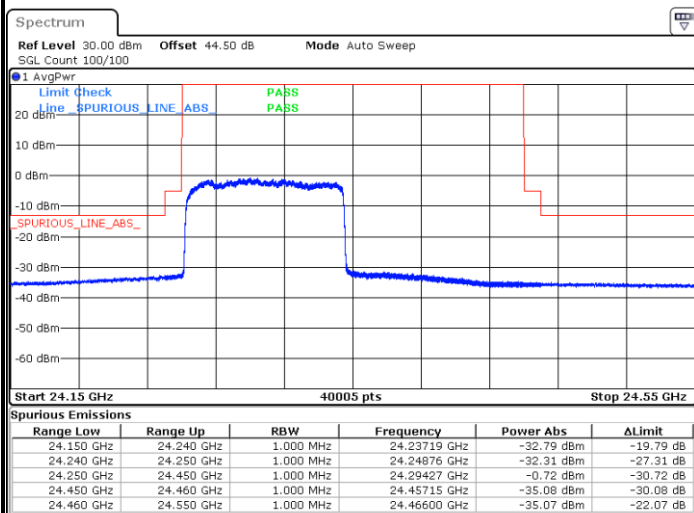




DFT-s-OFDM Module 0

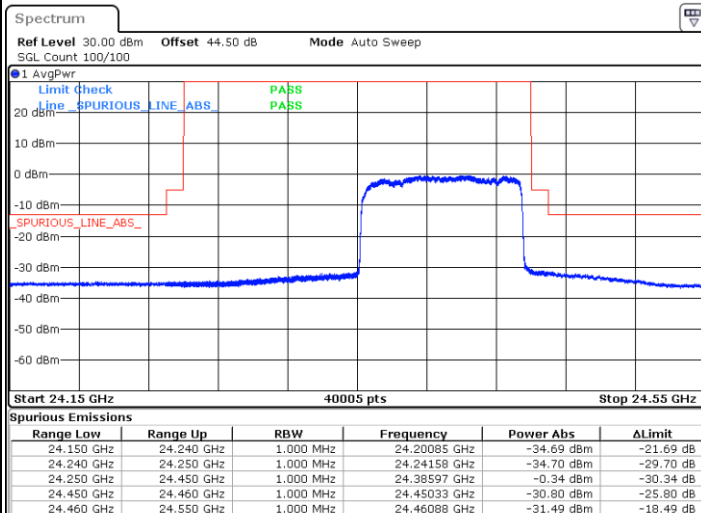
NR Band n258a/ 100MHz / 16QAM

Lowest Band Edge / Full RB



Date: 22.JUL.2020 20:22:29

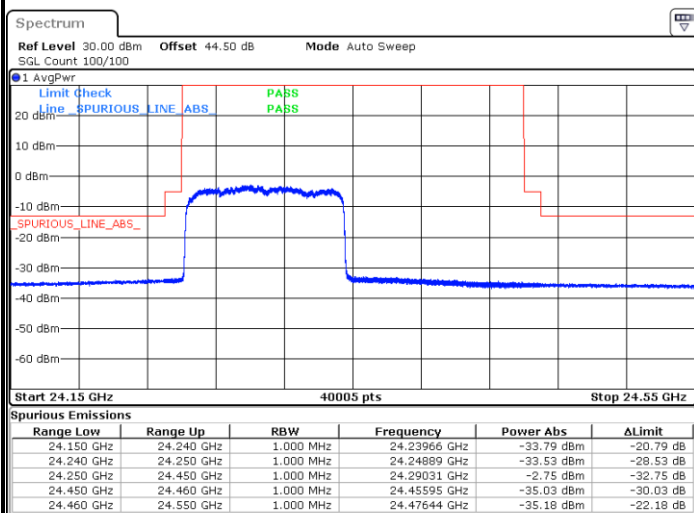
Highest Band Edge / Full RB



Date: 23.JUL.2020 03:27:40

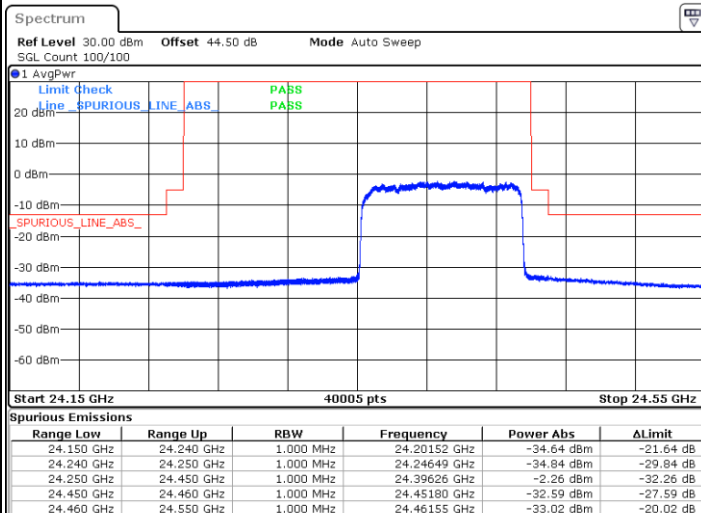
NR Band n258a/ 100MHz / 64QAM

Lowest Band Edge / Full RB



Date: 22.JUL.2020 20:23:37

Highest Band Edge / Full RB



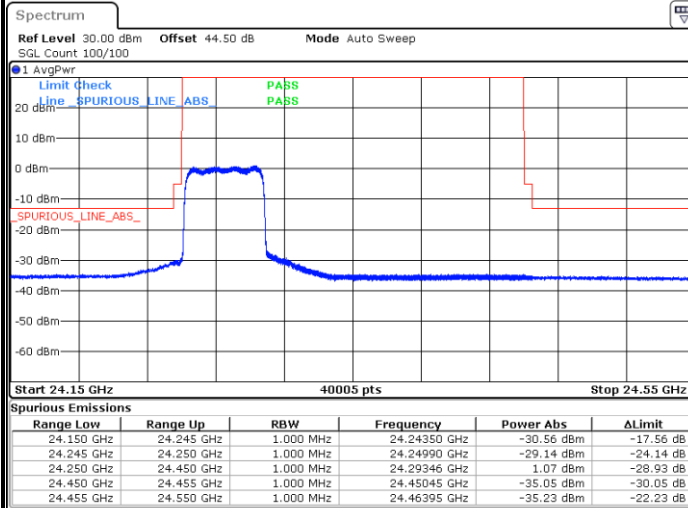
Date: 23.JUL.2020 03:29:14



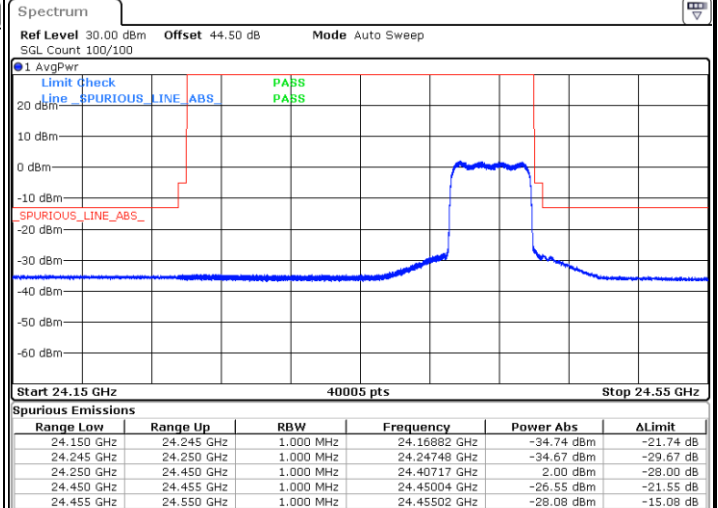
CP-OFDM Module 0

NR Band n258a/ 50MHz / QPSK

Lowest Band Edge / Full RB

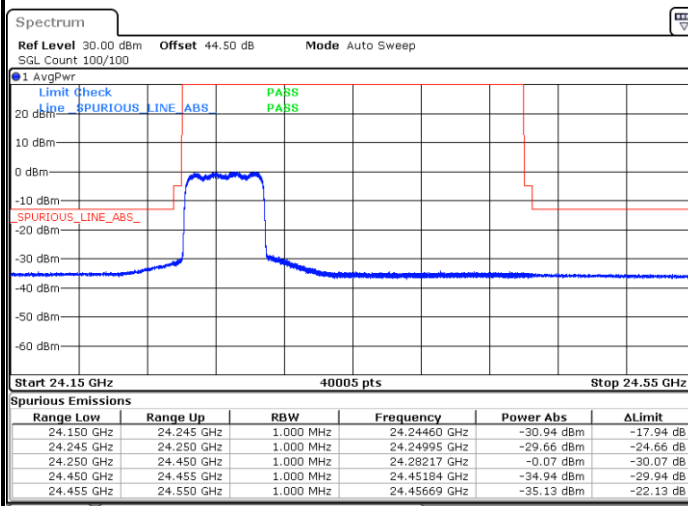


Highest Band Edge / Full RB

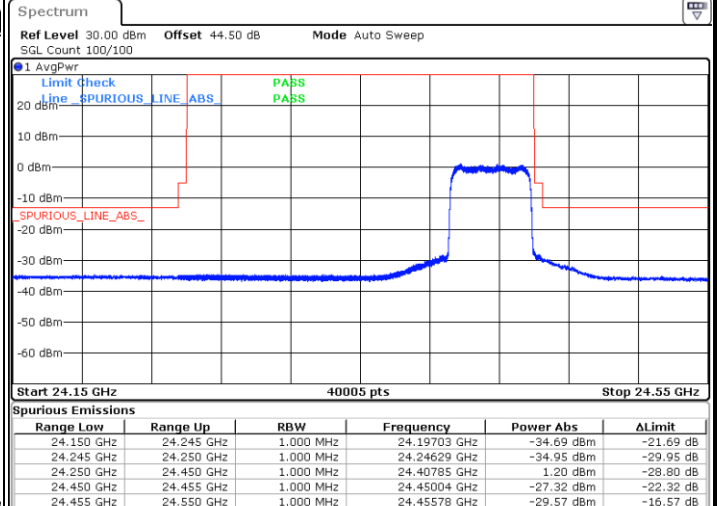


NR Band n258a/ 50MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

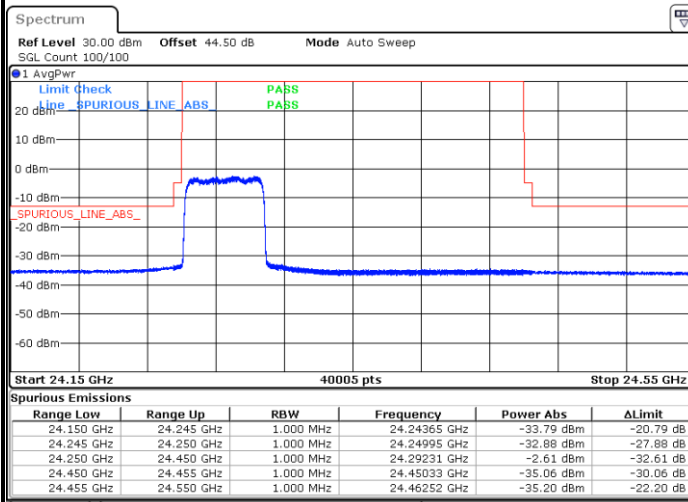




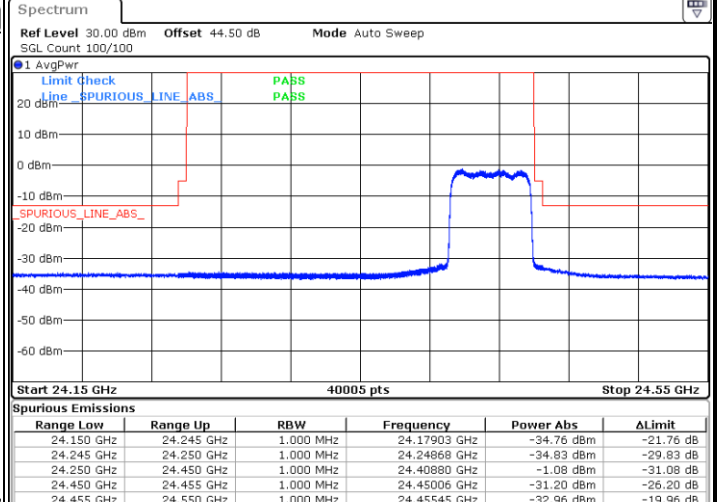
CP-OFDM Module 0

NR Band n258a/ 50MHz / 64QAM

Lowest Band Edge / Full RB

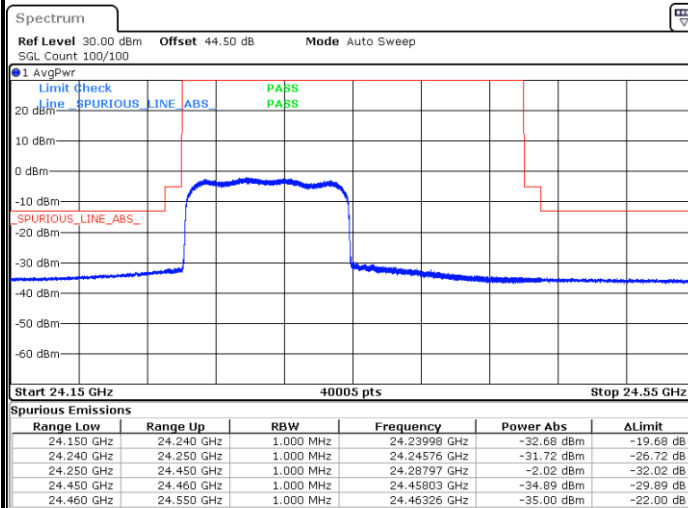


Highest Band Edge / Full RB

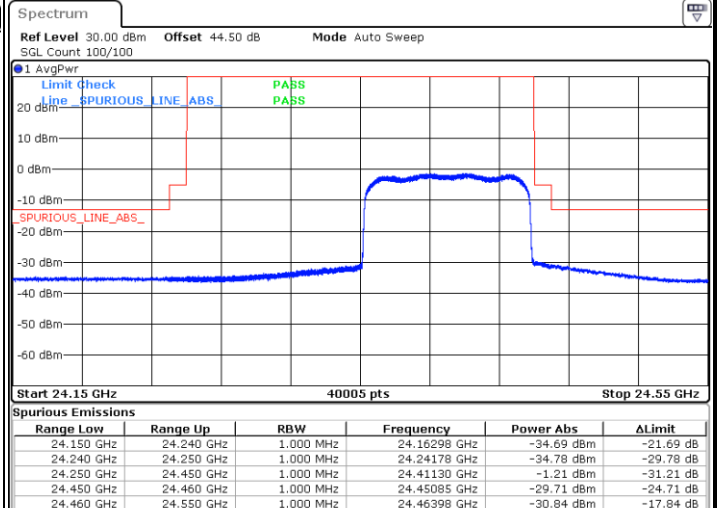


NR Band n258a/ 100MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

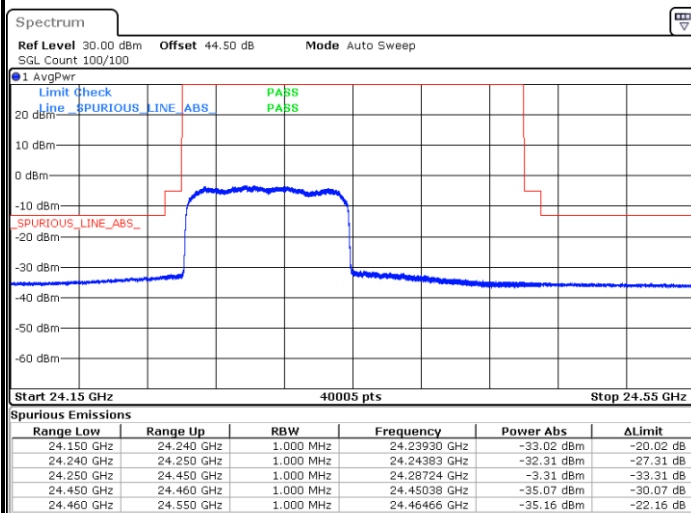




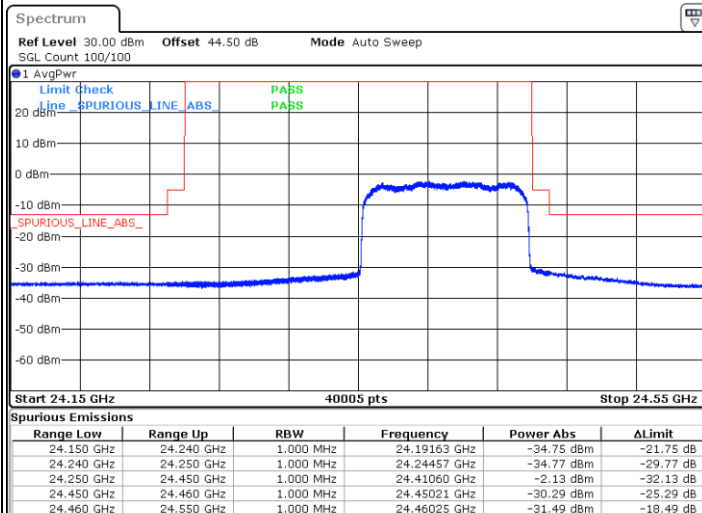
CP-OFDM Module 0

NR Band n258a/ 100MHz / 16QAM

Lowest Band Edge / Full RB

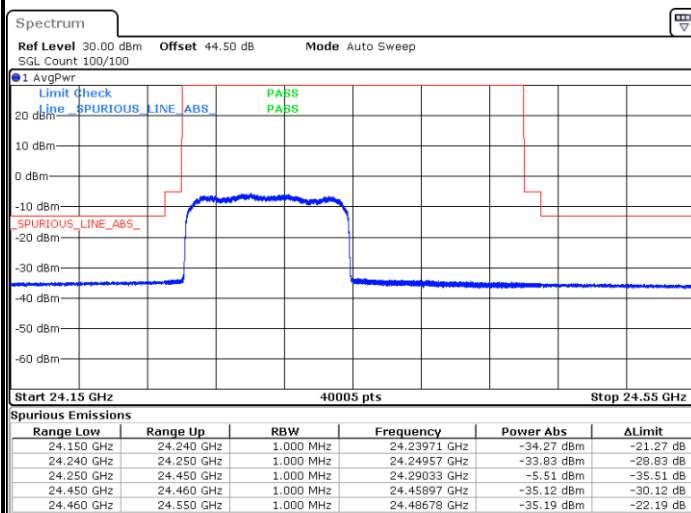


Highest Band Edge / Full RB

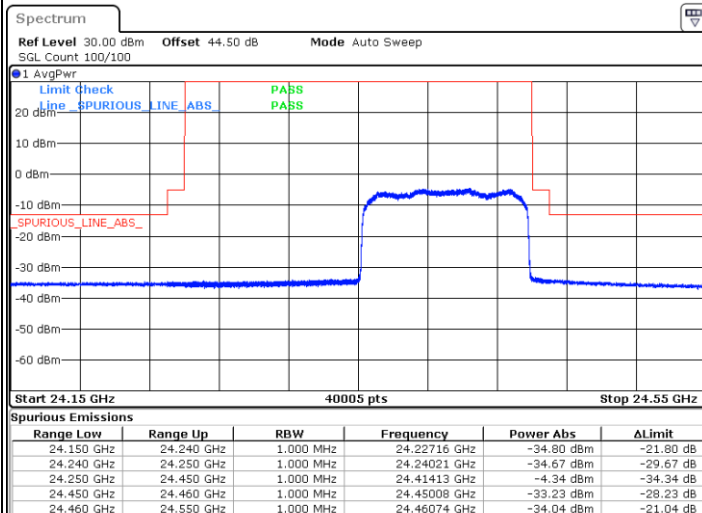


NR Band n258a/ 100MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB





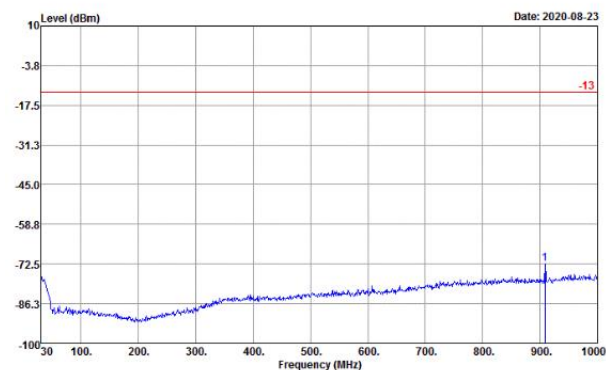
Spurious Emission

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

Only the noise floor is reported.

NR Band n258a (30MHz-1GHz)

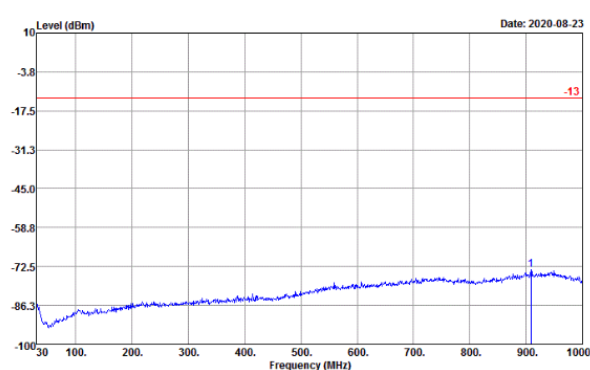
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 041657-01
: n258A Module 0

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1	908.82	-72.33	-59.33 -13.00

Vertical

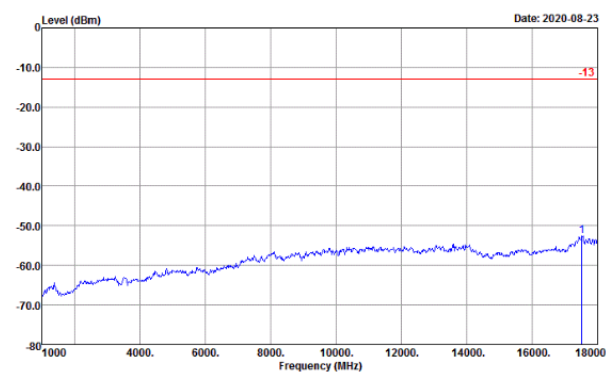


Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 041657-01
: n258A Module 0

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1	908.82	-73.69	-60.69 -13.00

NR Band n258a (1GHz-18GHz)

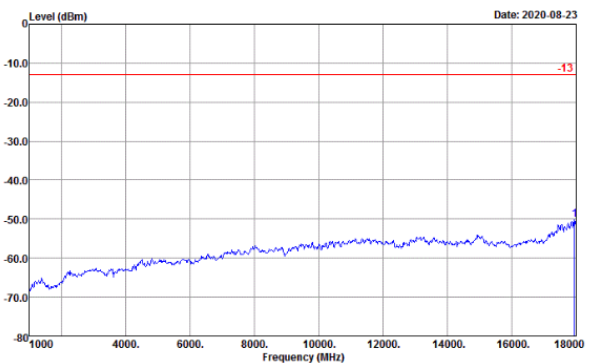
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 041657-01
: n258A Module 0

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1	17524.00	-52.68	-39.68 -13.00

Vertical



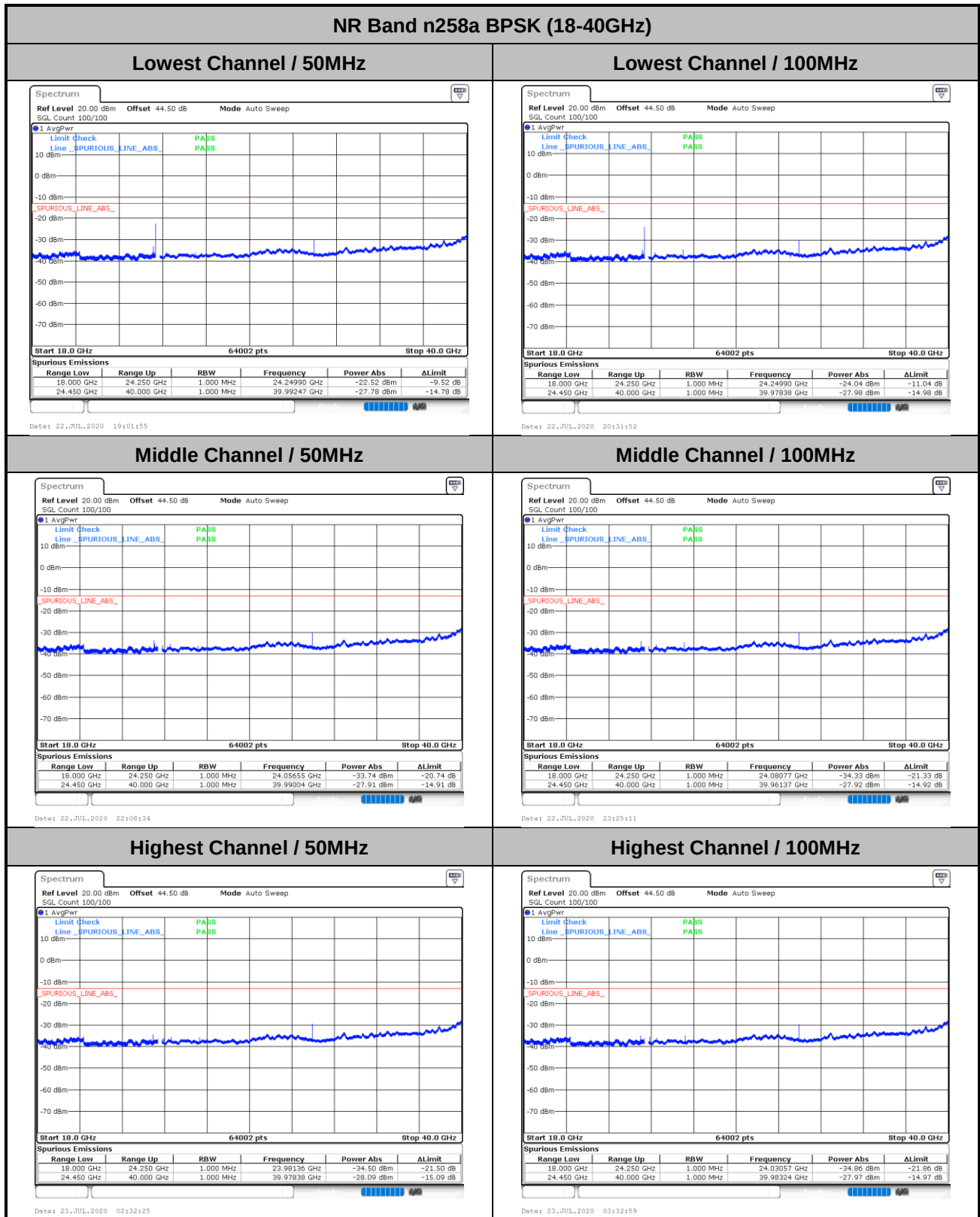
Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 041657-01
: n258A Module 0

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1	17949.00	-50.25	-37.25 -13.00



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

DFT-s-OFDM Module 0

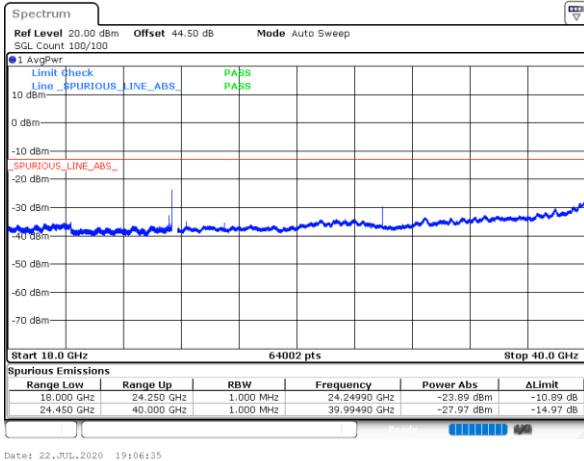




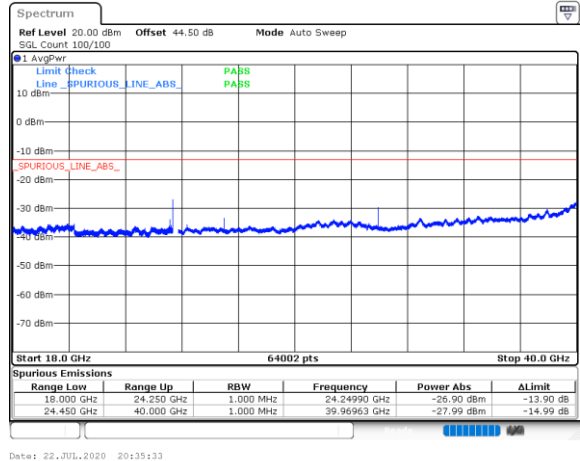
DFT-s-OFDM Module 0

NR Band n258a QPSK (18-40GHz)

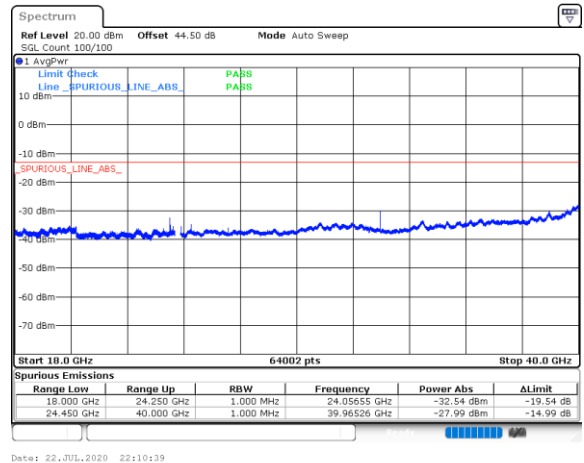
Lowest Channel / 50MHz



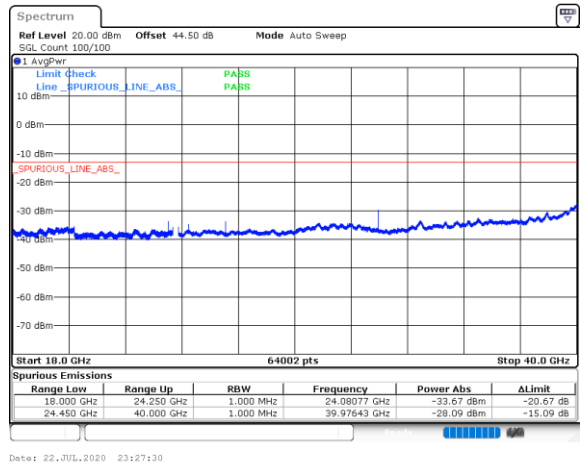
Lowest Channel / 100MHz



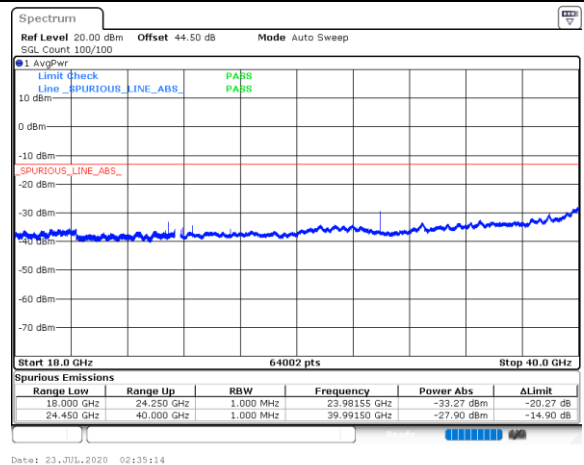
Middle Channel / 50MHz



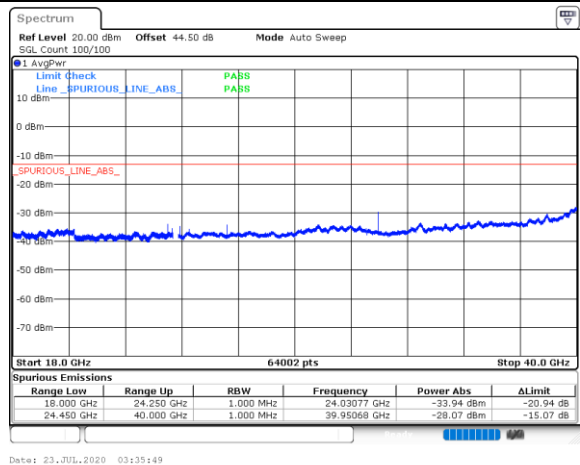
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz

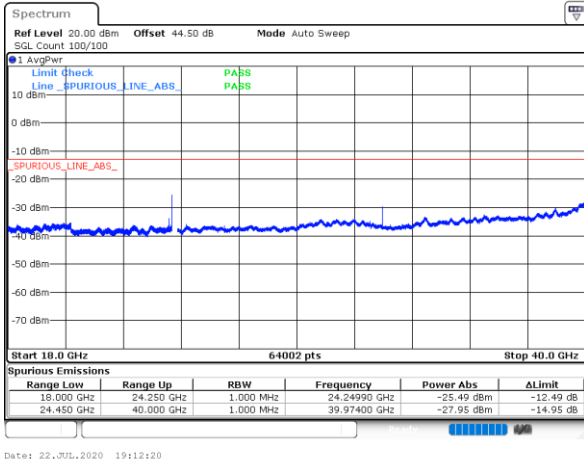




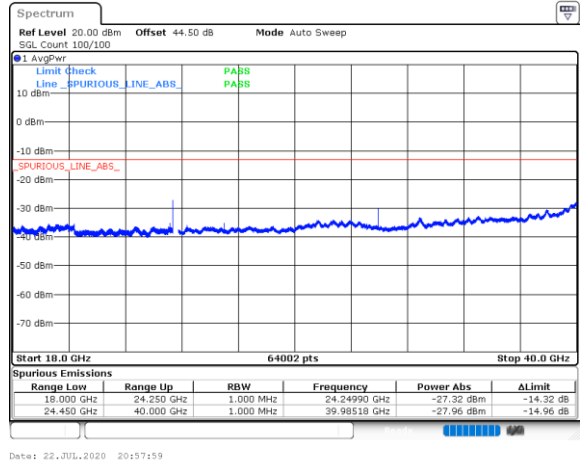
CP-OFDM Module 0

NR Band n258a QPSK (18-40GHz)

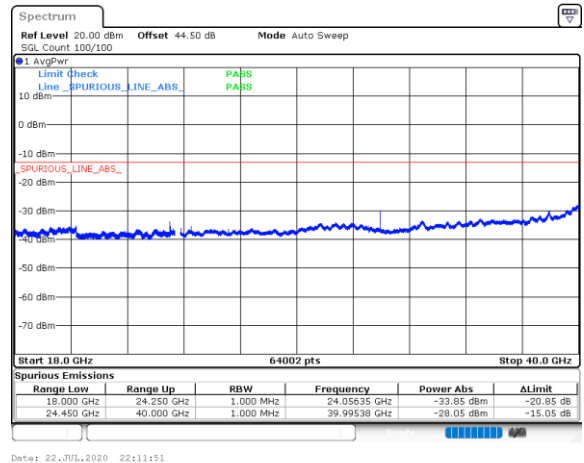
Lowest Channel / 50MHz



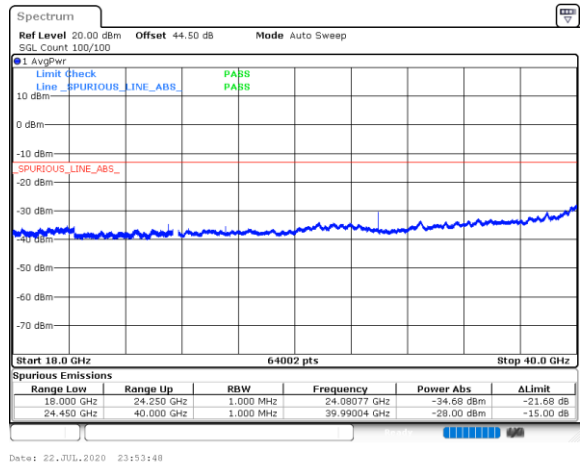
Lowest Channel / 100MHz



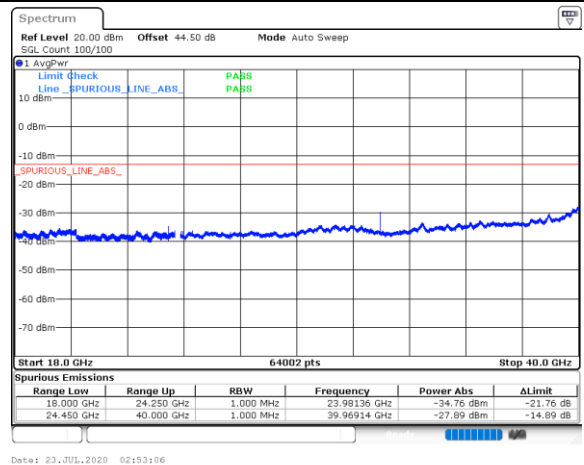
Middle Channel / 50MHz



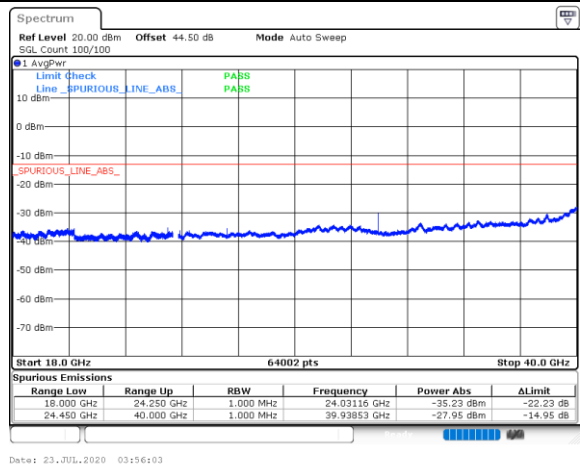
Middle Channel / 100MHz



Highest Channel / 50MHz

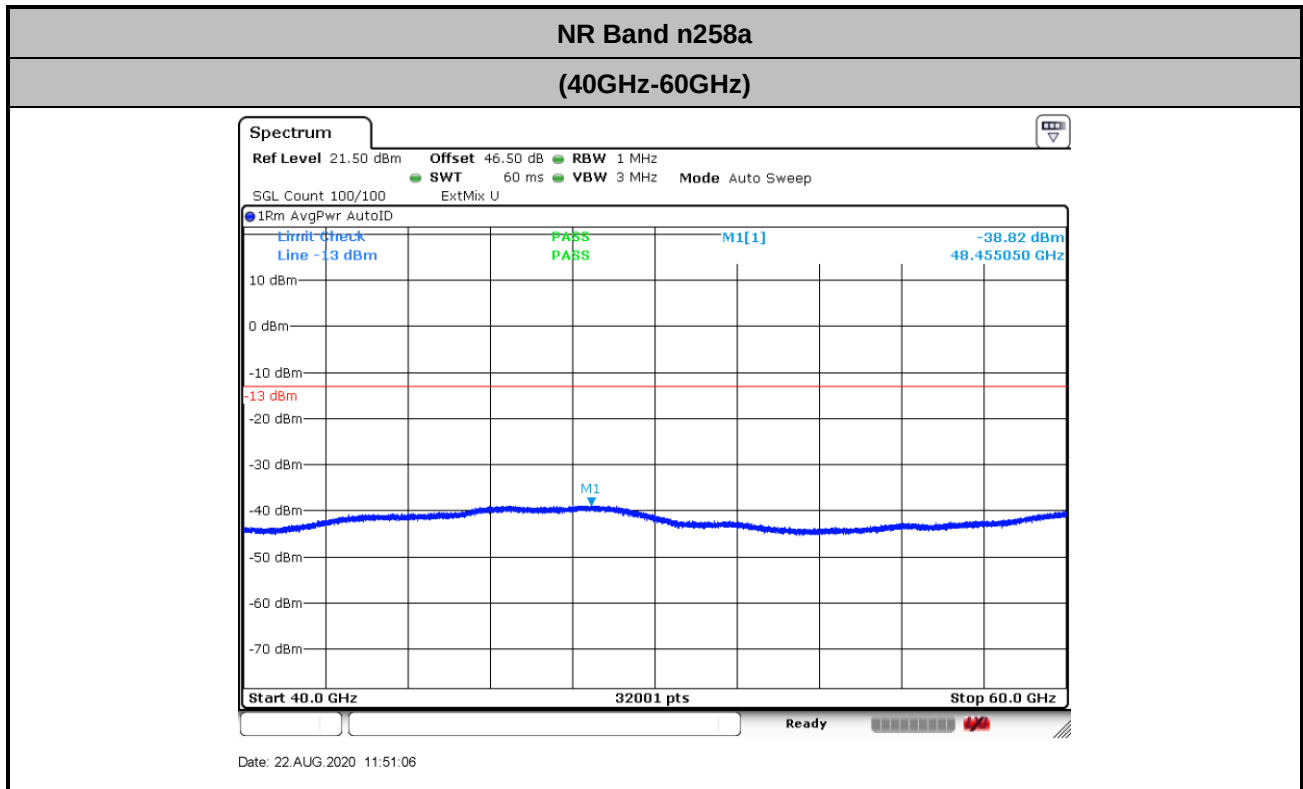


Highest Channel / 100MHz





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

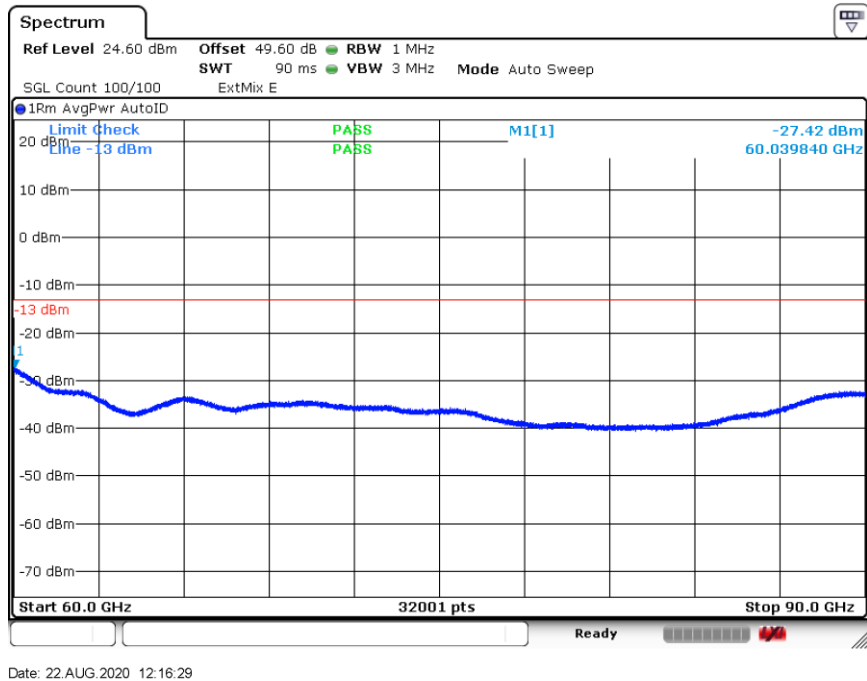


$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.3 + 2 + 107 + 20\log(1) - 104.8 = 46.5 \text{ (dB)}\end{aligned}$$

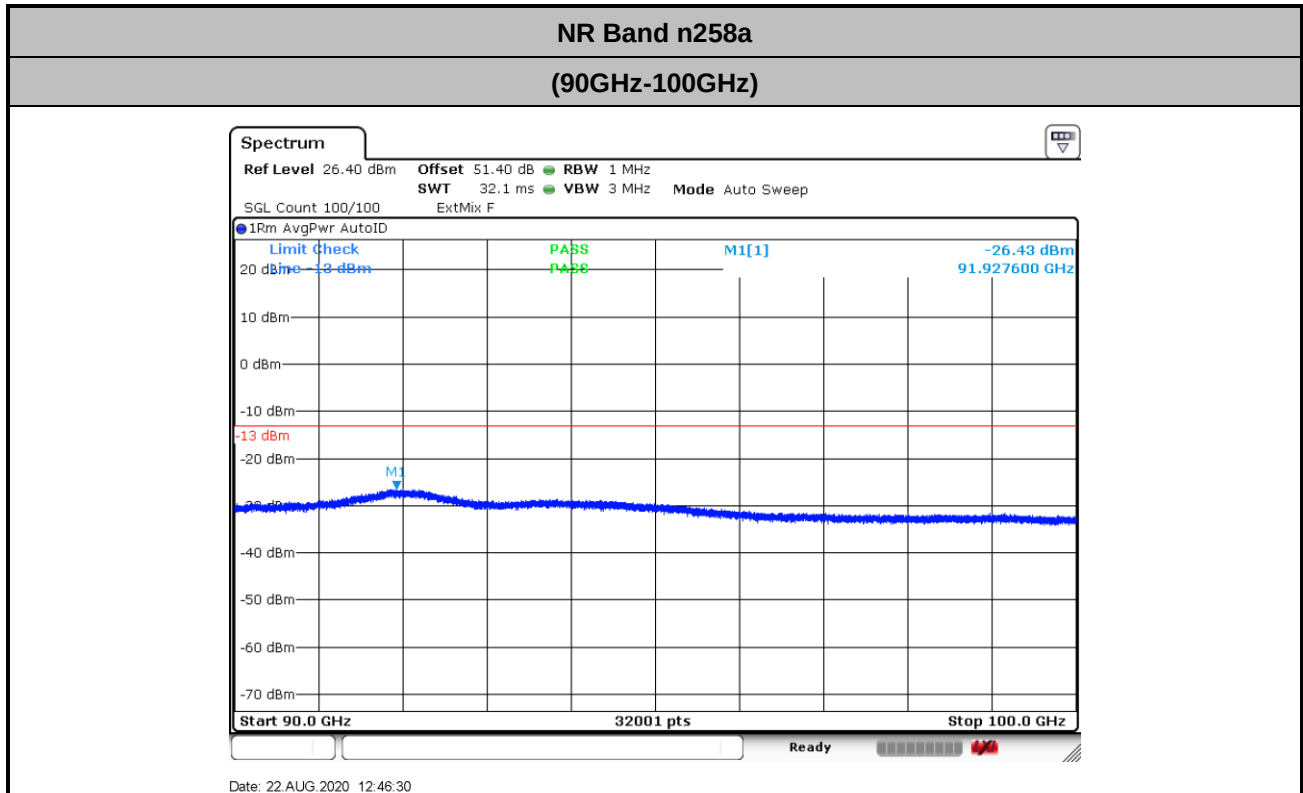


NR Band n258a

(60GHz-90GHz)



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



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



NR Band n258a Module 0 AG1

Occupied Bandwidth

Mode	DFT-s-OFDM Module 0 NR Band n258a: 99%OBW(MHz)							
BW	50MHz				100MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	45.28	45.26	45.24	45.32	90.64	90.32	90.28	90.56
Middle CH	45.56	45.20	45.20	45.40	90.72	90.80	90.44	90.76
Highest CH	45.48	45.10	45.06	45.30	89.92	90.44	90.16	89.96

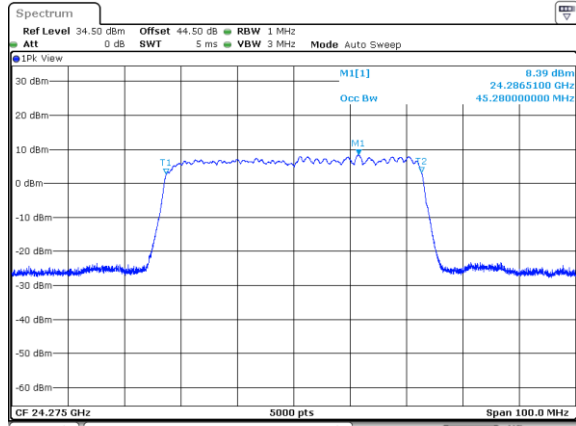
Mode	CP-OFDM Module 0 NR Band n258a: 99%OBW(MHz)					
BW	50MHz			100MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.20	45.42	45.30	92.60	92.72	92.80
Middle CH	45.40	45.34	45.52	93.08	93.28	93.20
Highest CH	45.26	45.26	45.40	92.76	92.40	92.80



DFT-s-OFDM Module 0

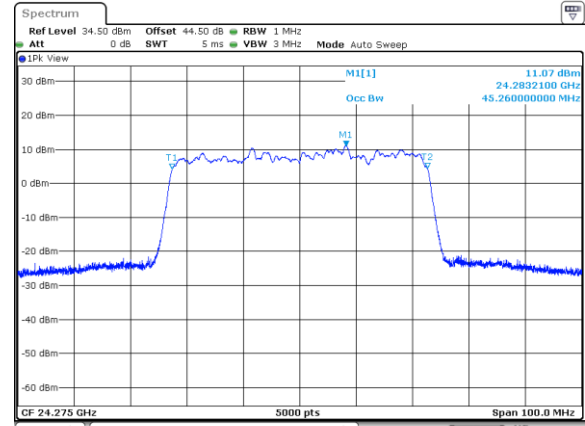
NR Band n258a

Lowest Channel / 50MHz / BPSK



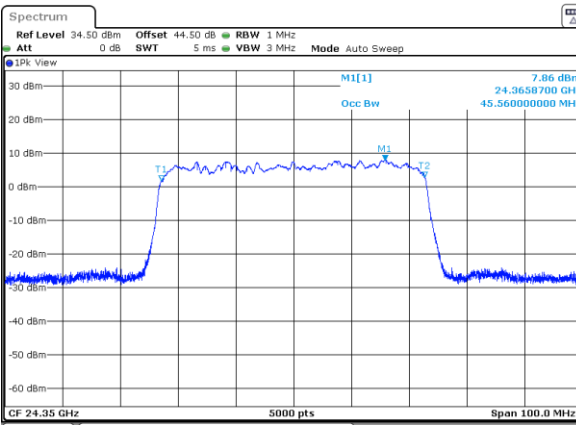
Date: 23.JUL.2020 09:27:49

Lowest Channel / 50MHz / QPSK



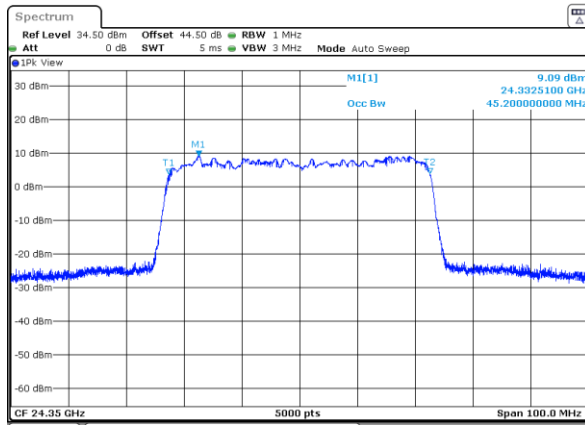
Date: 23.JUL.2020 09:22:37

Middle Channel / 50MHz / BPSK



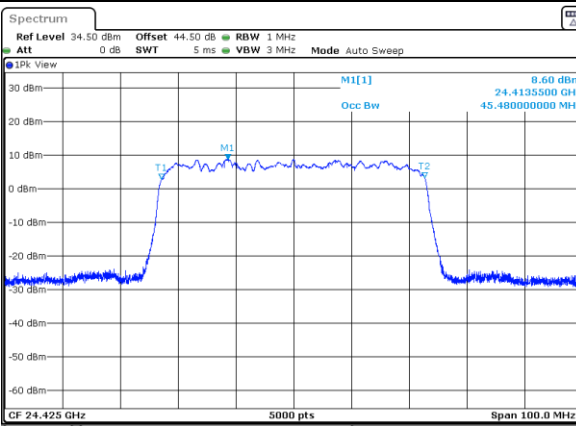
Date: 23.JUL.2020 21:36:12

Middle Channel / 50MHz / QPSK



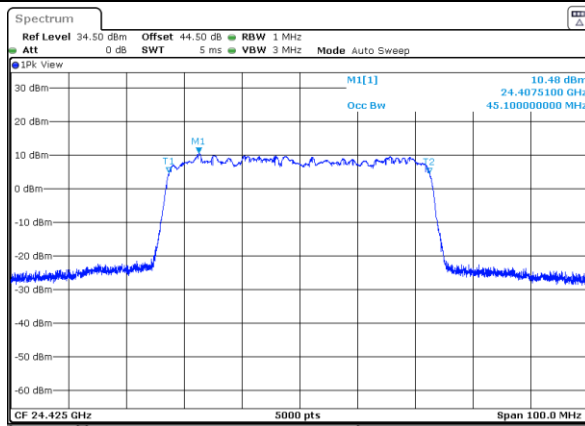
Date: 23.JUL.2020 21:34:07

Highest Channel / 50MHz / BPSK



Date: 23.JUL.2020 23:40:26

Highest Channel / 50MHz / QPSK



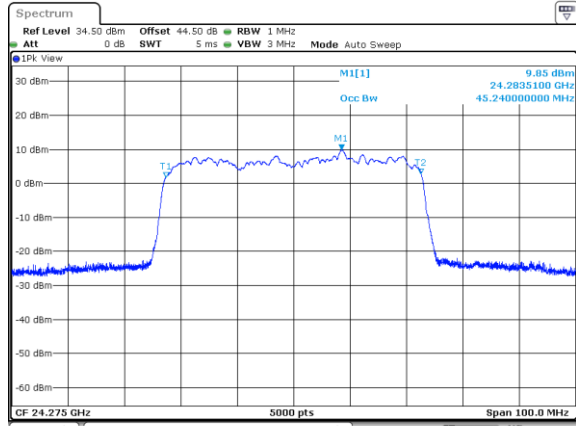
Date: 23.JUL.2020 23:35:30



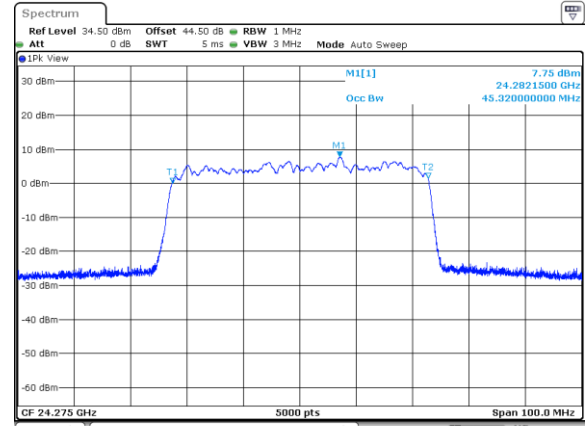
DFT-s-OFDM Module 0

NR Band n258a

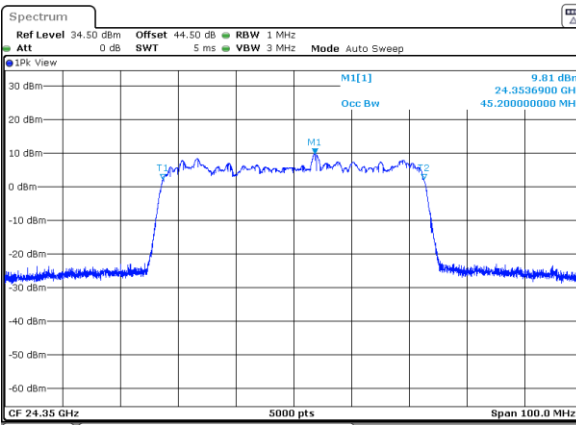
Lowest Channel / 50MHz / 16QAM



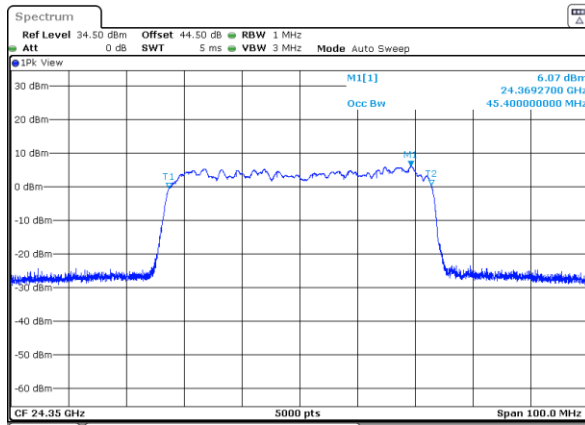
Lowest Channel / 50MHz / 64QAM



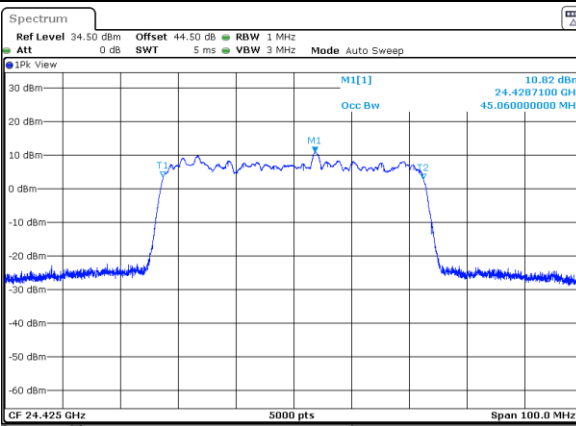
Middle Channel / 50MHz / 16QAM



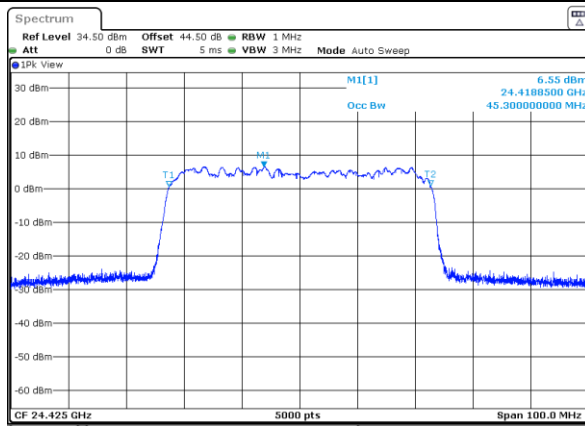
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

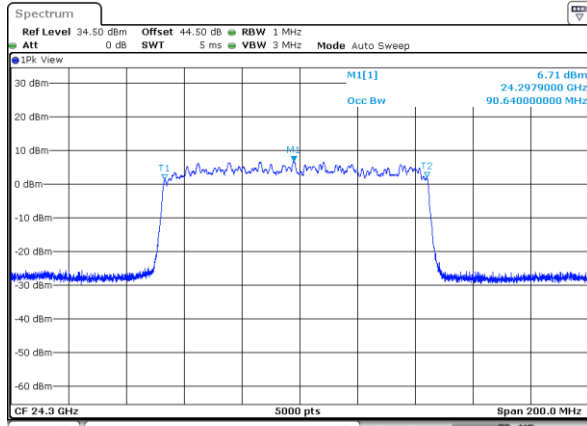




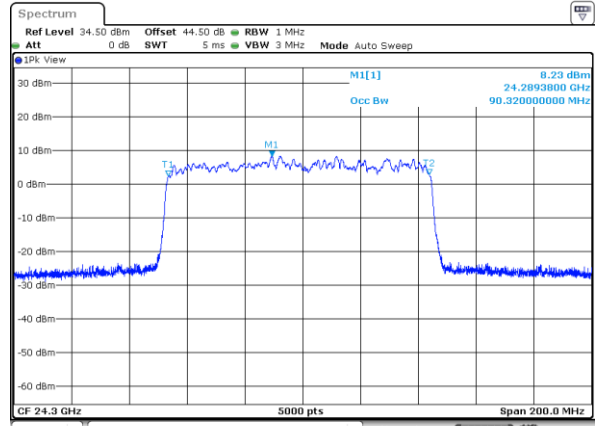
DFT-s-OFDM Module 0

NR Band n258a

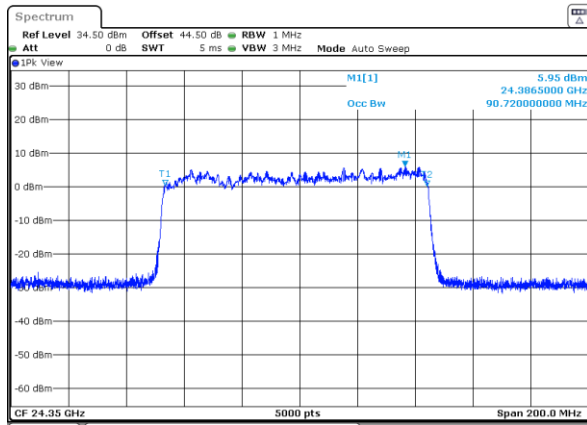
Lowest Channel / 100MHz / BPSK



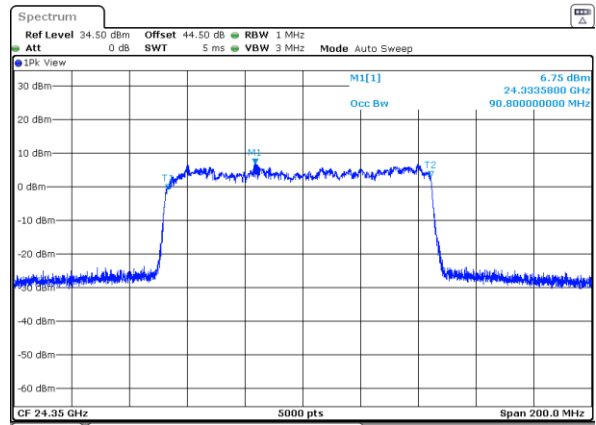
Lowest Channel / 100MHz / QPSK



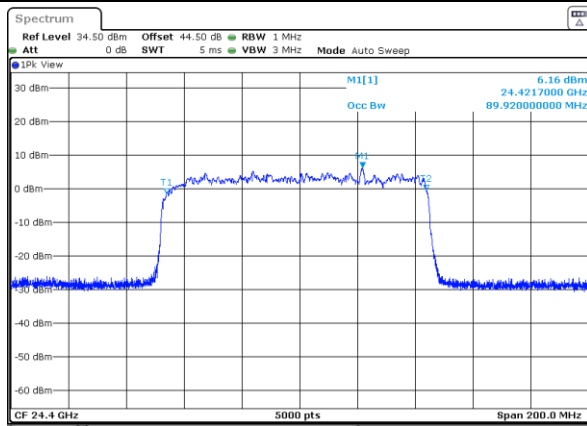
Middle Channel / 100MHz / BPSK



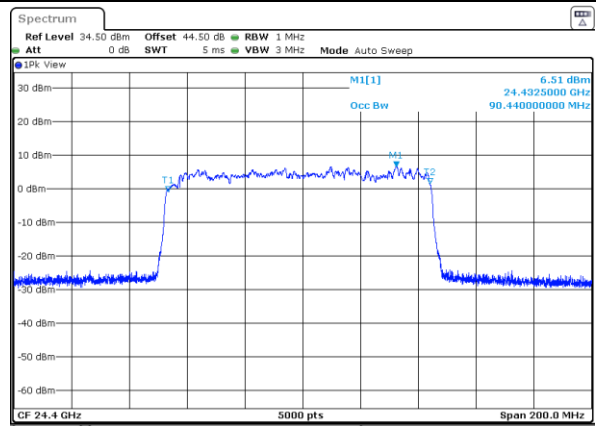
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

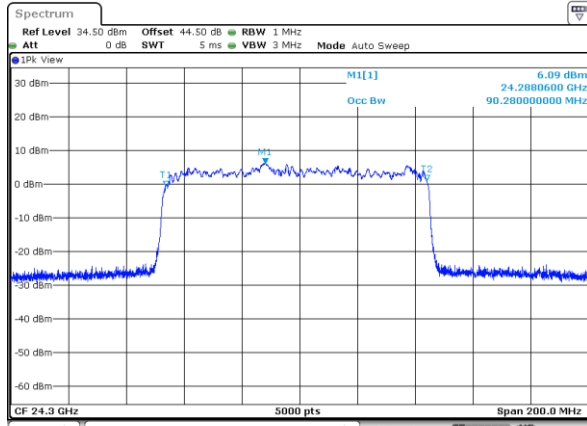




DFT-s-OFDM Module 0

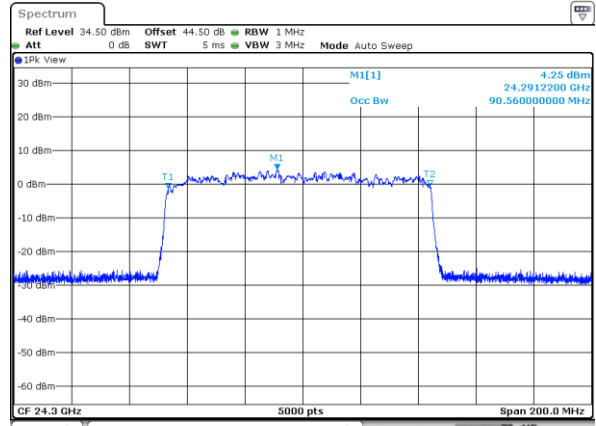
NR Band n258a

Lowest Channel / 100MHz / 16QAM



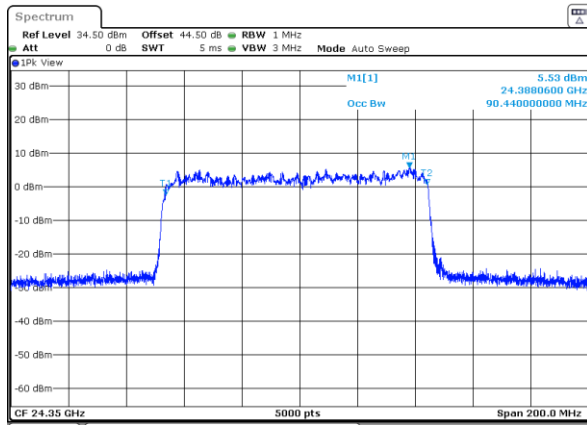
Date: 23.JUL.2020 06:16:10

Lowest Channel / 100MHz / 64QAM



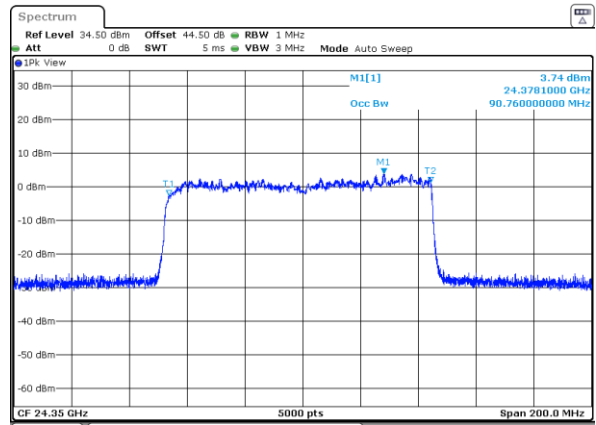
Date: 23.JUL.2020 06:17:54

Middle Channel / 100MHz / 16QAM



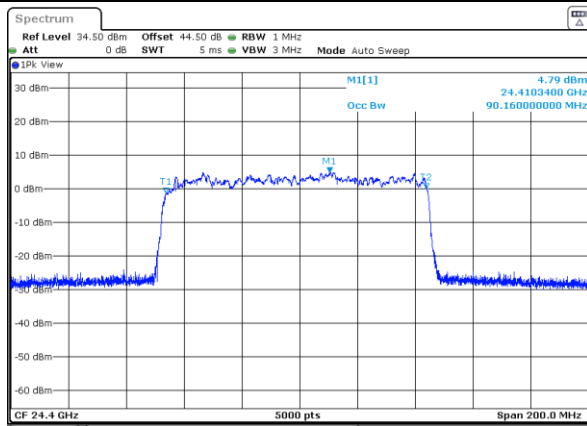
Date: 23.JUL.2020 22:02:44

Middle Channel / 100MHz / 64QAM



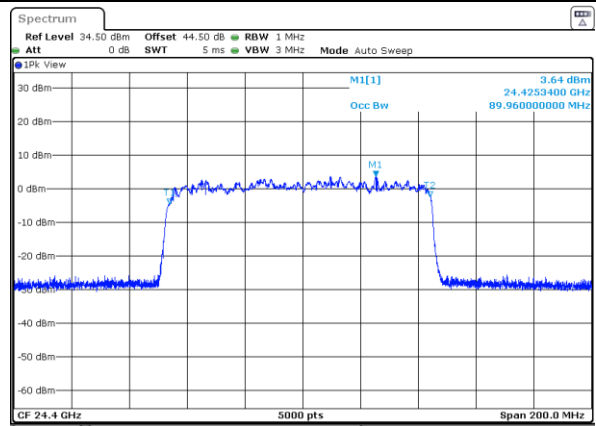
Date: 23.JUL.2020 22:03:20

Highest Channel / 100MHz / 16QAM



Date: 24.JUL.2020 02:02:24

Highest Channel / 100MHz / 64QAM



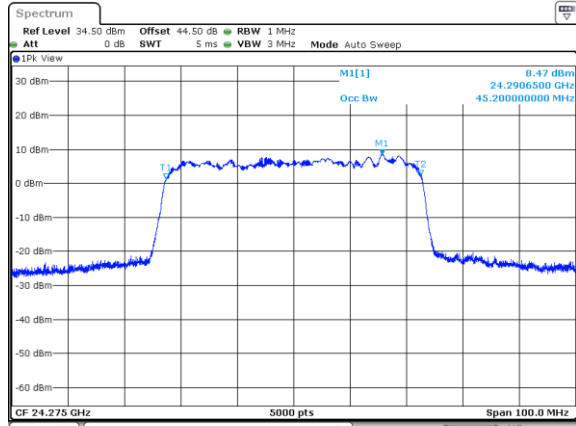
Date: 24.JUL.2020 02:04:53



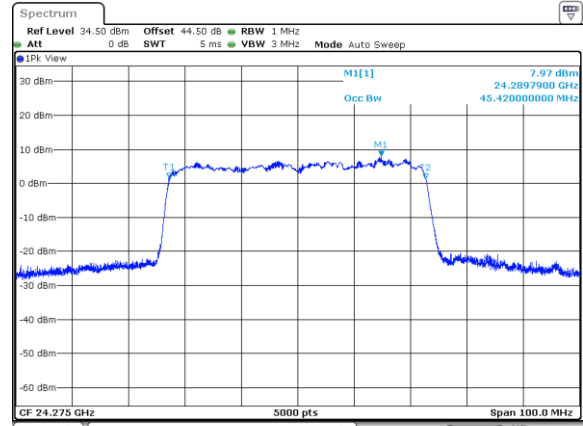
CP-OFDM Module 0

NR Band n258a

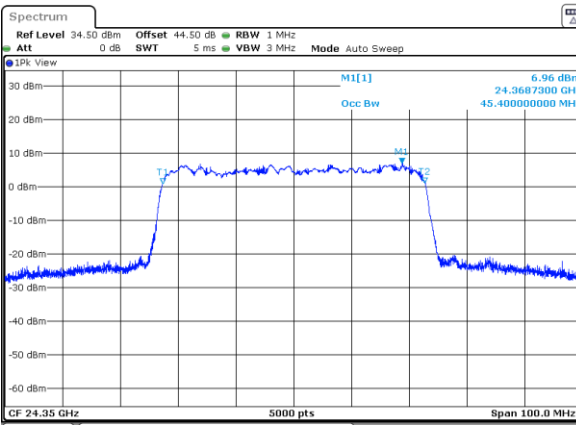
Lowest Channel / 50MHz / QPSK



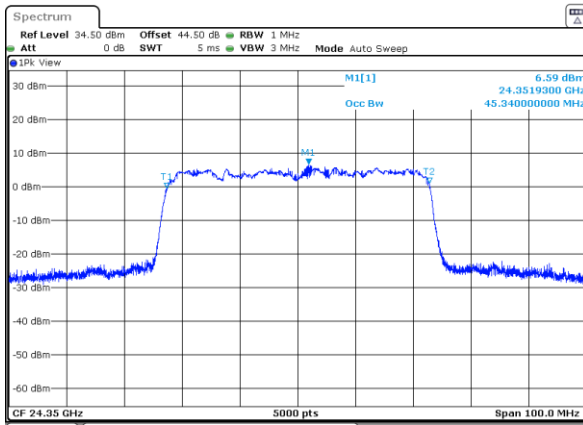
Lowest Channel / 50MHz / 16QAM



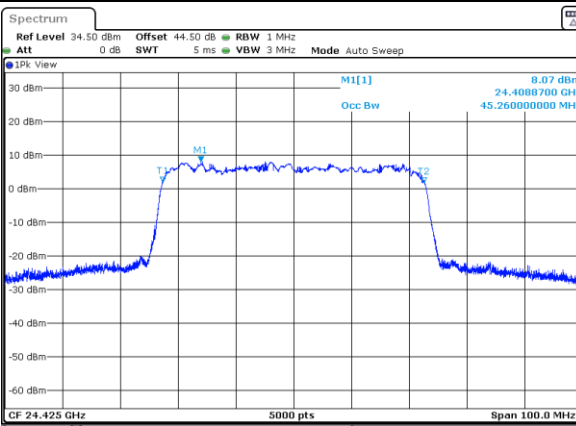
Middle Channel / 50MHz / QPSK



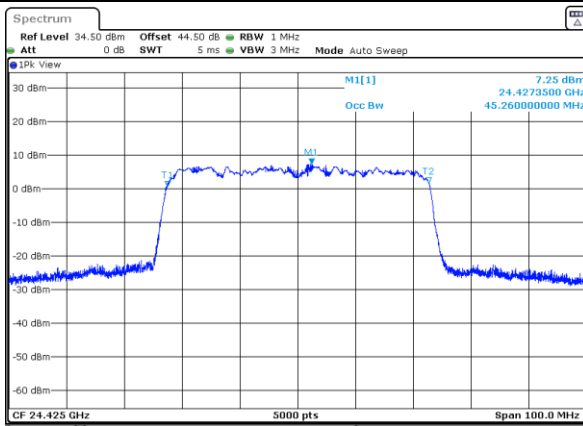
Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

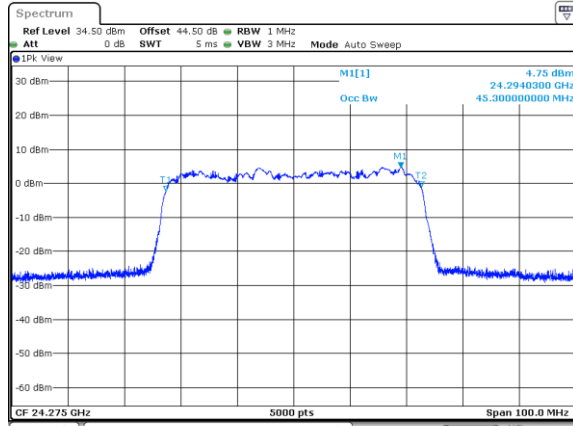




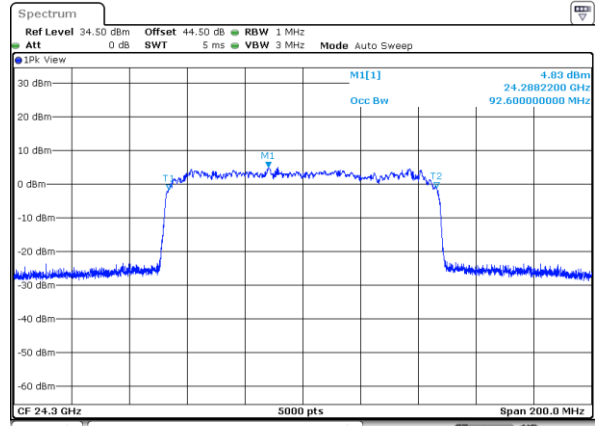
CP-OFDM Module 0

NR Band n258a

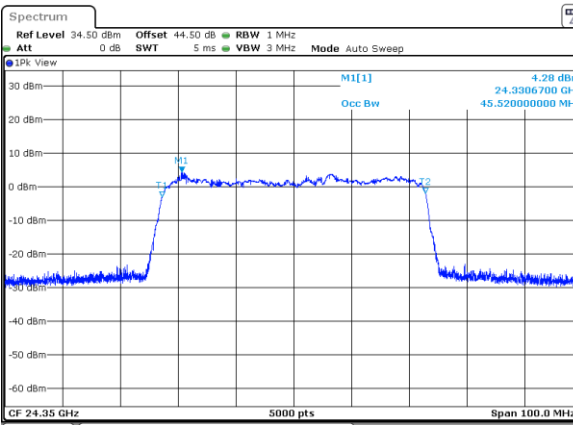
Lowest Channel / 50MHz / 64QAM



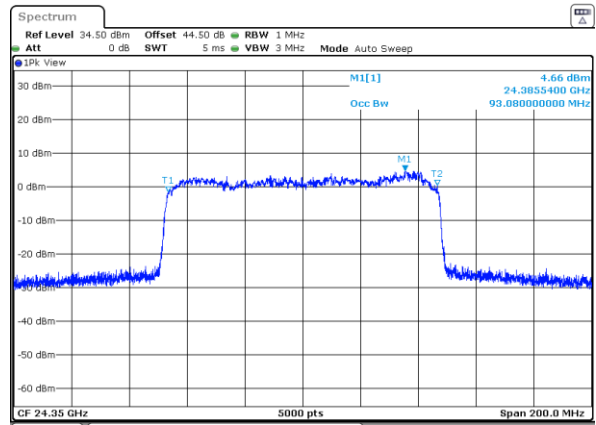
Lowest Channel / 100MHz / QPSK



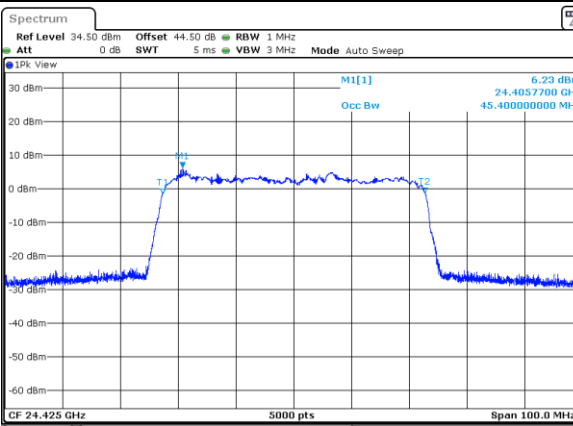
Middle Channel / 50MHz / 64QAM



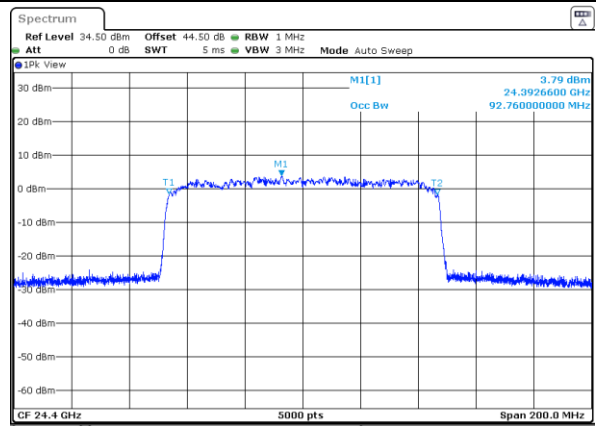
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / 64QAM



Highest Channel / 100MHz / QPSK

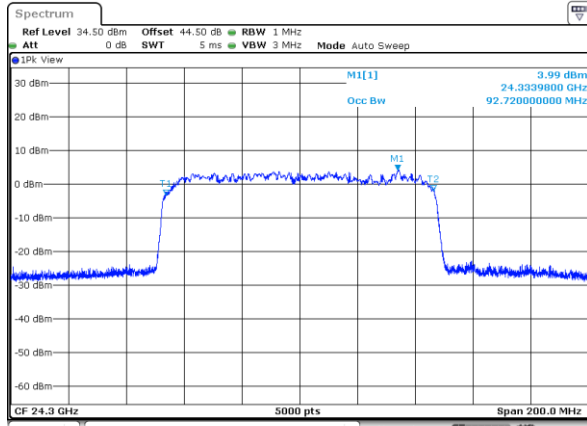




CP-OFDM Module 0

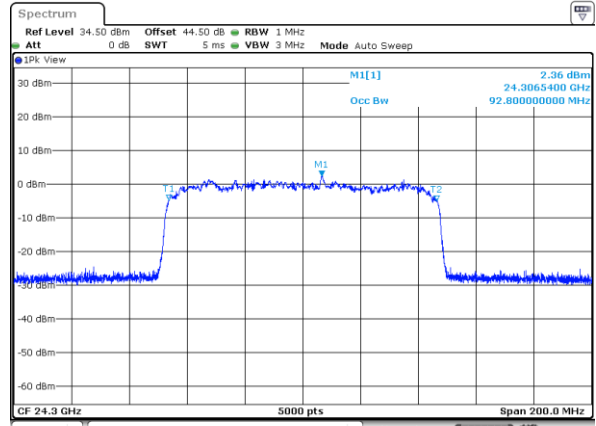
NR Band n258a

Lowest Channel / 100MHz / 16QAM



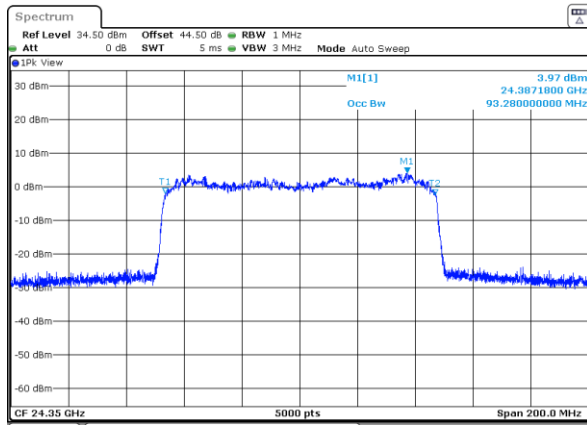
Date: 23.JUL.2020 06:36:54

Lowest Channel / 100MHz / 64QAM



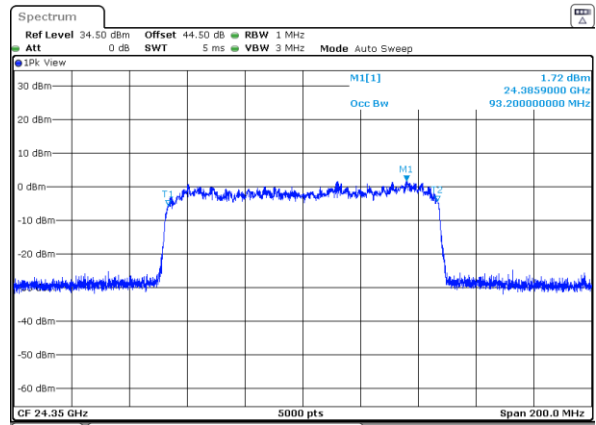
Date: 23.JUL.2020 06:38:18

Middle Channel / 100MHz / 16QAM



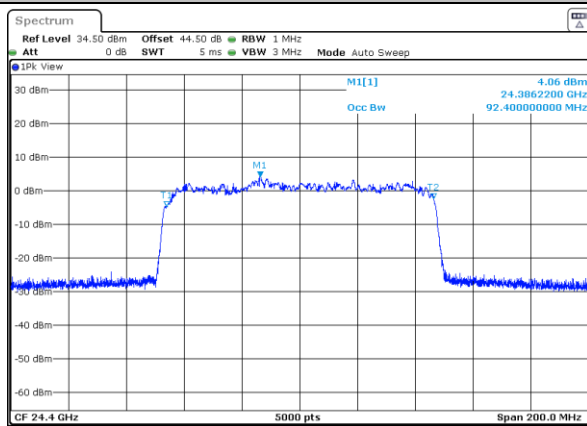
Date: 23.JUL.2020 22:14:35

Middle Channel / 100MHz / 64QAM



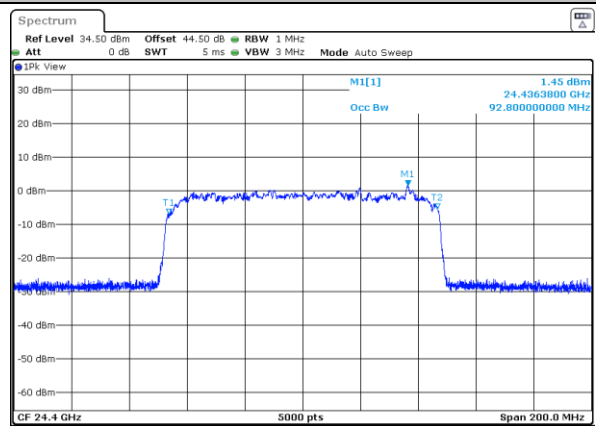
Date: 23.JUL.2020 22:13:20

Highest Channel / 100MHz / 16QAM



Date: 24.JUL.2020 02:21:11

Highest Channel / 100MHz / 64QAM



Date: 24.JUL.2020 02:23:03

**Radiated Out of Band Emissions**

Mode			DFT-s-OFDM Module 0 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	-21.72	-22.43	-24.13	-25.9	-25.07	-24.35	-25.44	-27.6
	>10%OB	≤ -13	-34.56	-34.31	-34.45	-34.58	-34.6	-34.49	-34.65	-34.68
High CH	0~10%OB	≤ -5	-23.57	-22.57	-24.31	-24.25	-26.61	-24.72	-27.18	-28.48
	>10%OB	≤ -13	-34.76	-34.56	-34.62	-35.12	-35.22	-35.08	-35.15	-35.26
Result			Compliance							

Mode			CP-OFDM Module 0 NR Band n258a: BE (dBm) 1 RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-24.52	-24.96	-25.28	-25.15	-25.83	-28.8
	>10%OB	≤ -13	-34.44	-34.62	-34.76	-34.73	-34.66	-34.61
High CH	0~10%OB	≤ -5	-23.89	-24.1	-28.94	-28.16	-26.55	-30.12
	>10%OB	≤ -13	-34.66	-34.89	-35.18	-34.99	-35.29	-35.21
Result			Compliance					

Mode			DFT-s-OFDM Module 0 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	-31.13	-30.19	-31.67	-32.64	-33.16	-32.12	-32.85	-33.78
	>10%OB	≤ -13	-34.03	-32.06	-32.7	-33.67	-34.19	-33.17	-33.45	-34.31
High CH	0~10%OB	≤ -5	-31.57	-30.35	-31.47	-32.74	-34.41	-33.23	-33.73	-34.28
	>10%OB	≤ -13	-34.33	-32.12	-32.63	-33.88	-34.78	-33.94	-34.15	-34.67
Result			Compliance							

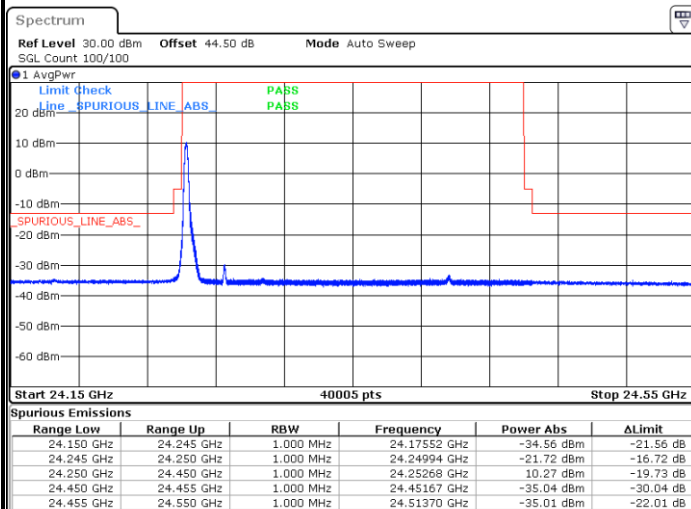
Mode			CP-OFDM Module 0 NR Band n258a: BE (dBm) Full RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-30.86	-31.57	-32.84	-32.72	-33.17	-34.11
	>10%OB	≤ -13	-32.3	-32.63	-34.17	-33.16	-33.82	-34.51
High CH	0~10%OB	≤ -5	-30.51	-31.38	-33.17	-33.17	-33.44	-34.48
	>10%OB	≤ -13	-31.88	-32.93	-34.04	-33.75	-34.02	-34.84
Result			Compliance					



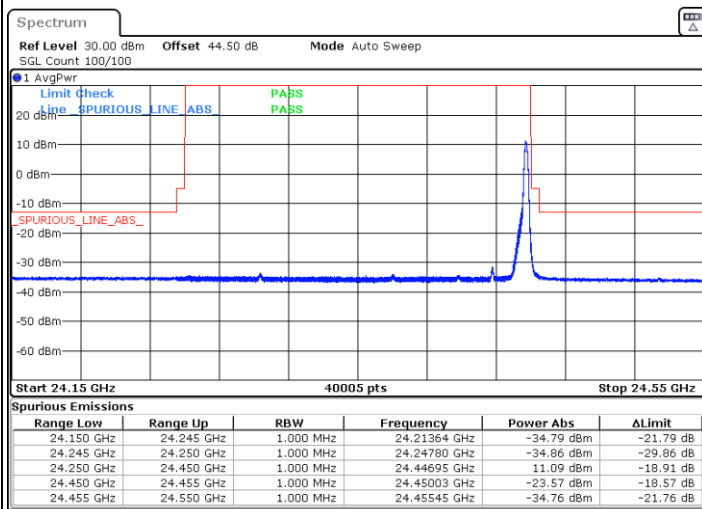
DFT-s-OFDM Module 0

NR Band n258a/ 50MHz / BPSK

Lowest Band Edge / 1 RB

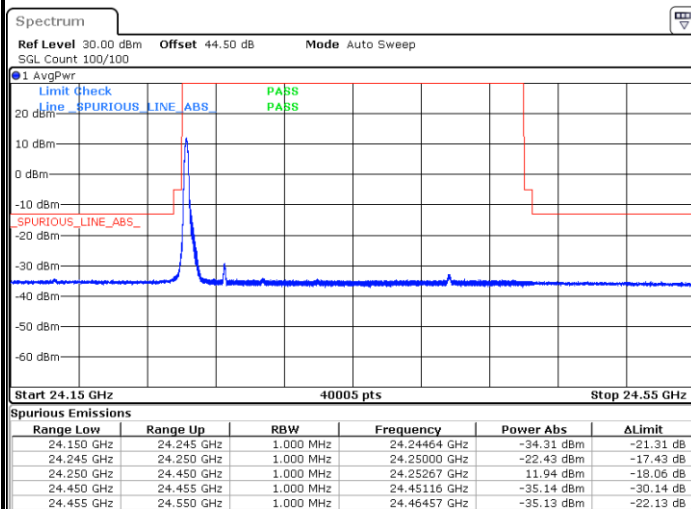


Highest Band Edge / 1 RB

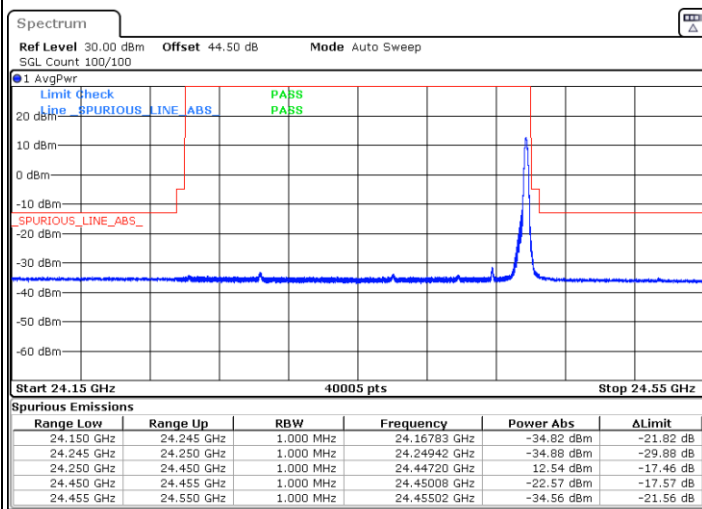


NR Band n258a/ 50MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

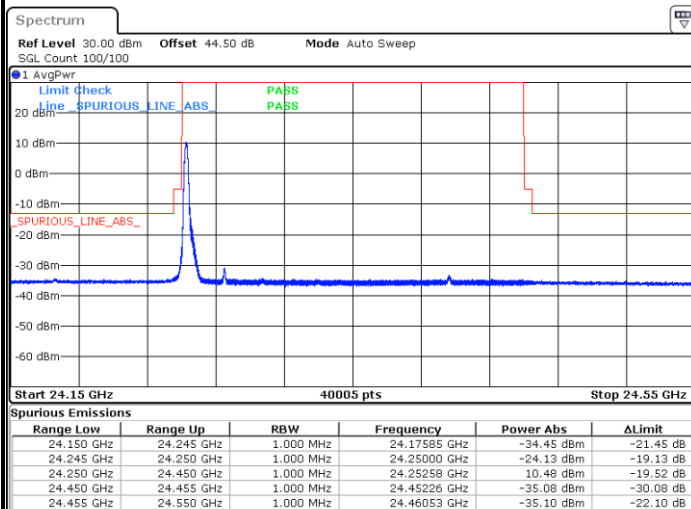




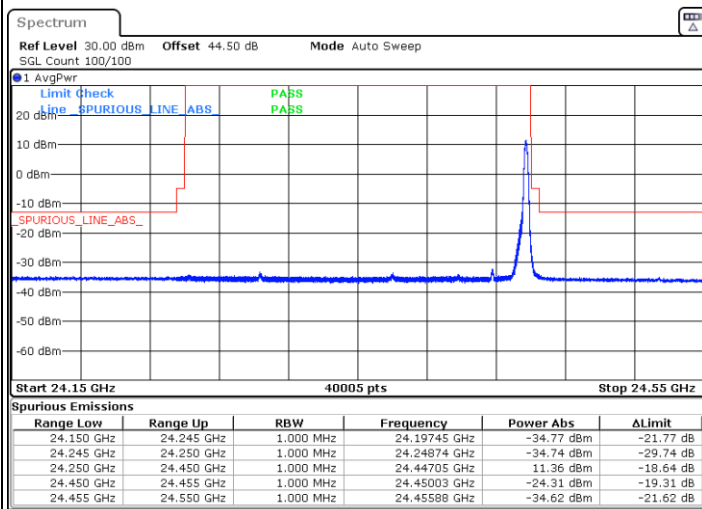
DFT-s-OFDM Module 0

NR Band n258a/ 50MHz / 16QAM

Lowest Band Edge / 1 RB

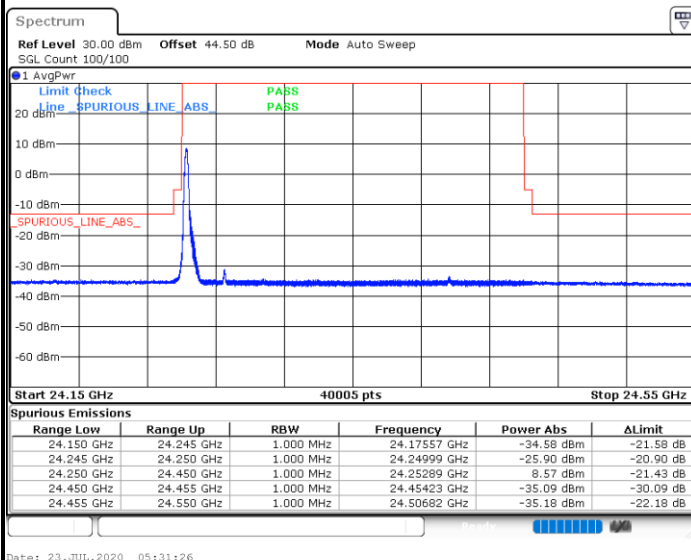


Highest Band Edge / 1 RB

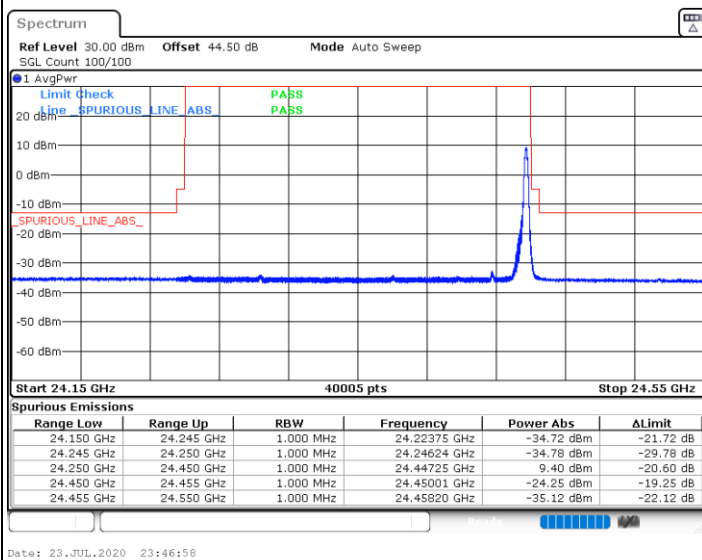


NR Band n258a/ 50MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

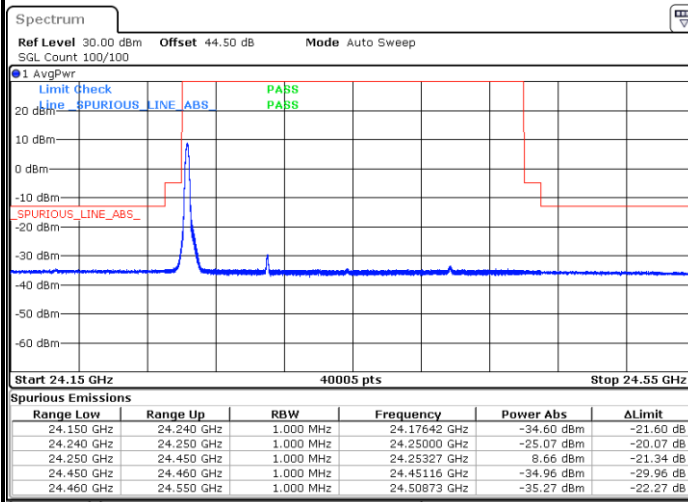




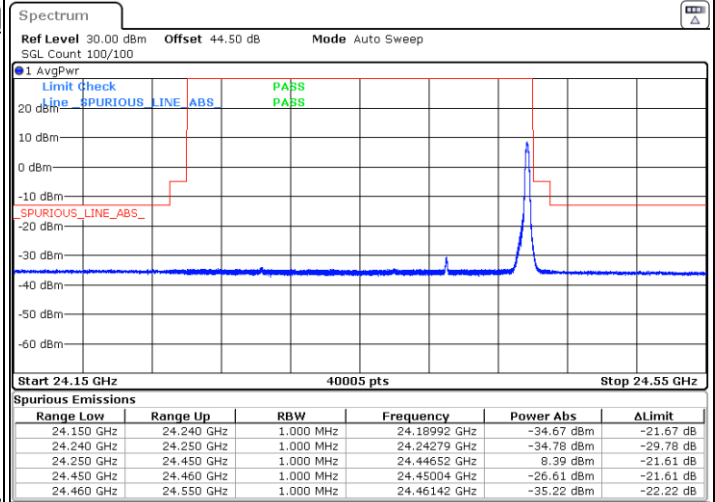
DFT-s-OFDM Module 0

NR Band n258a/ 100MHz / BPSK

Lowest Band Edge / 1 RB

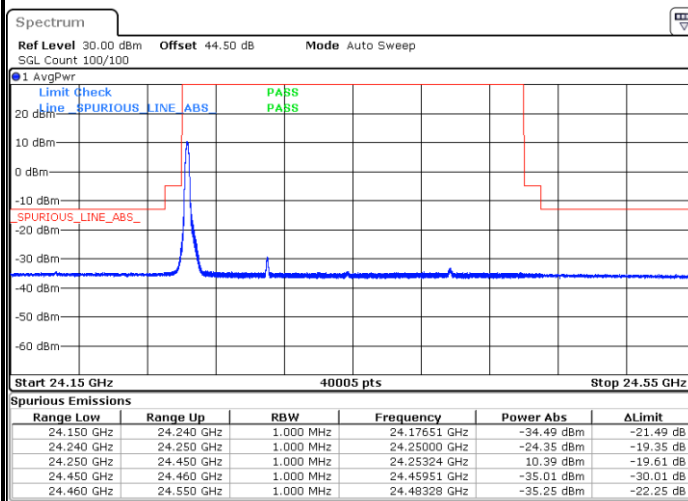


Highest Band Edge / 1 RB

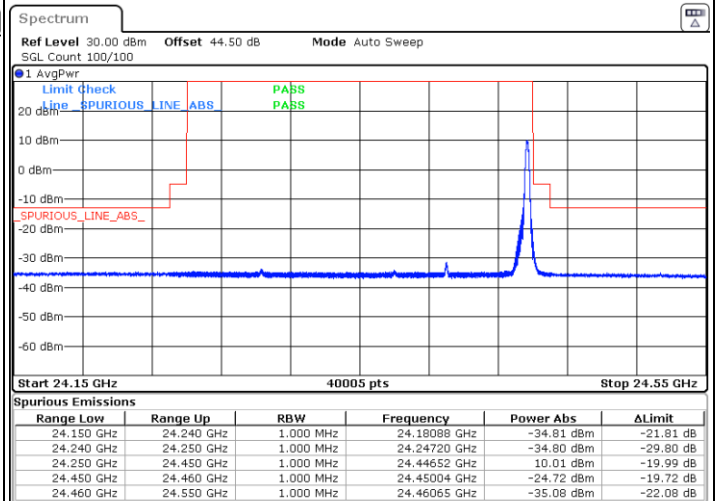


NR Band n258a/ 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

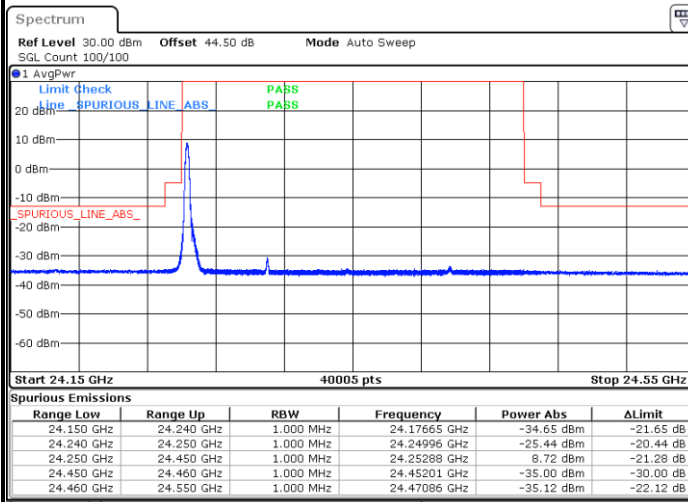




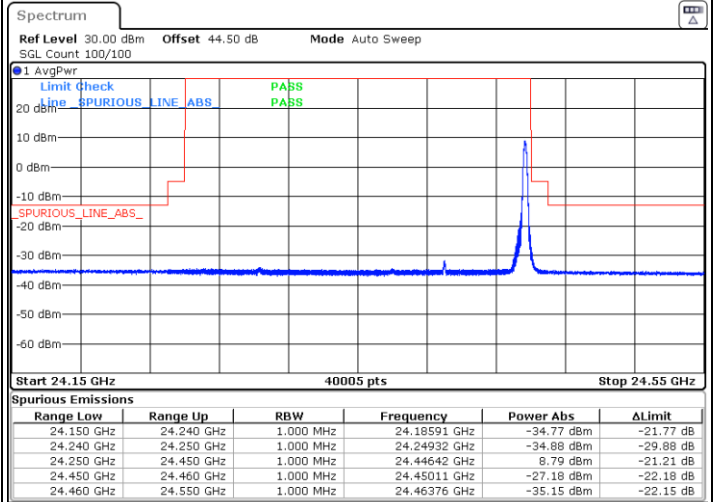
DFT-s-OFDM Module 0

NR Band n258a/ 100MHz / 16QAM

Lowest Band Edge / 1 RB

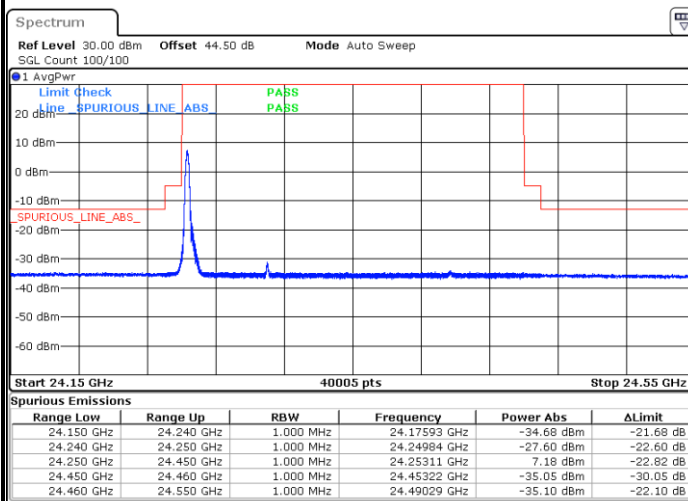


Highest Band Edge / 1 RB

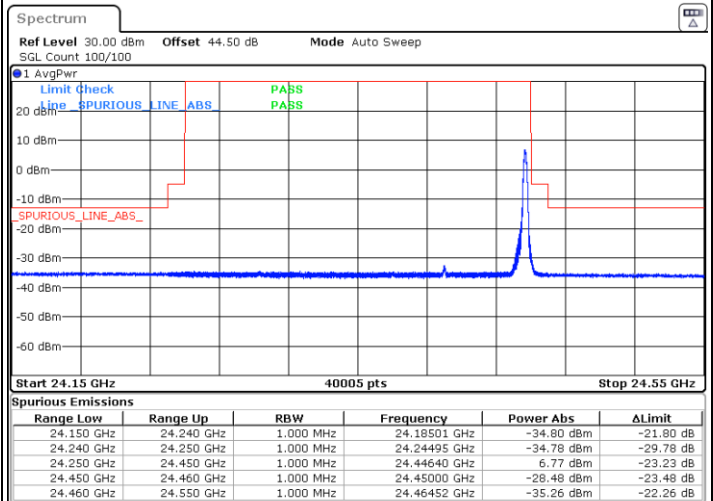


NR Band n258a/ 100MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

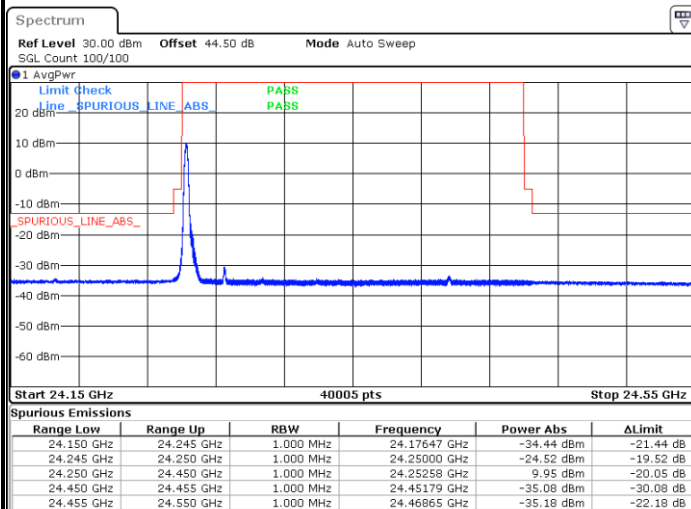




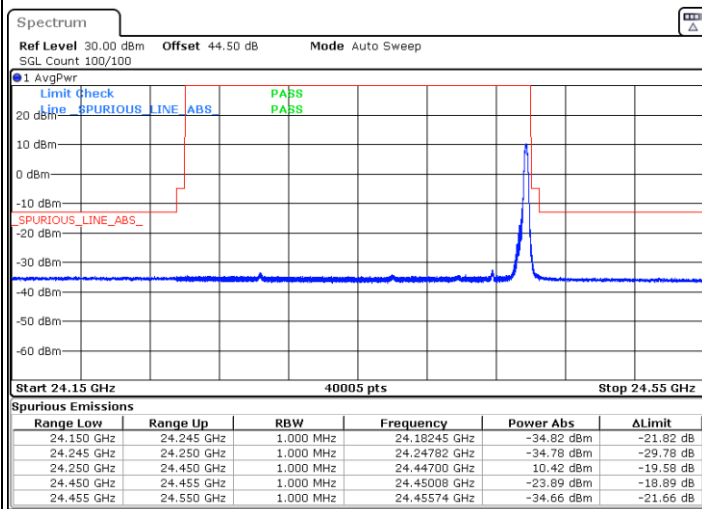
CP-OFDM Module 0

NR Band n258a/ 50MHz / QPSK

Lowest Band Edge / 1 RB

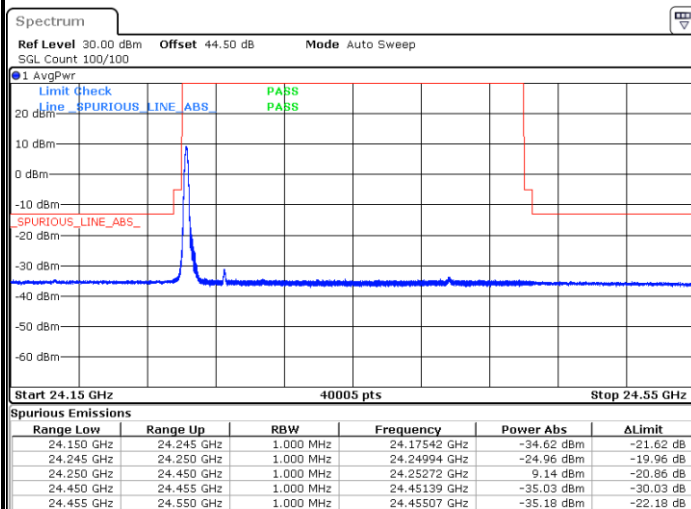


Highest Band Edge / 1 RB

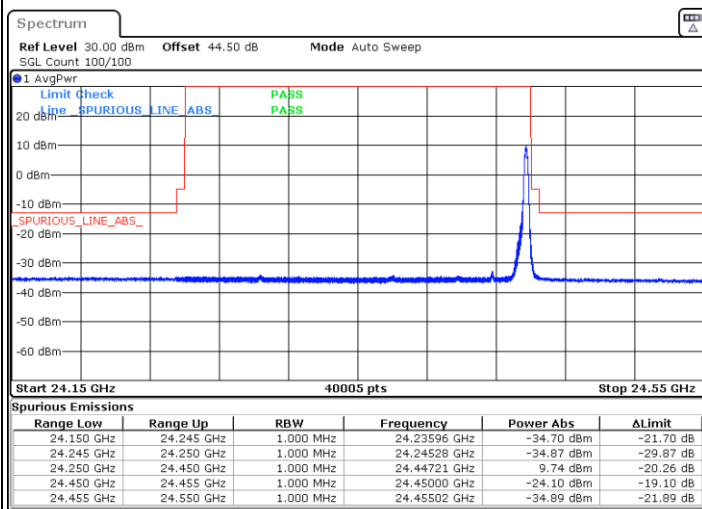


NR Band n258a/ 50MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

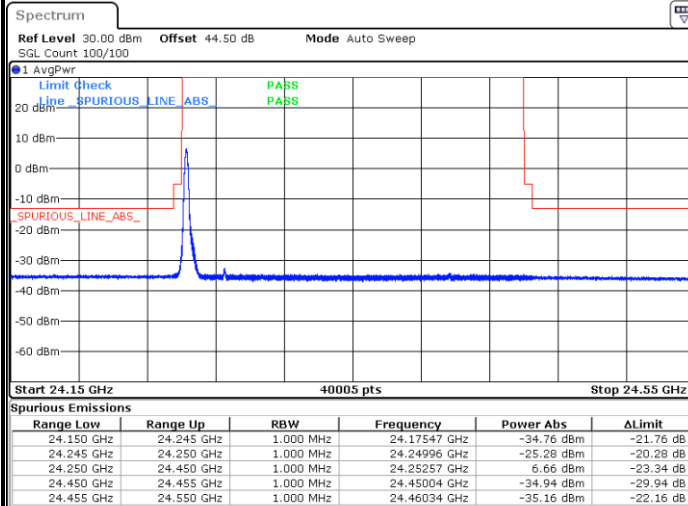




CP-OFDM Module 0

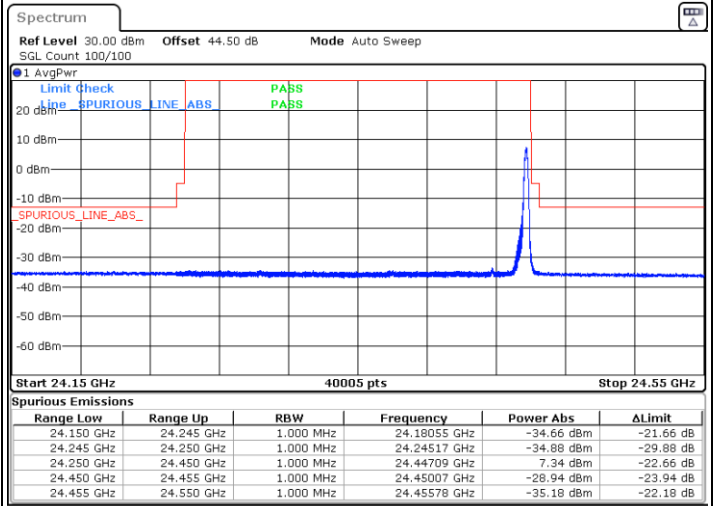
NR Band n258a/ 50MHz / 64QAM

Lowest Band Edge / 1 RB



Date: 23.JUL.2020 05:44:35

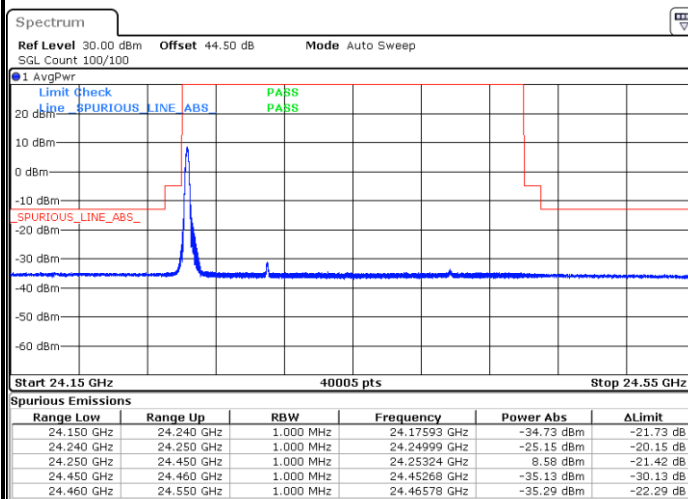
Highest Band Edge / 1 RB



Date: 23.JUL.2020 23:48:34

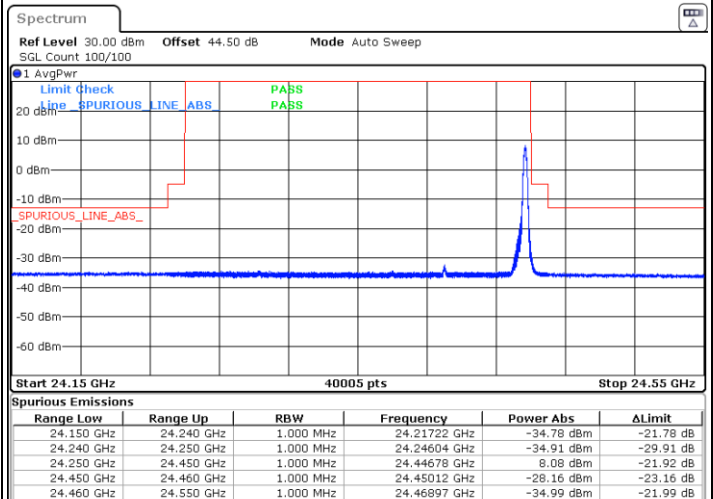
NR Band n258a/ 100MHz / QPSK

Lowest Band Edge / 1 RB



Date: 23.JUL.2020 06:44:01

Highest Band Edge / 1 RB



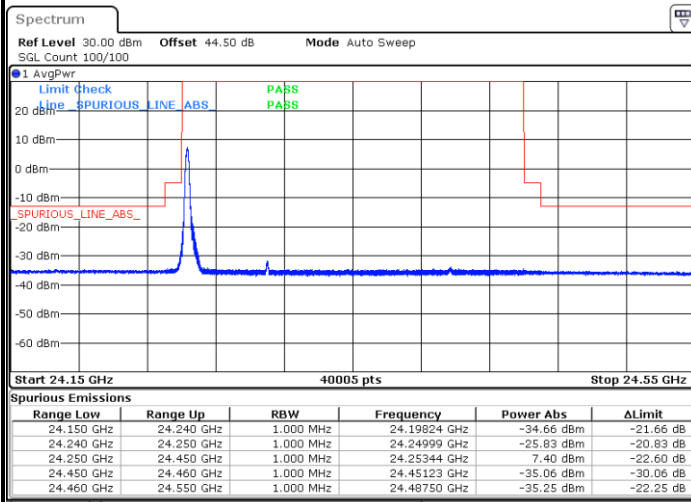
Date: 24.JUL.2020 02:26:55



CP-OFDM Module 0

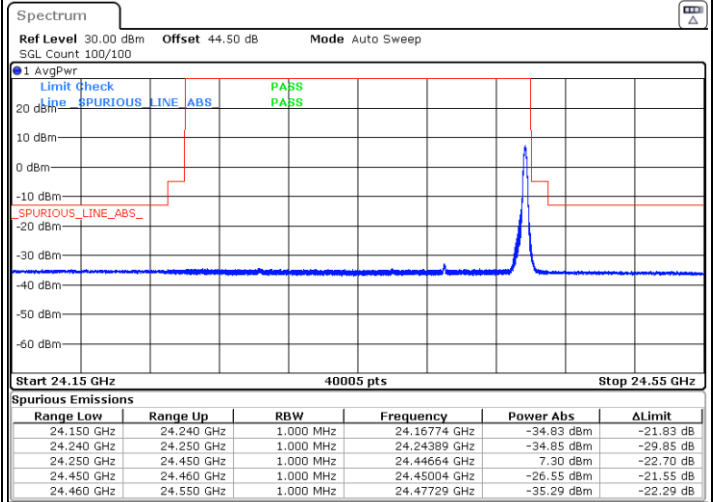
NR Band n258a/ 100MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 23.JUL.2020 06:42:25

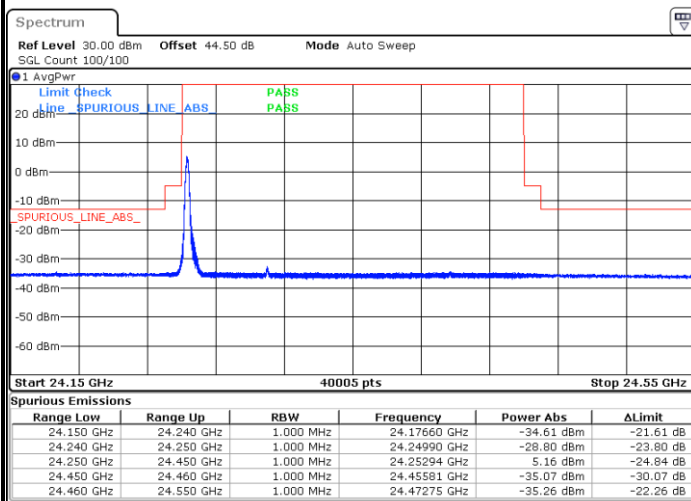
Highest Band Edge / 1 RB



Date: 24.JUL.2020 02:27:32

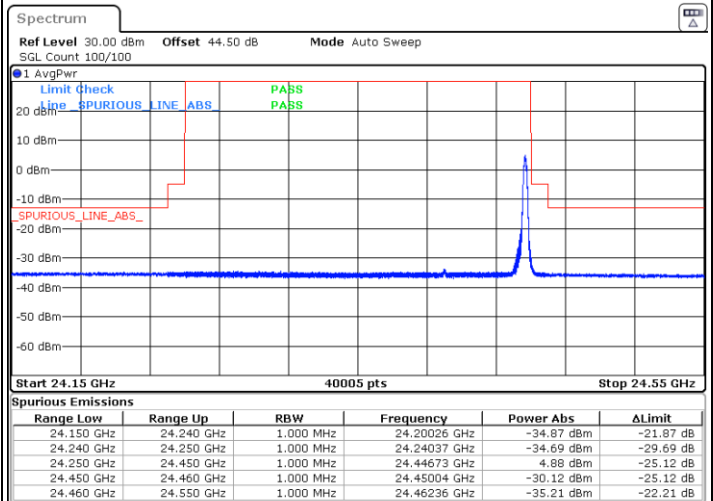
NR Band n258a/ 100MHz / 64QAM

Lowest Band Edge / 1 RB



Date: 23.JUL.2020 06:41:23

Highest Band Edge / 1 RB



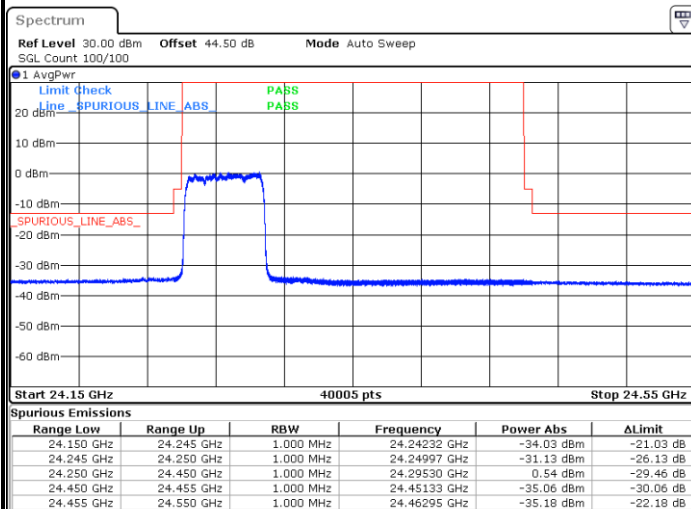
Date: 24.JUL.2020 02:28:24



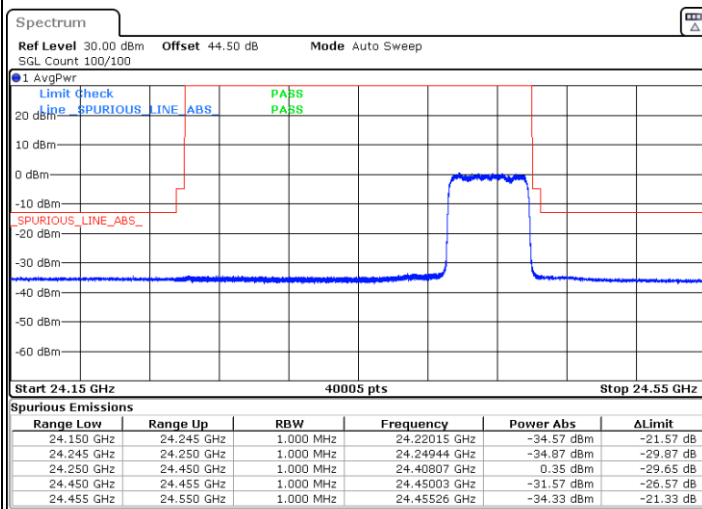
DFT-s-OFDM Module 0

NR Band n258a/ 50MHz / BPSK

Lowest Band Edge / Full RB

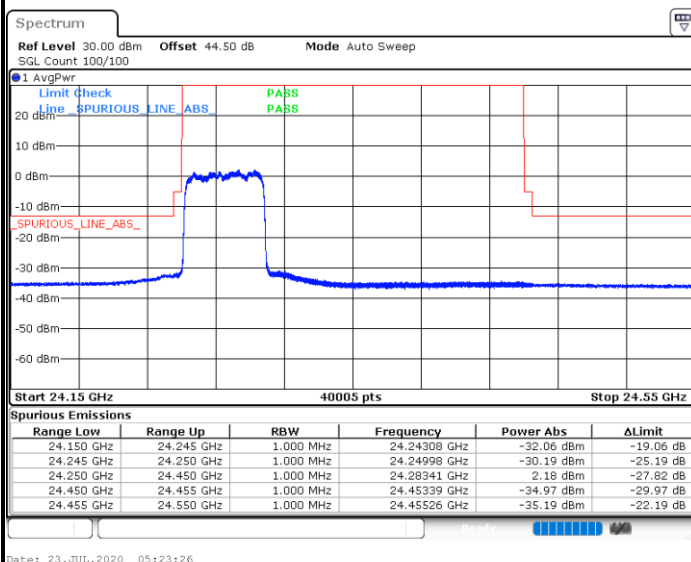


Highest Band Edge / Full RB



NR Band n258a/ 50MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

