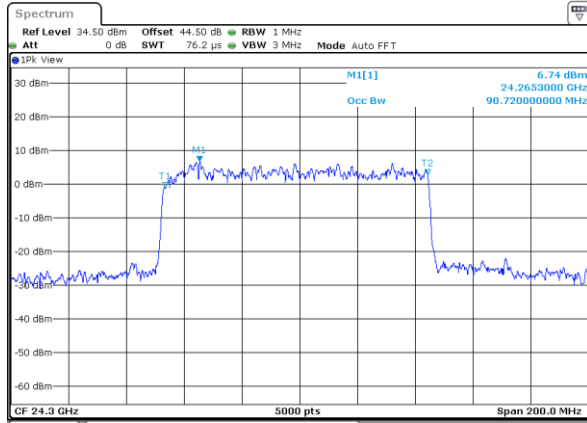
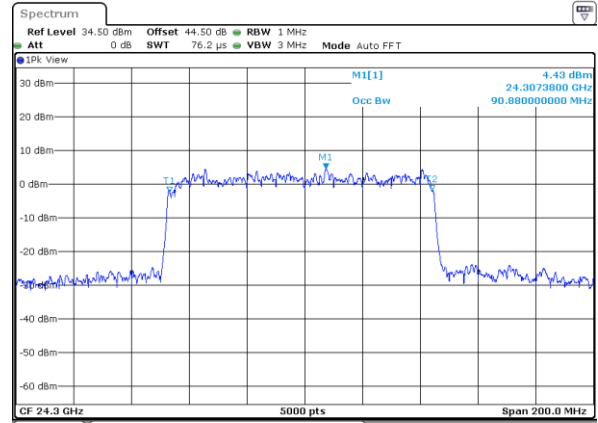
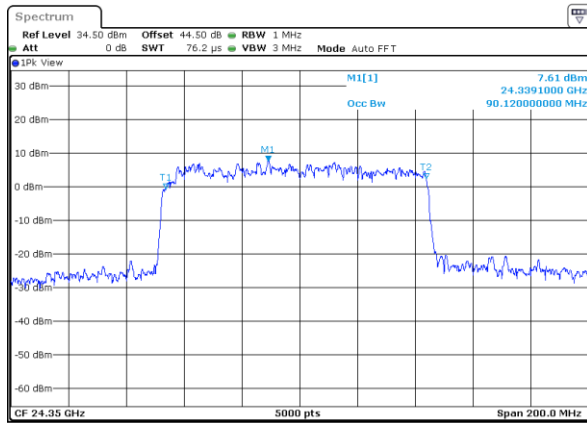
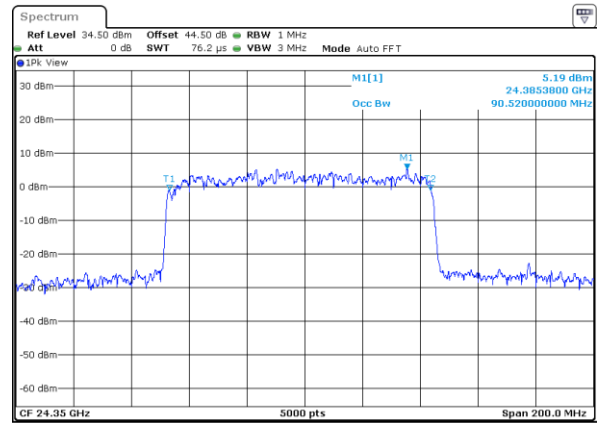
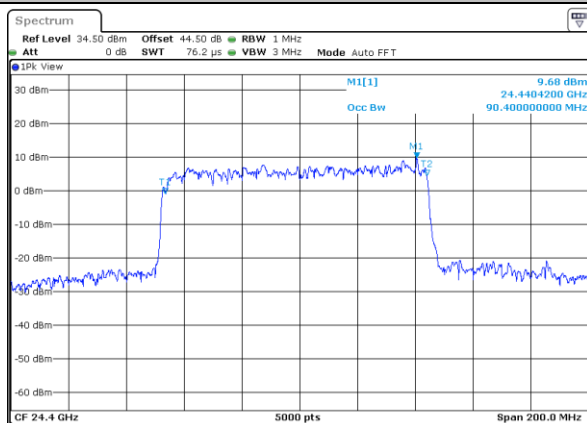
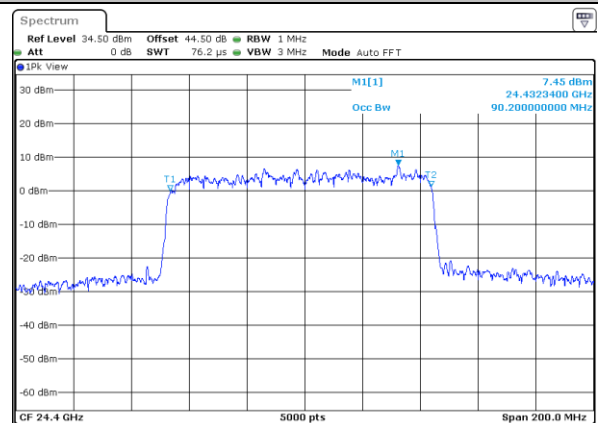


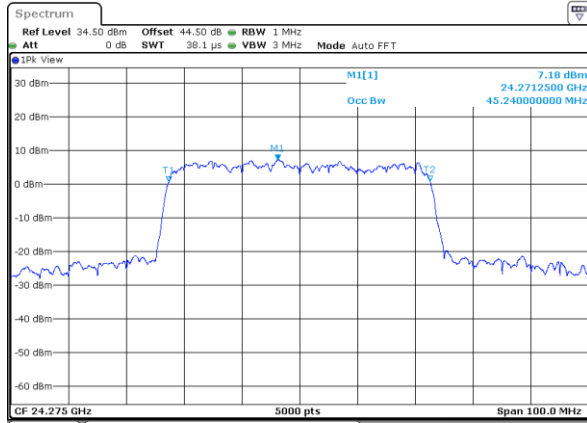
**DFT-s-OFDM Module 1****NR Band n258a****Lowest Channel / 100MHz / 16QAM****Lowest Channel / 100MHz / 64QAM****Middle Channel / 100MHz / 16QAM****Middle Channel / 100MHz / 64QAM****Highest Channel / 100MHz / 16QAM****Highest Channel / 100MHz / 64QAM**



CP-OFDM Module 1

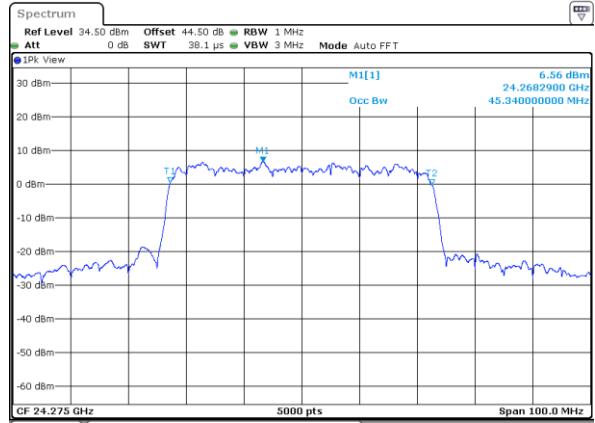
NR Band n258a

Lowest Channel / 50MHz / QPSK



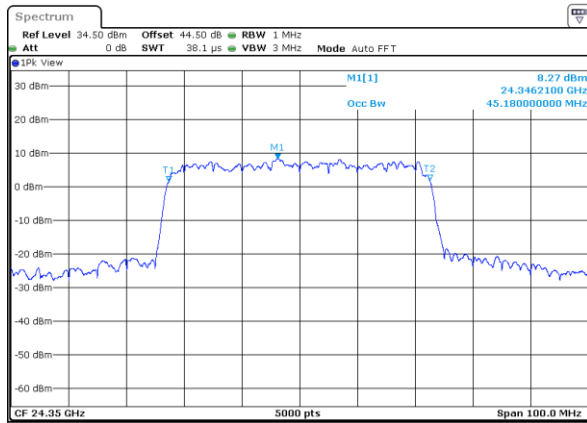
Date: 22.JUL.2020 22:05:00

Lowest Channel / 50MHz / 16QAM



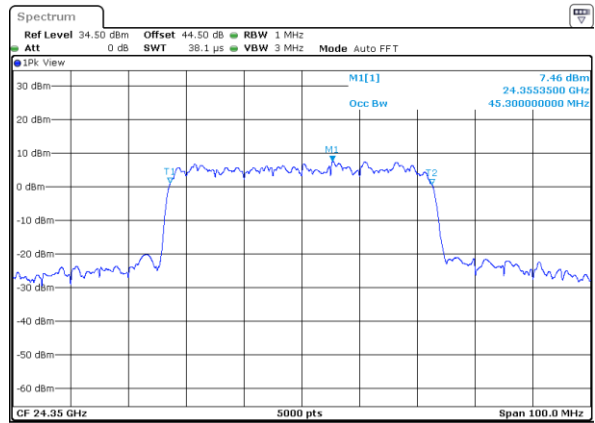
Date: 22.JUL.2020 22:03:32

Middle Channel / 50MHz / QPSK



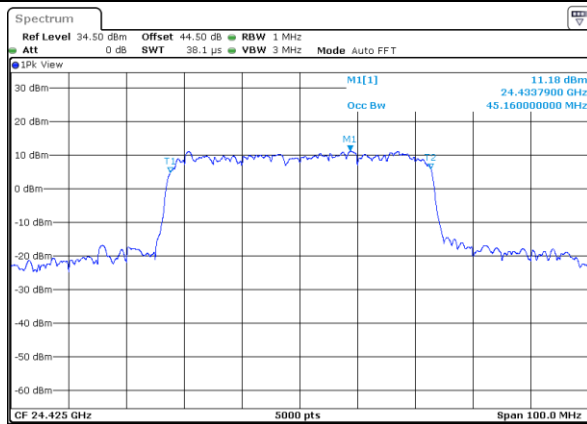
Date: 22.JUL.2020 20:42:06

Middle Channel / 50MHz / 16QAM



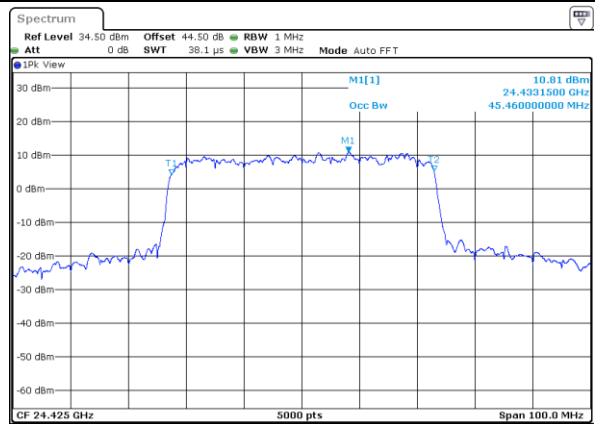
Date: 22.JUL.2020 20:40:32

Highest Channel / 50MHz / QPSK



Date: 23.JUL.2020 22:11:18

Highest Channel / 50MHz / 16QAM



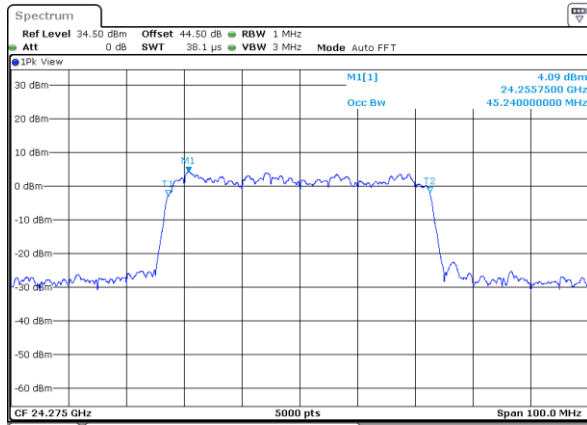
Date: 23.JUL.2020 22:08:46



CP-OFDM Module 1

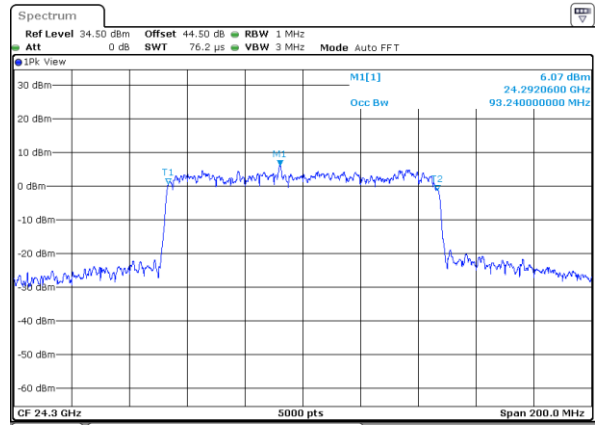
NR Band n258a

Lowest Channel / 50MHz / 64QAM



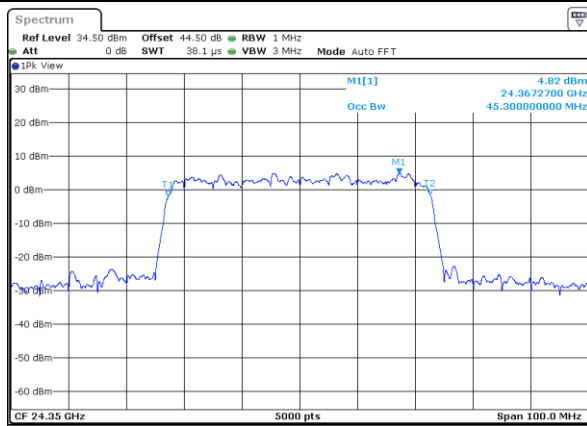
Date: 22.JUL.2020 22:00:12

Lowest Channel / 100MHz / QPSK



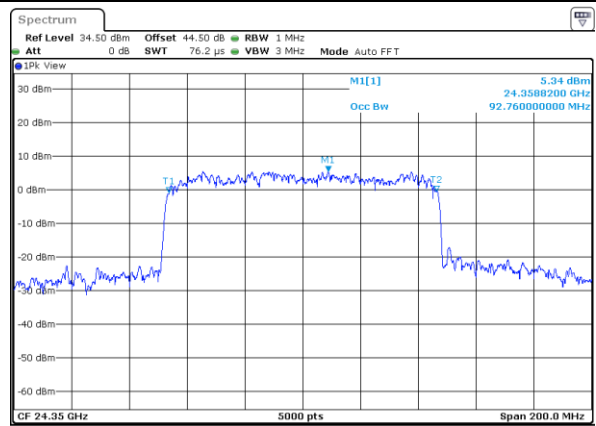
Date: 22.JUL.2020 23:12:37

Middle Channel / 50MHz / 64QAM



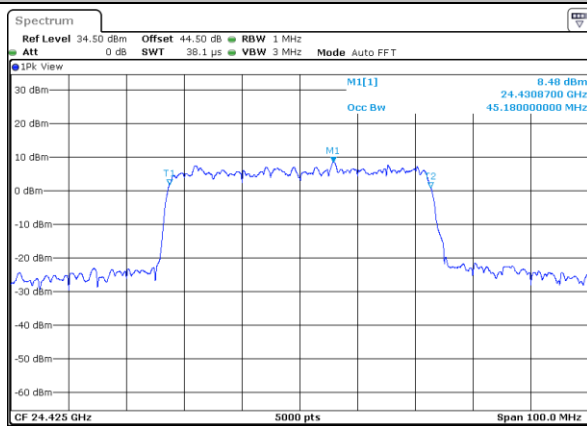
Date: 22.JUL.2020 20:39:27

Middle Channel / 100MHz / QPSK



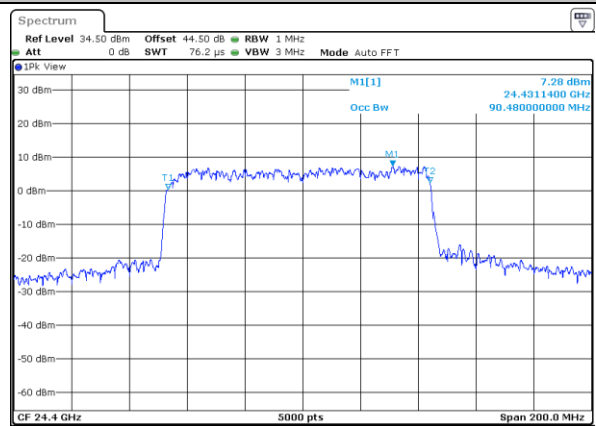
Date: 22.JUL.2020 20:43:25

Highest Channel / 50MHz / 64QAM



Date: 23.JUL.2020 22:06:07

Highest Channel / 100MHz / QPSK



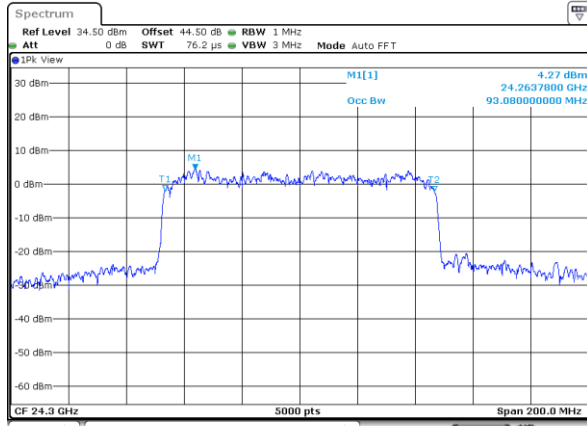
Date: 23.JUL.2020 21:45:27



CP-OFDM Module 1

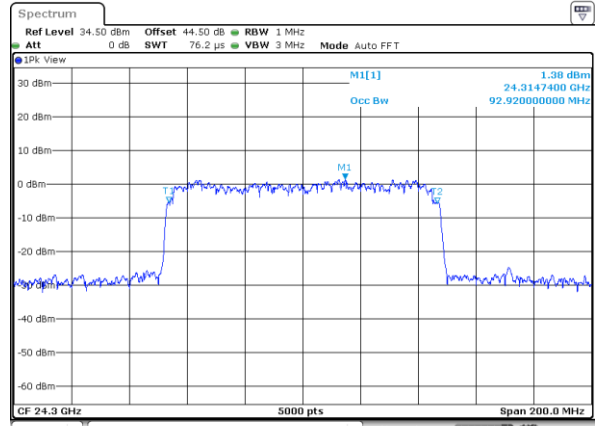
NR Band n258a

Lowest Channel / 100MHz / 16QAM



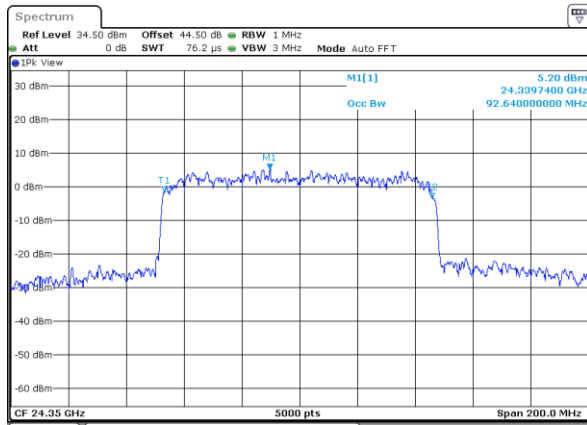
Date: 22.JUL.2020 23:21:42

Lowest Channel / 100MHz / 64QAM



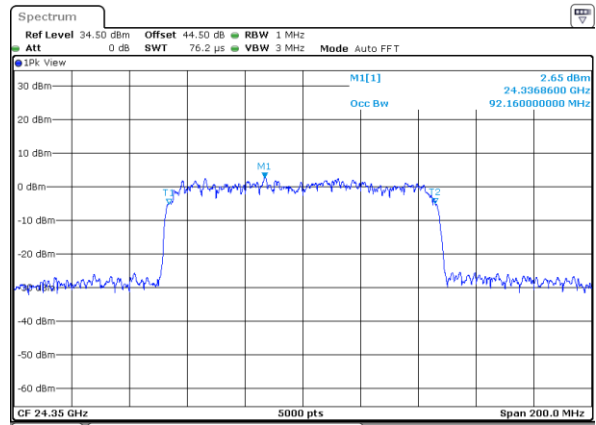
Date: 22.JUL.2020 23:20:14

Middle Channel / 100MHz / 16QAM



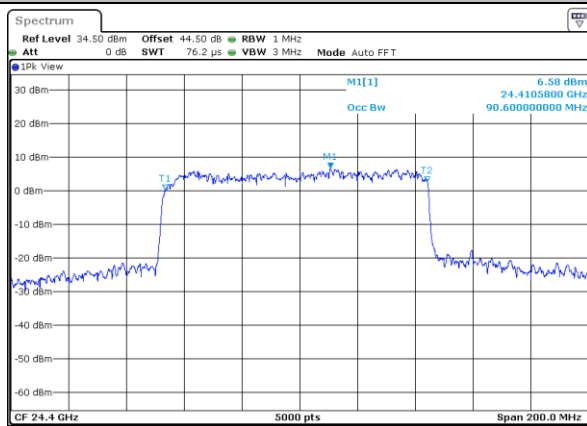
Date: 22.JUL.2020 20:45:30

Middle Channel / 100MHz / 64QAM



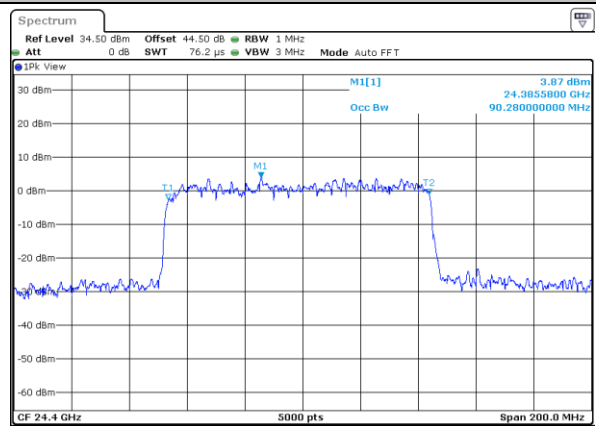
Date: 22.JUL.2020 20:46:54

Highest Channel / 100MHz / 16QAM



Date: 23.JUL.2020 21:49:21

Highest Channel / 100MHz / 64QAM



Date: 23.JUL.2020 21:51:25

Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module 1 NR Band n258a: BE (dBm) 1 RB							
BW			50MHz				100MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-23.46	-23.17	-22.8	-29.28	-24.52	-24.23	-25.24	-27.35
	>10%OB	≤ -13	-32.98	-33.04	-33.17	-32.79	-34.32	-34.28	-34.37	-34.69
High CH	0~10%OB	≤ -5	-16.64	-16.02	-19.98	-18.85	-17.05	-17.26	-18.44	-21.15
	>10%OB	≤ -13	-31.86	-31.67	-32.15	-32.76	-32.51	-32.32	-32.86	-33.7
Result			Compliance							

Mode			CP-OFDM Module 1 NR Band n258a: BE (dBm) 1 RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-24.46	-28.30	-28.36	-25.45	-25.22	-29.65
	>10%OB	≤ -13	-32.39	-32.73	-32.92	-34.35	-34.49	-34.63
High CH	0~10%OB	≤ -5	-20.03	-19.35	-28.42	-19.15	-20.87	-23.13
	>10%OB	≤ -13	-32.20	-32.18	-31.79	-32.96	-33.51	-33.74
Result			Compliance					

Mode			DFT-s-OFDM Module 1 NR Band n258a: BE (dBm) Full RB							
BW			50MHz				100MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-33.07	-30.21	-30.94	-33.05	-32.73	-30.46	-31.37	-32.62
	>10%OB	≤ -13	-33.72	-31.66	-32.10	-32.85	-33.66	-31.50	-31.75	-33.23
High CH	0~10%OB	≤ -5	-26.54	-24.76	-26.62	-27.76	-30.27	-27.59	-28.30	-30.25
	>10%OB	≤ -13	-30.26	-24.97	-26.99	-27.67	-31.50	-29.04	-29.54	-30.92
Result			Compliance							

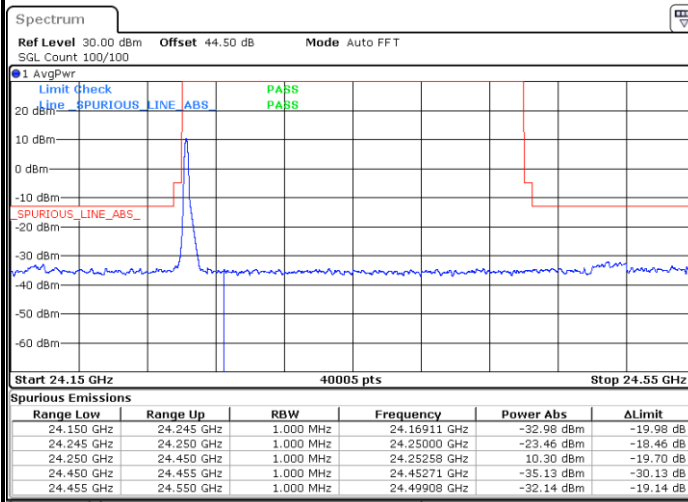
Mode			CP-OFDM Module 1 NR Band n258a: BE (dBm) Full RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-30.69	-31.79	-33.25	-30.58	-31.05	-33.29
	>10%OB	≤ -13	-31.40	-32.04	-33.50	-30.93	-31.60	-33.56
High CH	0~10%OB	≤ -5	-24.90	-25.69	-30.34	-26.83	-28.23	-31.58
	>10%OB	≤ -13	-25.71	-26.89	-30.57	-28.46	-29.37	32.37
Result			Compliance					



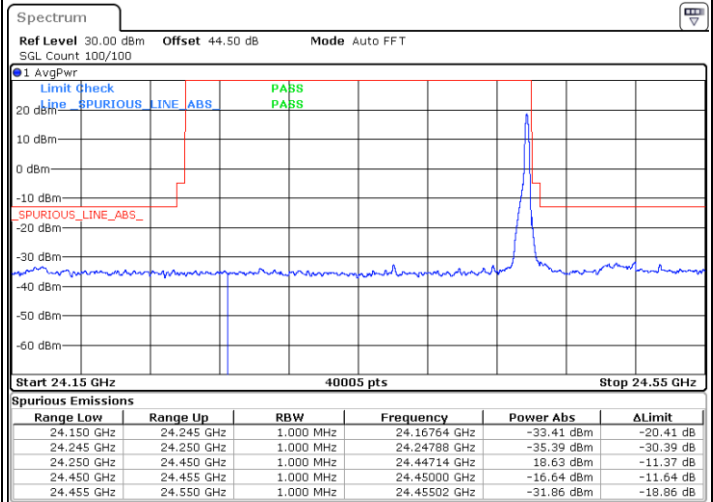
DFT-s-OFDM Module 1

NR Band n258a/ 50MHz / BPSK

Lowest Band Edge / 1 RB

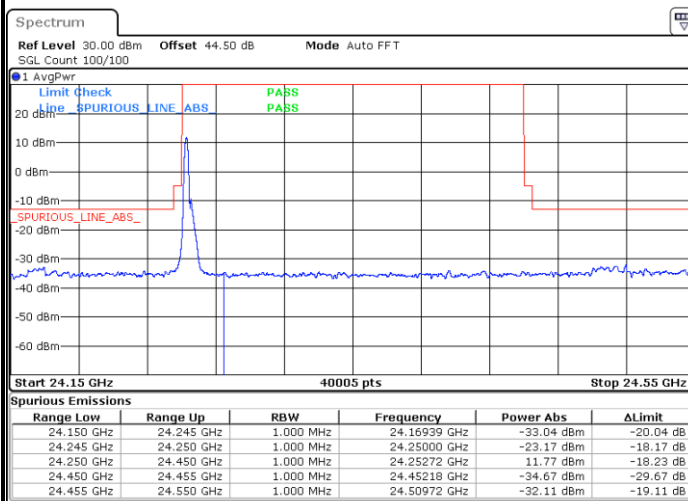


Highest Band Edge / 1 RB

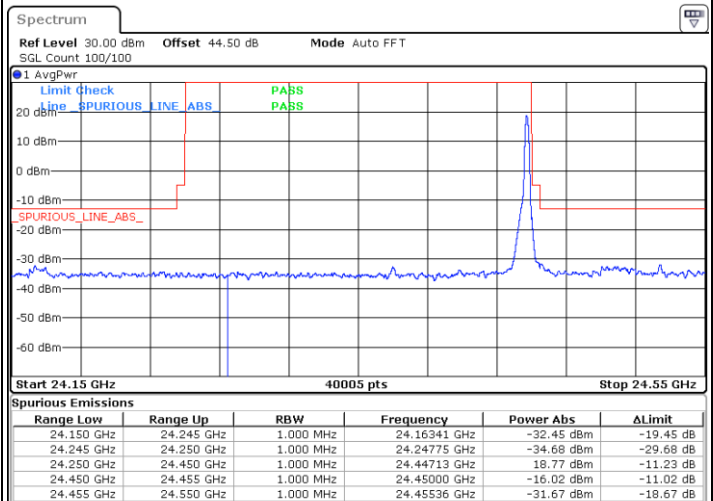


NR Band n258a/ 50MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

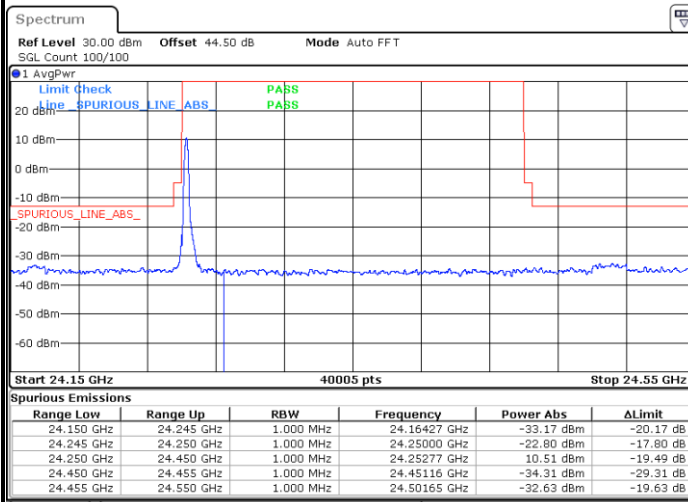




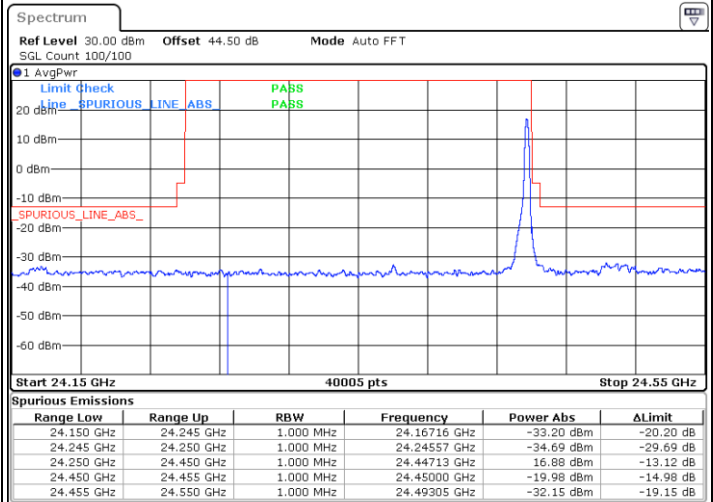
DFT-s-OFDM Module 1

NR Band n258a/ 50MHz / 16QAM

Lowest Band Edge / 1 RB

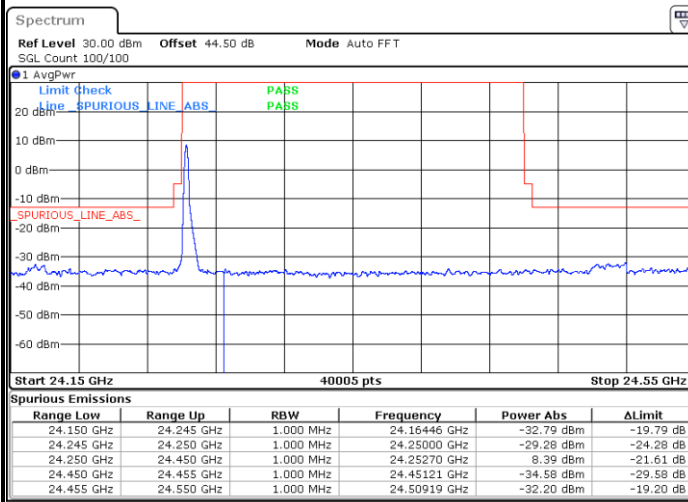


Highest Band Edge / 1 RB

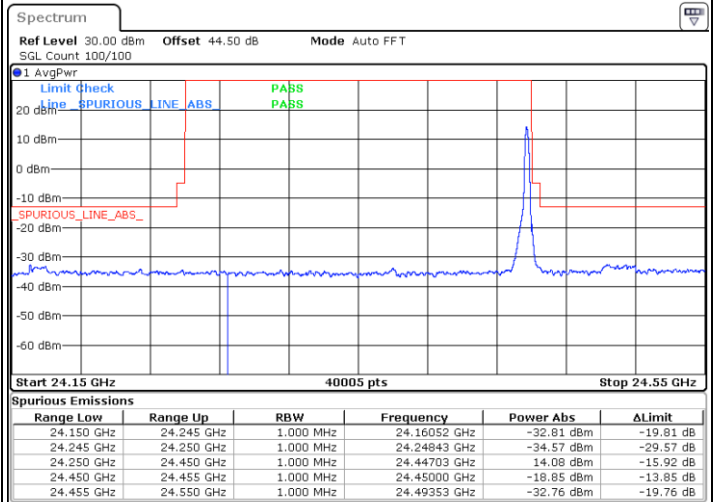


NR Band n258a/ 50MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

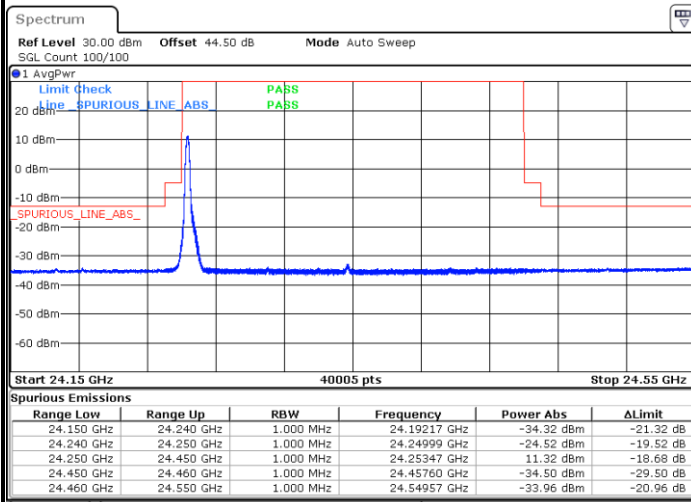




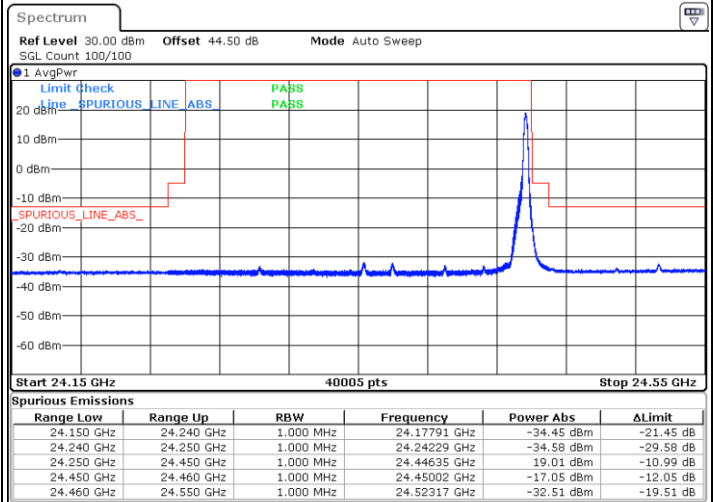
DFT-s-OFDM Module 1

NR Band n258a/ 100MHz / BPSK

Lowest Band Edge / 1 RB

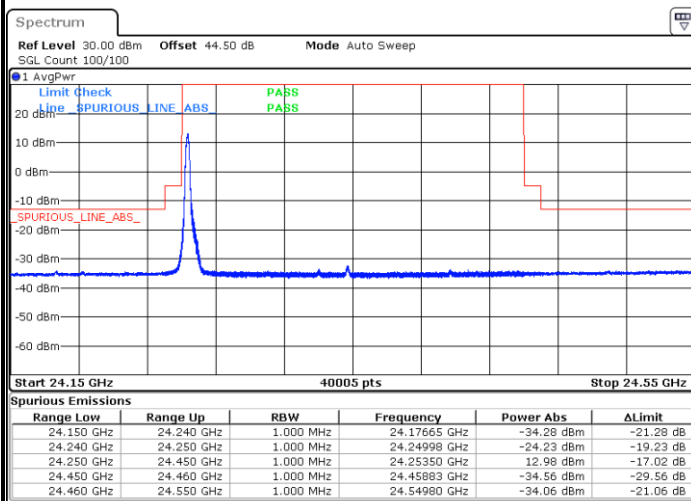


Highest Band Edge / 1 RB

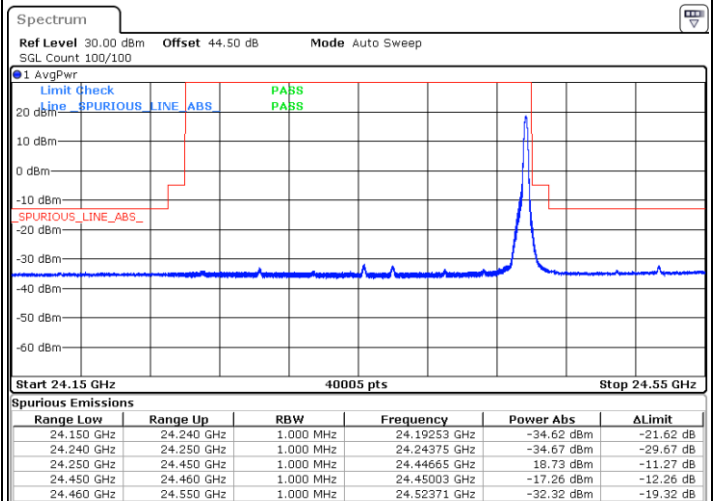


NR Band n258a/ 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

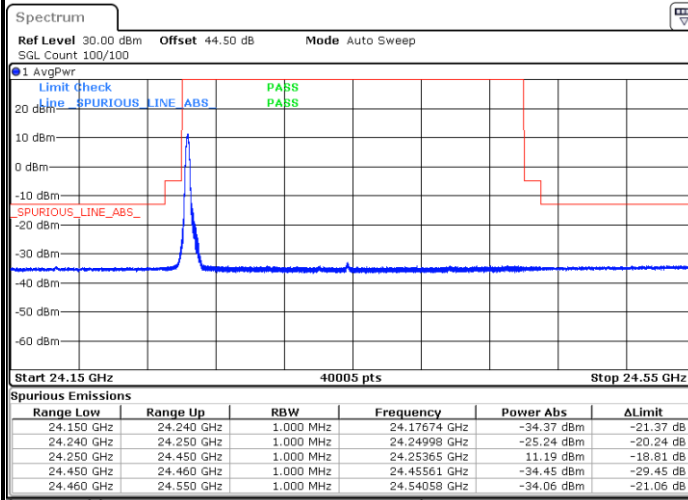




DFT-s-OFDM Module 1

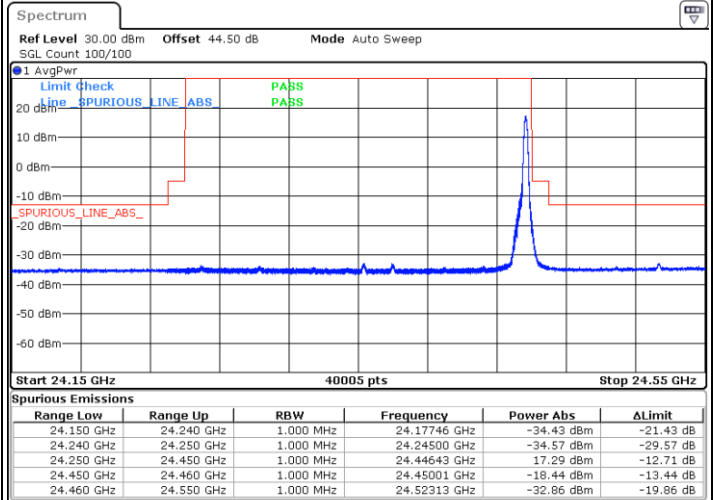
NR Band n258a/ 100MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 22.JUL.2020 23:39:03

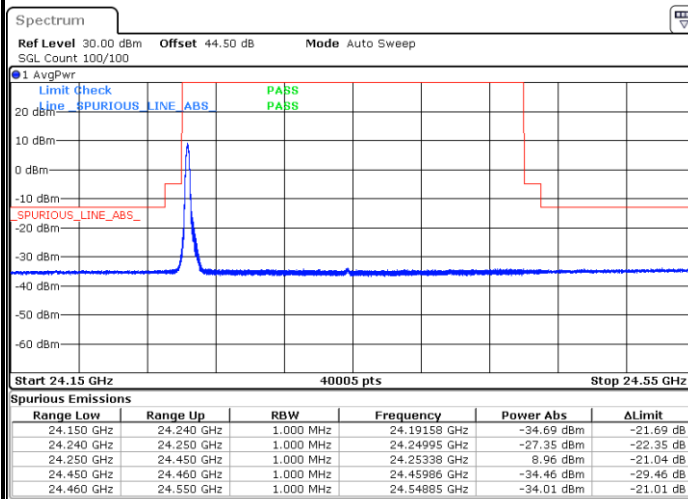
Highest Band Edge / 1 RB



Date: 23.JUL.2020 21:37:32

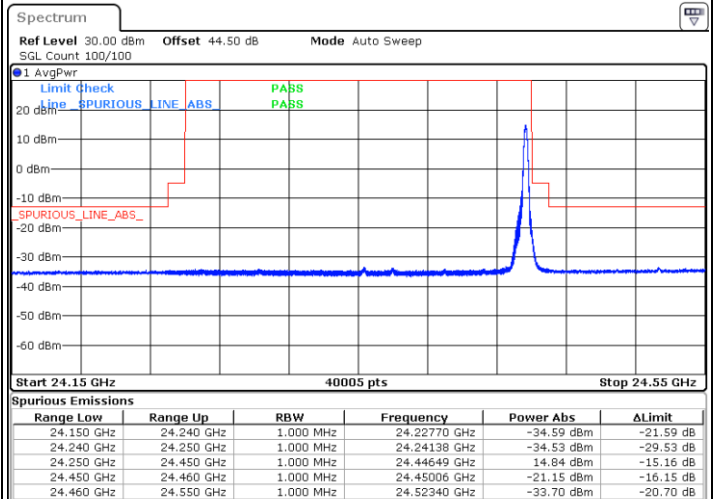
NR Band n258a/ 100MHz / 64QAM

Lowest Band Edge / 1 RB



Date: 22.JUL.2020 23:37:58

Highest Band Edge / 1 RB



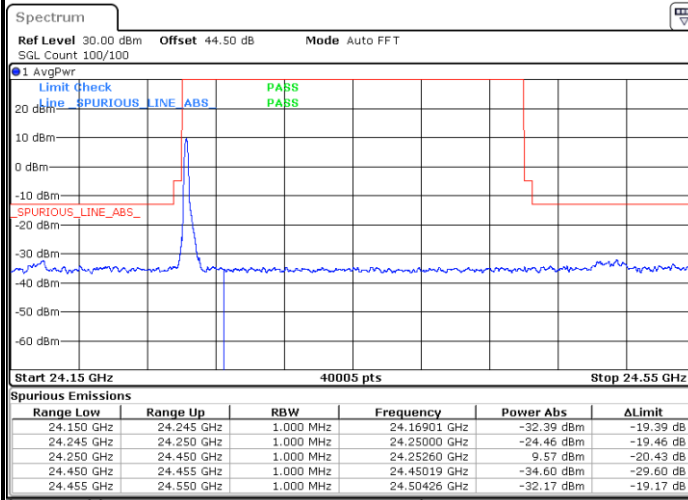
Date: 23.JUL.2020 21:38:39



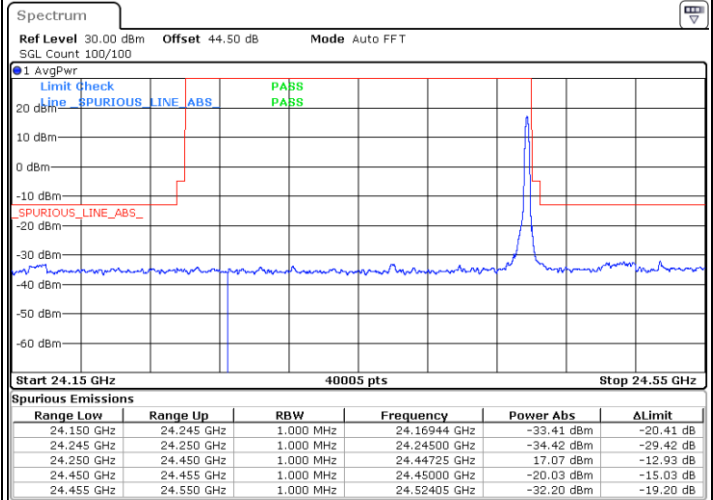
CP-OFDM Module 1

NR Band n258a/ 50MHz / QPSK

Lowest Band Edge / 1 RB

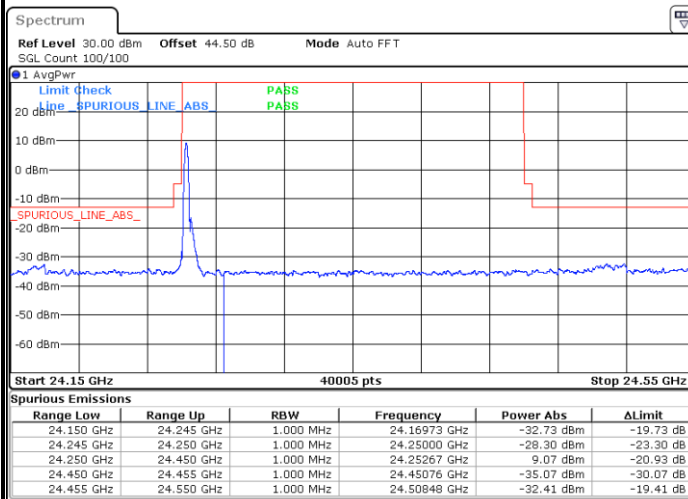


Highest Band Edge / 1 RB

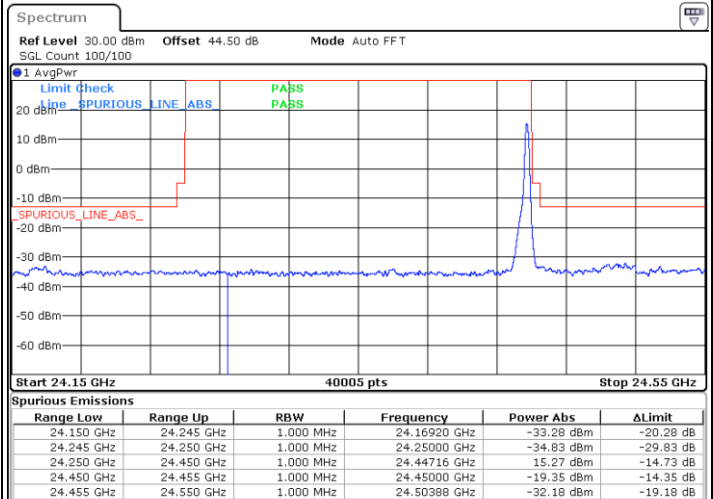


NR Band n258a/ 50MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

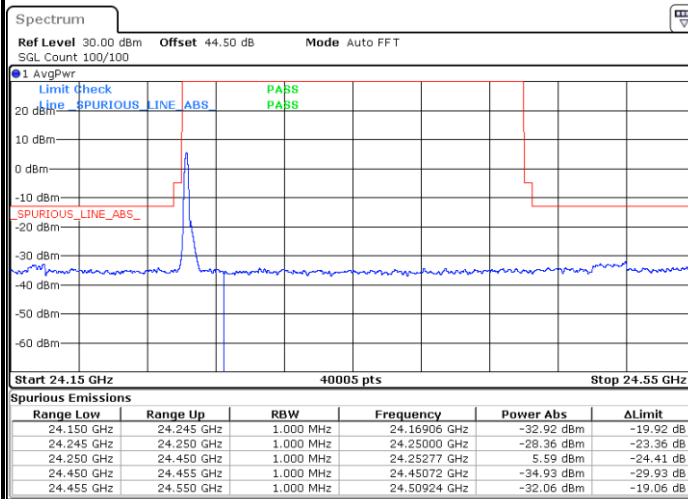




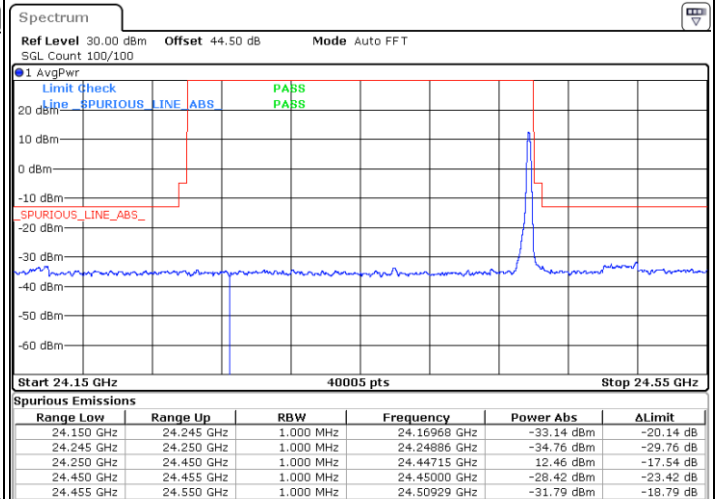
CP-OFDM Module 1

NR Band n258a/ 50MHz / 64QAM

Lowest Band Edge / 1 RB

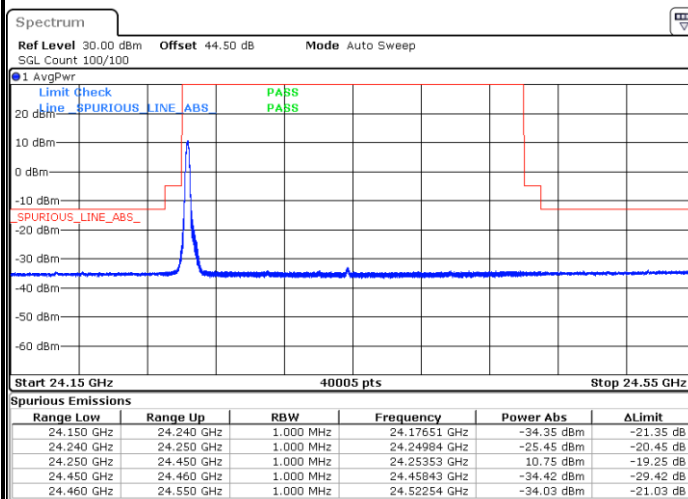


Highest Band Edge / 1 RB

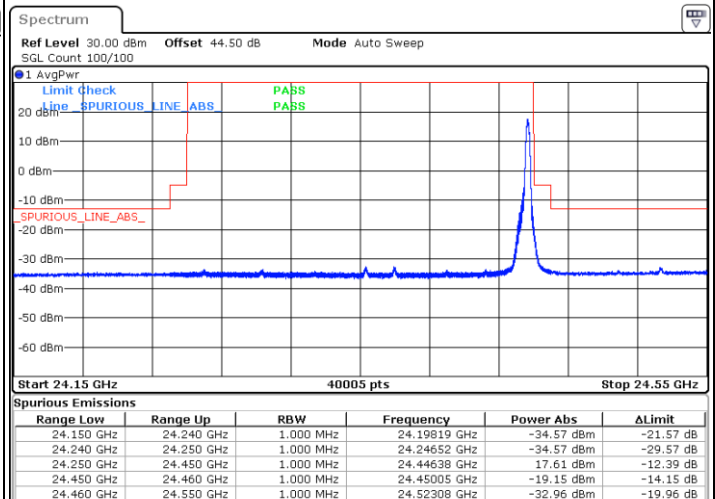


NR Band n258a/ 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

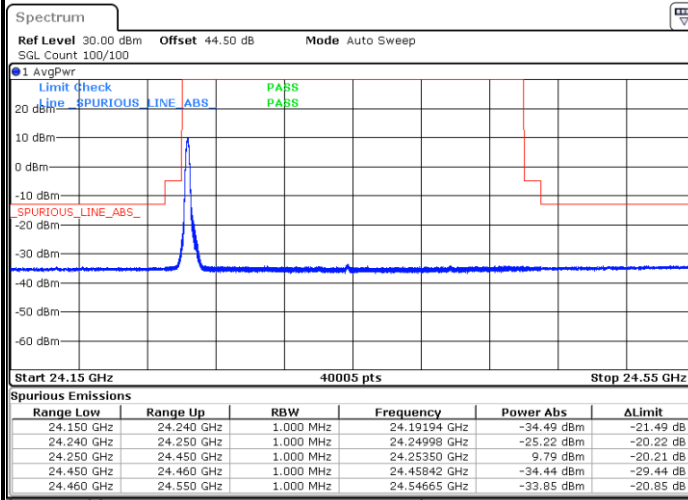




CP-OFDM Module 1

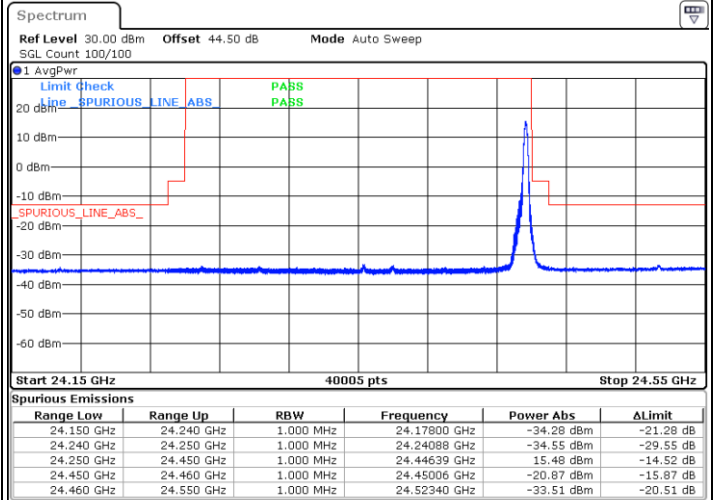
NR Band n258a/ 100MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 22.JUL.2020 23:27:48

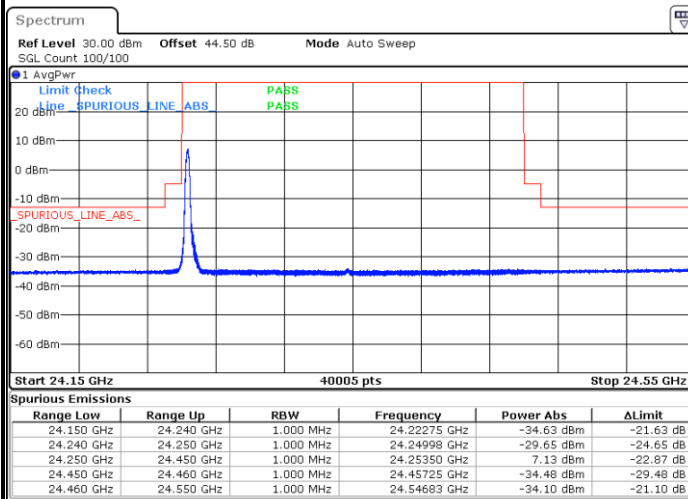
Highest Band Edge / 1 RB



Date: 23.JUL.2020 21:42:21

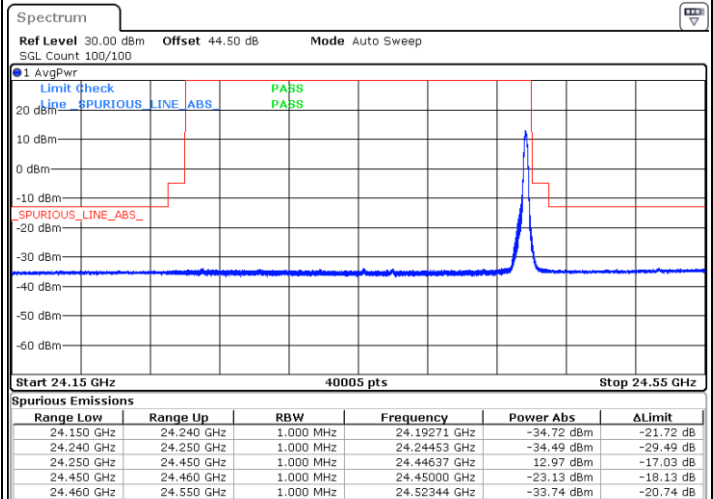
NR Band n258a/ 100MHz / 64QAM

Lowest Band Edge / 1 RB



Date: 22.JUL.2020 23:28:52

Highest Band Edge / 1 RB



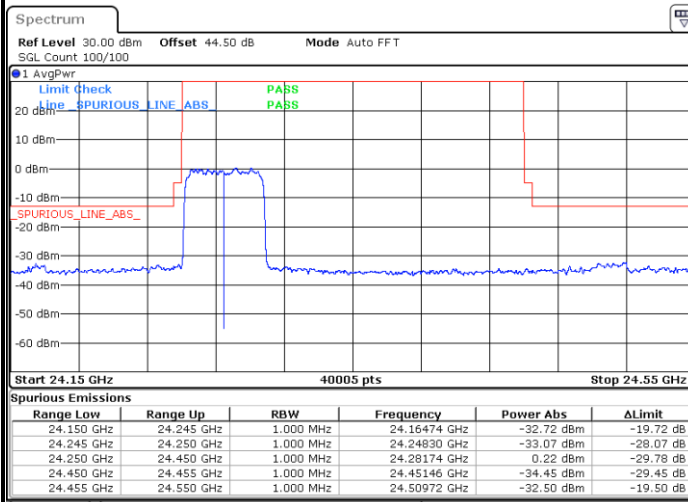
Date: 23.JUL.2020 21:40:53



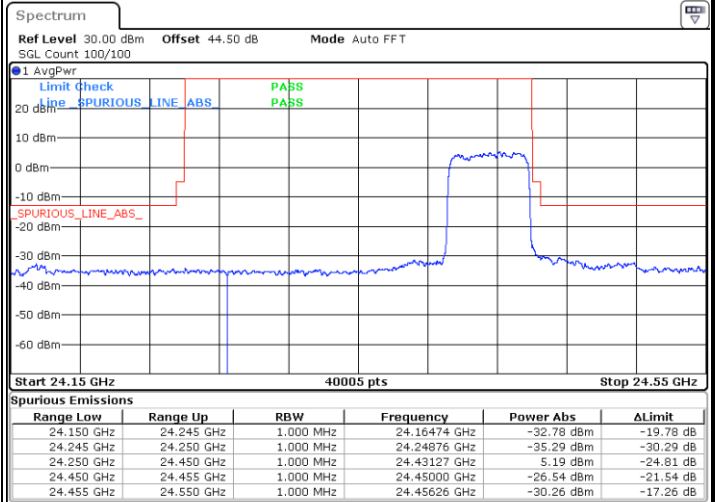
DFT-s-OFDM Module 1

NR Band n258a/ 50MHz / BPSK

Lowest Band Edge / Full RB

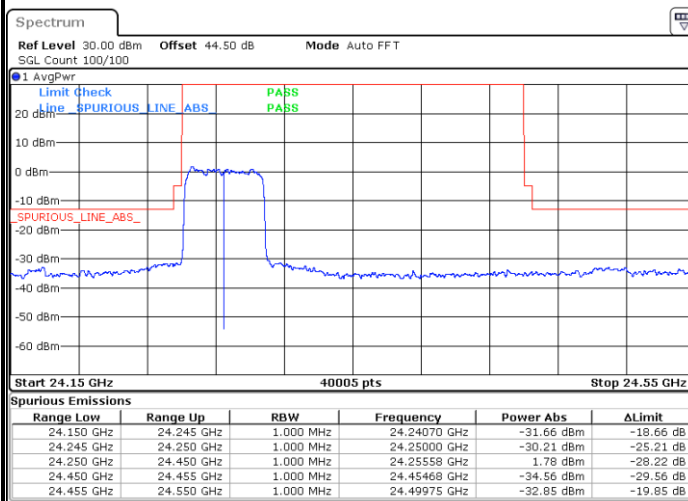


Highest Band Edge / Full RB

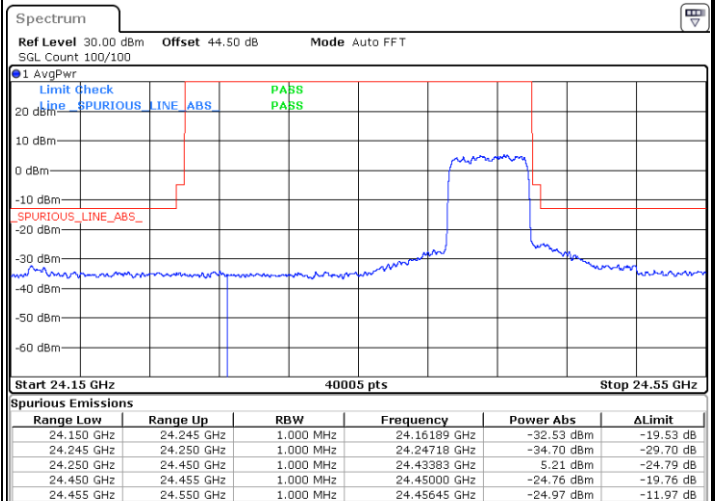


NR Band n258a/ 50MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

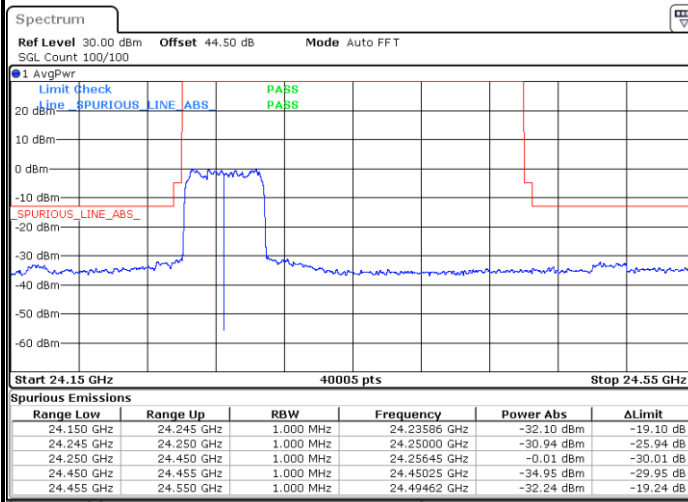




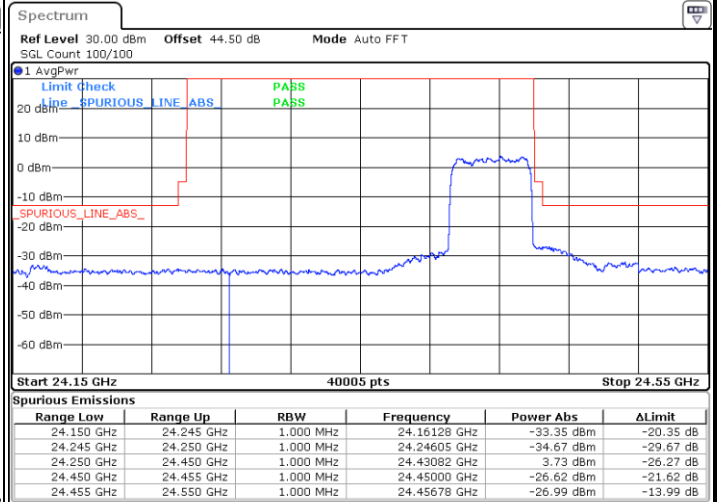
DFT-s-OFDM Module 1

NR Band n258a/ 50MHz / 16QAM

Lowest Band Edge / Full RB

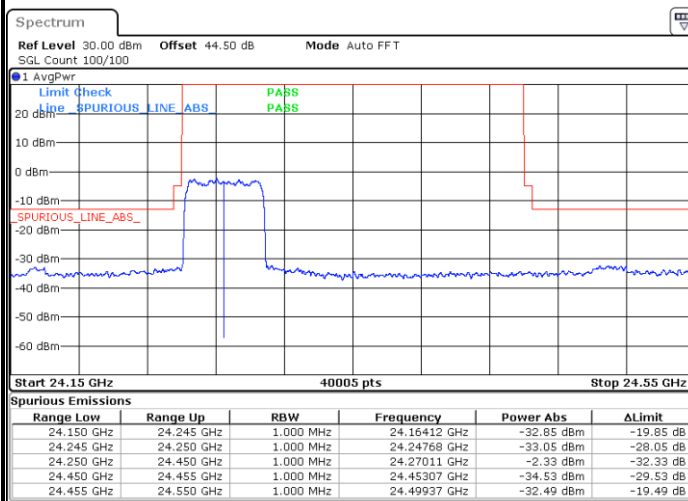


Highest Band Edge / Full RB

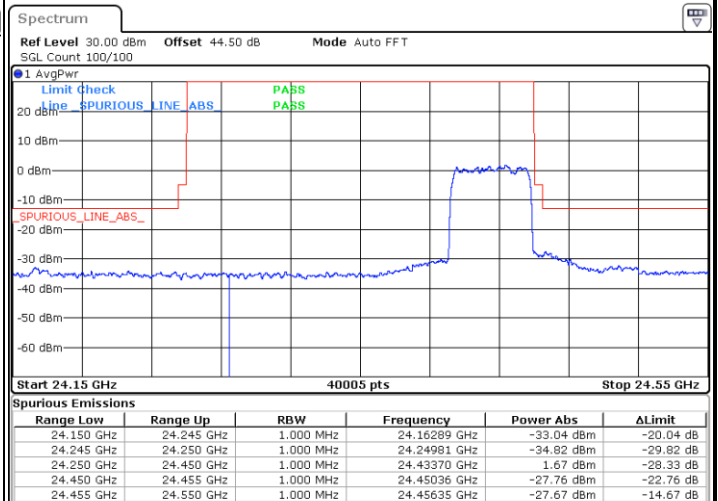


NR Band n258a/ 50MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

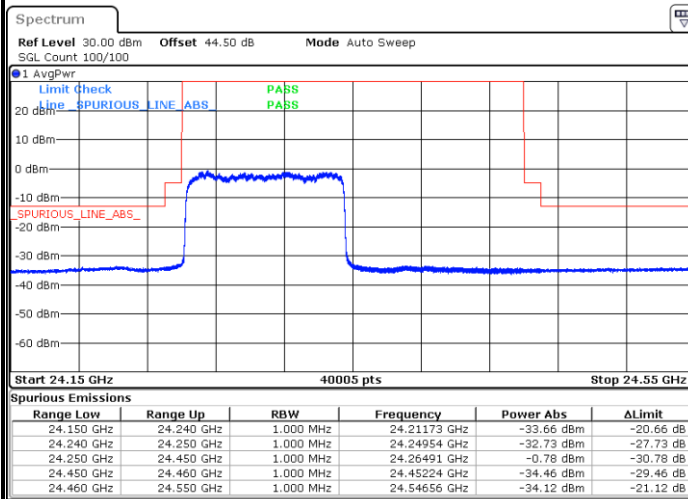




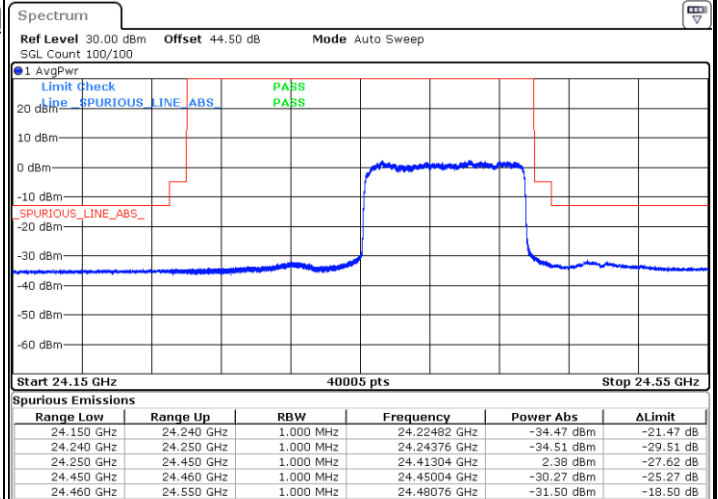
DFT-s-OFDM Module 1

NR Band n258a/ 100MHz / BPSK

Lowest Band Edge / Full RB

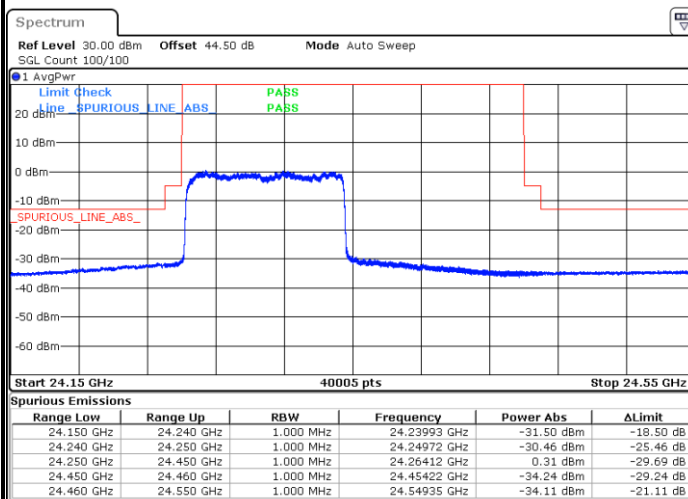


Highest Band Edge / Full RB

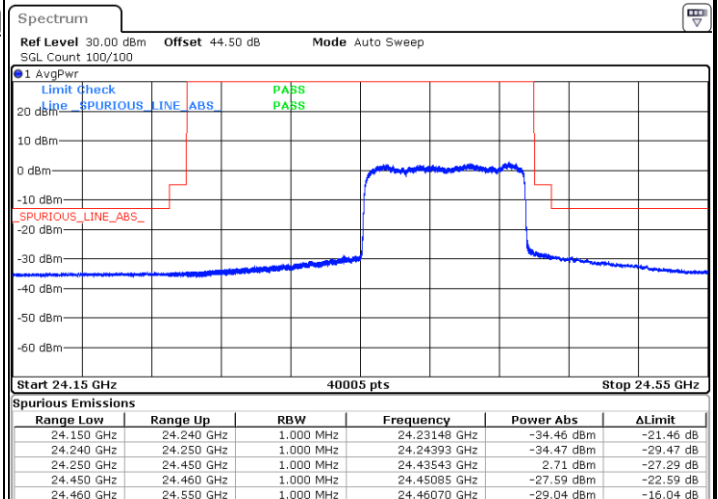


NR Band n258a/ 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

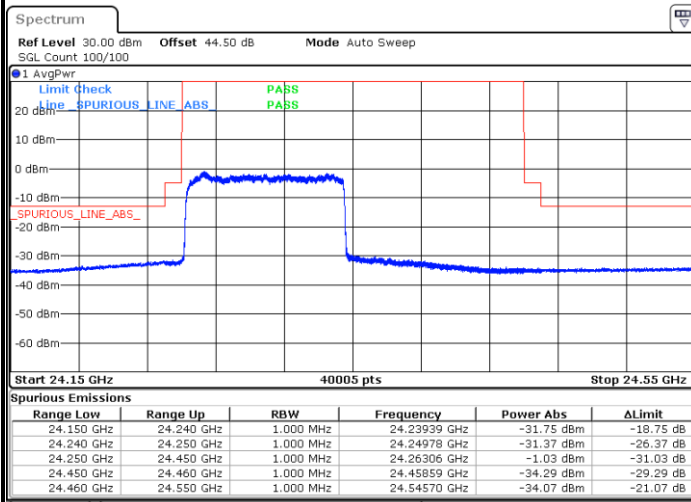




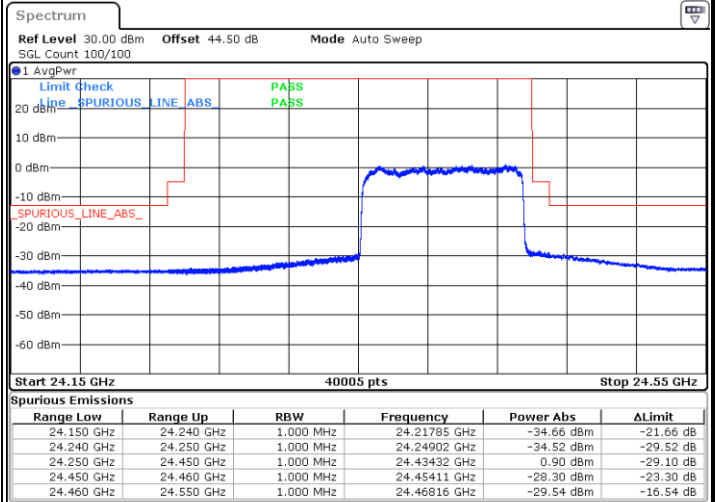
DFT-s-OFDM Module 1

NR Band n258a/ 100MHz / 16QAM

Lowest Band Edge / Full RB

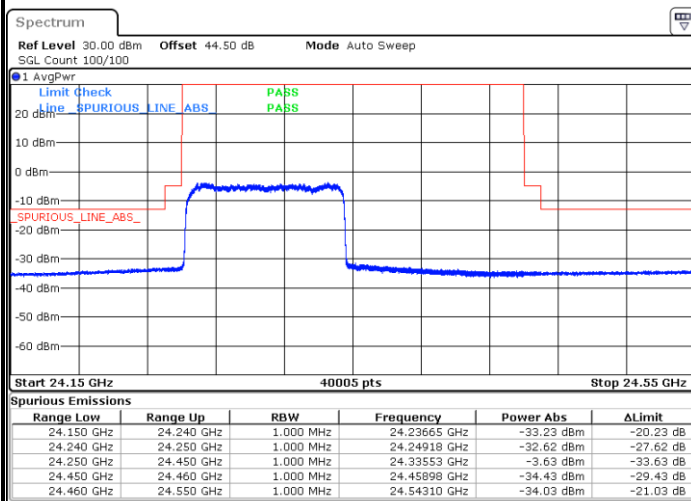


Highest Band Edge / Full RB

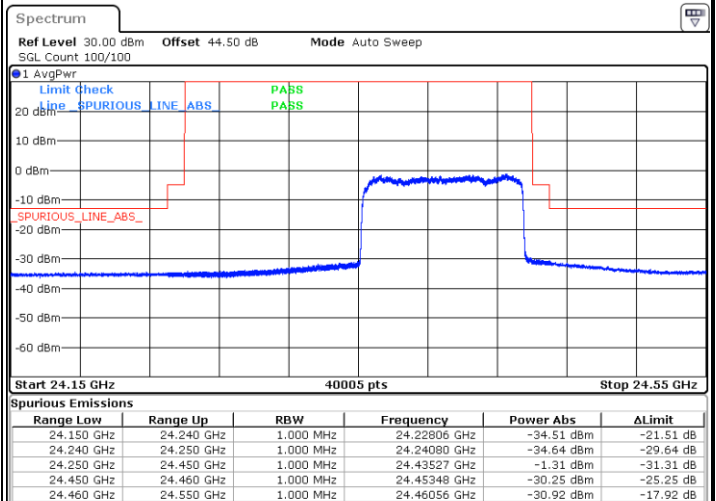


NR Band n258a/ 100MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

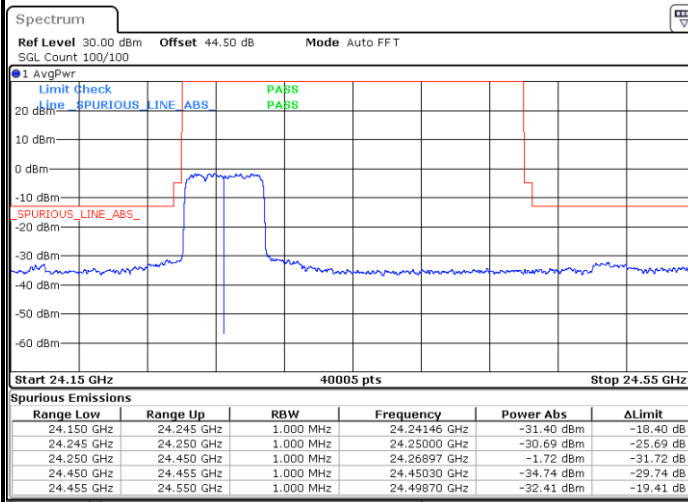




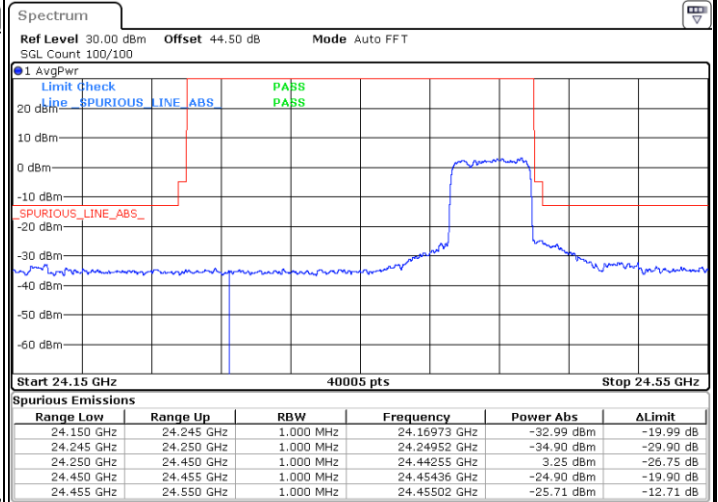
CP-OFDM Module 1

NR Band n258a/ 50MHz / QPSK

Lowest Band Edge / Full RB

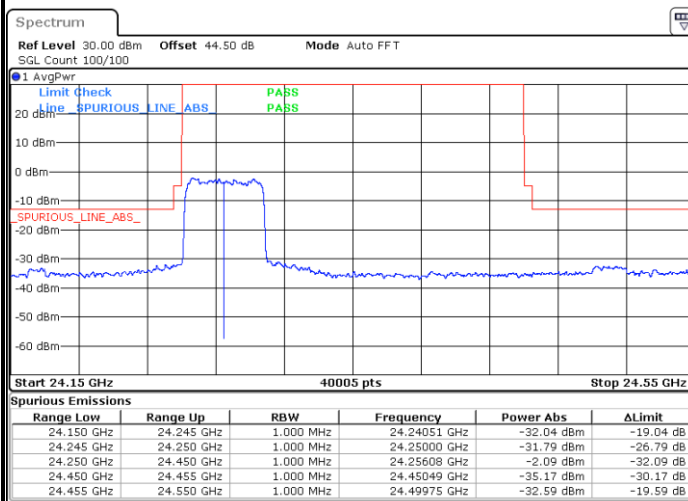


Highest Band Edge / Full RB

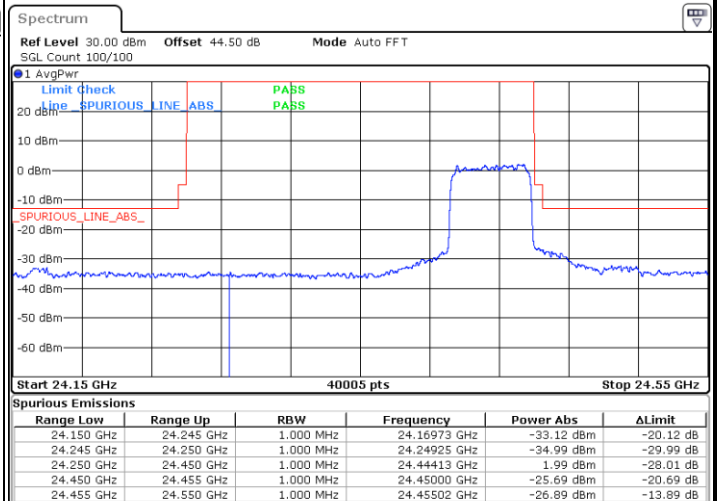


NR Band n258a/ 50MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

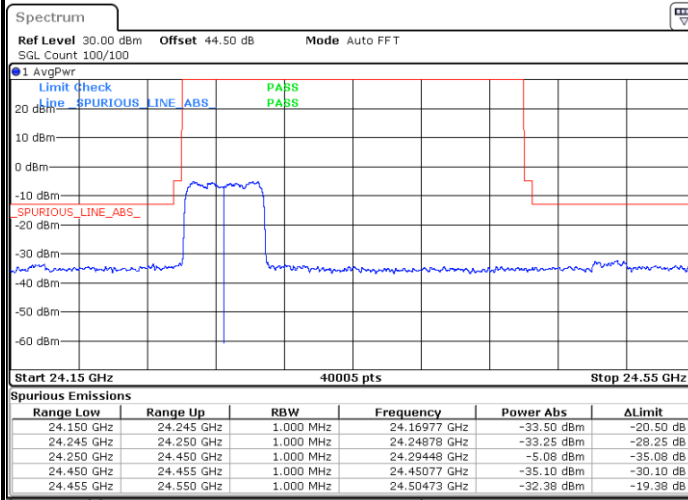




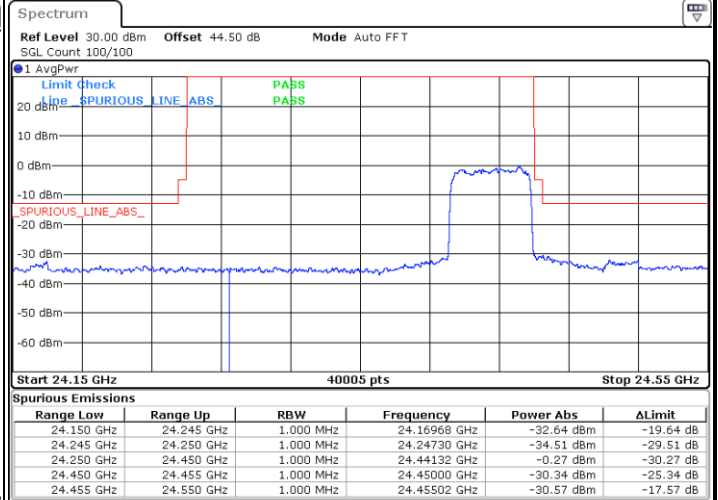
CP-OFDM Module 1

NR Band n258a/ 50MHz / 64QAM

Lowest Band Edge / Full RB

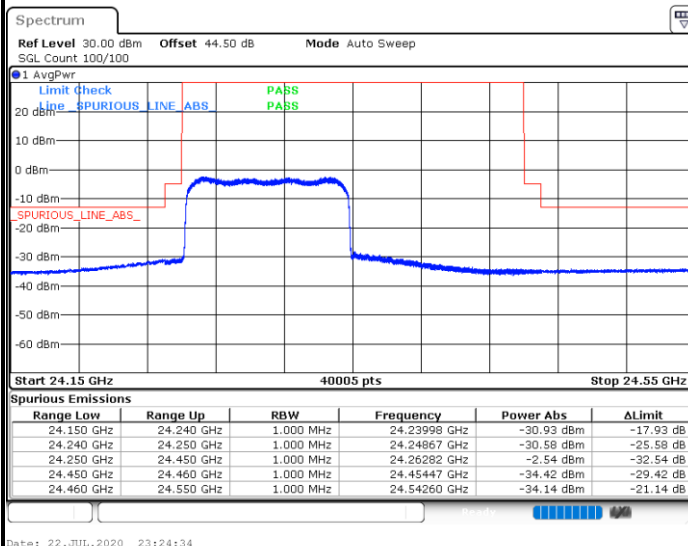


Highest Band Edge / Full RB

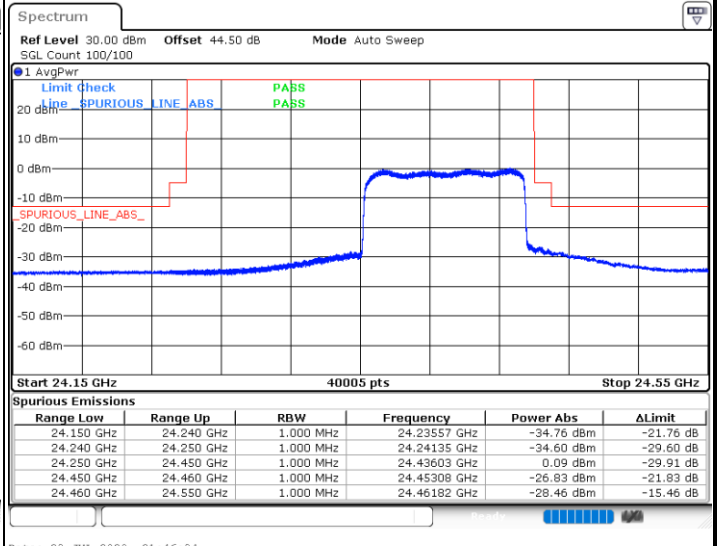


NR Band n258a/ 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

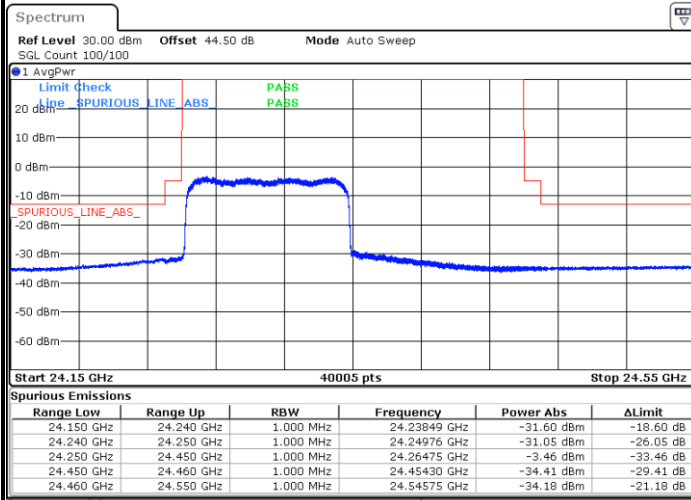




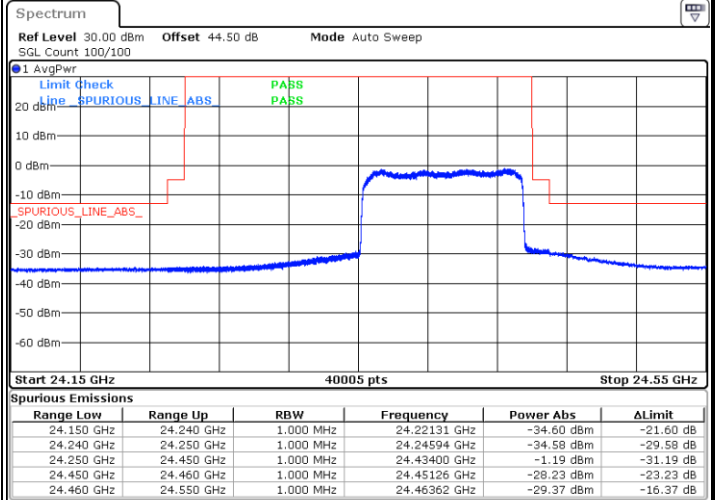
CP-OFDM Module 1

NR Band n258a/ 100MHz / 16QAM

Lowest Band Edge / Full RB

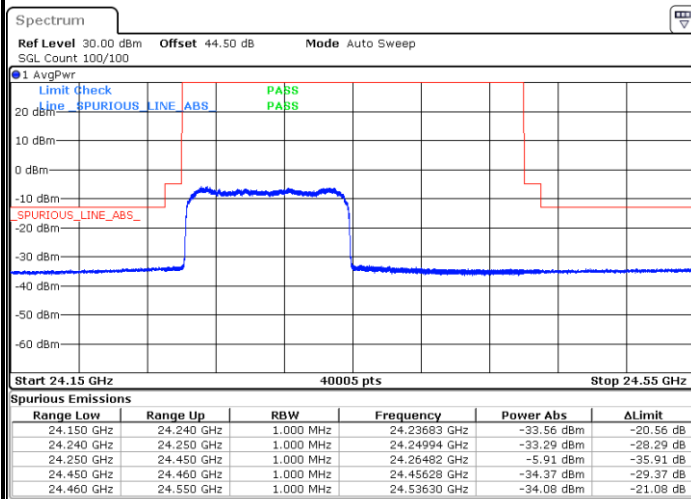


Highest Band Edge / Full RB

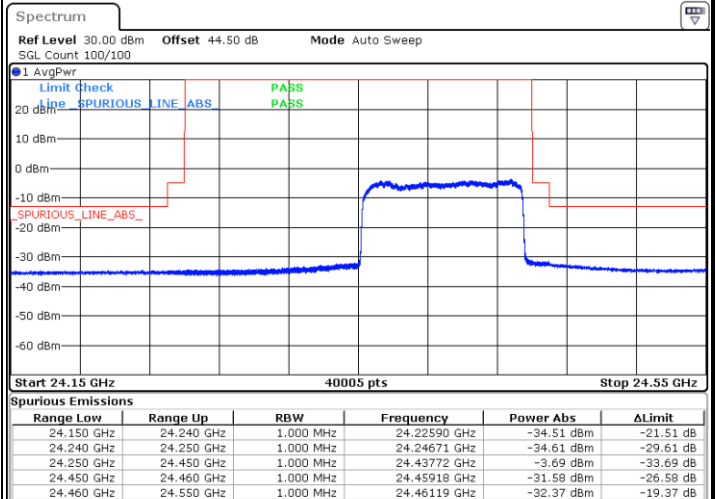


NR Band n258a/ 100MHz / 64QAM

Lowest Band Edge / Full RB



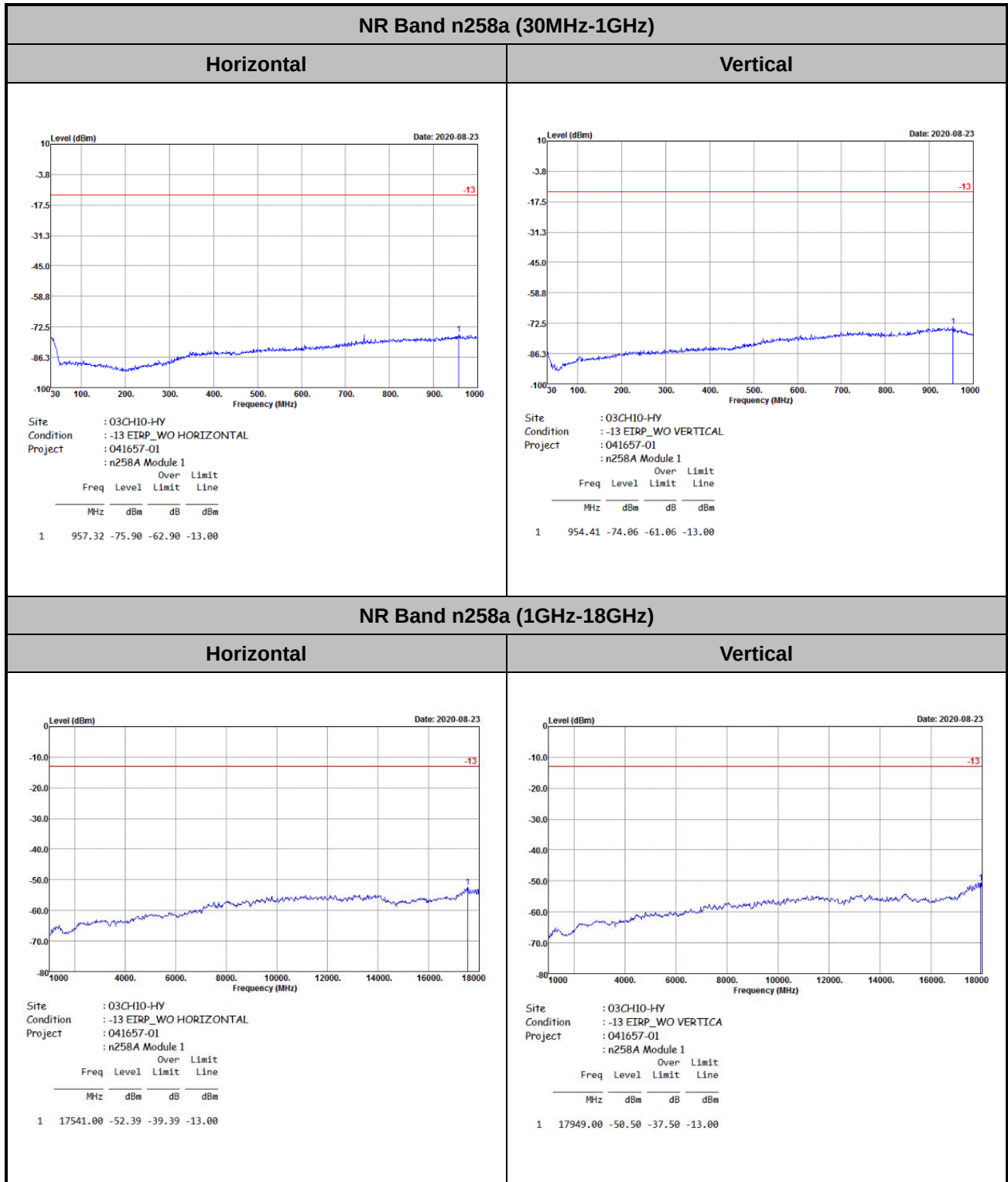
Highest Band Edge / Full RB



Spurious Emission

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

Only the noise floor is reported.



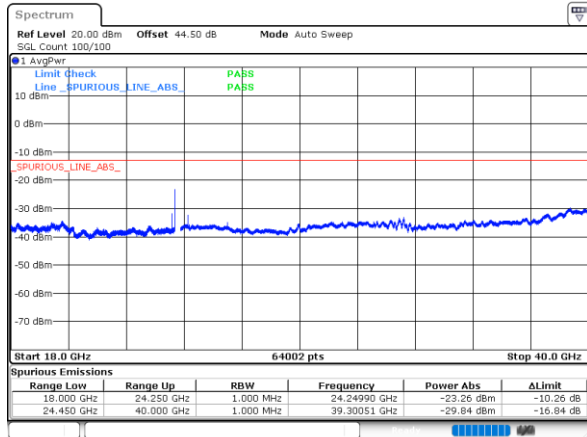


Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

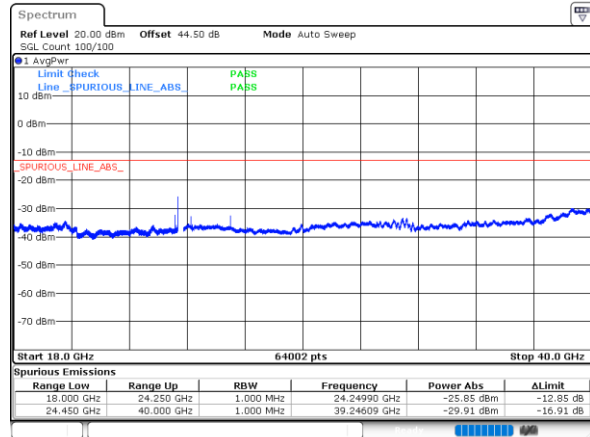
DFT-s-OFDM Module 1

NR Band n258aBPSK (18-40GHz)

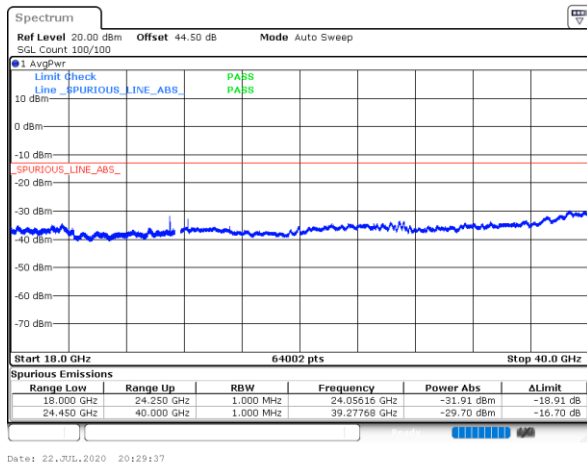
Lowest Channel / 50MHz



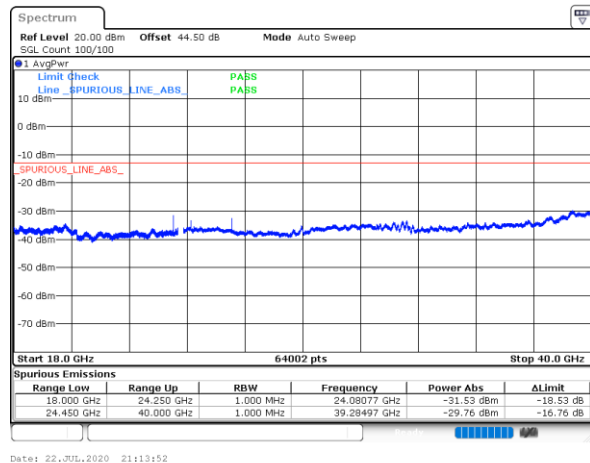
Lowest Channel / 100MHz



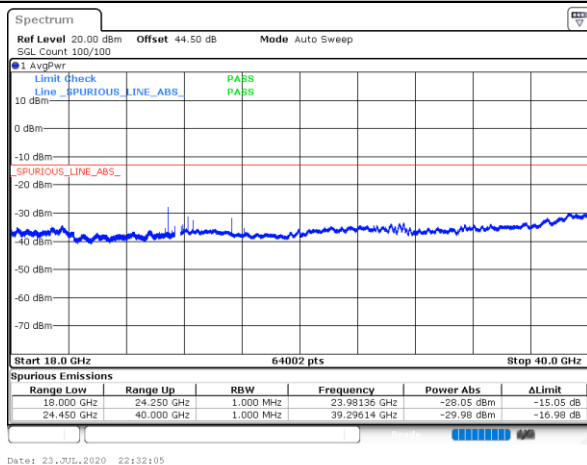
Middle Channel / 50MHz



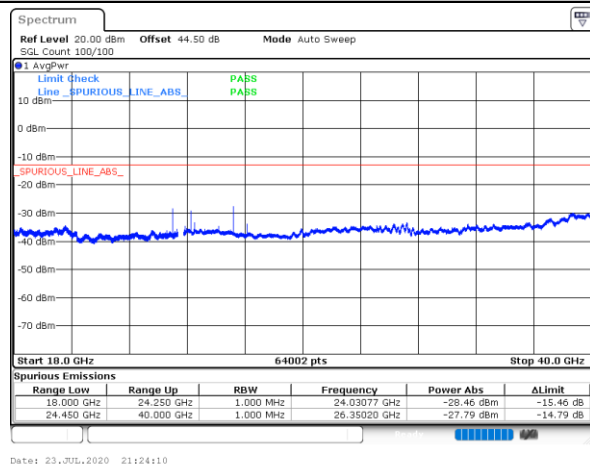
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

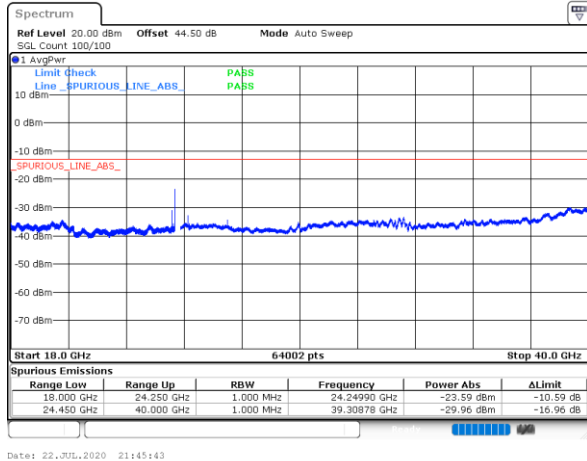




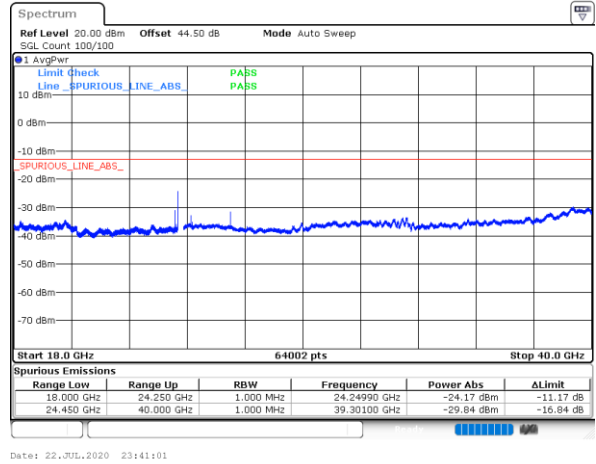
DFT-s-OFDM Module 1

NR Band n258aQPSK (18-40GHz)

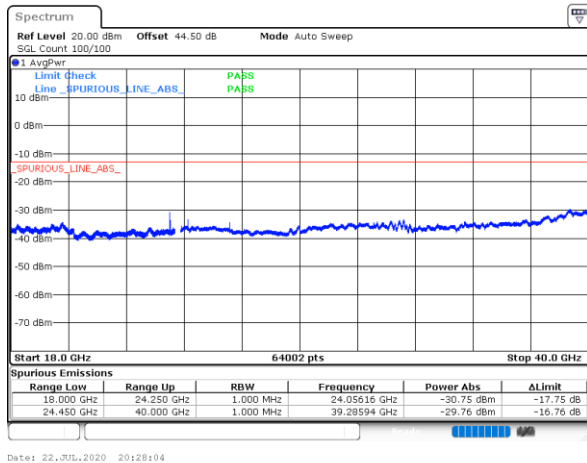
Lowest Channel / 50MHz



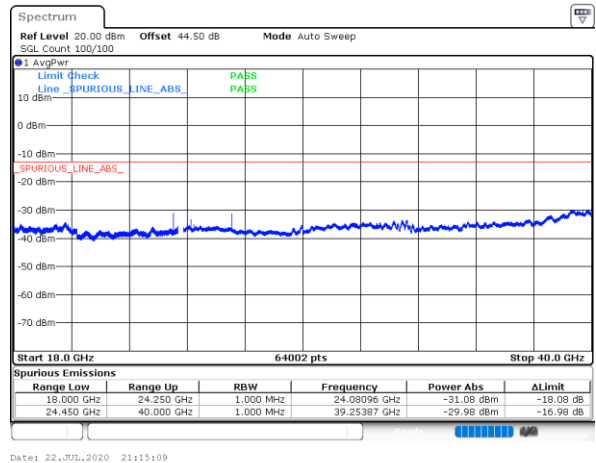
Lowest Channel / 100MHz



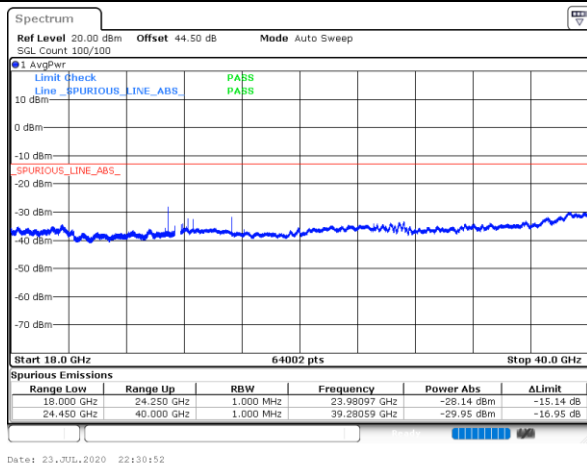
Middle Channel / 50MHz



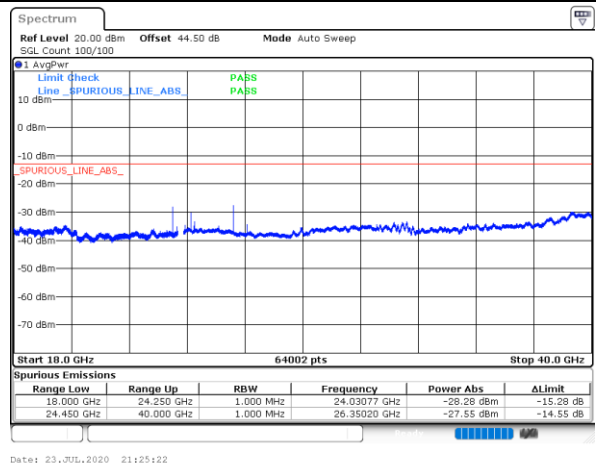
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

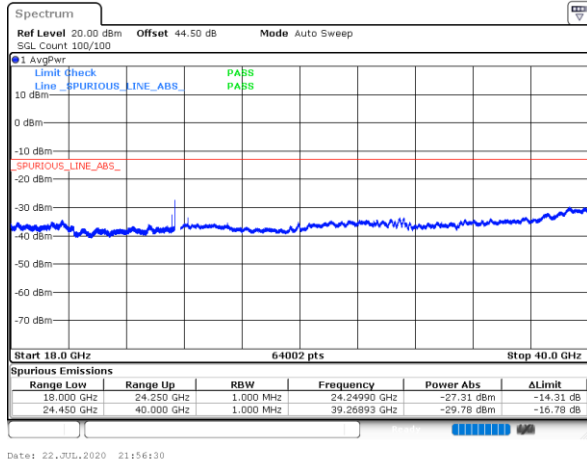




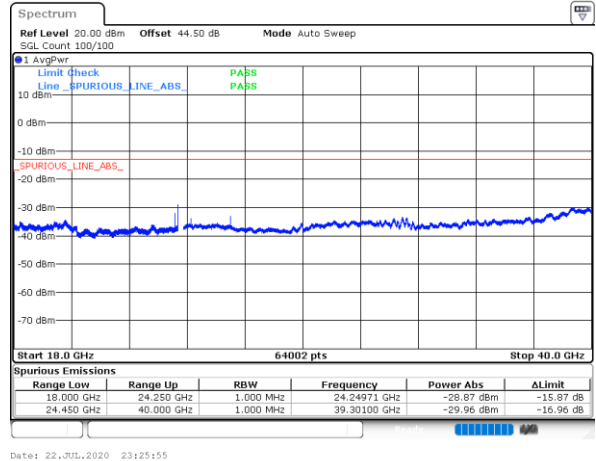
CP-OFDM Module 1

NR Band n258aQPSK (18-40GHz)

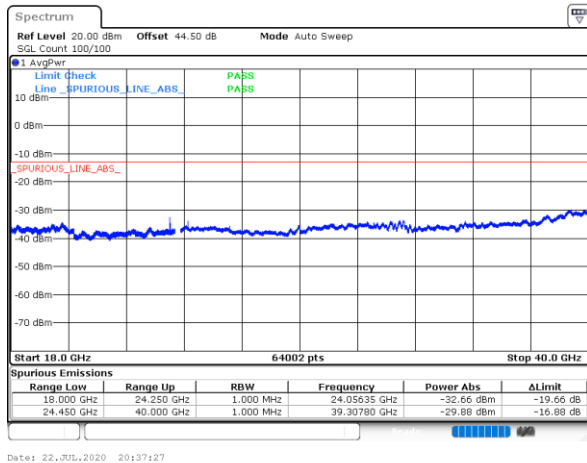
Lowest Channel / 50MHz



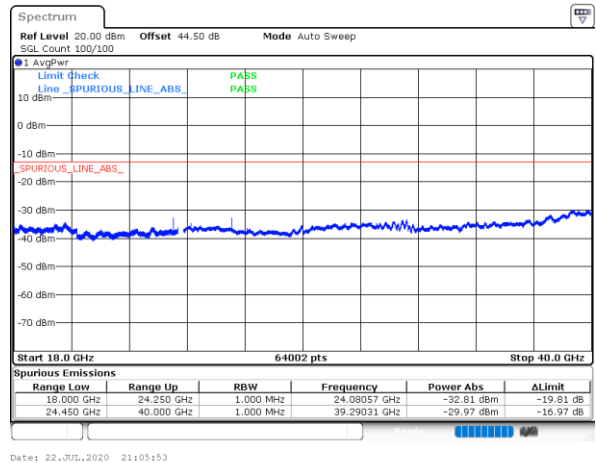
Lowest Channel / 100MHz



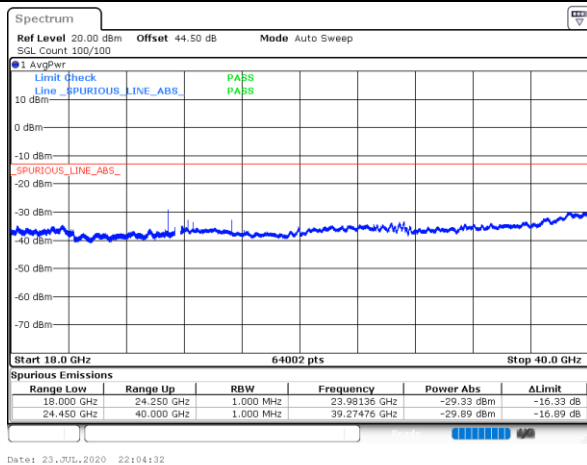
Middle Channel / 50MHz



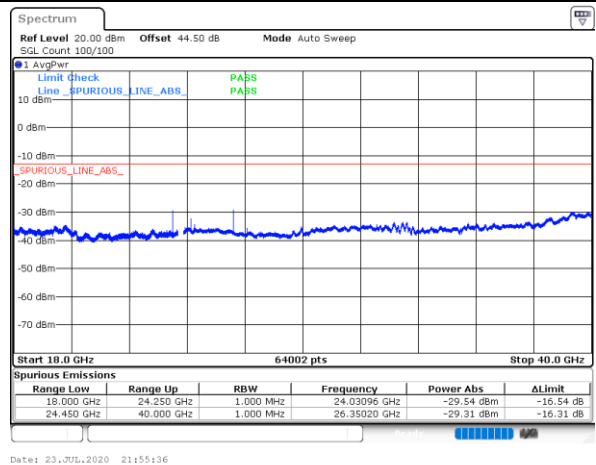
Middle Channel / 100MHz



Highest Channel / 50MHz

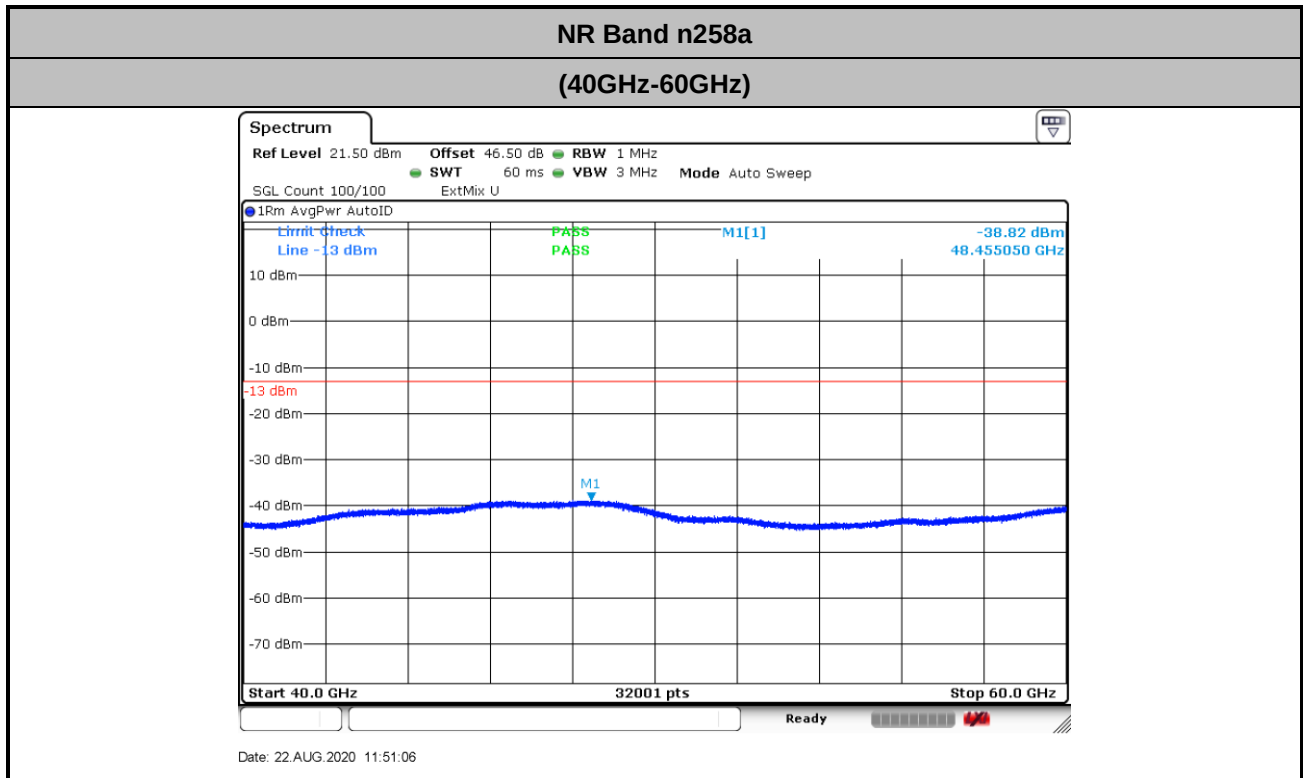


Highest Channel / 100MHz

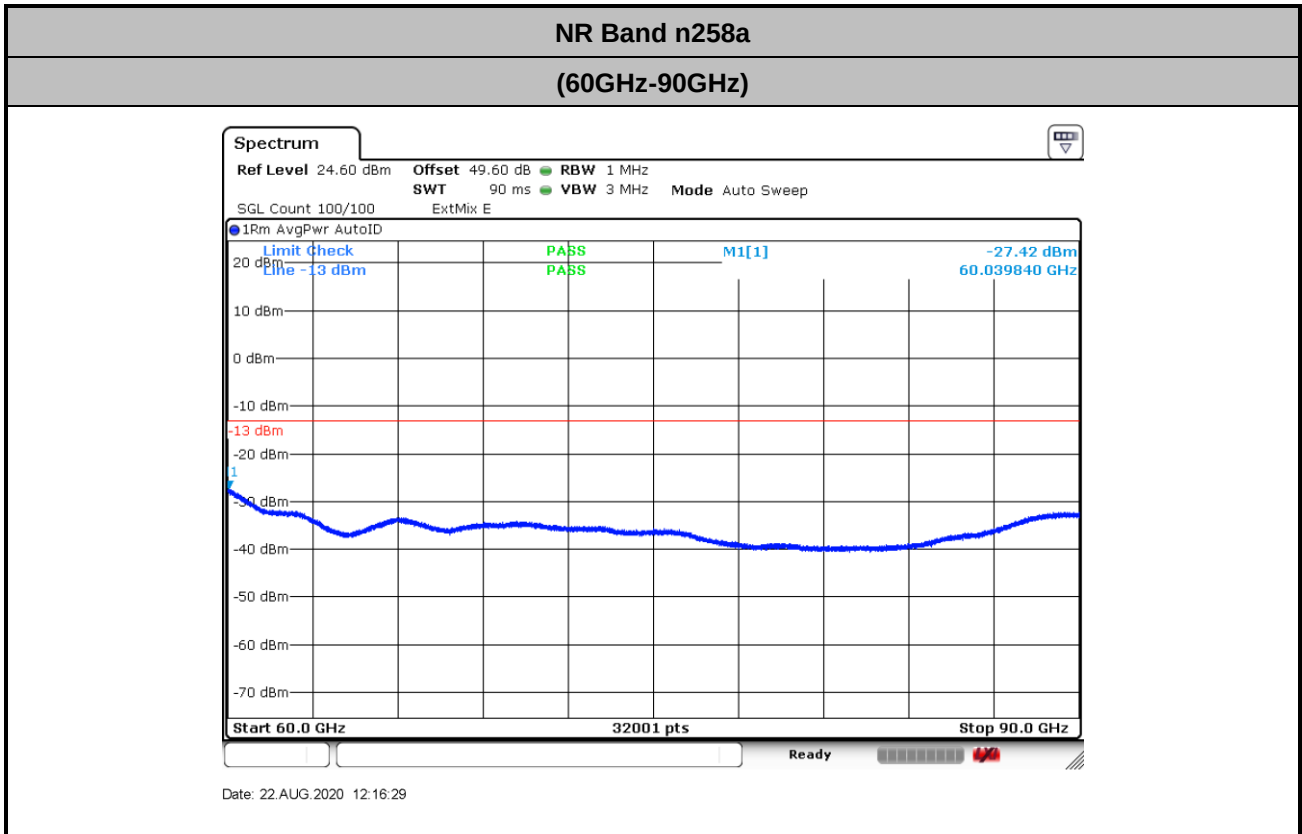




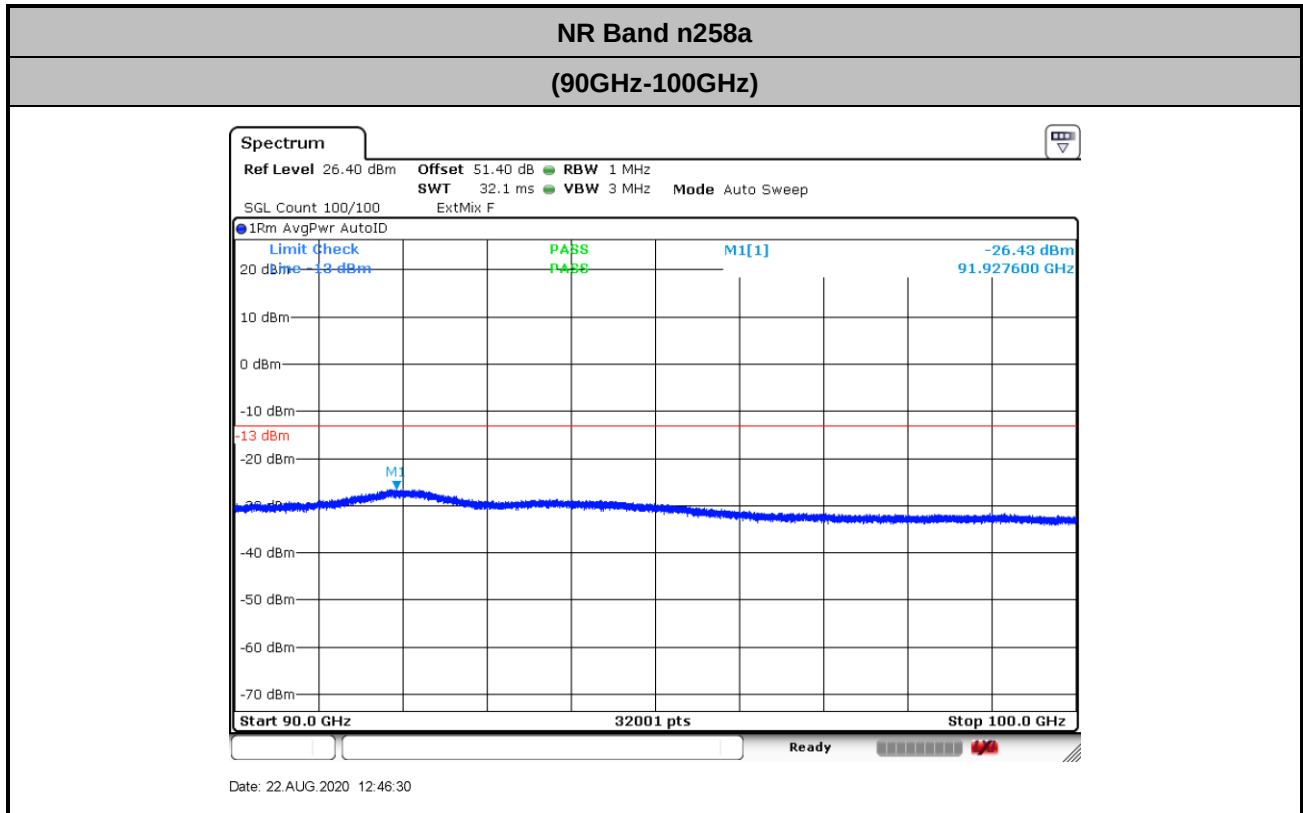
There is no significant spurious emission signal found for frequency started from 40GHz up to 100GHz.
Only the noise floor is reported.



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



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



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



NR Band n258a Module 1 AG1

Occupied Bandwidth

Mode	DFT-s-OFDM Module 1 NR Band n258a: 99%OBW(MHz)							
BW	50MHz				100MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	45.22	45.24	45.02	45.26	90.24	90.68	90.56	90.36
Middle CH	45.32	45.38	45.42	45.32	90.84	90.68	90.64	90.48
Highest CH	45.54	45.1	45.36	45.36	90.24	90.20	89.68	90.08

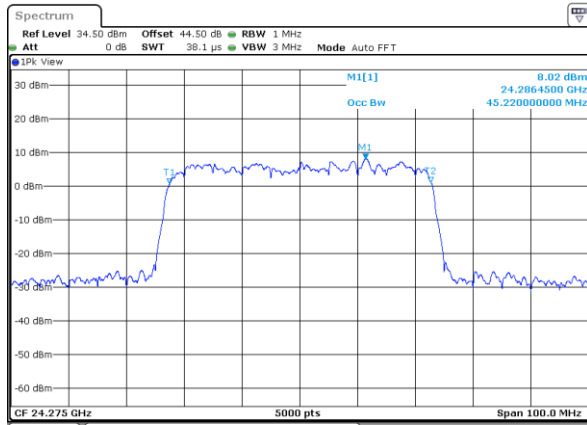
Mode	CP-OFDM Module 1 NR Band n258a: 99%OBW(MHz)					
BW	50MHz			100MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.24	45.16	45.18	92.88	92.88	92.88
Middle CH	45.32	45.26	45.32	93.36	93.32	93.28
Highest CH	45.34	45.24	45.28	92.40	92.72	92.88



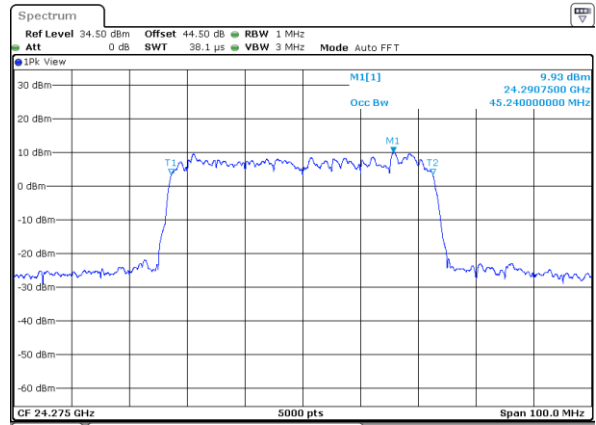
DFT-s-OFDM Module 1

NR Band n258a

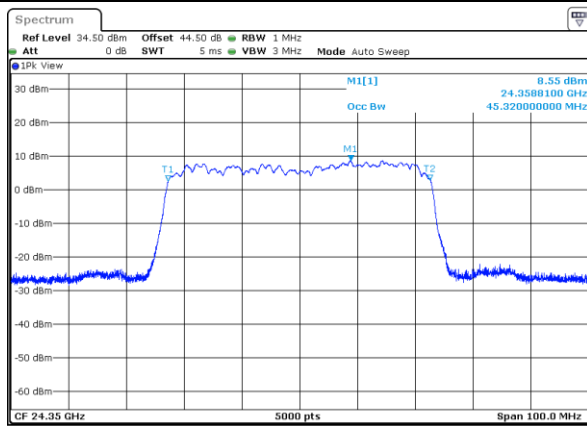
Lowest Channel / 50MHz / BPSK



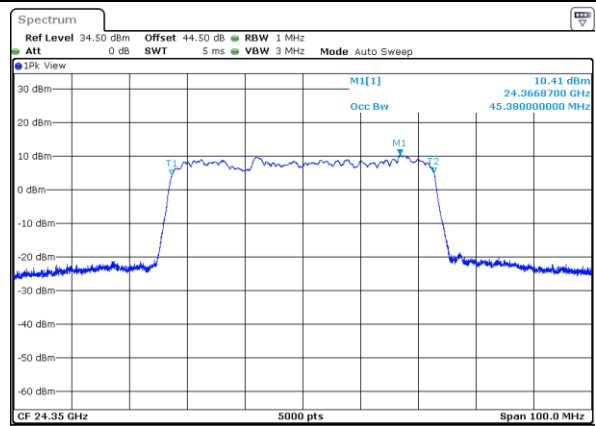
Lowest Channel / 50MHz / QPSK



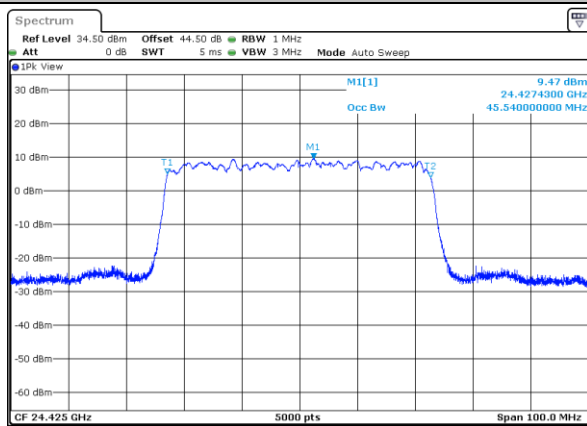
Middle Channel / 50MHz / BPSK



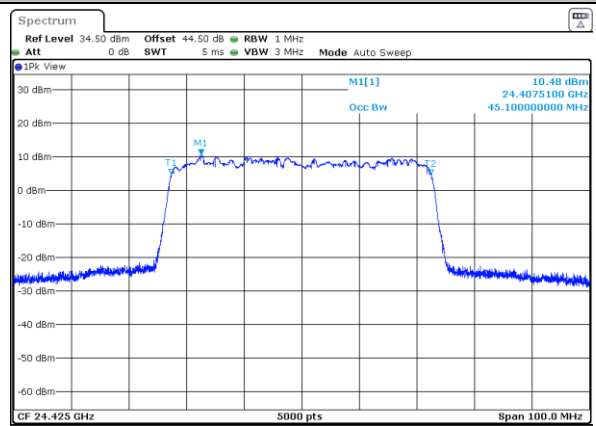
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

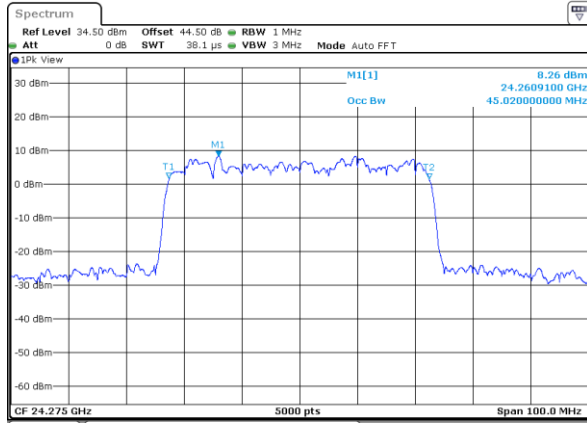




DFT-s-OFDM Module 1

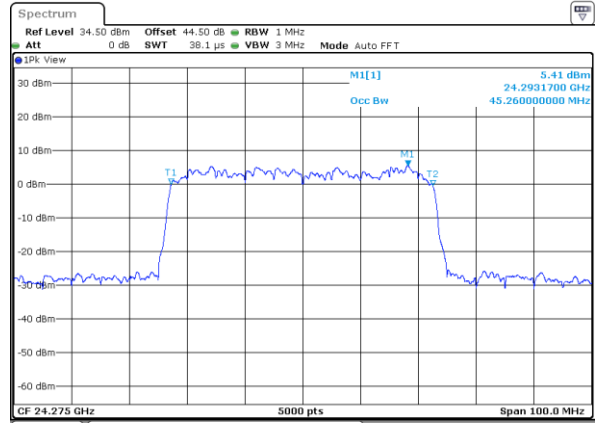
NR Band n258a

Lowest Channel / 50MHz / 16QAM



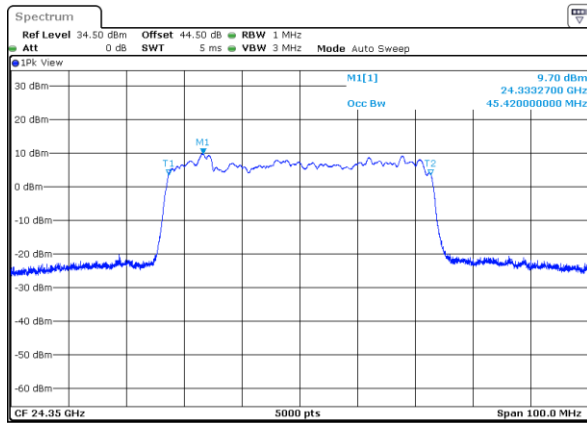
Date: 25.JUL.2020 03:58:47

Lowest Channel / 50MHz / 64QAM



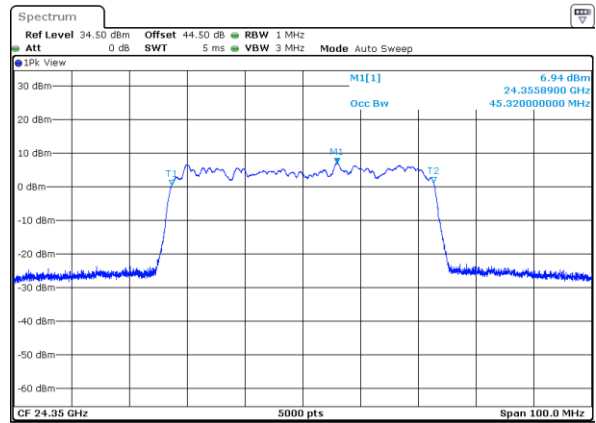
Date: 25.JUL.2020 04:00:54

Middle Channel / 50MHz / 16QAM



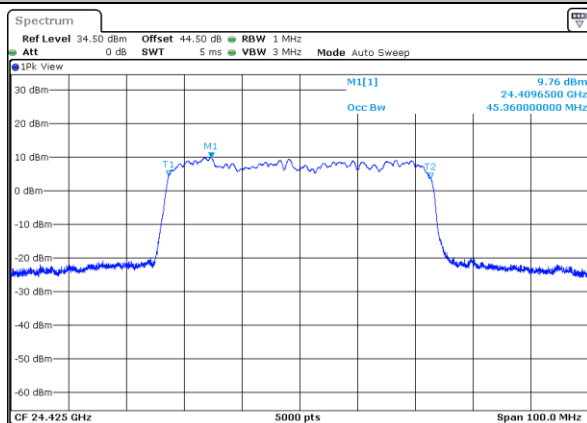
Date: 25.JUL.2020 05:57:43

Middle Channel / 50MHz / 64QAM



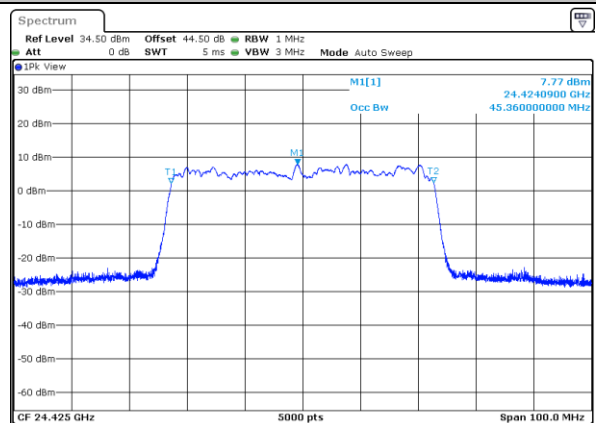
Date: 25.JUL.2020 05:58:25

Highest Channel / 50MHz / 16QAM



Date: 25.JUL.2020 10:29:54

Highest Channel / 50MHz / 64QAM



Date: 25.JUL.2020 10:24:19