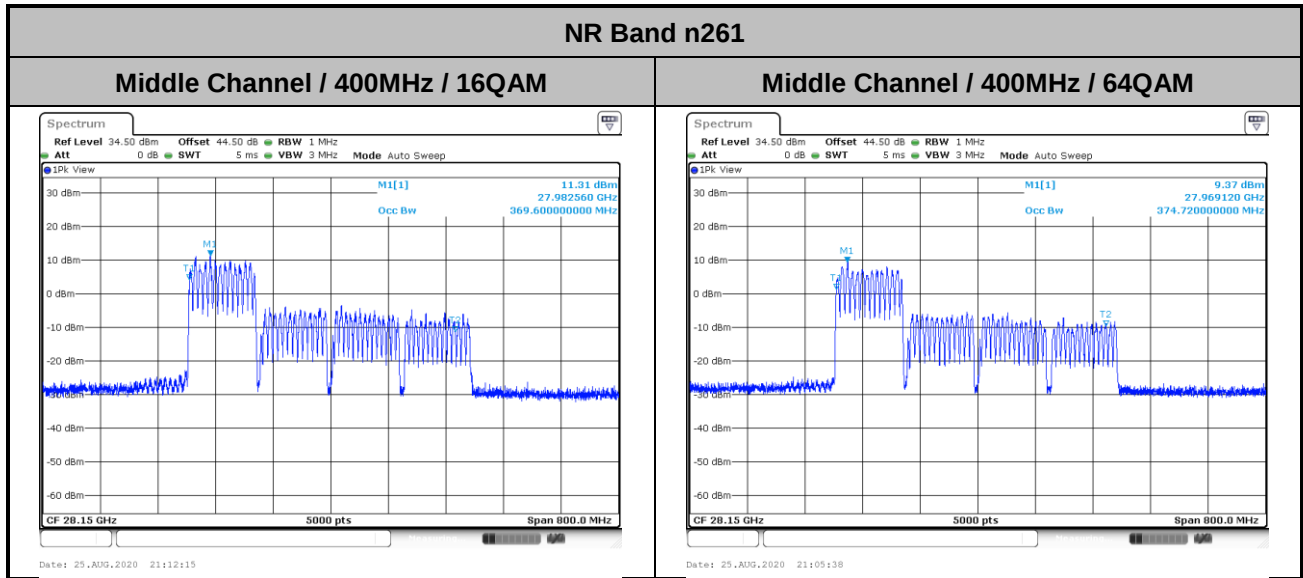


Highest Channel / 400MHz / QPSK





DFT-s-OFDM Module 2

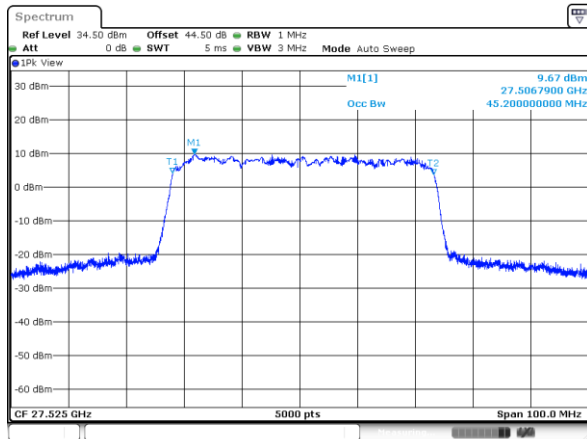




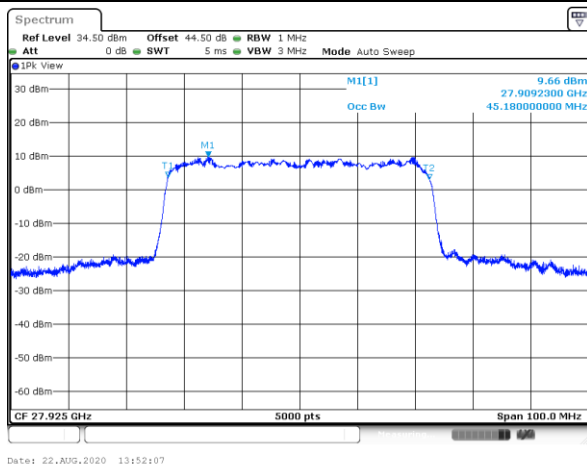
CP-OFDM Module 2

NR Band n261

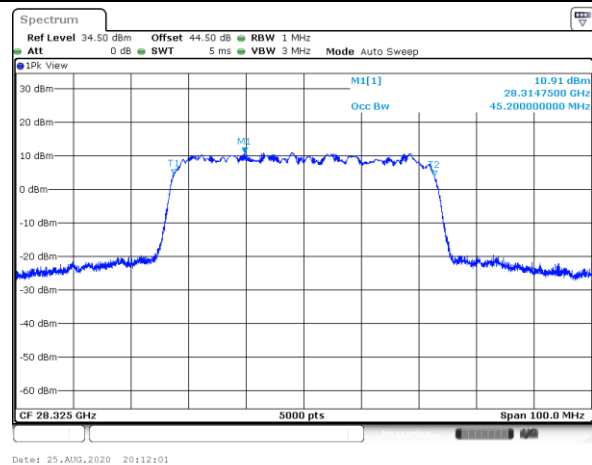
Lowest Channel / 50MHz / QPSK



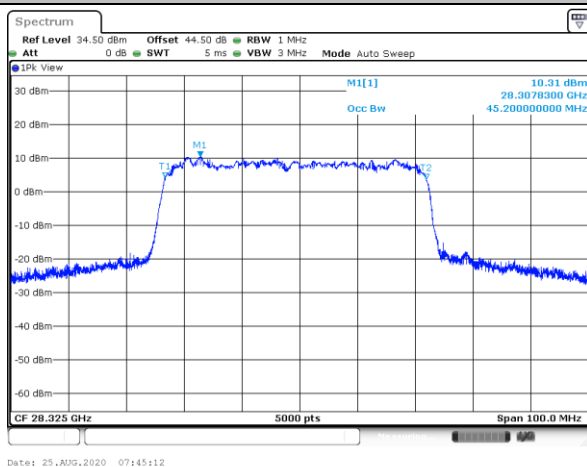
Middle Channel / 50MHz / QPSK



Middle Channel / 50MHz / 16QAM

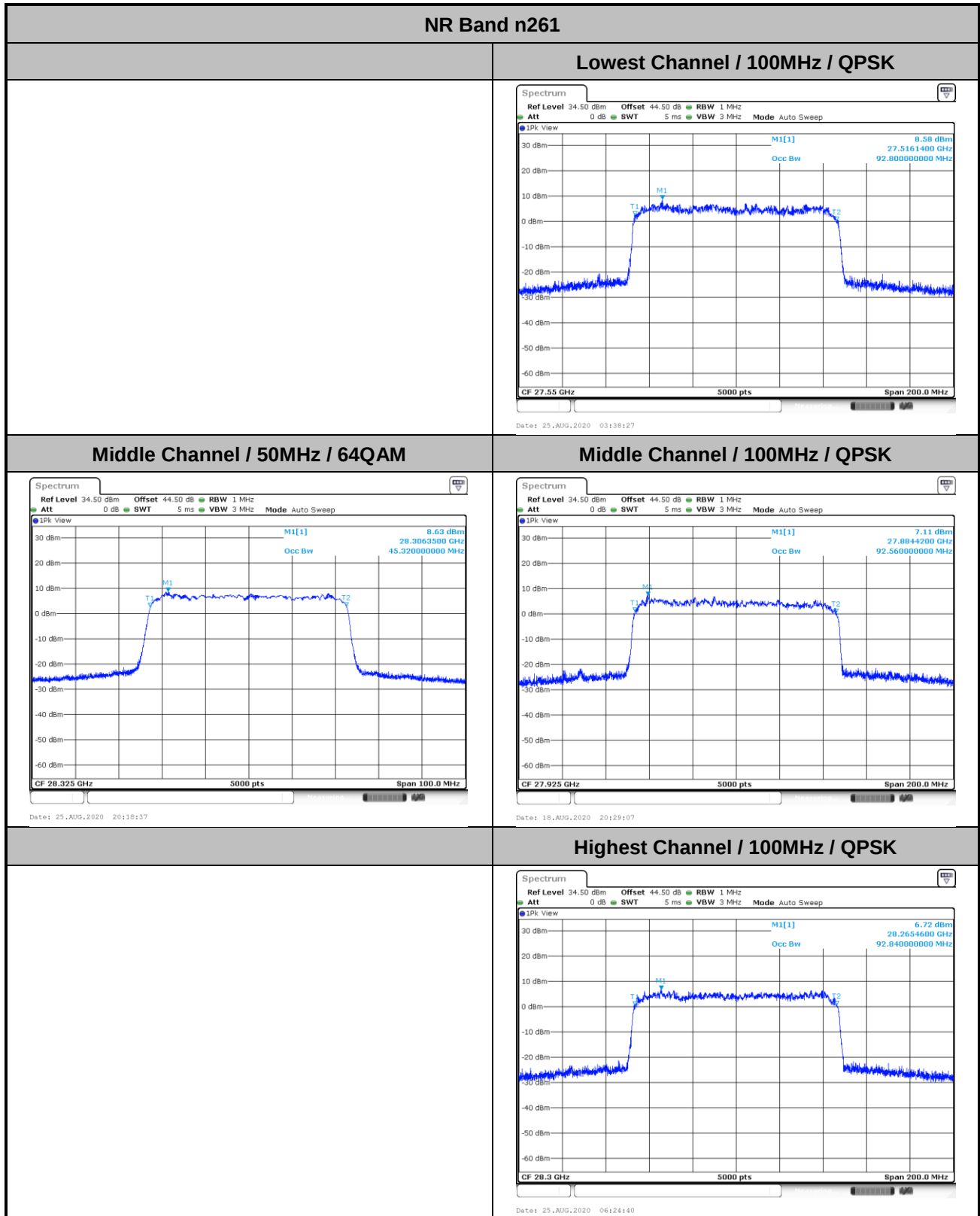


Highest Channel / 50MHz / QPSK



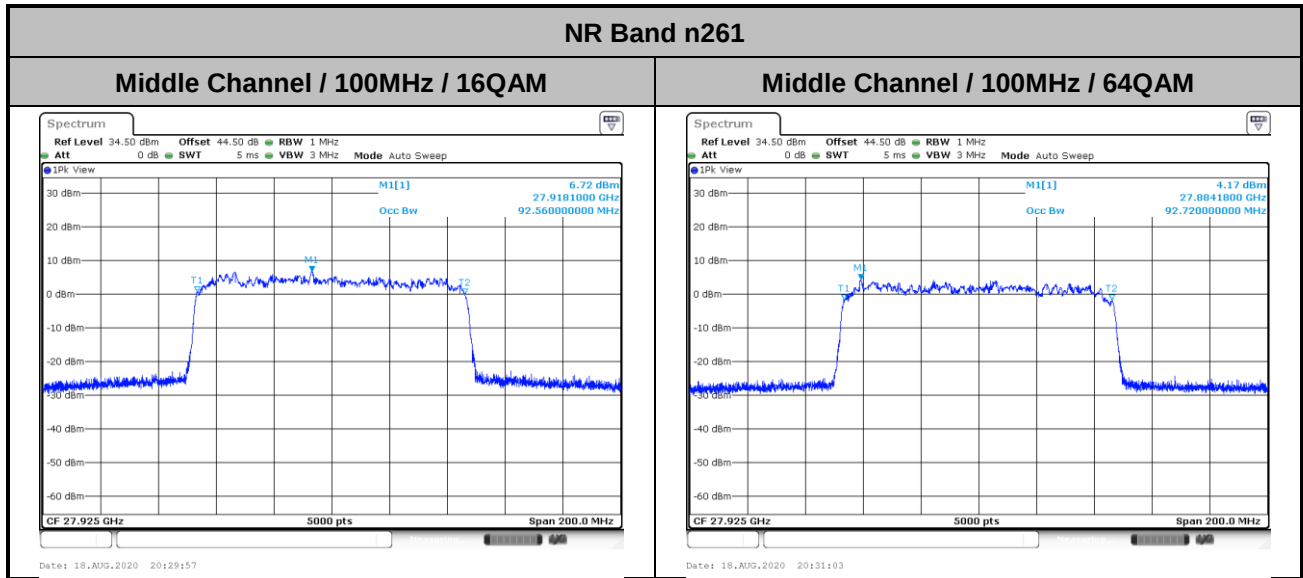


CP-OFDM Module 2





CP-OFDM Module 2

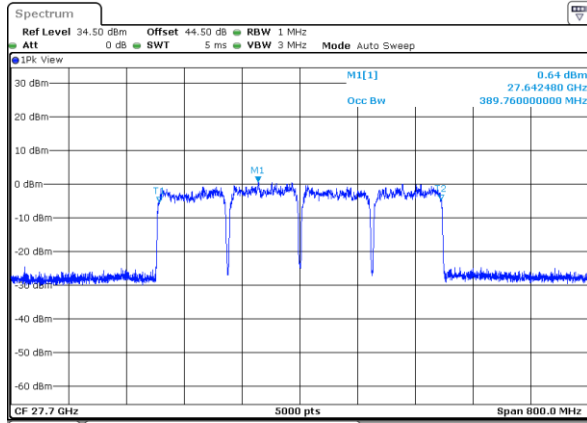




CP-OFDM Module 2

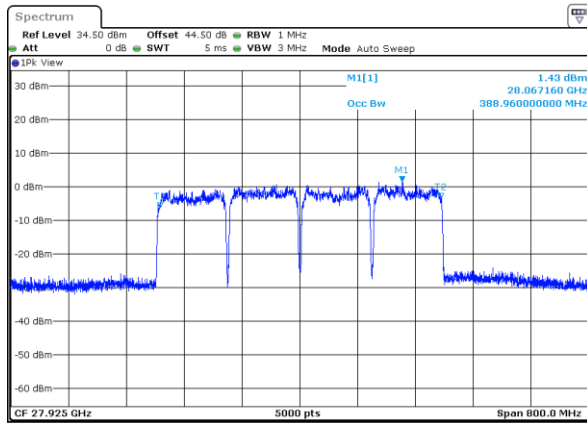
NR Band n261

Lowest Channel / 400MHz / QPSK



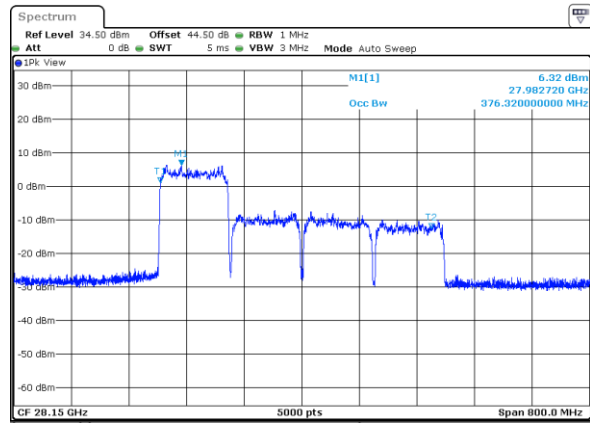
Date: 7,SEP,2020 22:17:50

Middle Channel / 400MHz / QPSK



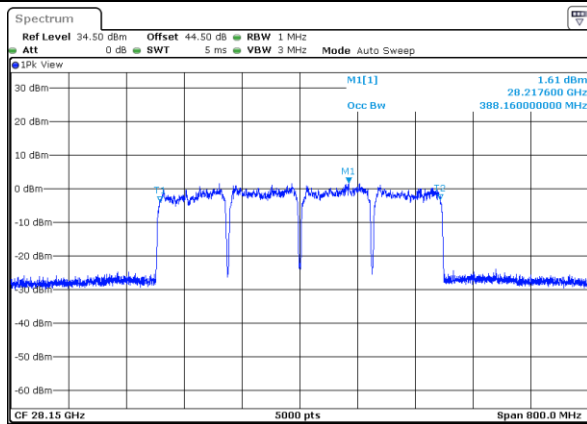
Date: 7,SEP,2020 17:34:15

Middle Channel / 400MHz / 16QAM



Date: 25,AUG,2020 21:31:08

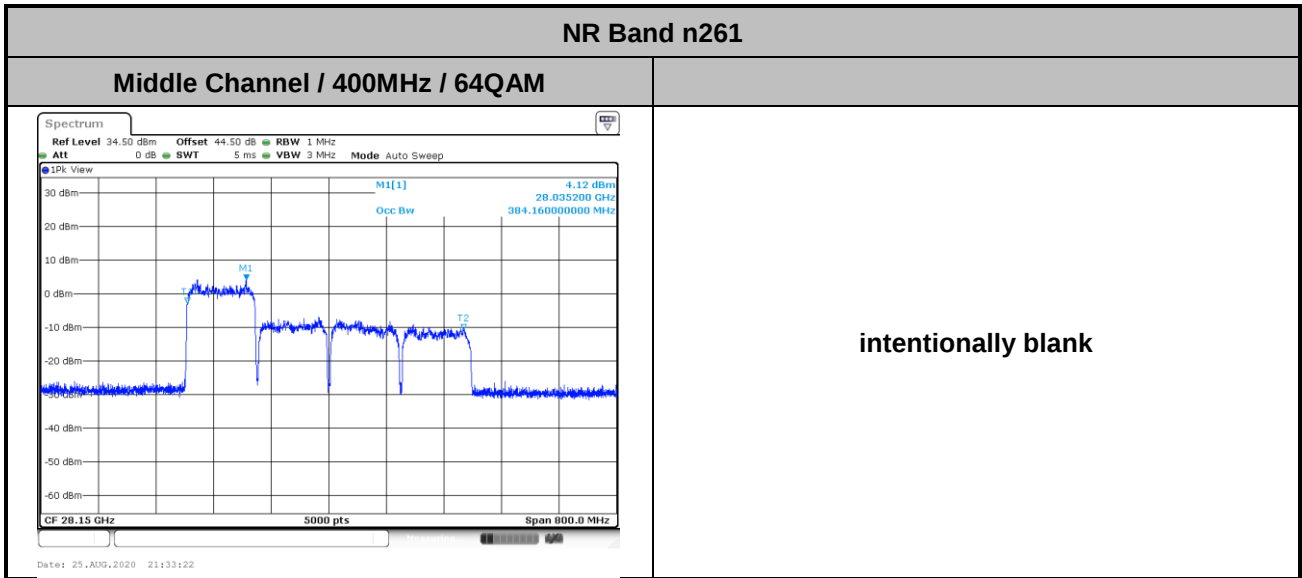
Highest Channel / 400MHz / QPSK



Date: 7,SEP,2020 14:09:00



CP-OFDM Module 2





Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module 2 NR Band n261 : BE (dBm) 1 RB											
BW			50MHz				100MHz				400MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-26.09	-23.1	-	-	-20.87	-20.24	-	-	-31.85	-30.95	-	-
	>10%OB	≤-13	-31.81	-30.24	-	-	-31.87	-31	-	-	-34.29	-34.16	-	-
High CH	0~10%OB	≤-5	-24.77	-23.47	-	-	-21.7	-19.77	-	-	-32.81	-30.78	-	-
	>10%OB	≤-13	-32.66	-31.87	-	-	-33.05	-32.71	-	-	-34.66	-34.35	-	-
Result			Compliance											

Mode			CP-OFDM Module 2 NR Band n261 : BE (dBm) 1 RB								
BW			50MHz			100MHz			400MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-27.29	-	-	-24.96	-	-	-31.54	-	-
	>10%OB	≤-13	-32.29	-	-	-33.29	-	-	-33.09	-	-
High CH	0~10%OB	≤-5	-26.33	-	-	-25.95	-	-	-31.45	-	-
	>10%OB	≤-13	-33.14	-	-	-33.06	-	-	-32.63	-	-
Result			Compliance								

Mode			DFT-s-OFDM Module 2 NR Band n261 : BE (dBm) Full RB											
BW			50MHz				100MHz				400MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-28.88	-24.82	-	-	-31.53	-22.48	-	-	-33.72	-32.63	-	-
	>10%OB	≤-13	-30.76	-25.14	-	-	-32.2	-32.49	-	-	-33.78	-32.68	-	-
High CH	0~10%OB	≤-5	-31.2	-23.82	-	-	-32.75	-28.4	-	-	-34.11	-32.71	-	-
	>10%OB	≤-13	-32.37	-32.62	-	-	-33.25	-30.28	-	-	-34.16	-32.61	-	-
Result			Compliance											

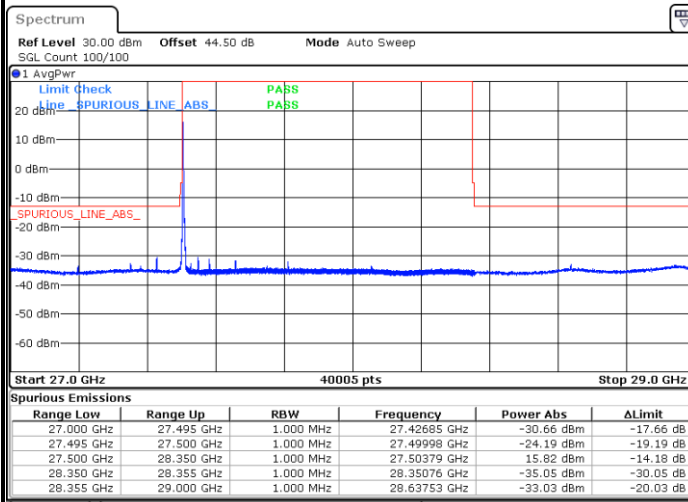
Mode			CP-OFDM Module 2 NR Band n261 : BE (dBm) Full RB								
BW			50MHz			100MHz			400MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-28.27	-	-	-30.16	-	-	-34.12	-	-
	>10%OB	≤-13	-29.33	-	-	-31.54	-	-	-34.1	-	-
High CH	0~10%OB	≤-5	-28.71	-	-	-31.2	-	-	-33.72	-	-
	>10%OB	≤-13	-30.61	-	-	-32.42	-	-	-34.09	-	-
Result			Compliance								



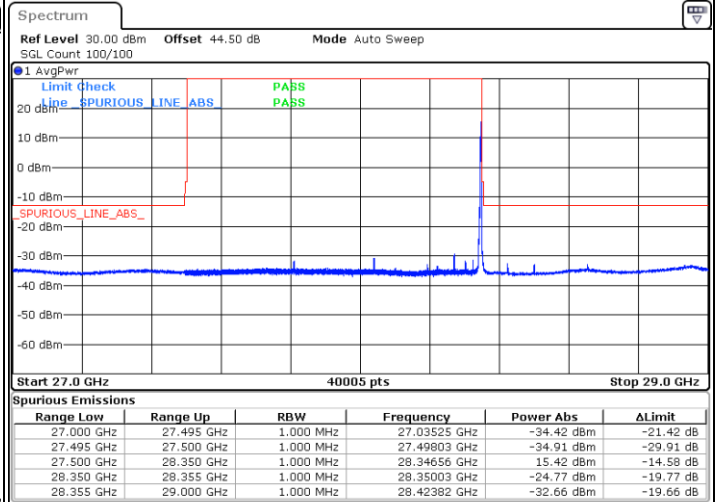
DFT-s-OFDM Module 2

NR Band n261 / 50MHz / BPSK

Lowest Band Edge / 1 RB

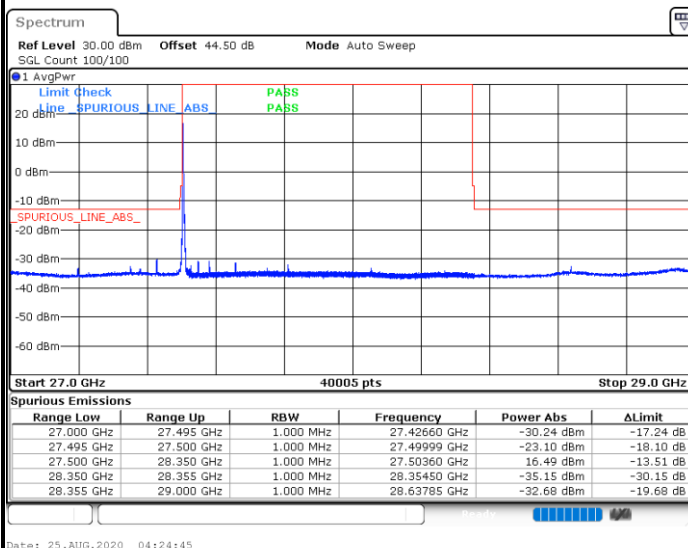


Highest Band Edge / 1 RB

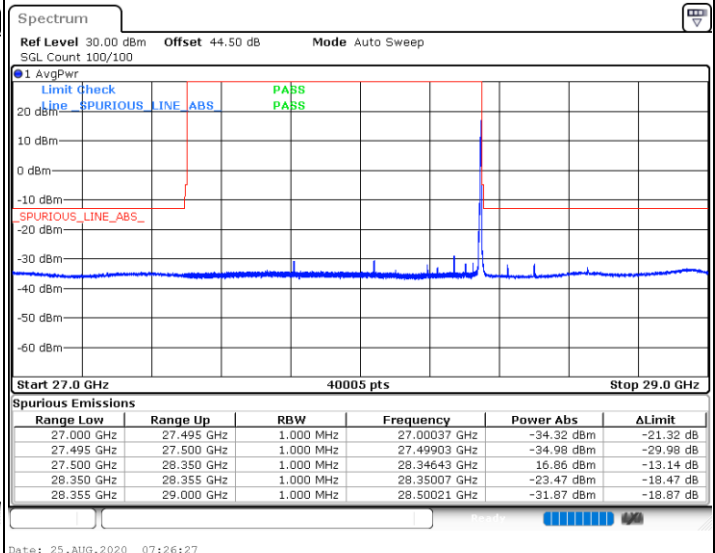


NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

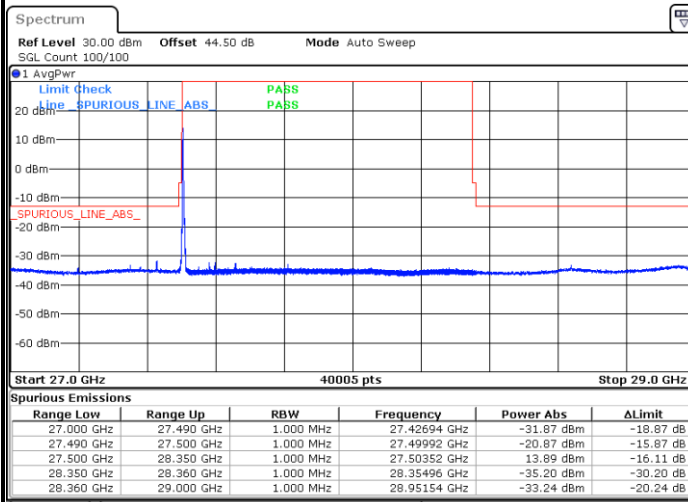




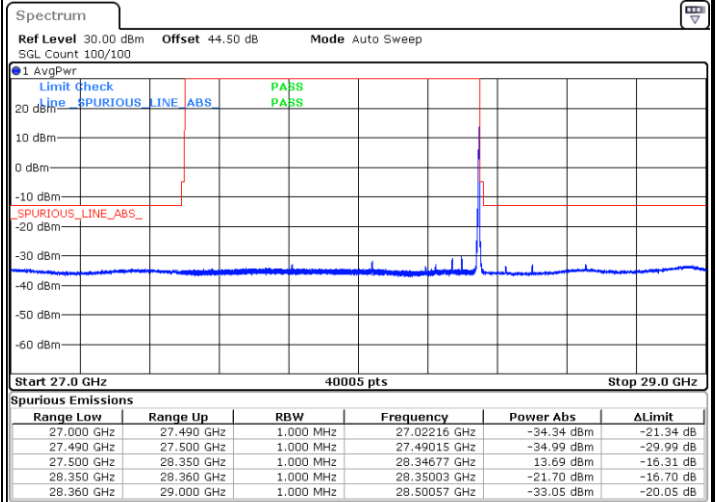
DFT-s-OFDM Module 2

NR Band n261 / 100MHz / BPSK

Lowest Band Edge / 1 RB

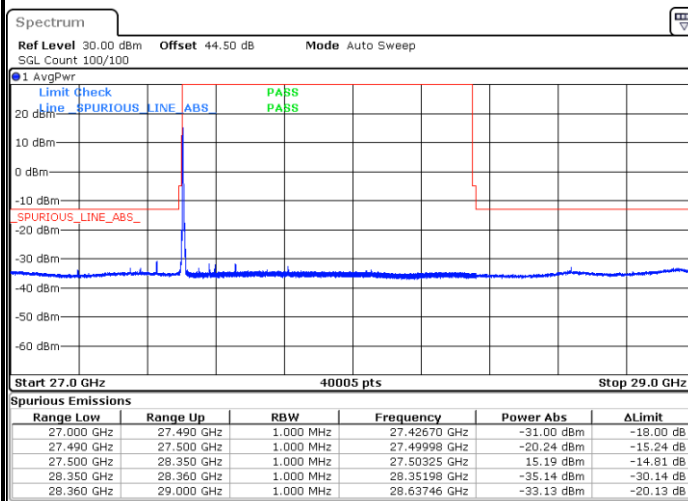


Highest Band Edge / 1 RB

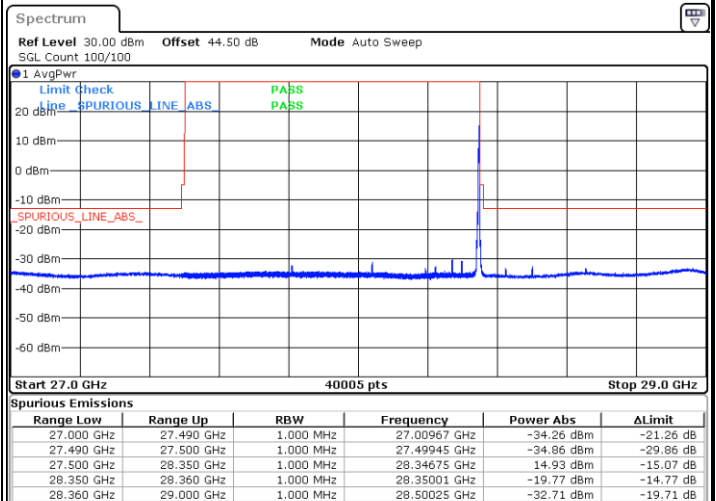


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

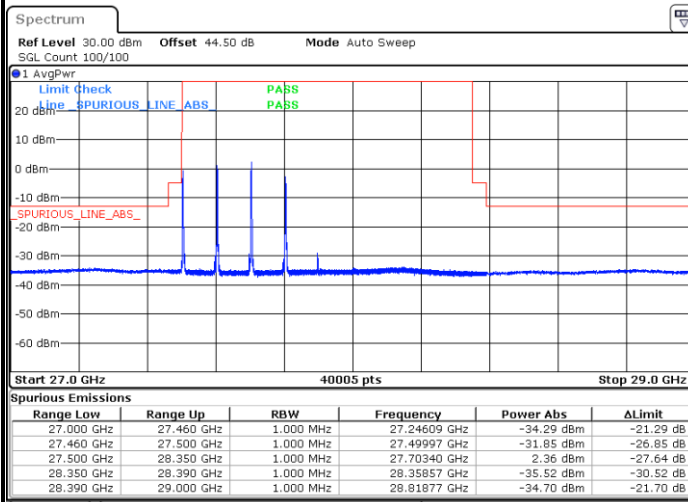




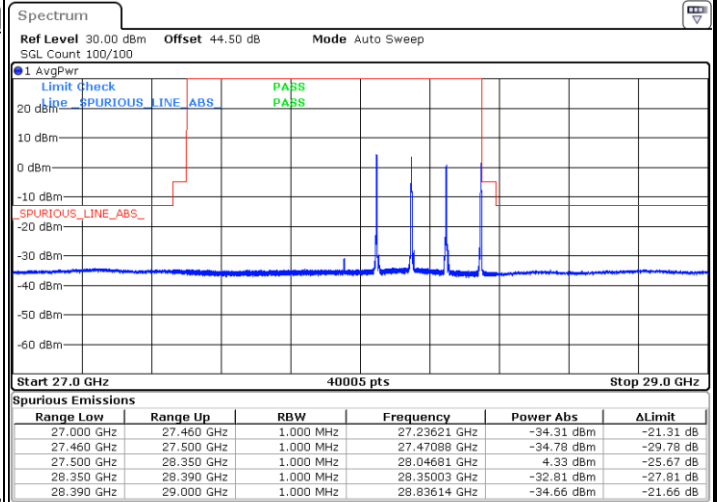
DFT-s-OFDM Module 2

NR Band n261 / 400MHz / BPSK

Lowest Band Edge / 1 RB

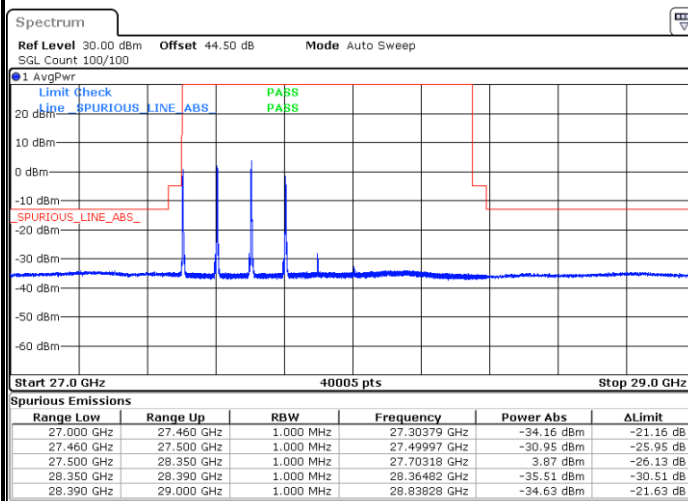


Highest Band Edge / 1 RB

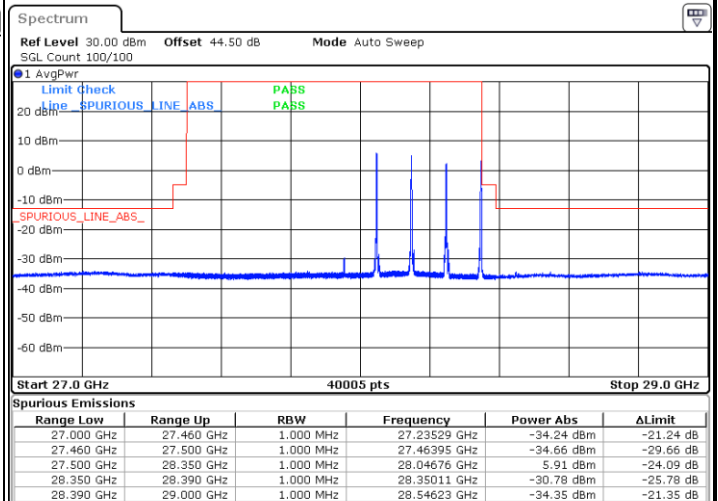


NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



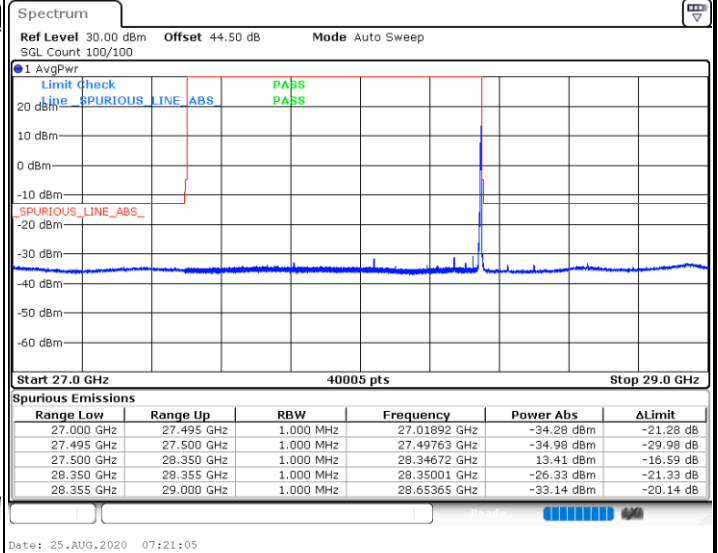
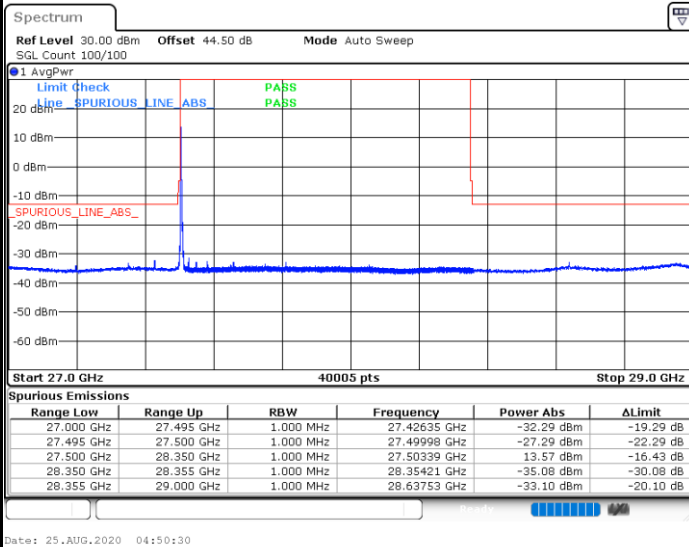


CP-OFDM Module 2

NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

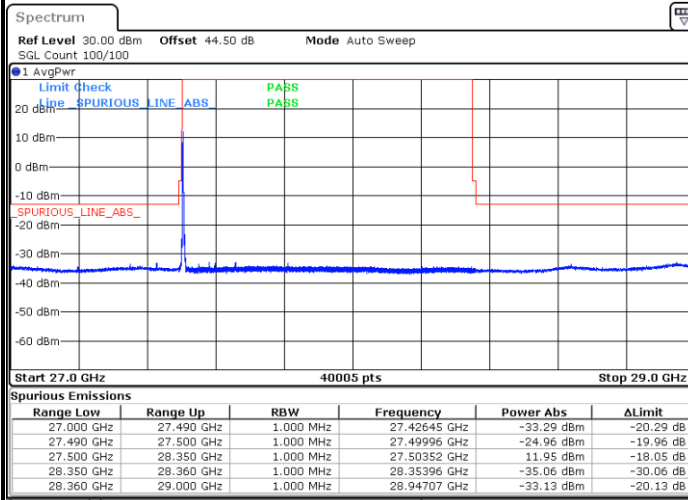




CP-OFDM Module 2

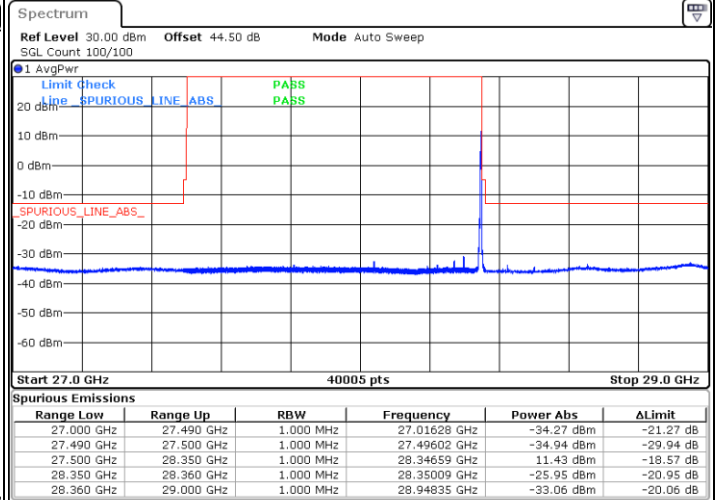
NR Band n261 / 100MHz / QPSK

Lowest Band Edge / 1 RB



Date: 25.AUG.2020 03:46:38

Highest Band Edge / 1 RB



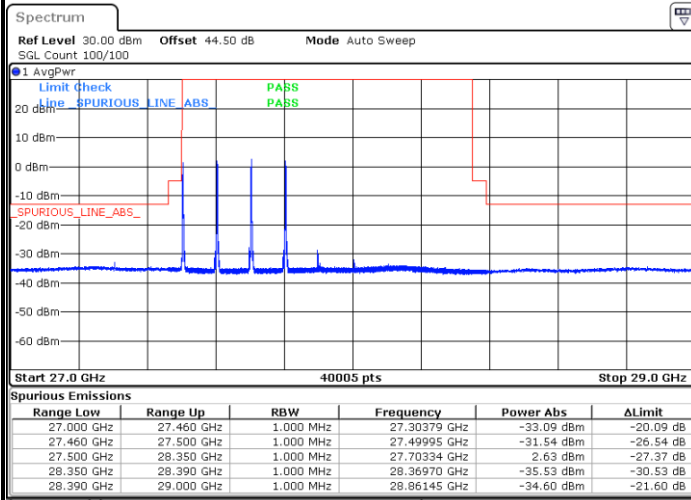
Date: 25.AUG.2020 06:35:13



CP-OFDM Module 2

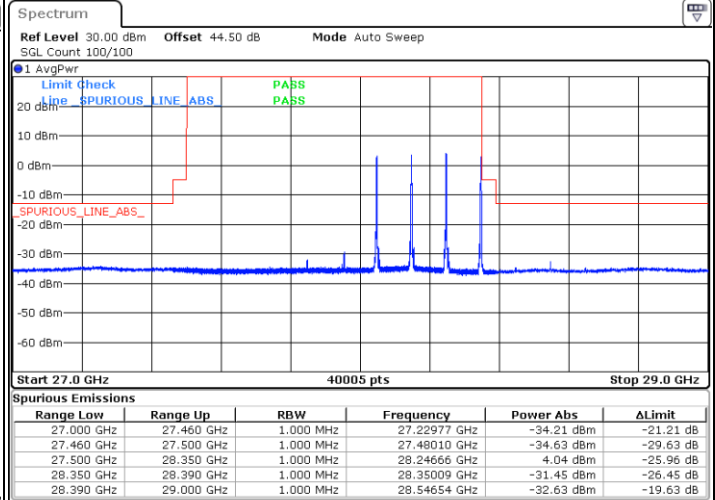
NR Band n261 / 400MHz / QPSK

Lowest Band Edge / 1 RB



Date: 7.SEP.2020 22:52:45

Highest Band Edge / 1 RB



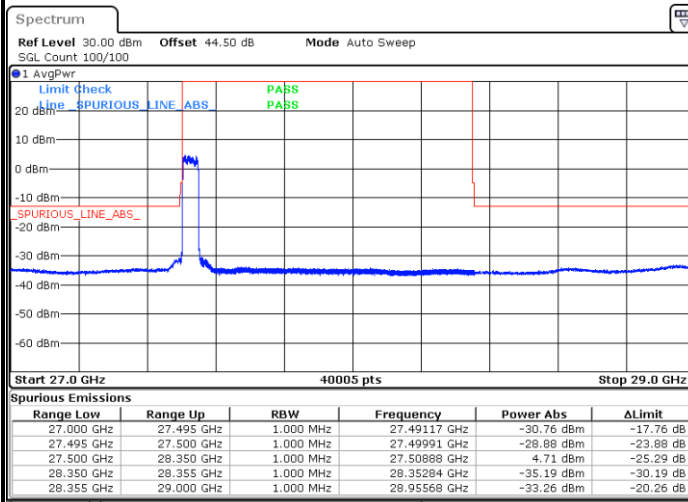
Date: 7.SEP.2020 14:00:25



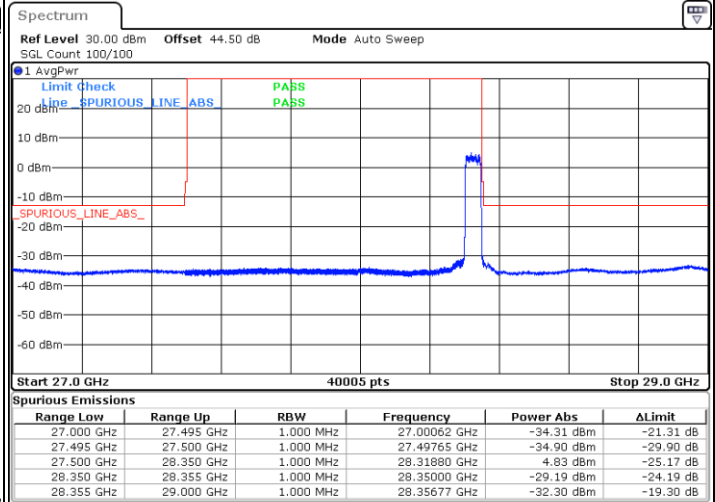
DFT-s-OFDM Module 2

NR Band n261 / 50MHz / BPSK

Lowest Band Edge / Full RB

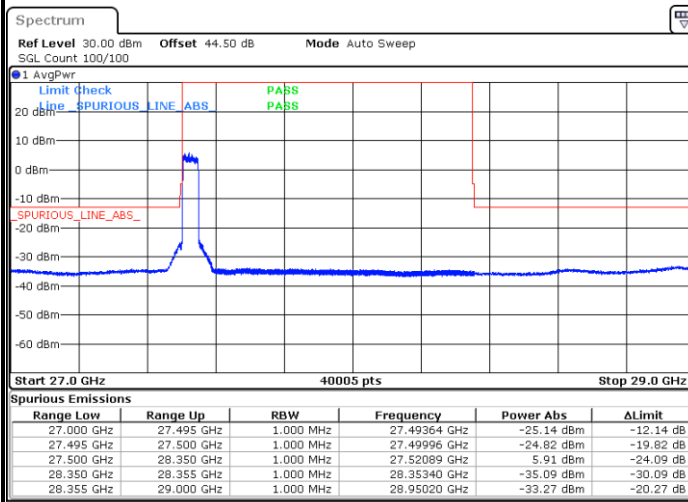


Highest Band Edge / Full RB

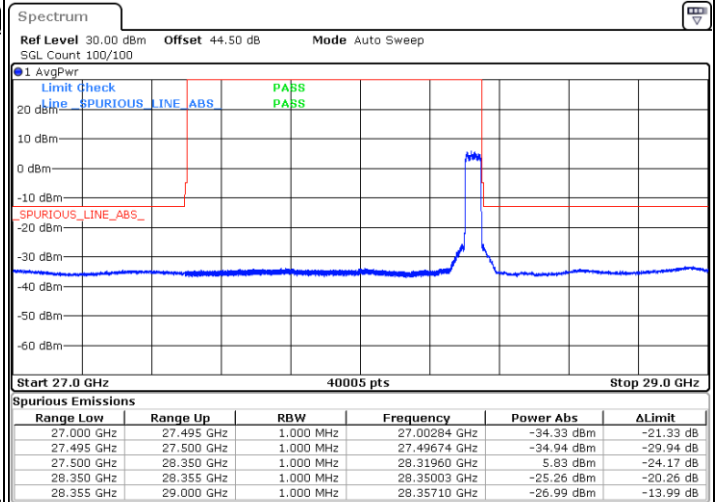


NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

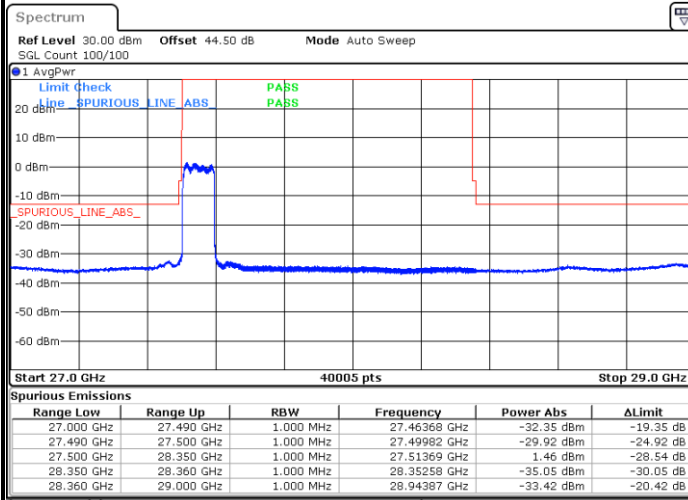




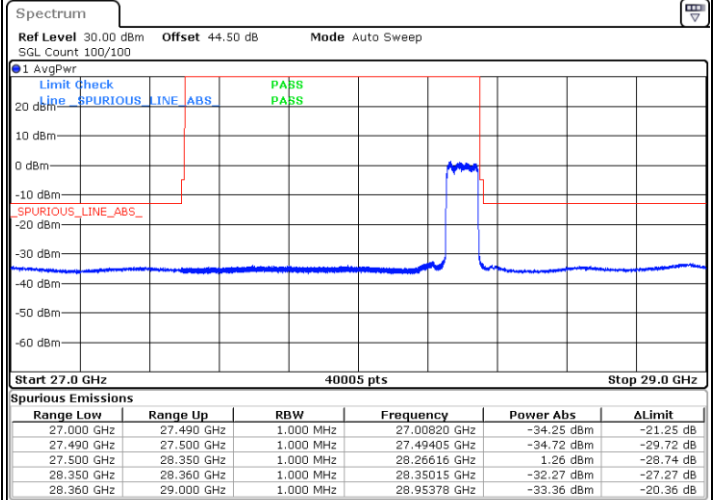
DFT-s-OFDM Module 2

NR Band n261 / 100MHz / BPSK

Lowest Band Edge / Full RB

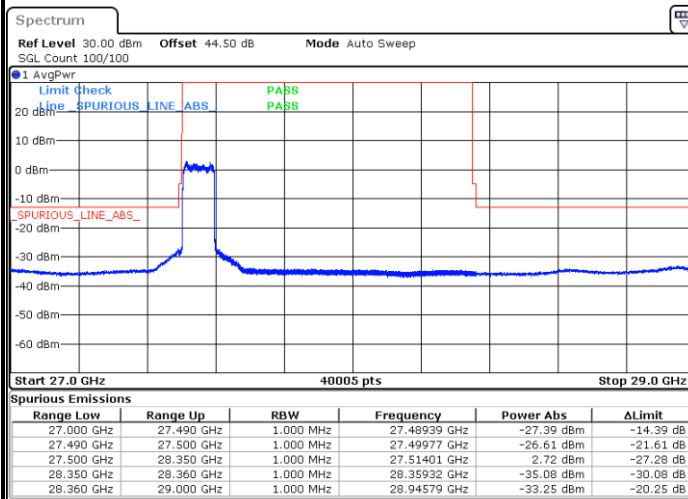


Highest Band Edge / Full RB

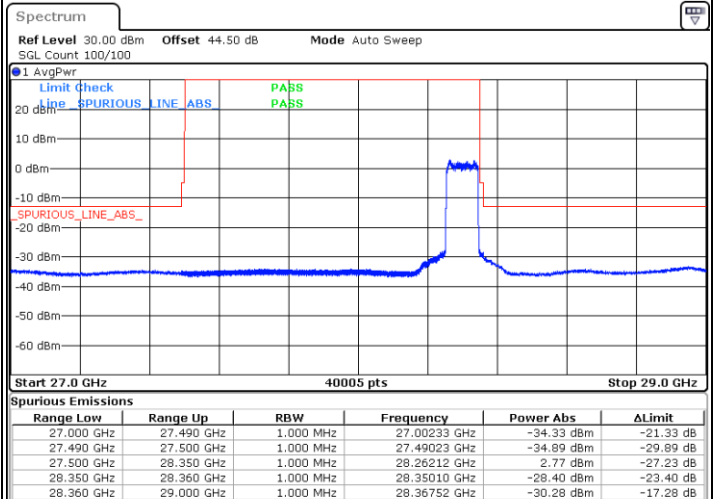


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

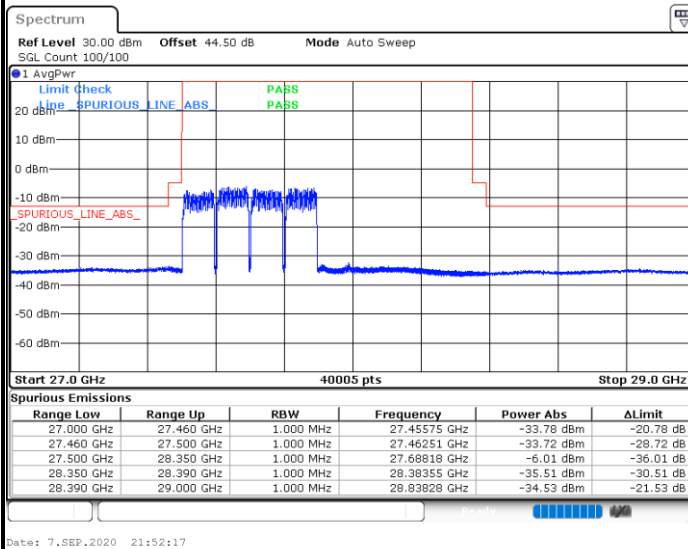




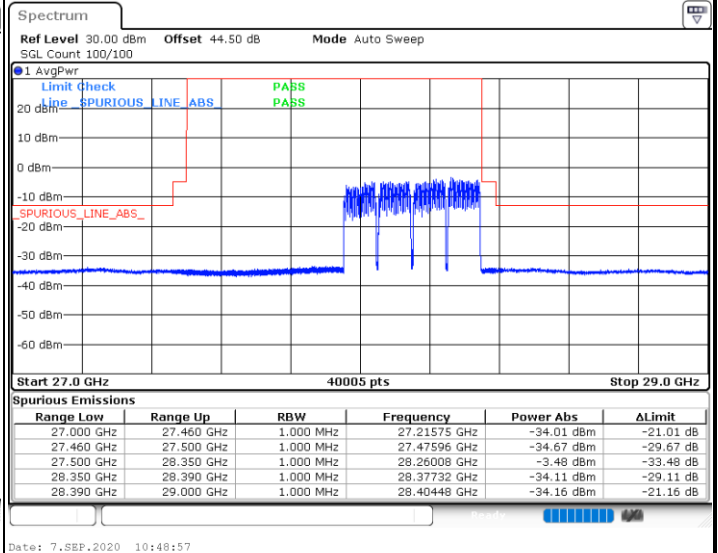
DFT-s-OFDM Module 2

NR Band n261 / 400MHz / BPSK

Lowest Band Edge / Full RB

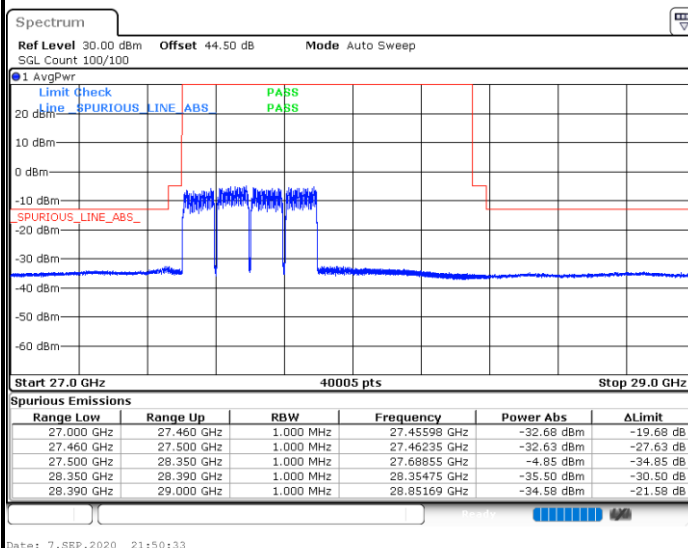


Highest Band Edge / Full RB

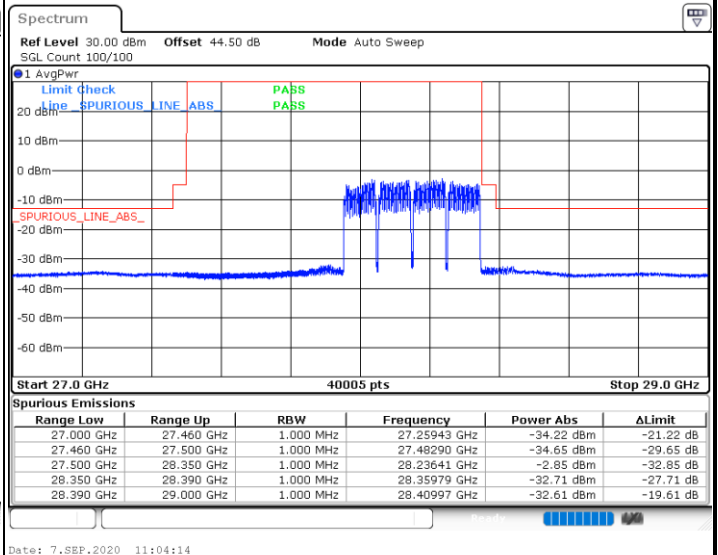


NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



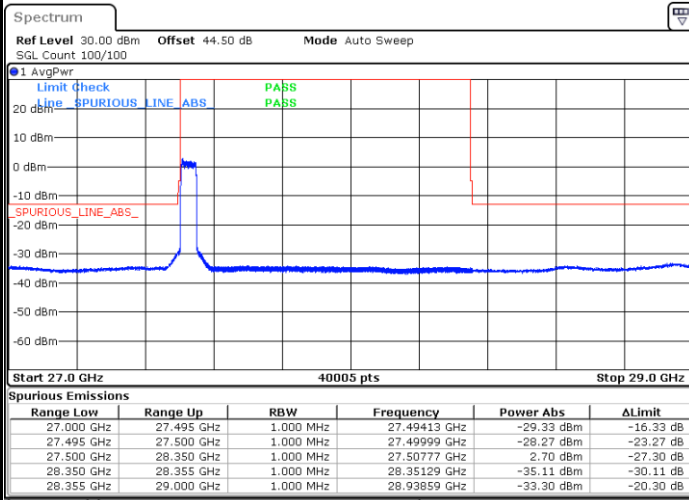


CP-OFDM Module 2

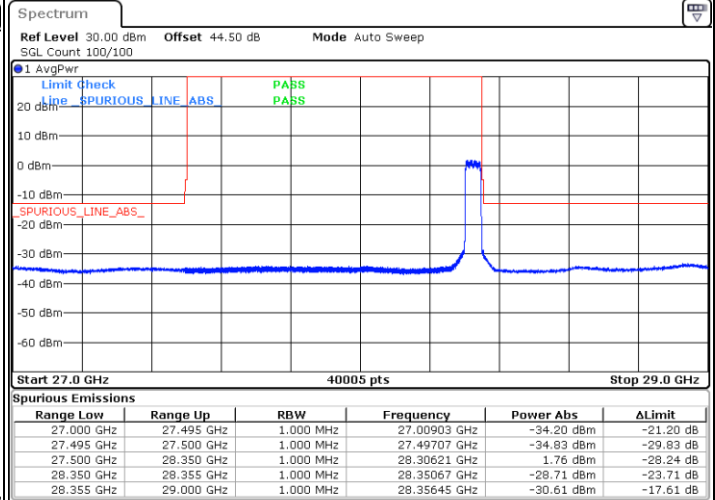
NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 25.AUG.2020 04:44:56



Date: 25.AUG.2020 07:45:00

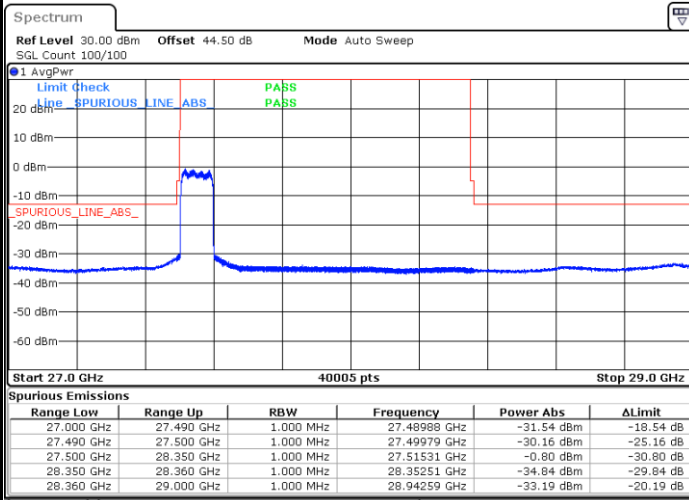


CP-OFDM Module 2

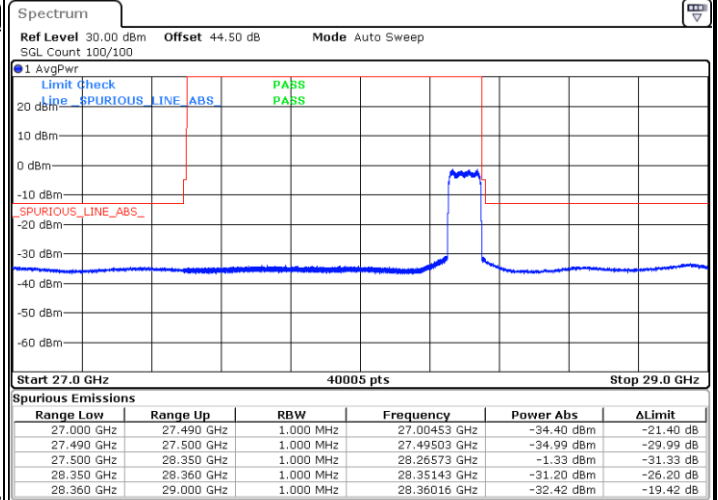
NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 25.AUG.2020 03:38:12



Date: 25.AUG.2020 06:24:27

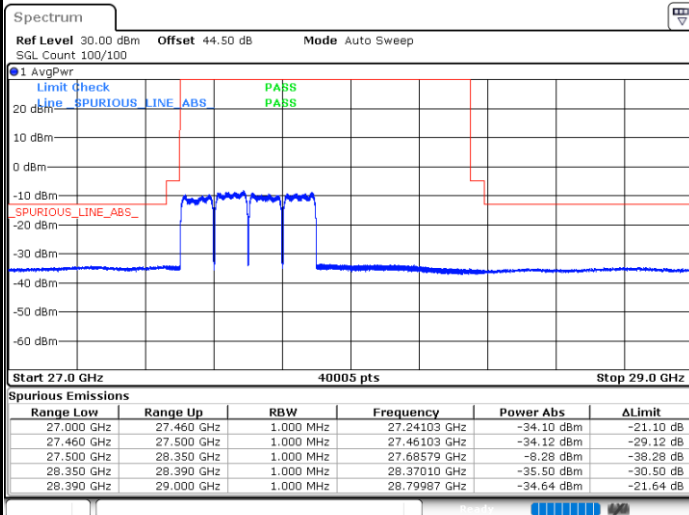


CP-OFDM Module 2

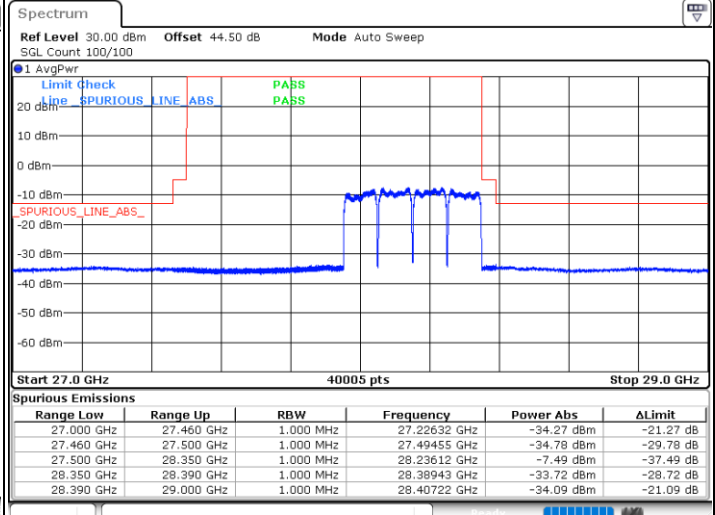
NR Band n261 / 400MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



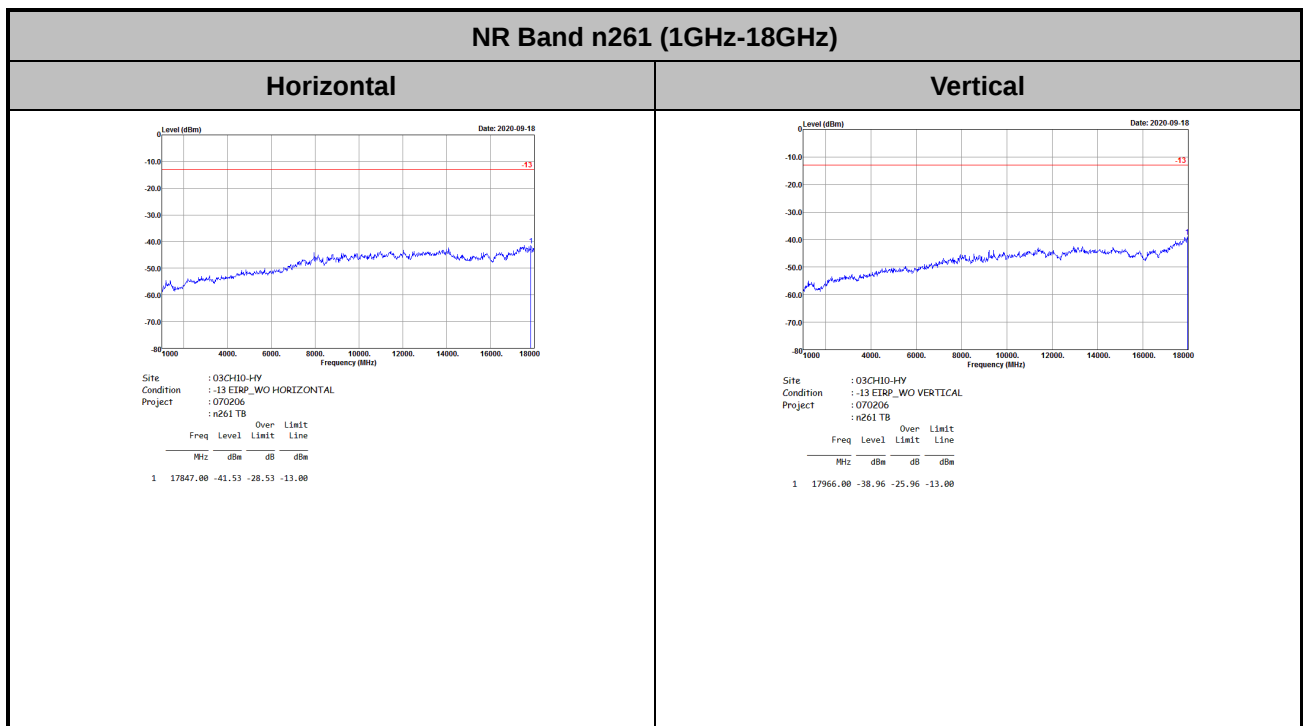
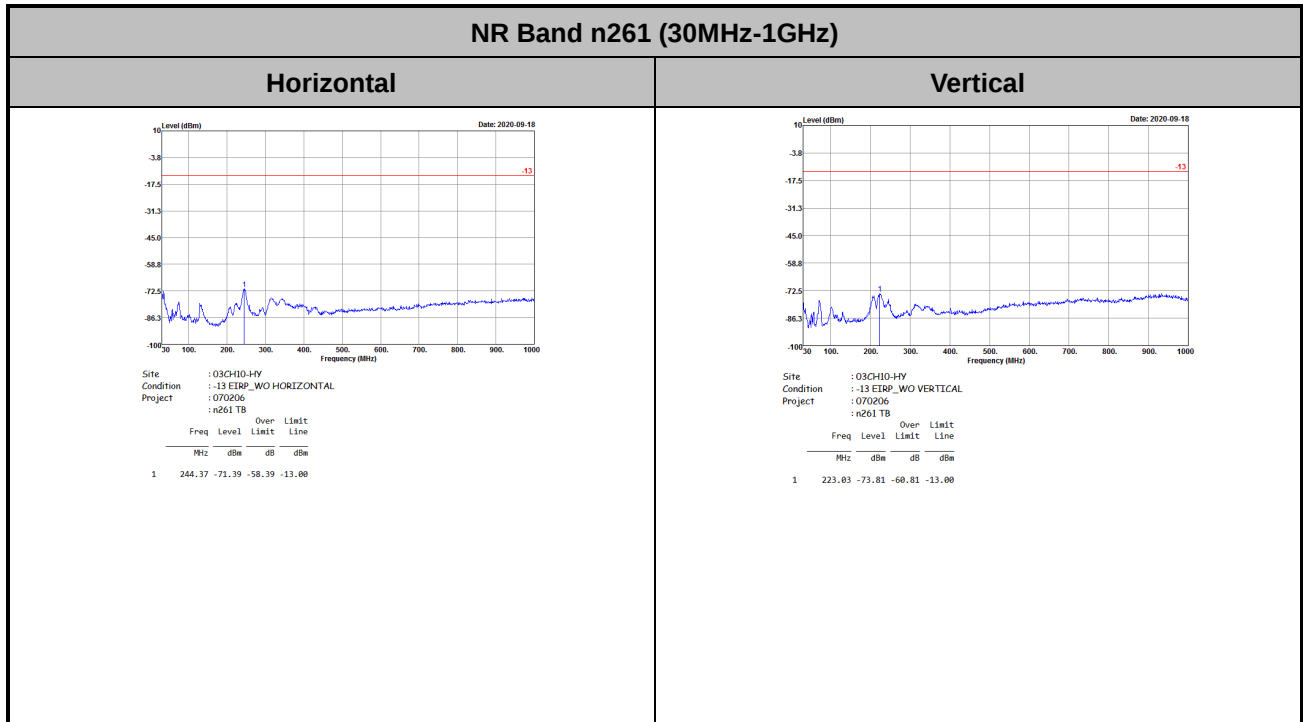
Date: 7.SEP.2020 22:43:13



Date: 7.SEP.2020 14:10:27

Spurious Emission

There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz.
Only the noise floor is reported.



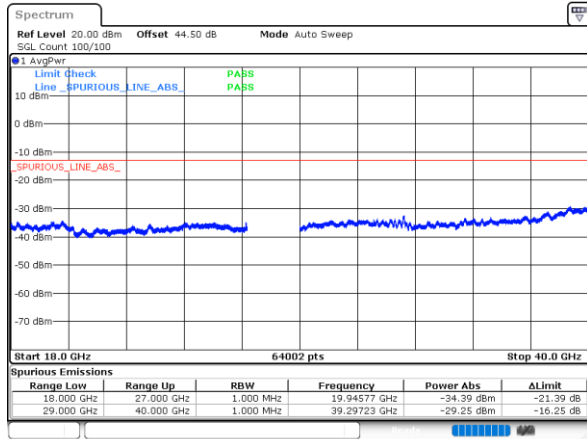


Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

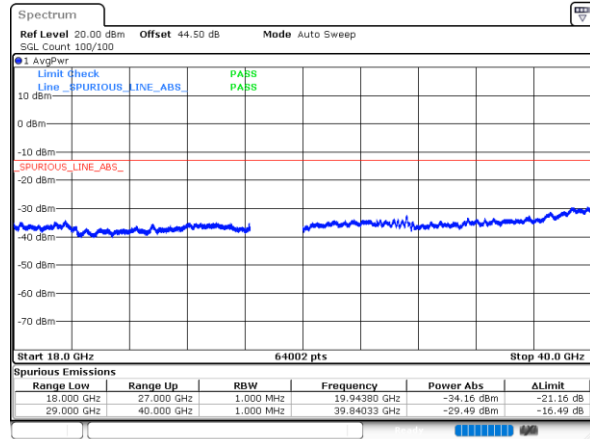
DFT-s-OFDM Module 2

NR Band n261 BPSK (18-40GHz)

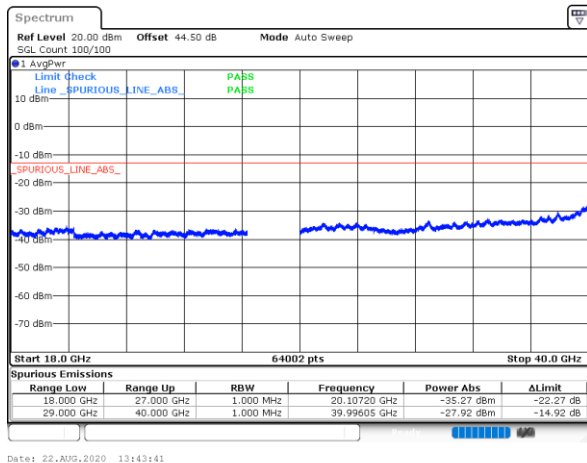
Lowest Channel / 50MHz



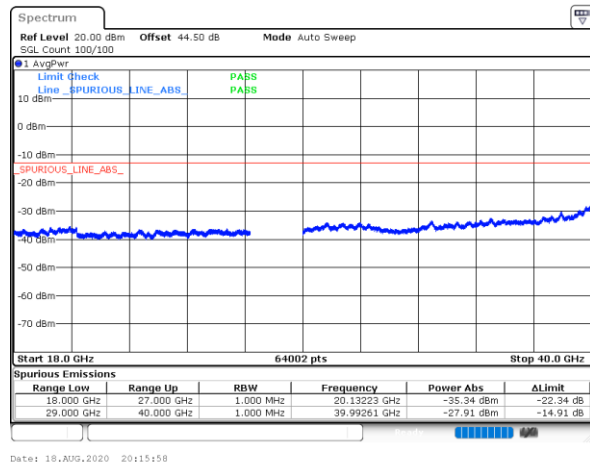
Lowest Channel / 100MHz



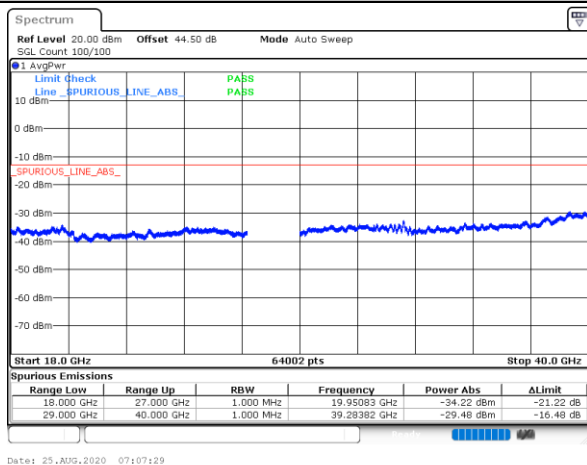
Middle Channel / 50MHz



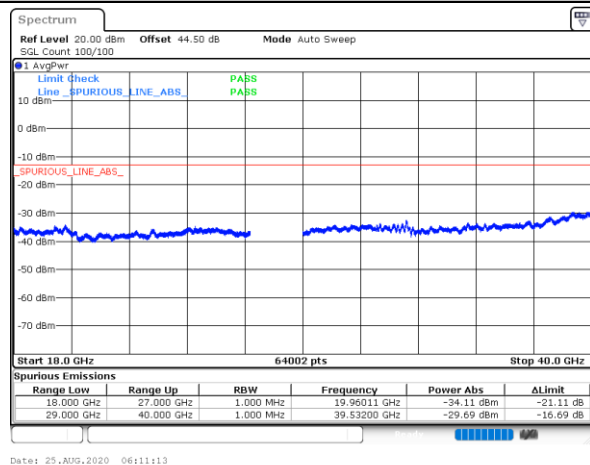
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

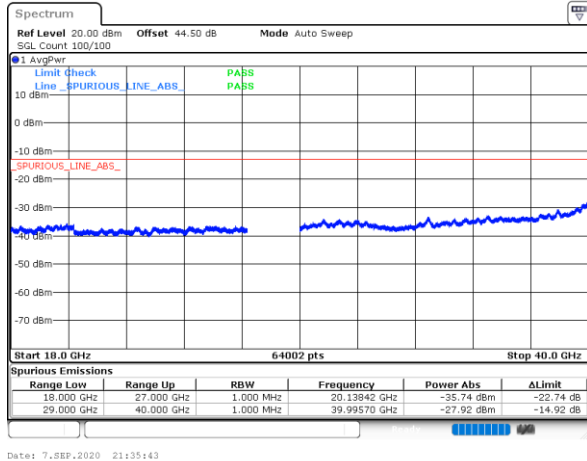




DFT-s-OFDM Module 2

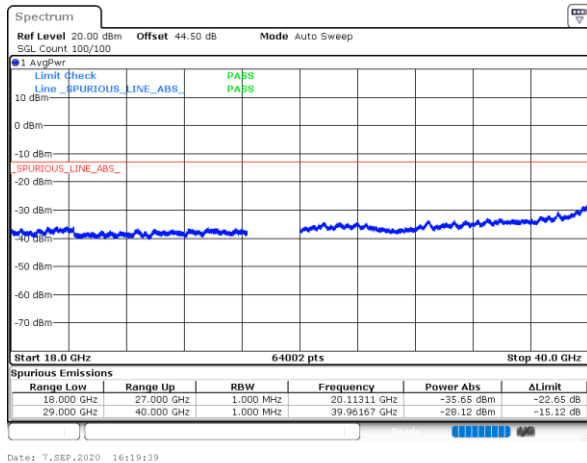
NR Band n261 BPSK (18-40GHz)

Lowest Channel / 400MHz



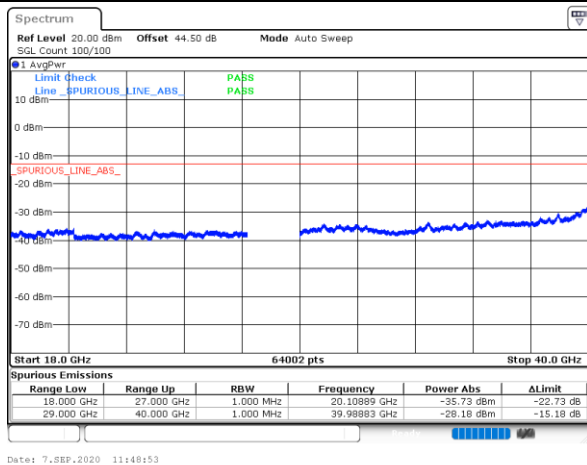
intentionally blank

Middle Channel / 400MHz



intentionally blank

Highest Channel / 400MHz



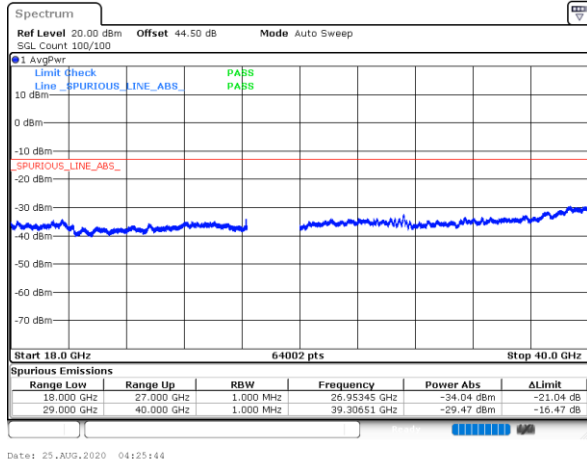
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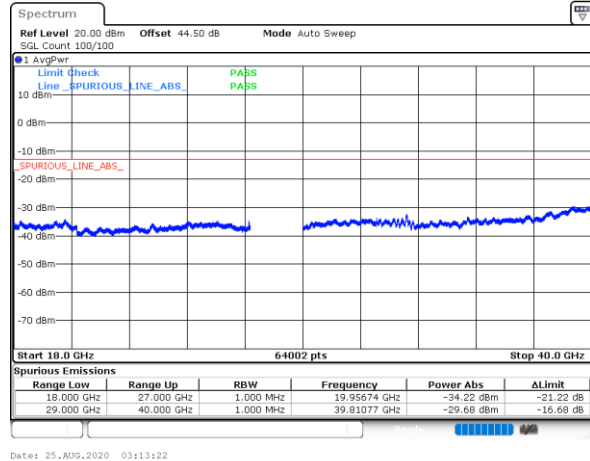
DFT-s-OFDM Module 2

NR Band n261 QPSK (18-40GHz)

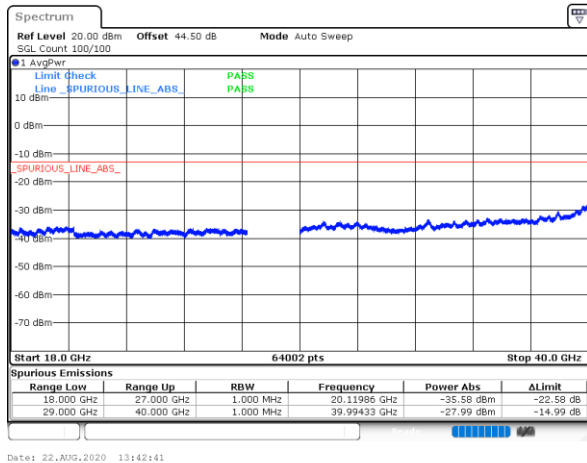
Lowest Channel / 50MHz



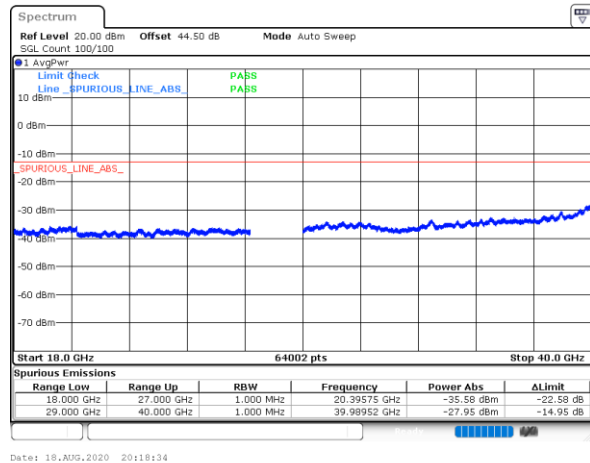
Lowest Channel / 100MHz



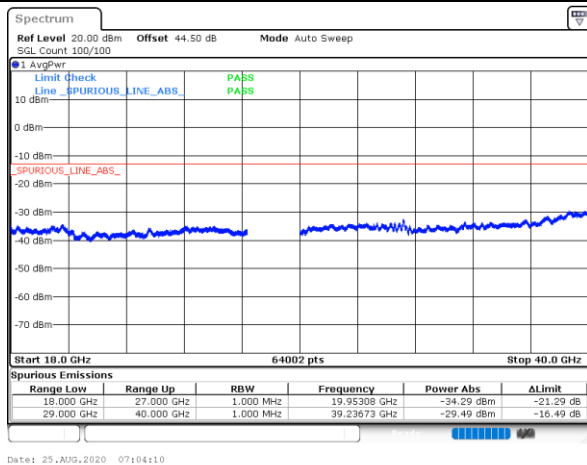
Middle Channel / 50MHz



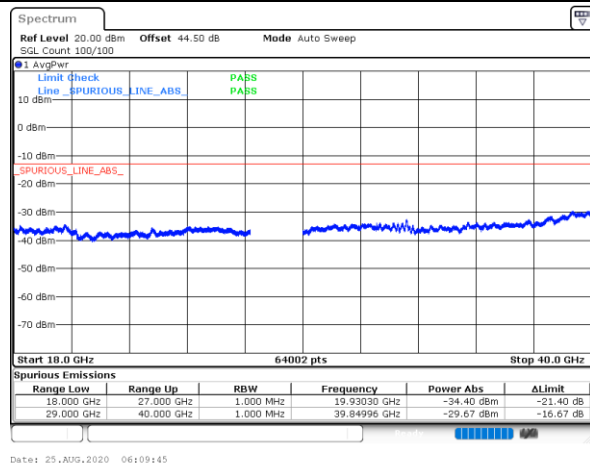
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

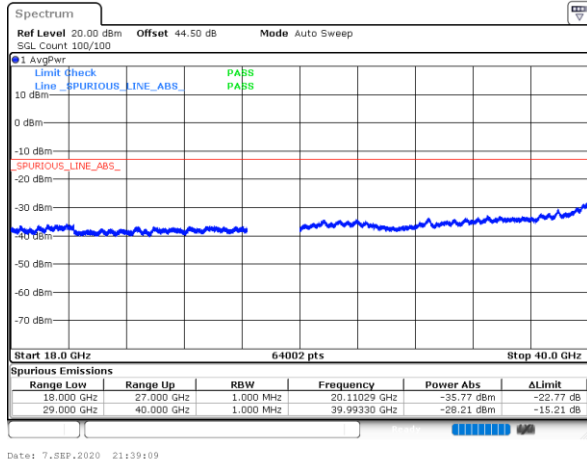




DFT-s-OFDM Module 2

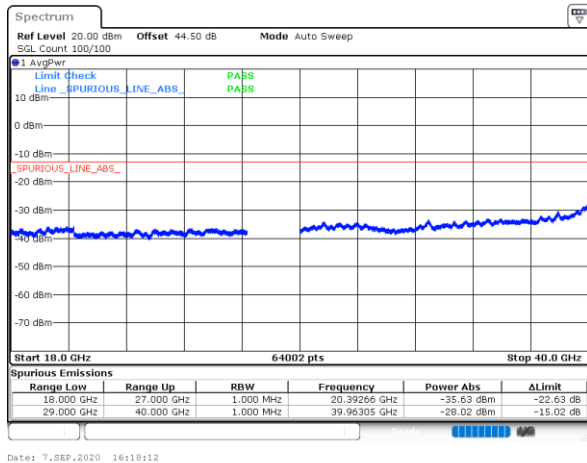
NR Band n261 QPSK (18-40GHz)

Lowest Channel / 400MHz



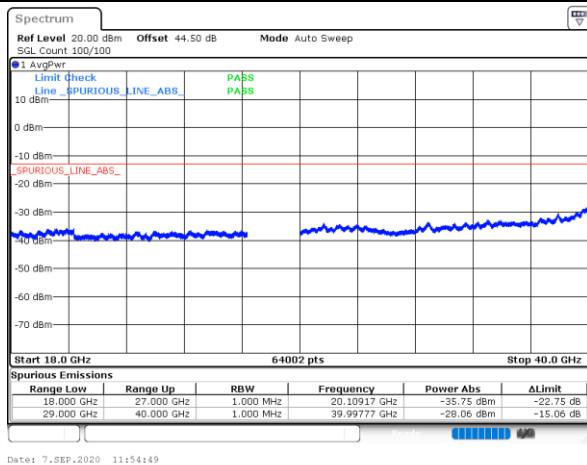
intentionally blank

Middle Channel / 400MHz



intentionally blank

Highest Channel / 400MHz



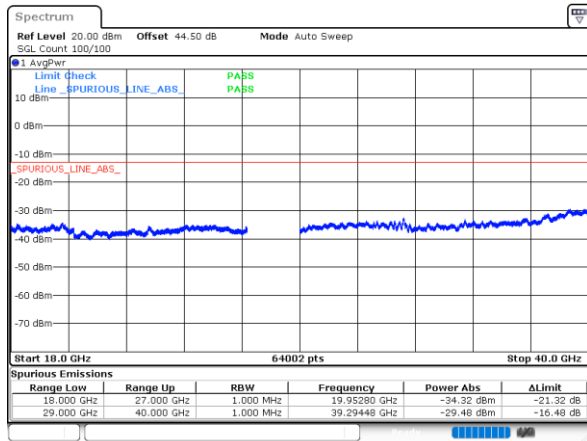
intentionally blank



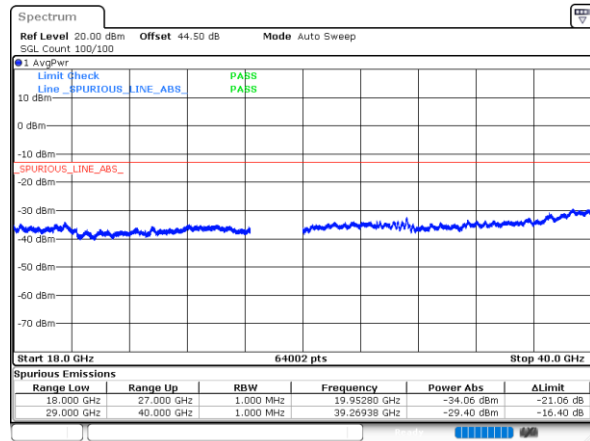
CP-OFDM Module 2

NR Band n261 QPSK (18-40GHz)

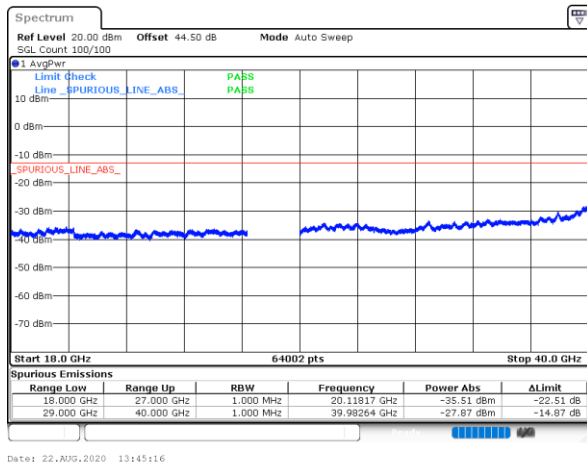
Lowest Channel / 50MHz



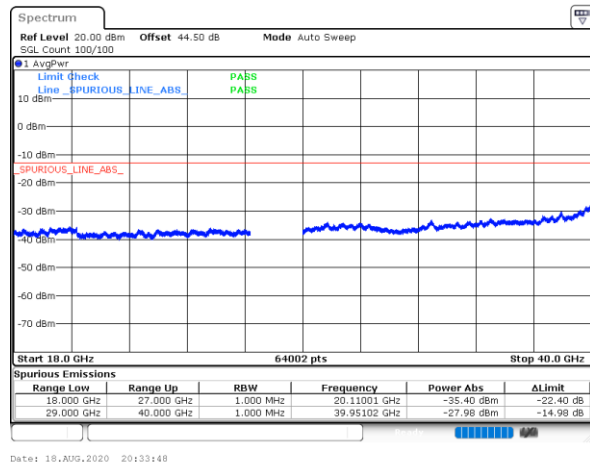
Lowest Channel / 100MHz



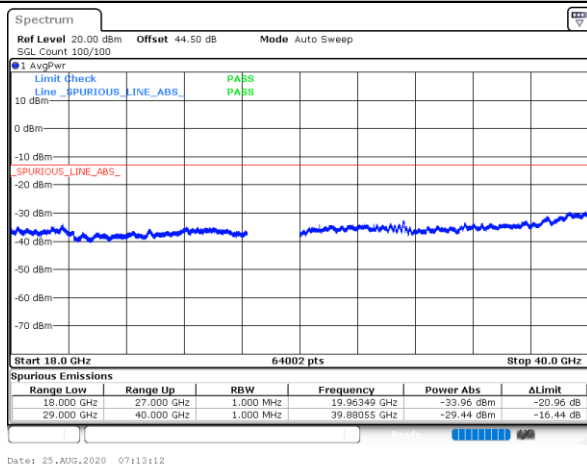
Middle Channel / 50MHz



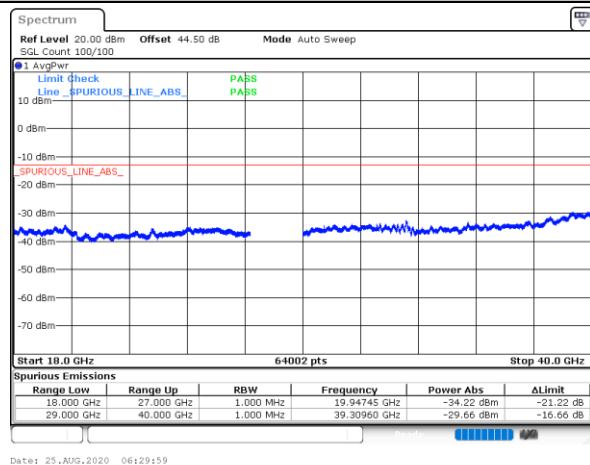
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

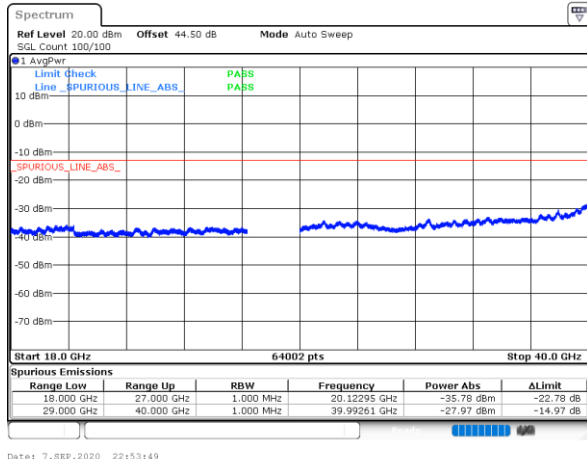




CP-OFDM Module 2

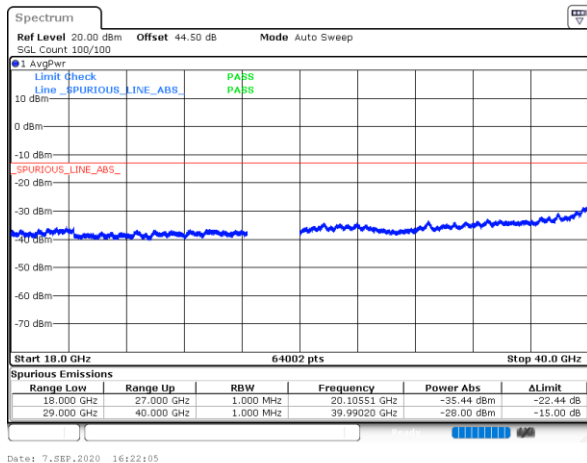
NR Band n261 QPSK (18-40GHz)

Lowest Channel / 400MHz



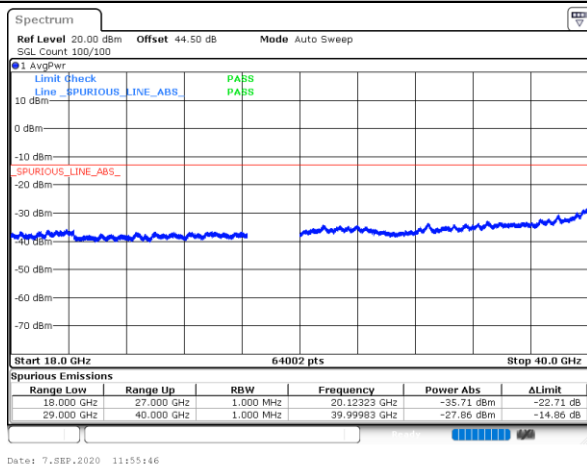
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Middle Channel / 400MHz



intentionally blank

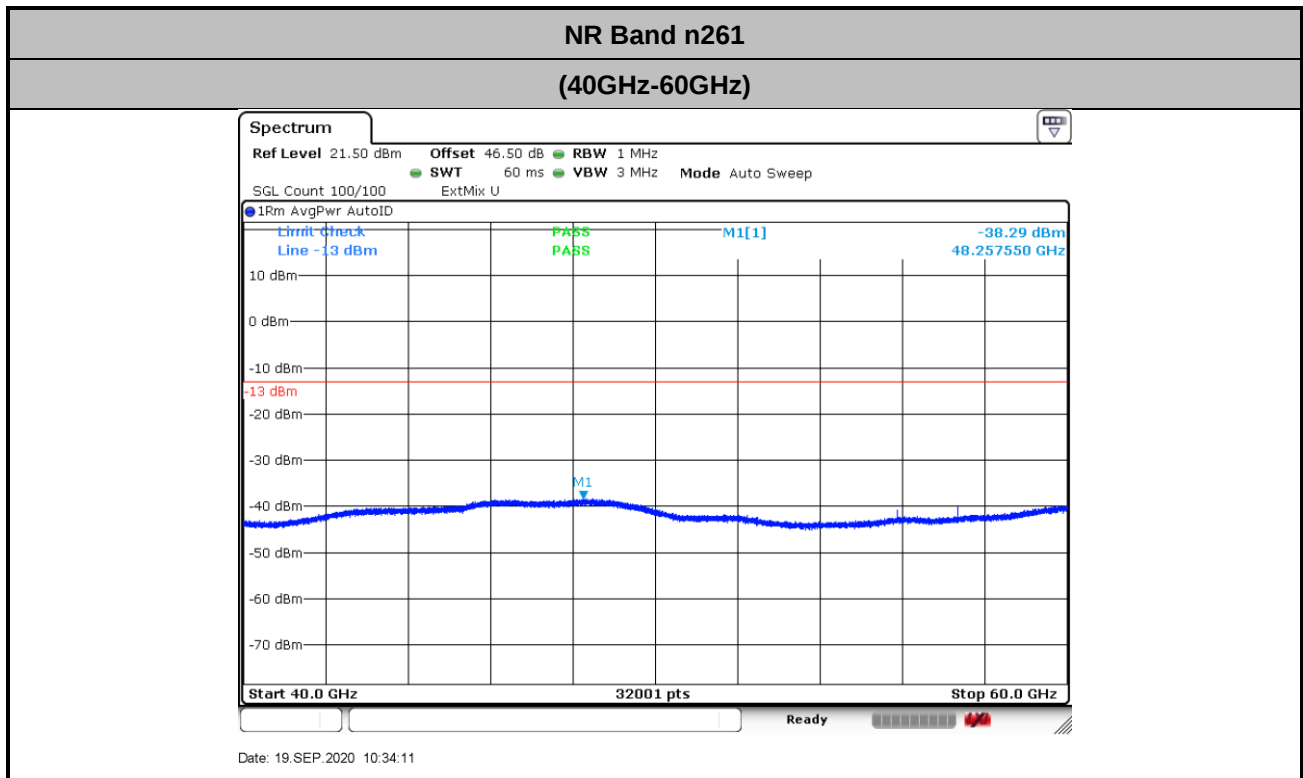
Highest Channel / 400MHz



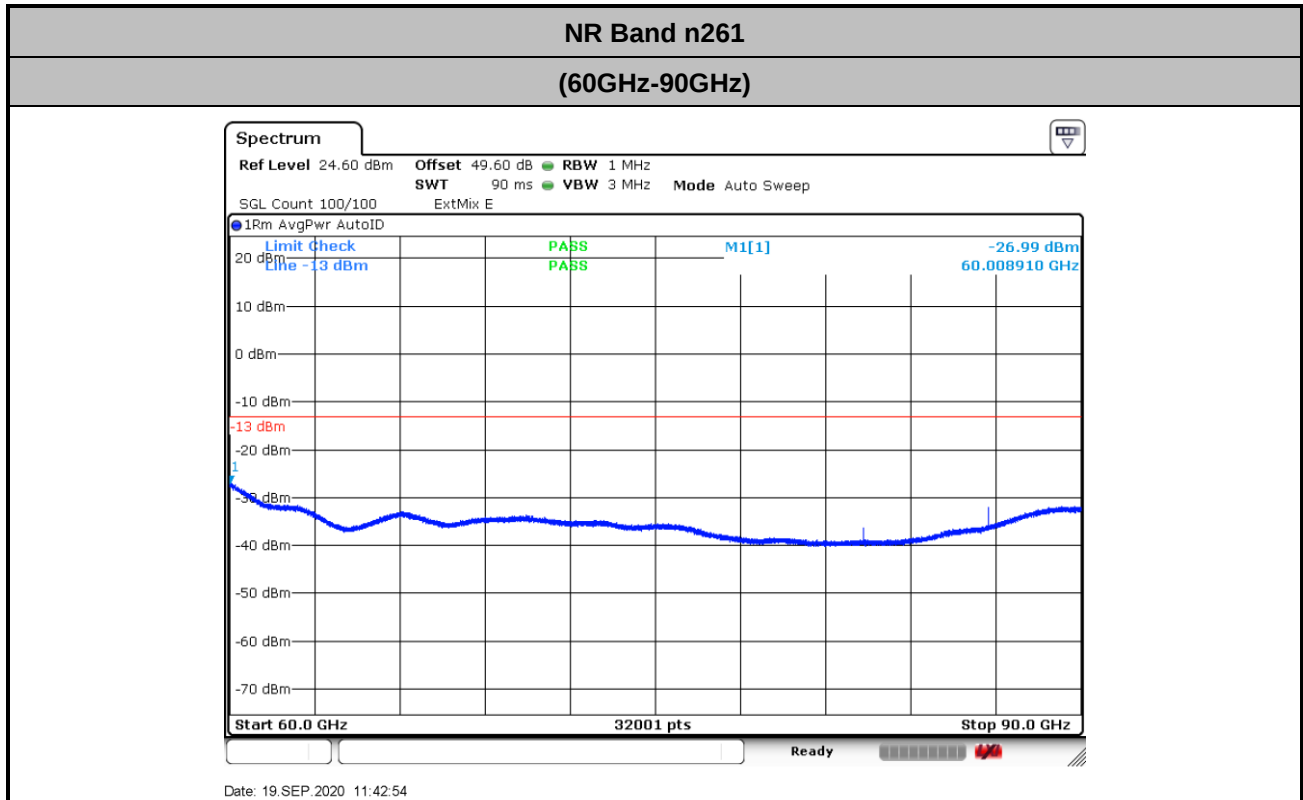
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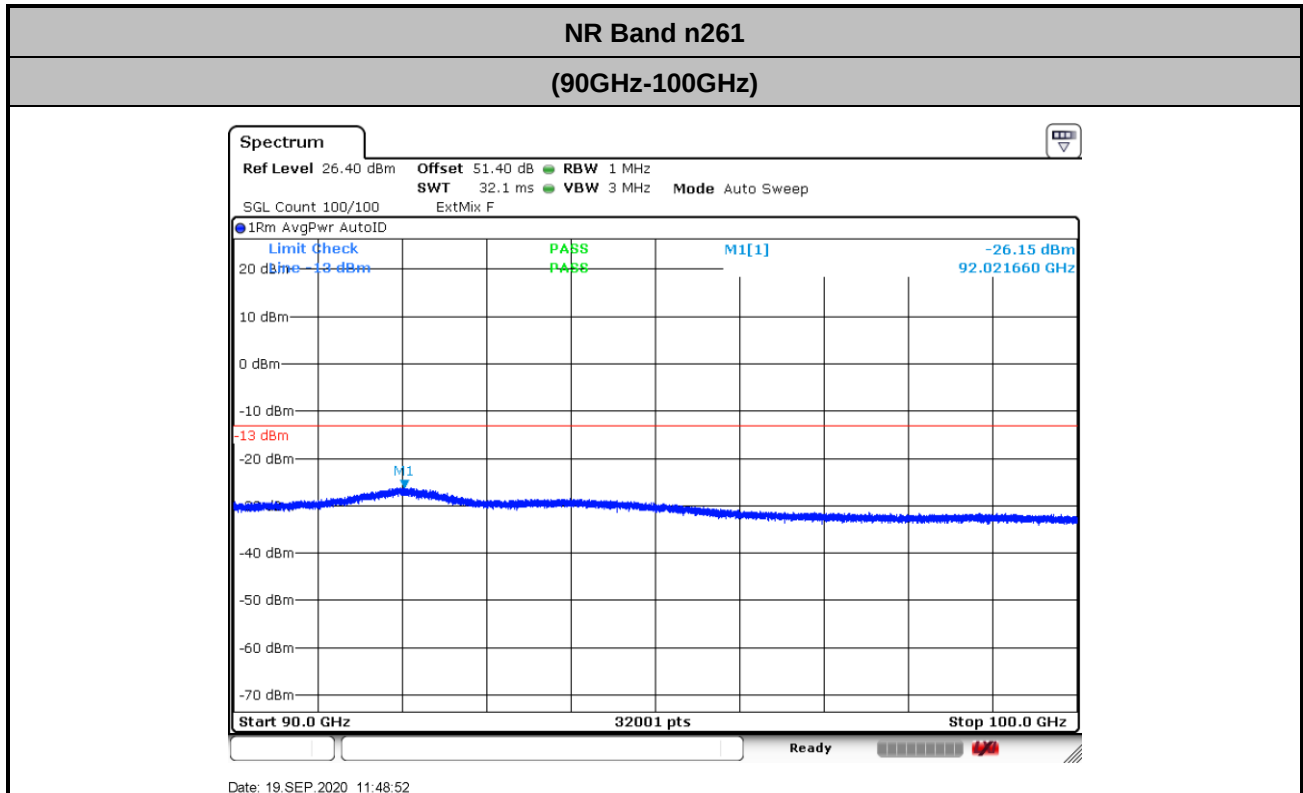
There is no significant spurious emission signal found for frequency started from 40GHz up to 100GHz.
Only the noise floor is reported.



$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.3 + 2 + 107 + 20\log(1) - 104.8 = 46.5 \text{ (dB)}\end{aligned}$$



$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 45.4 + 2 + 107 + 20\log(1) - 104.8 = 49.6 \text{ (dB)}\end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 47.2 + 2 + 107 + 20\log(1) - 104.8 = 51.4 \text{ (dB)} \end{aligned}$$

NR Band n261

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	27.9252118	-212.800	7.620	Pass
40	Normal Voltage	27.9251439	-144.900	5.189	
30	Normal Voltage	27.9250839	-84.900	3.040	
20(Ref.)	Normal Voltage	27.924999	0.000	0.000	
10	Normal Voltage	27.924962	37.000	1.325	
0	Normal Voltage	27.9249211	77.900	2.790	
-10	Normal Voltage	27.9248811	117.900	4.222	
-20	Normal Voltage	27.9248492	149.800	5.364	
-30	Normal Voltage	27.9247652	233.800	8.372	
20	Maximum Voltage	27.924988	11.000	0.394	
20	Normal Voltage	27.924994	5.000	0.179	
20	Battery End Point	27.924967	32.000	1.146	

Note:

1. Normal Voltage =7.6 V. ; Battery End Point (BEP) =6.4 V. ; Maximum Voltage =8 V.
2. The frequency fundamental emissions stay within the operation band.