

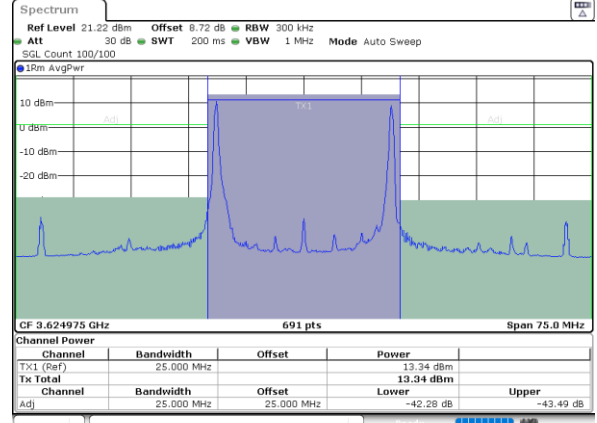
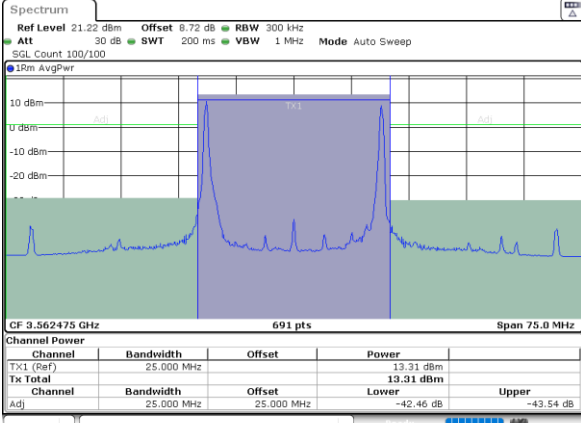


LTE Band 48C/ 20MHz+5MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB24

Middle Band Edge / 1RB0 and 1RB24

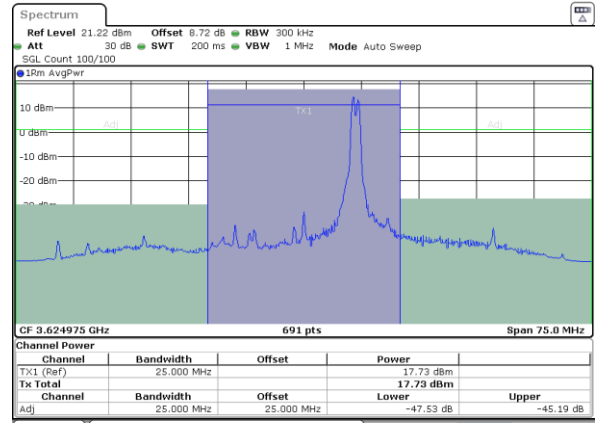
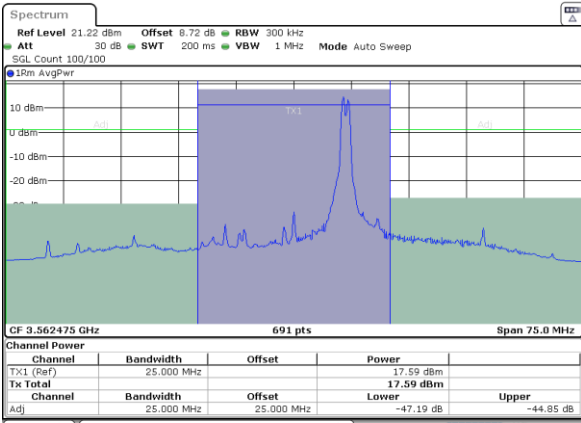


Date: 18.MAY.2022 13:02:13

Date: 18.MAY.2022 13:13:20

Lowest Band Edge / 1RB99 and 1RB0

Middle Band Edge / 1RB99 and 1RB0

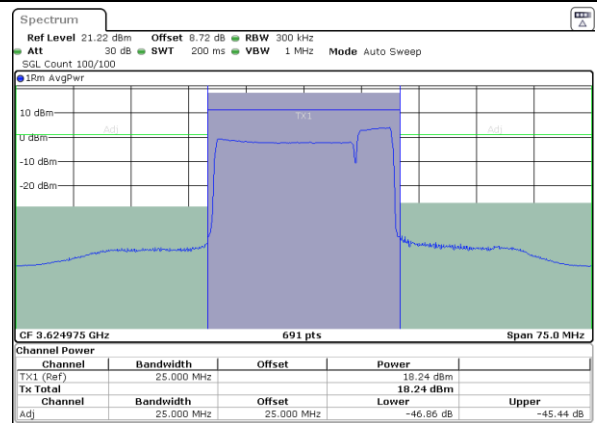
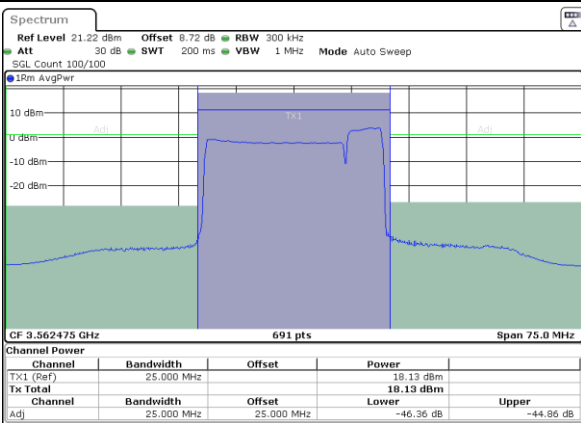


Date: 18.MAY.2022 13:01:28

Date: 18.MAY.2022 13:14:04

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 18.MAY.2022 13:07:23

Date: 18.MAY.2022 13:08:10

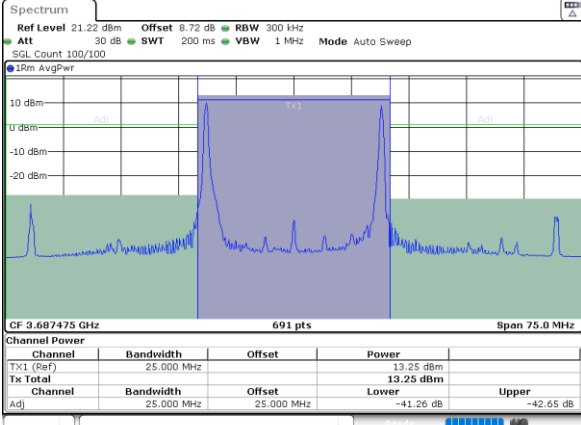


LTE Band 48C / 20MHz+5MHz

256QAM

Highest Band Edge / 1RB0 and 1RB24

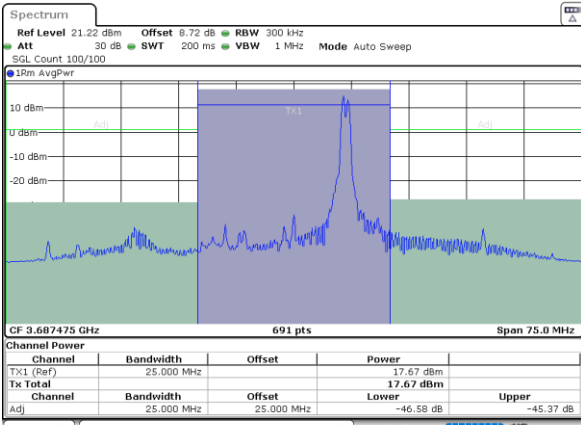
N/A



Date: 18\_MAY\_2022 13:20:01

Highest Band Edge / 1RB99 and 1RB0

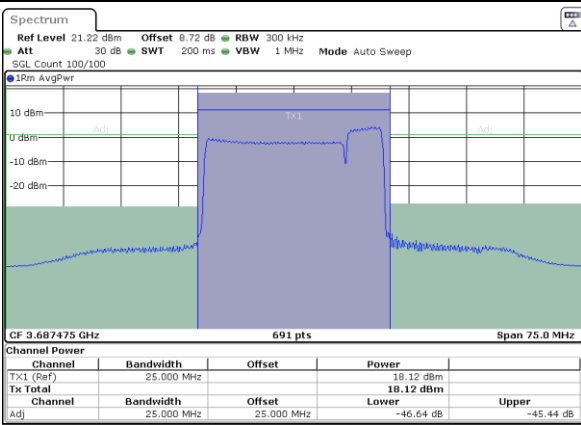
N/A



Date: 18\_MAY\_2022 13:19:17

Highest Band Edge / Full RB

N/A



Date: 18\_MAY\_2022 13:29:34

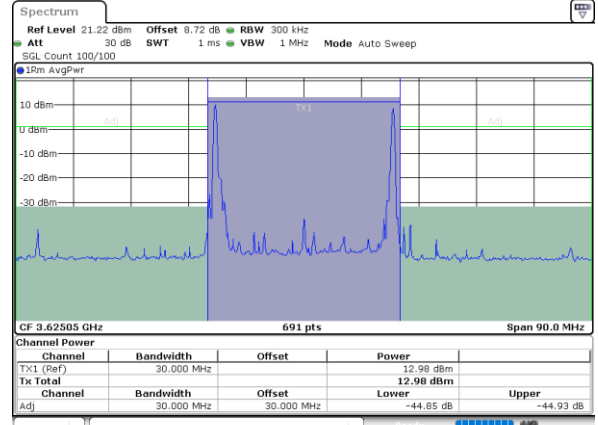
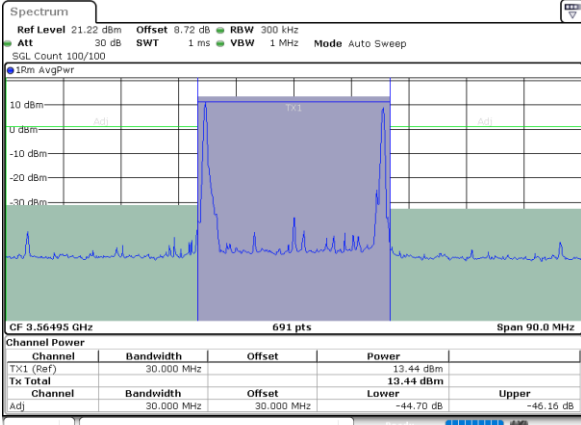


LTE Band 48C / 20MHz+10MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB49

Middle Band Edge / 1RB0 and 1RB49

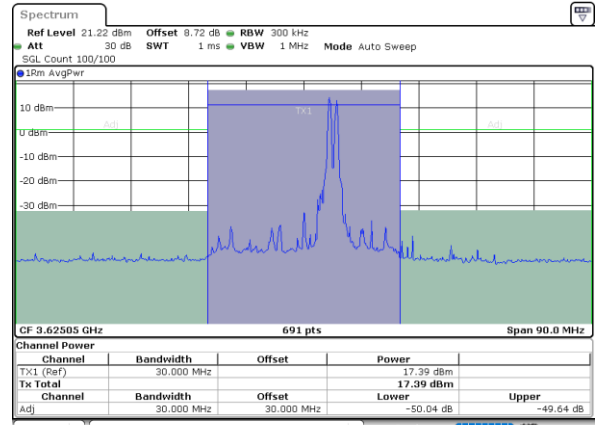
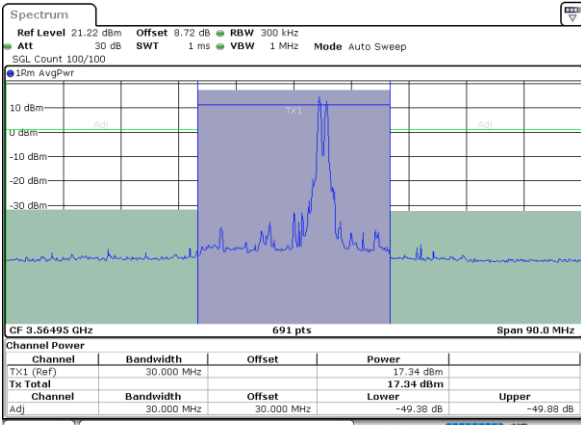


Date: 19\_MAY\_2022 05:00:08

Date: 19\_MAY\_2022 05:10:02

Lowest Band Edge / 1RB99 and 1RB0

Middle Band Edge / 1RB99 and 1RB0

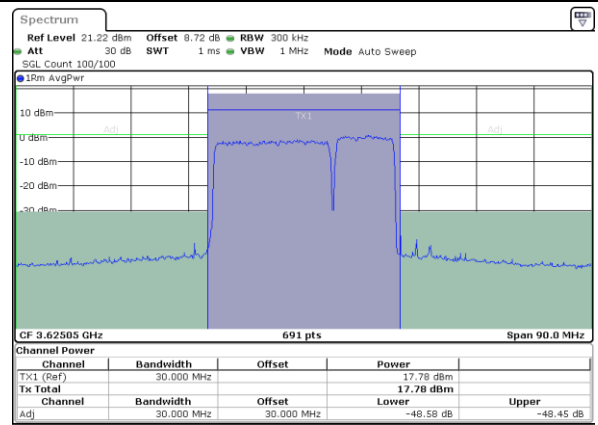
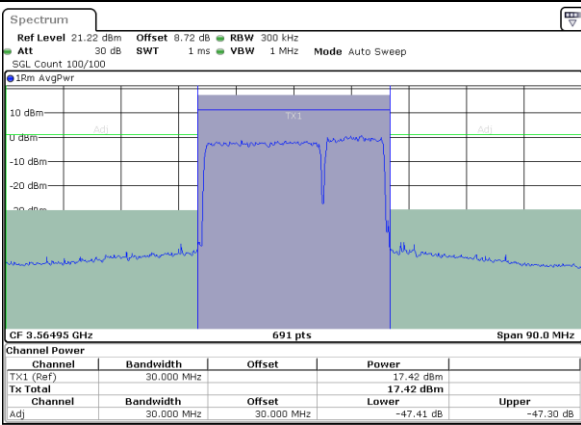


Date: 19\_MAY\_2022 05:01:17

Date: 19\_MAY\_2022 05:08:08

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 19\_MAY\_2022 04:53:45

Date: 19\_MAY\_2022 05:16:21

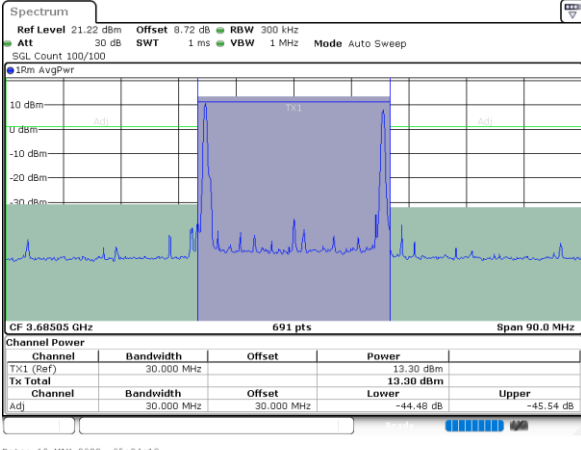


LTE Band 48C / 20MHz+10MHz

256QAM

Highest Band Edge / 1RB0 and 1RB49

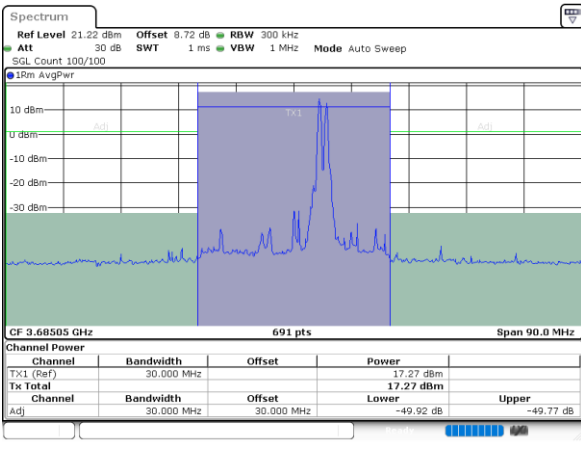
N/A



Date: 19\_MAY\_2022 05:24:18

Highest Band Edge / 1RB99 and 1RB0

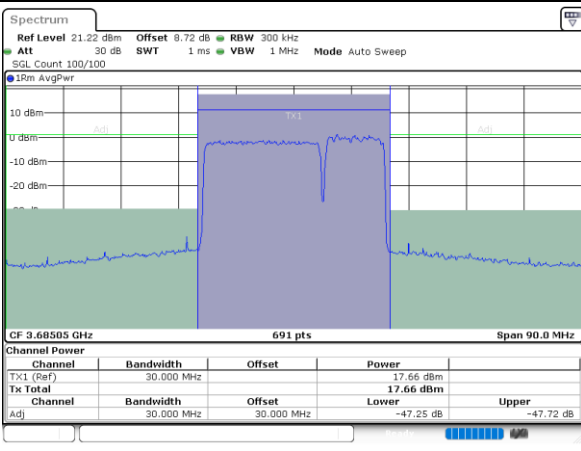
N/A



Date: 19\_MAY\_2022 05:25:26

Highest Band Edge / Full RB

N/A



Date: 19\_MAY\_2022 05:17:19

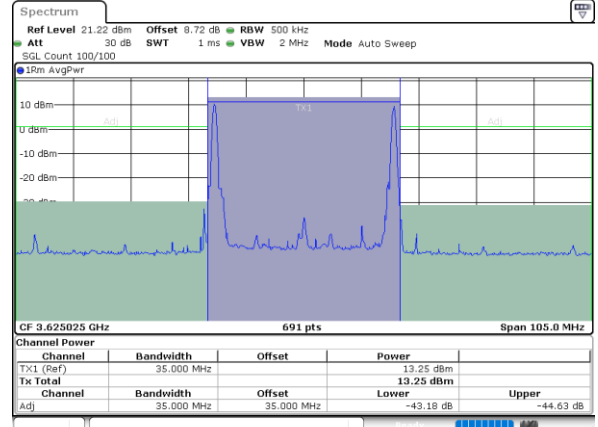
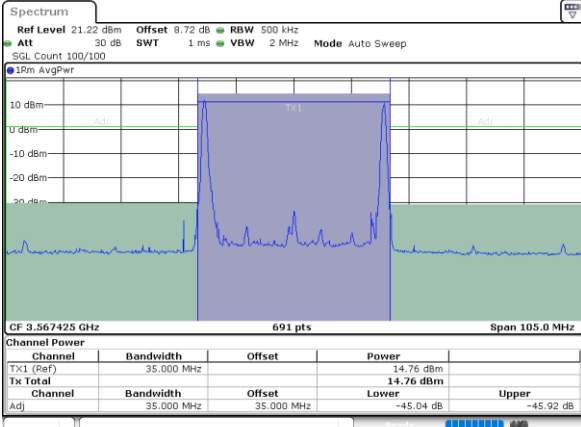


LTE Band 48C / 20MHz+15MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB74

Middle Band Edge / 1RB0 and 1RB74

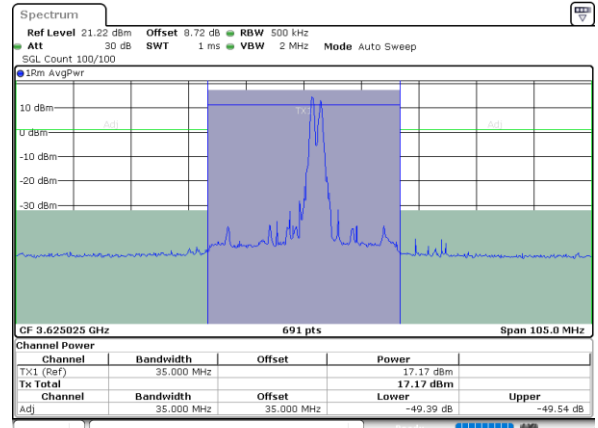
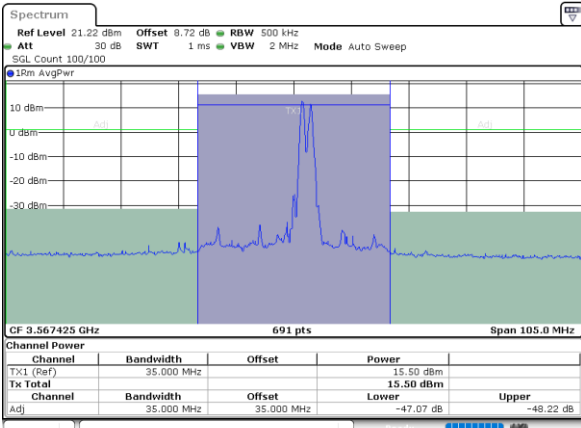


Date: 19\_MAY\_2022 05:36:24

Date: 19\_MAY\_2022 05:50:53

Lowest Band Edge / 1RB99 and 1RB0

Middle Band Edge / 1RB99 and 1RB0

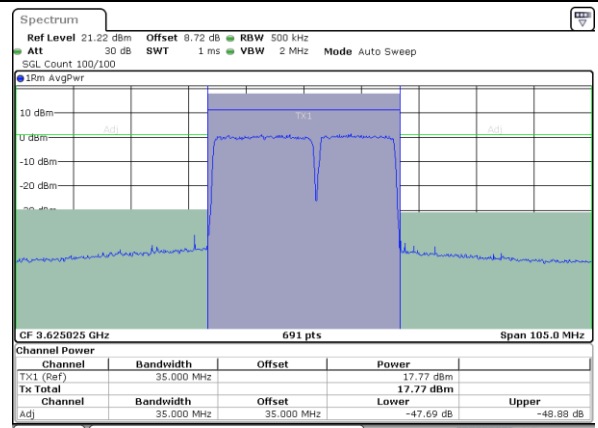
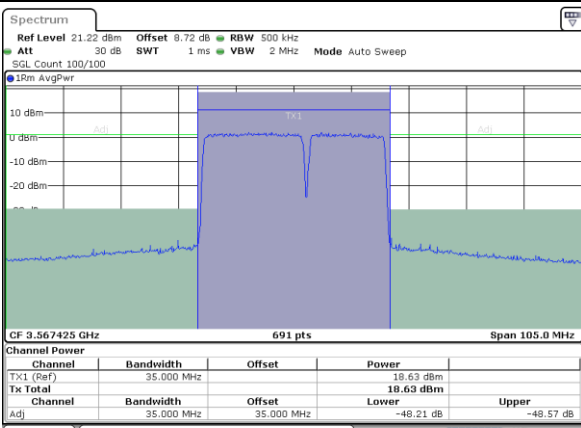


Date: 19\_MAY\_2022 05:42:38

Date: 19\_MAY\_2022 05:43:39

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 19\_MAY\_2022 05:35:09

Date: 19\_MAY\_2022 05:52:06

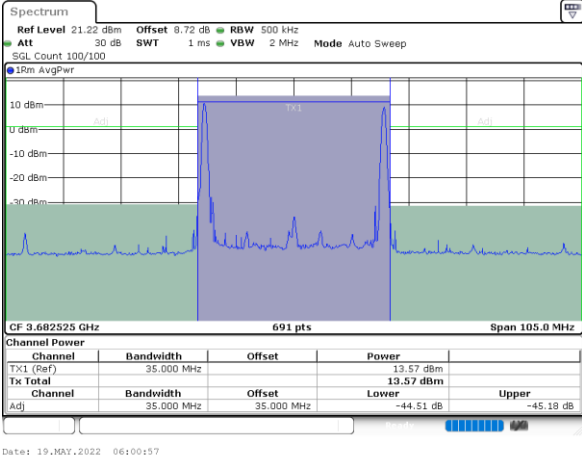


LTE Band 48C / 20MHz+15MHz

256QAM

Highest Band Edge / 1RB0 and 1RB74

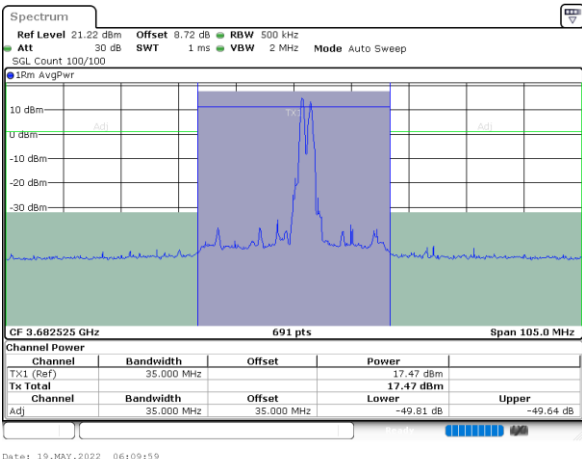
N/A



Date: 19\_MAY\_2022 06:00:57

Highest Band Edge / 1RB99 and 1RB0

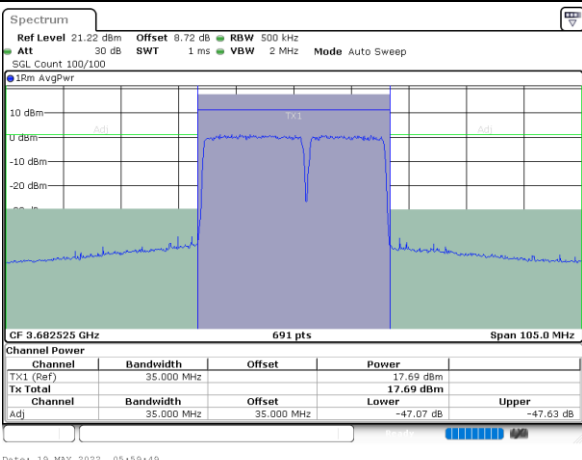
N/A



Date: 19\_MAY\_2022 06:09:59

Highest Band Edge / Full RB

N/A



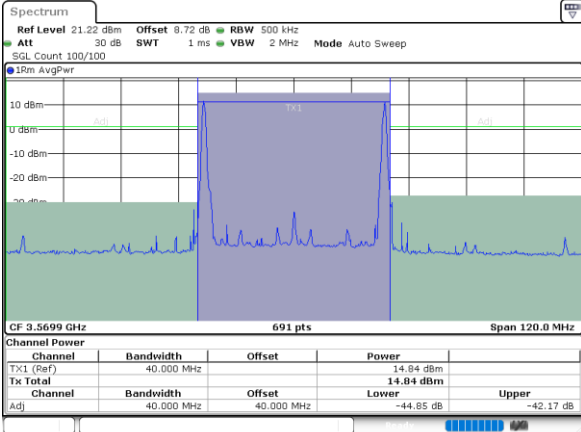
Date: 19\_MAY\_2022 05:59:49



LTE Band 48C / 20MHz+20MHz

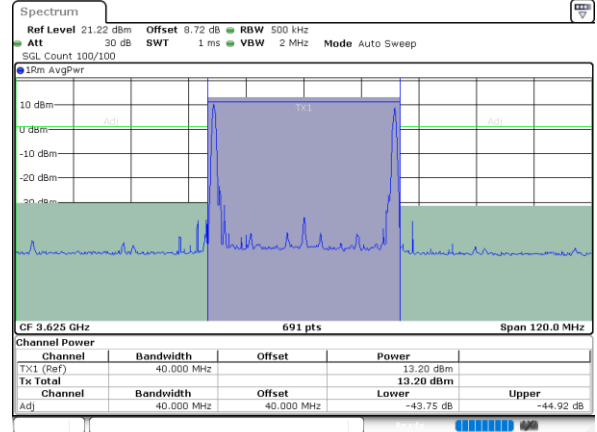
256QAM

Lowest Band Edge / 1RB0 and 1RB99



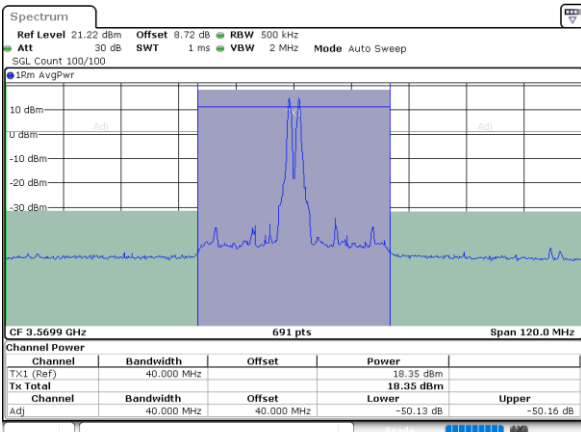
Date: 19\_MAY.2022 06:29:30

Middle Band Edge / 1RB0 and 1RB99



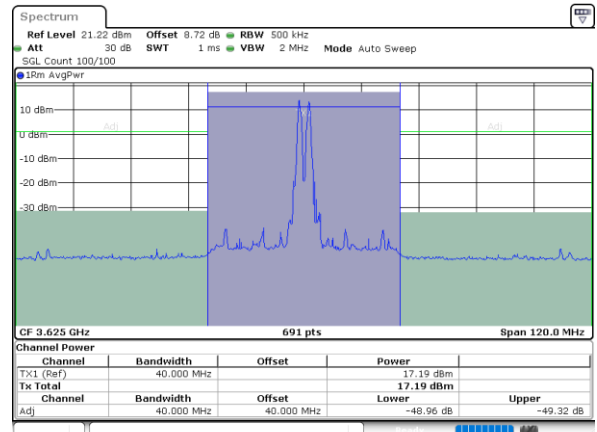
Date: 19\_MAY.2022 06:40:19

Lowest Band Edge / 1RB99 and 1RB0



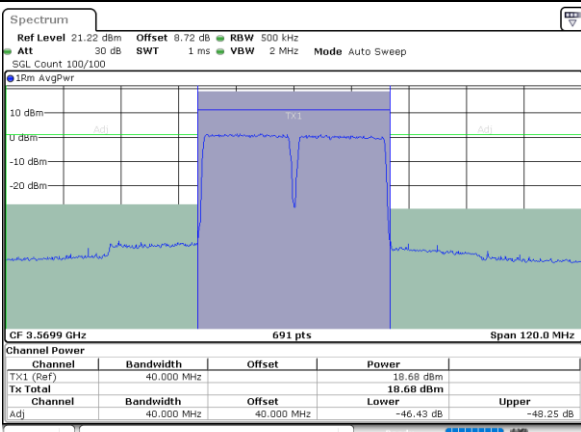
Date: 19\_MAY.2022 06:34:30

Middle Band Edge / 1RB99 and 1RB0



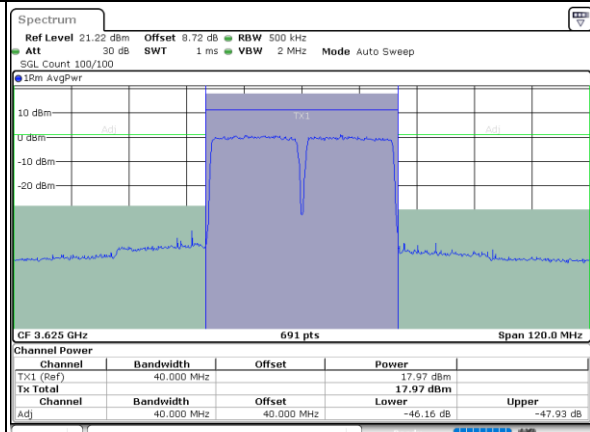
Date: 19\_MAY.2022 06:35:20

Lowest Band Edge / Full RB



Date: 19\_MAY.2022 06:28:47

Middle Band Edge / Full RB



Date: 19\_MAY.2022 06:41:03

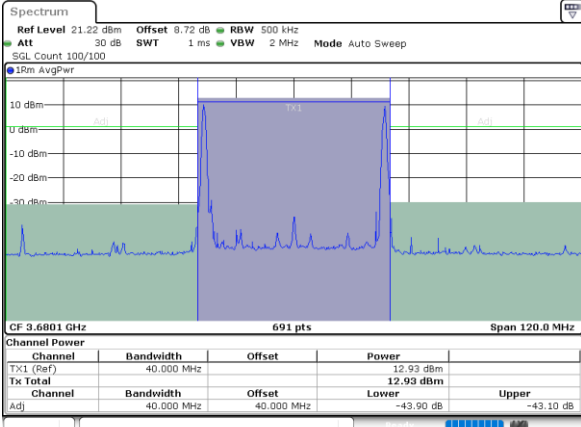


LTE Band 48C / 20MHz+20MHz

256QAM

Highest Band Edge / 1RB0 and 1RB99

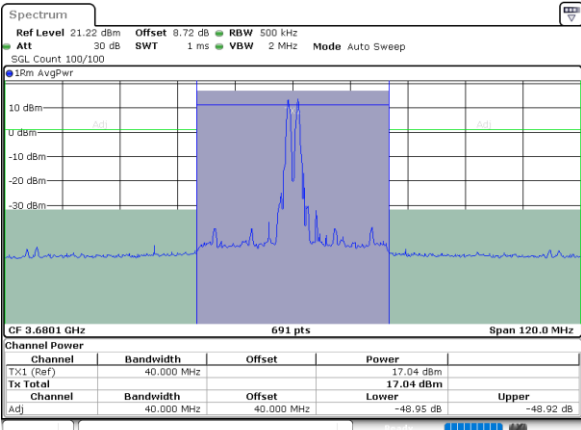
N/A



Date: 19\_MAY\_2022 06:46:51

Highest Band Edge / 1RB99 and 1RB0

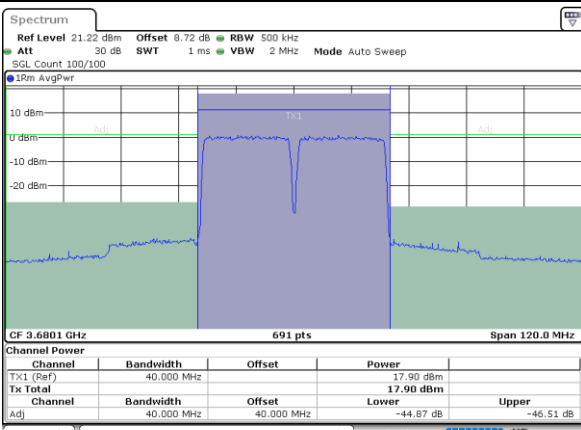
N/A



Date: 19\_MAY\_2022 06:51:52

Highest Band Edge / Full RB

N/A



Date: 19\_MAY\_2022 06:46:08





Frequency Stability

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0000	PASS
40	Normal Voltage	0.0116	
30	Normal Voltage	0.0028	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0205	
0	Normal Voltage	0.0277	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0132	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0038	
20	Normal Voltage	0.0012	
20	Battery End Point	0.0245	

Note:

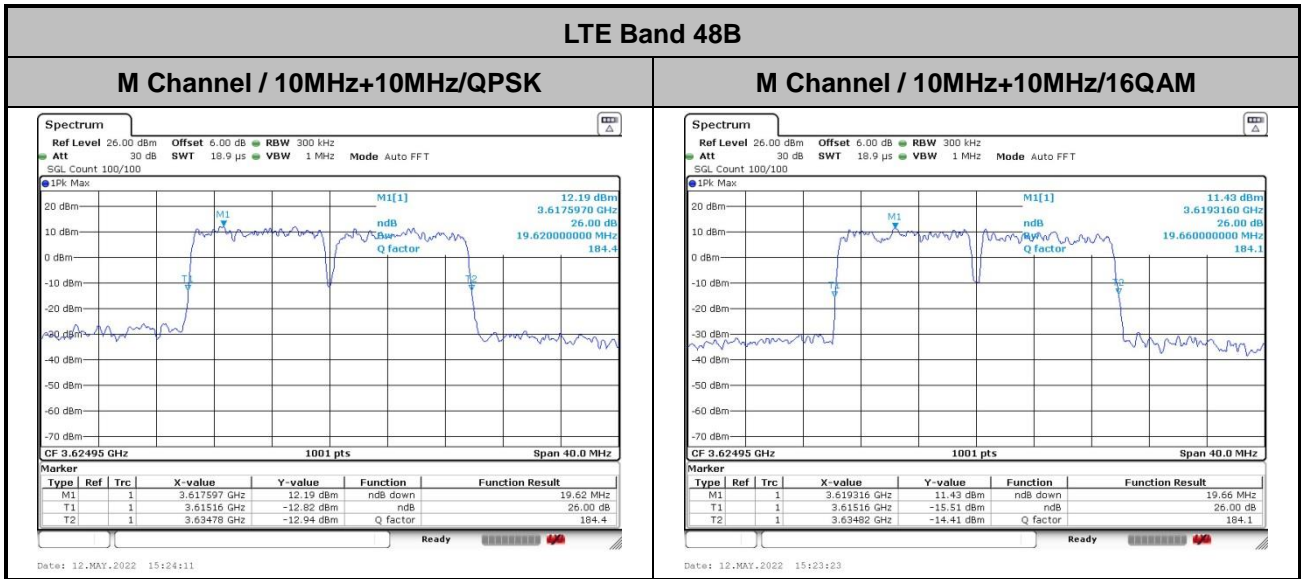
1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.48 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 48B

## 26dB Bandwidth

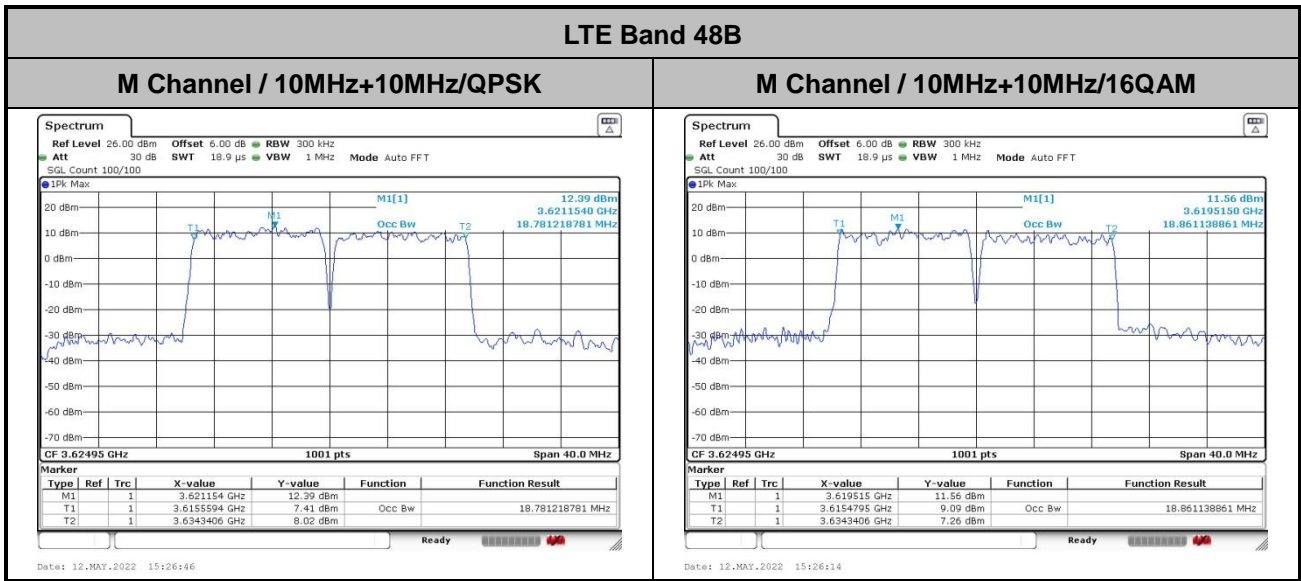
Mode	LTE Band 48B : 26dB BW(MHz)	
QPSK	QPSK	16QAM
BW	10MHz+10MHz	10MHz+10MHz
Middle CH	19.62	19.66





# Occupied Bandwidth

Mode	LTE Band 48B : 99%OBW(MHz)	
QPSK	QPSK	16QAM
BW	10MHz+10MHz	10MHz+10MHz
Middle CH	18.78	18.86





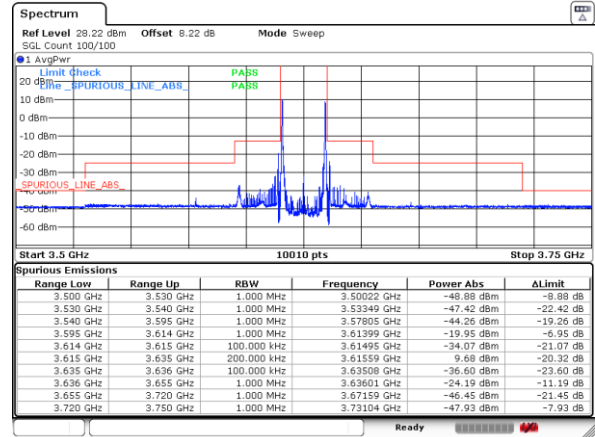
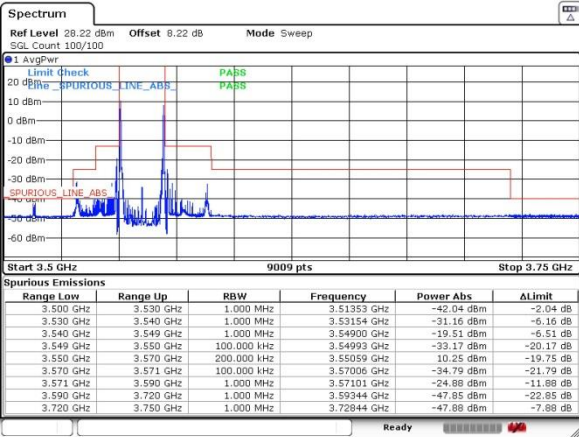
# Conducted Band Edge

## LTE Band 48B / 10MHz+10MHz

### QPSK

#### Lowest Band Edge / 1RB0 and 1RB49

#### Middle Band Edge / 1RB0 and 1RB49

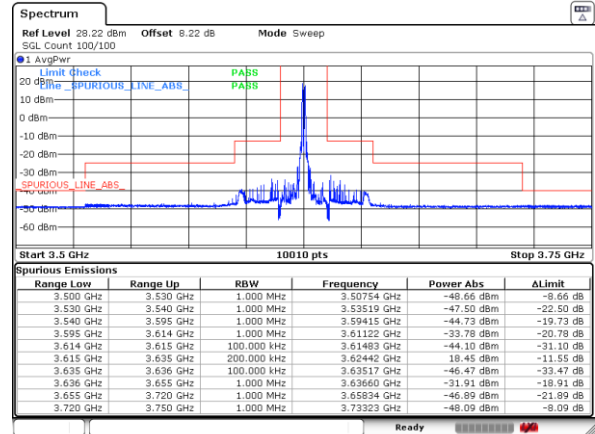
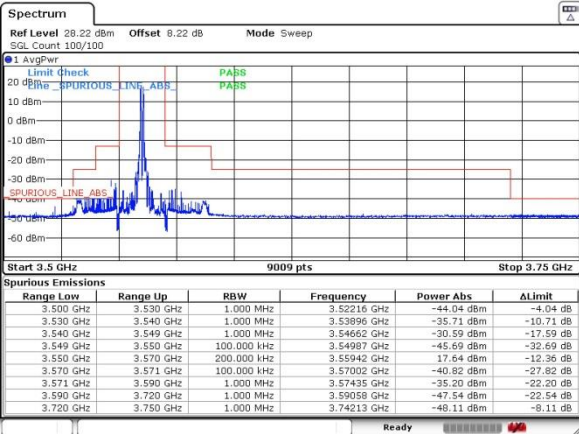


Date: 12.MAY.2022 14:09:40

Date: 12.MAY.2022 14:00:06

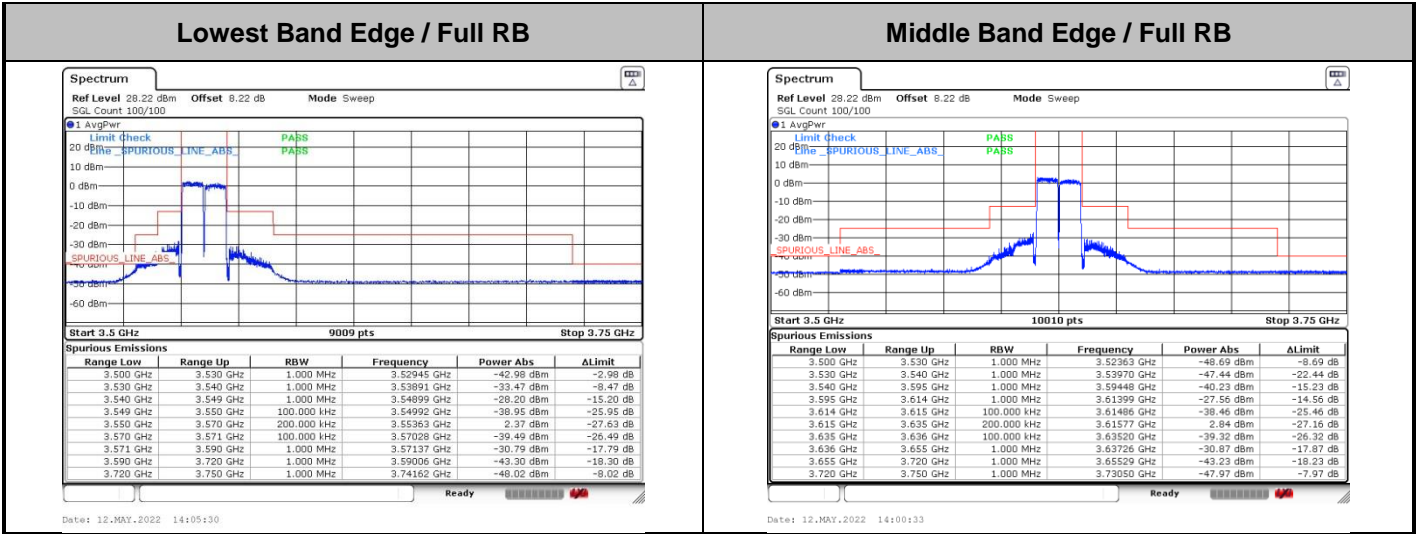
#### Lowest Band Edge / 1RB49 and 1RB0

#### Middle Band Edge / 1RB49 and 1RB0



Date: 12.MAY.2022 14:10:14

Date: 12.MAY.2022 13:57:13

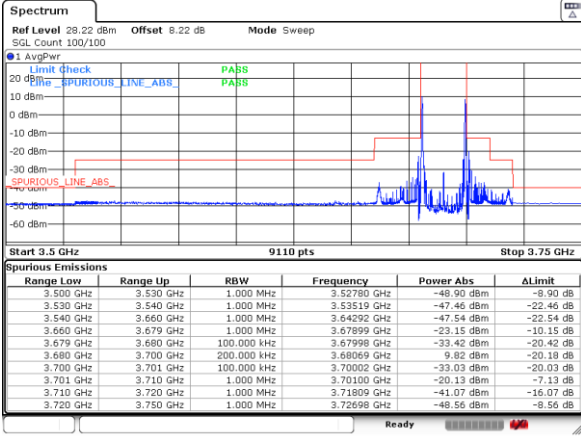




LTE Band 48B / 10MHz+10MHz

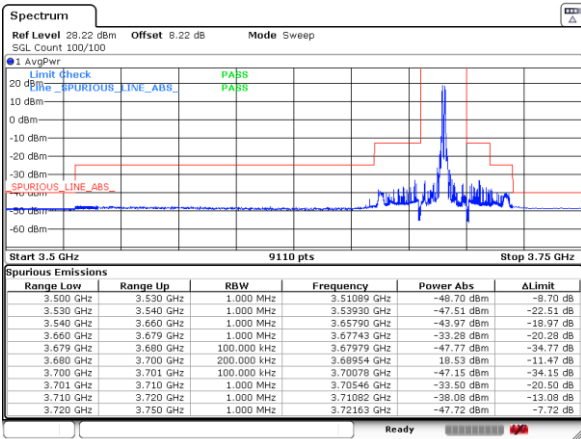
QPSK

Highest Band Edge / 1RB0 and 1RB49



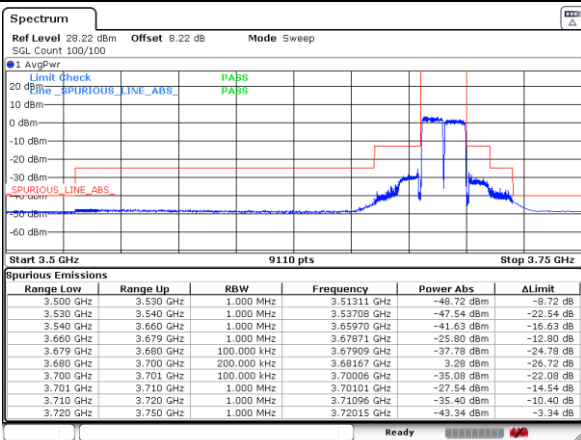
Date: 12, MAY, 2022 13:48:03

Highest Band Edge / 1RB49 and 1RB0



Date: 12, MAY, 2022 13:48:46

Highest Band Edge / Full RB



Date: 12, MAY, 2022 13:44:57

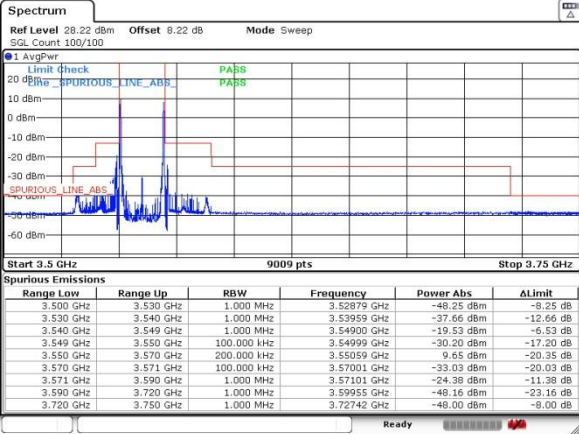


LTE Band 48B / 10MHz+10MHz

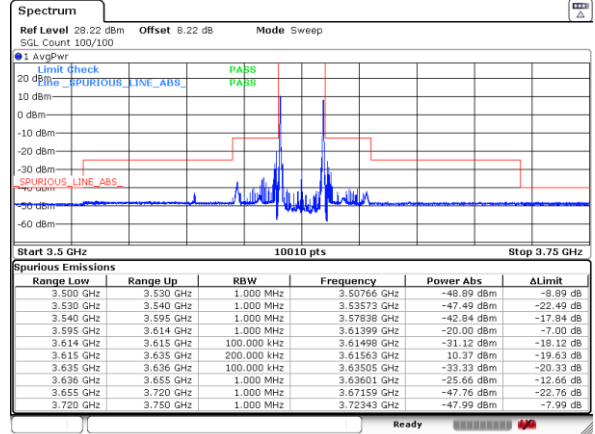
16QAM

Lowest Band Edge / 1RB0 and 1RB49

Middle Band Edge / 1RB0 and 1RB49



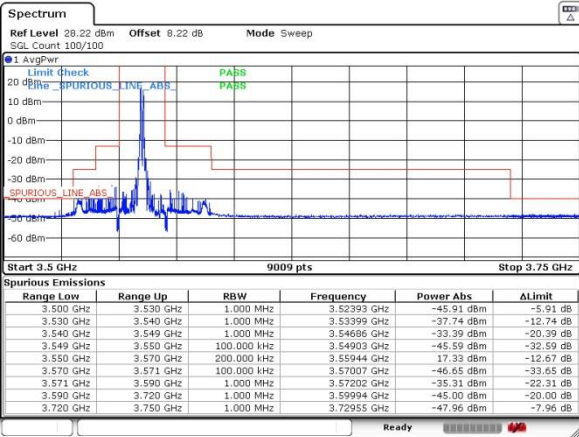
Date: 12.MAY.2022 14:09:19



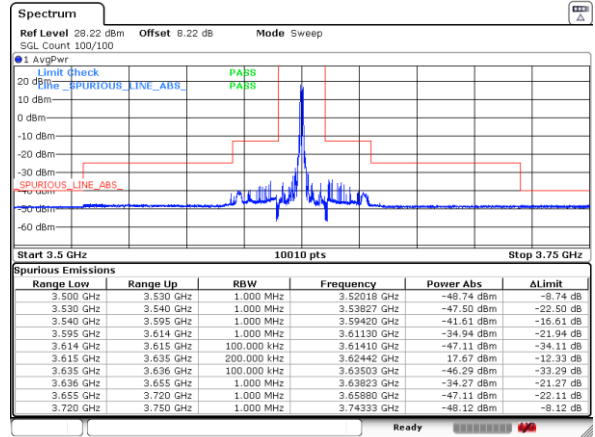
Date: 12.MAY.2022 13:59:37

Lowest Band Edge / 1RB49 and 1RB0

Middle Band Edge / 1RB9 and 1RB0



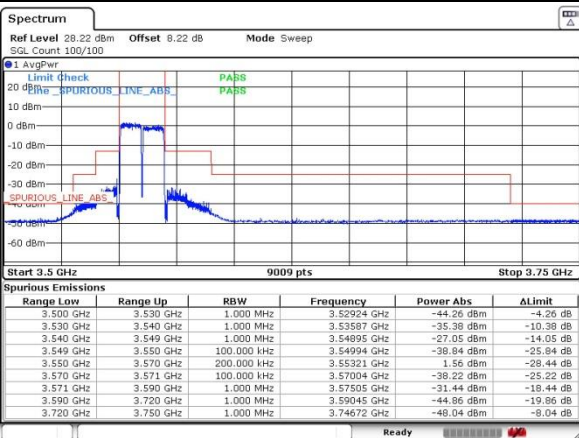
Date: 12.MAY.2022 14:10:58



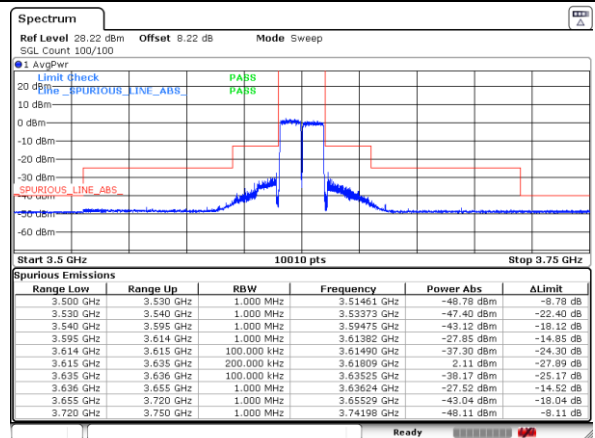
Date: 12.MAY.2022 13:58:07

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 12.MAY.2022 14:07:23



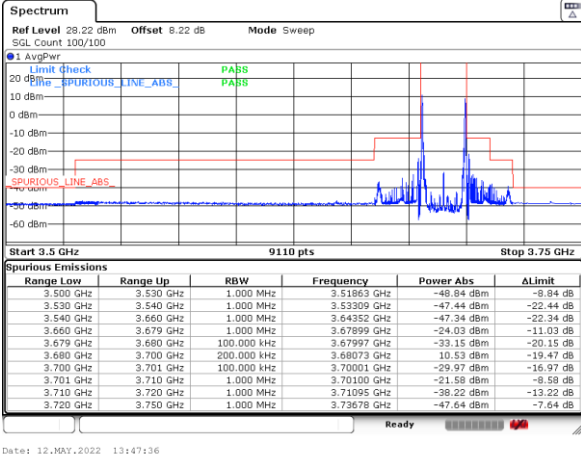
Date: 12.MAY.2022 14:01:09



LTE Band 48B / 10MHz+10MHz

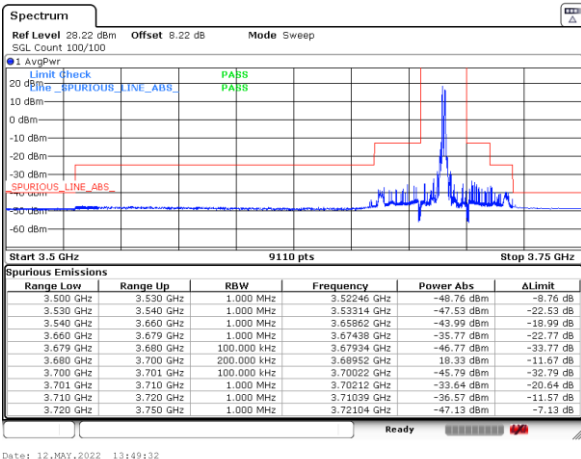
16QAM

Highest Band Edge / 1RB0 and 1RB49



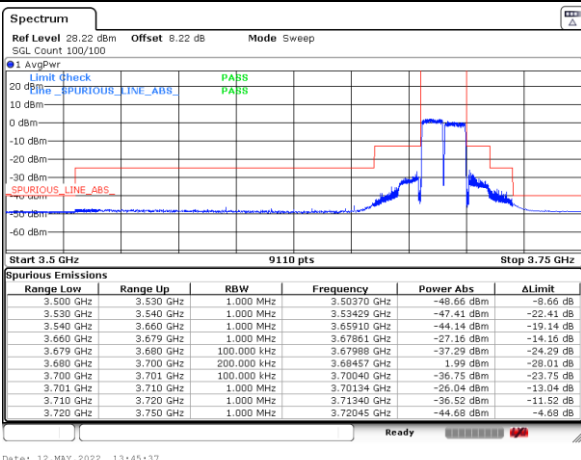
Date: 12.MAY.2022 13:47:36

Highest Band Edge / 1RB49 and 1RB0



Date: 12.MAY.2022 13:49:32

Highest Band Edge / Full RB



Date: 12.MAY.2022 13:45:37



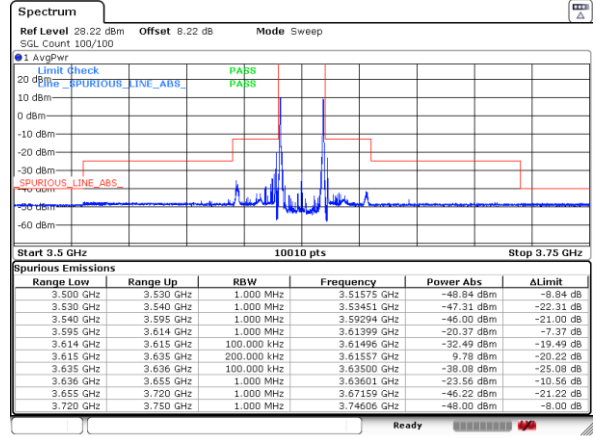
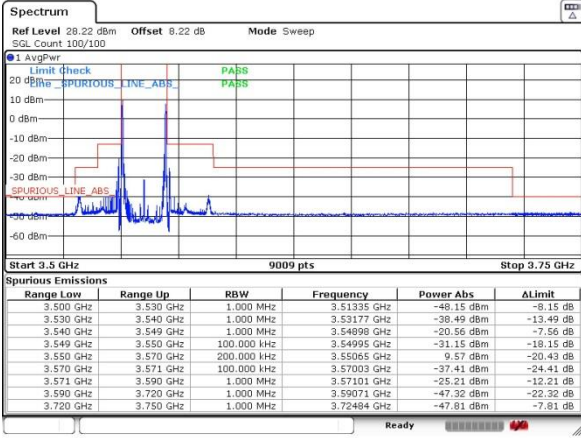


LTE Band 48B/ 10MHz+10MHz

64QAM

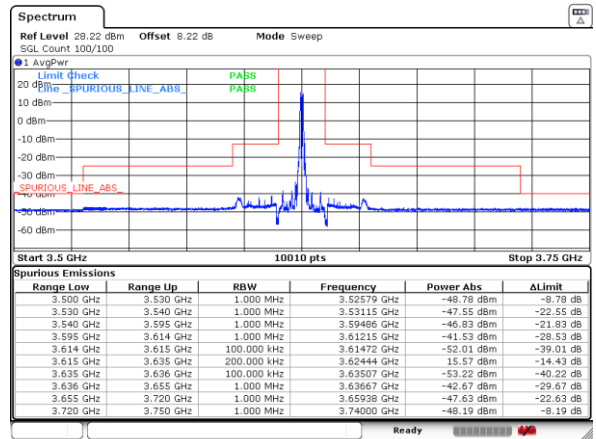
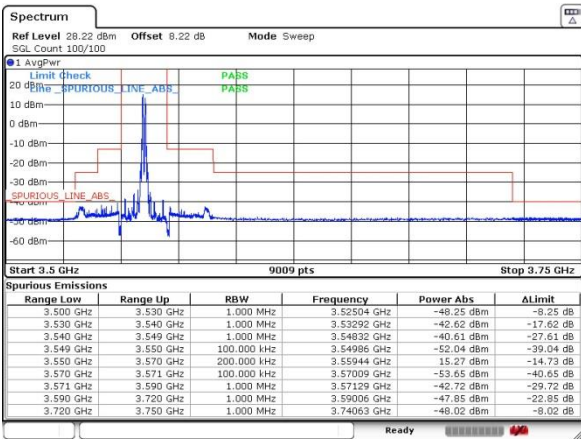
Lowest Band Edge / 1RB0 and 1RB49

Middle Band Edge / 1RB0 and 1RB49



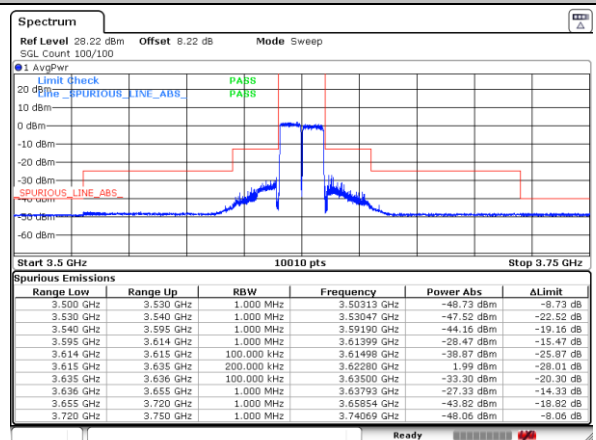
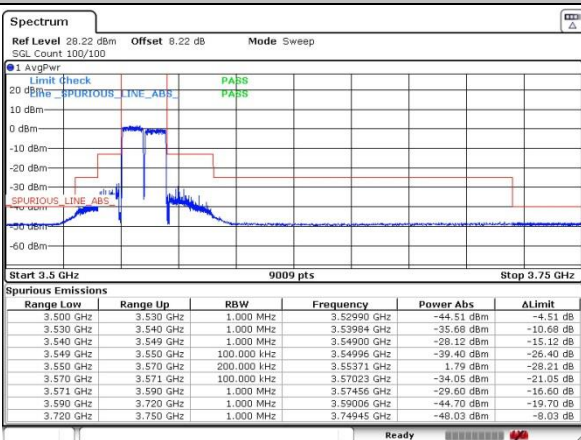
Lowest Band Edge / 1RB49 and 1RB0

Middle Band Edge / 1RB49 and 1RB0



Lowest Band Edge / Full RB

Middle Band Edge / Full RB

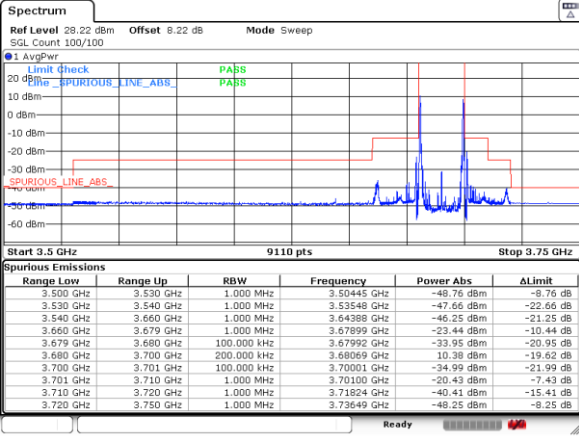




LTE Band 48B / 10MHz+10MHz

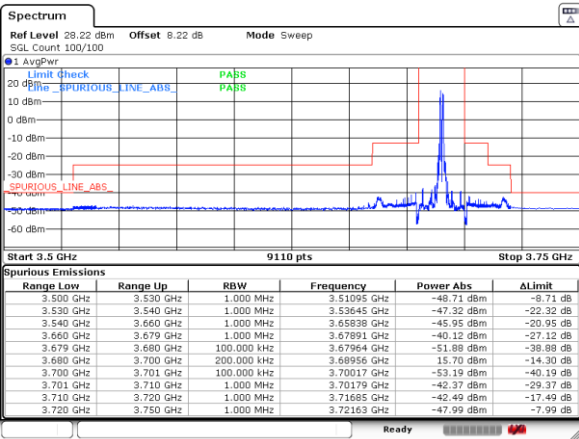
64QAM

Highest Band Edge / 1RB0 and 1RB49



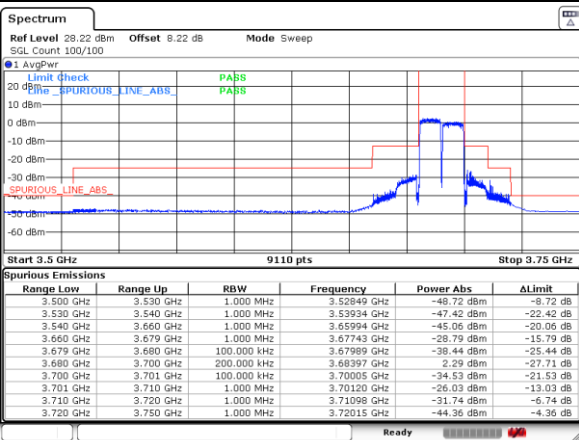
Date: 12\_MAY\_2022 13:46:41

Highest Band Edge / 1RB49 and 1RB0



Date: 12\_MAY\_2022 13:50:13

Highest Band Edge / Full RB



Date: 12\_MAY\_2022 13:46:05

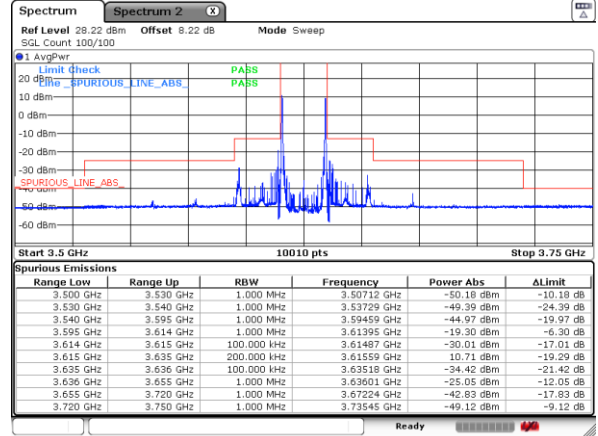
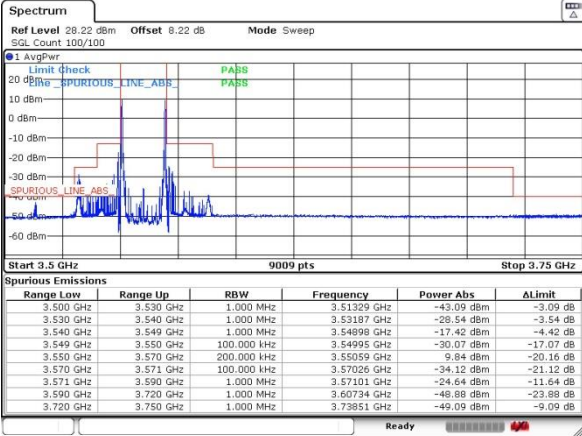


LTE Band 48B/ 10MHz+10MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB49

Middle Band Edge / 1RB0 and 1RB49

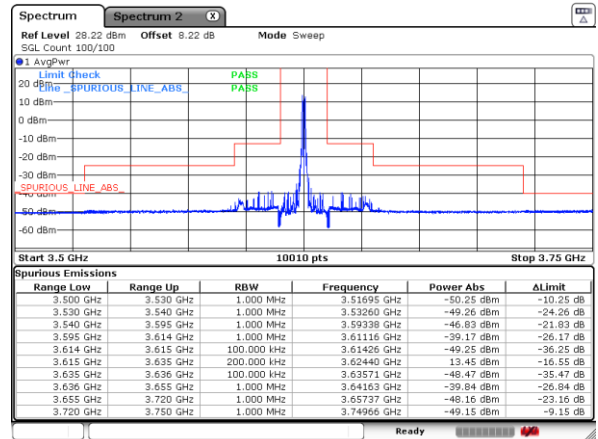
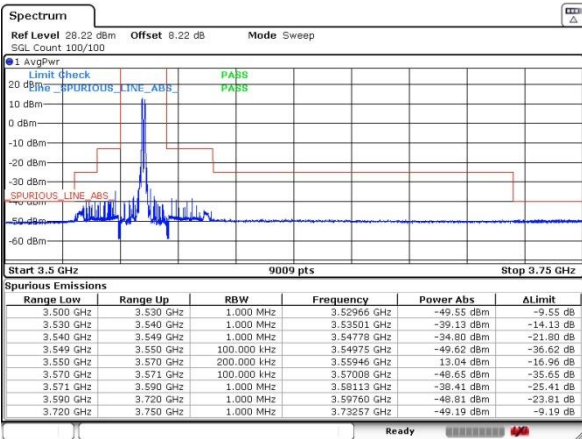


Date: 14 MAY 2022 02:23:33

Date: 14 MAY 2022 02:52:08

Lowest Band Edge / 1RB49 and 1RB0

Middle Band Edge / 1RB49 and 1RB0

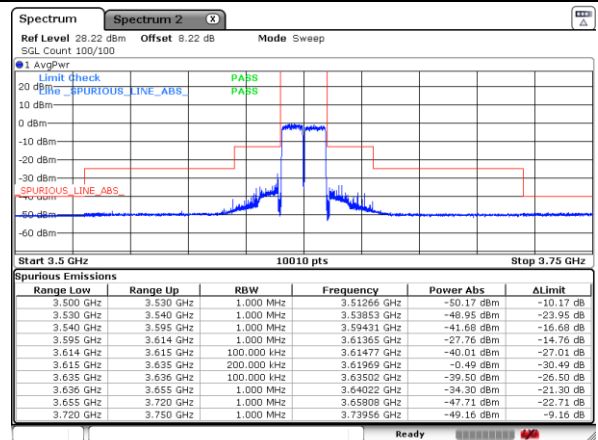


Date: 14 MAY 2022 02:24:55

Date: 14 MAY 2022 02:52:43

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 14 MAY 2022 02:22:19

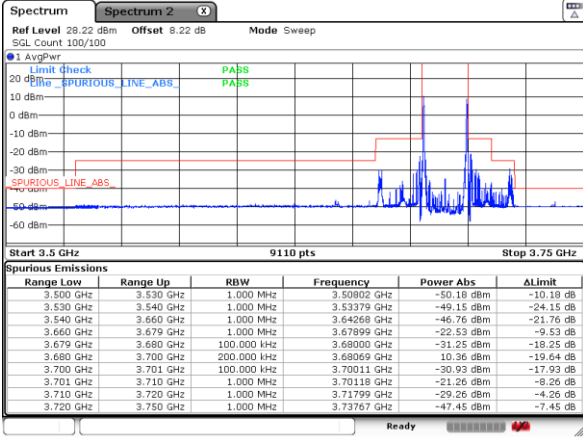
Date: 14 MAY 2022 02:51:11



LTE Band 48B / 10MHz+10MHz

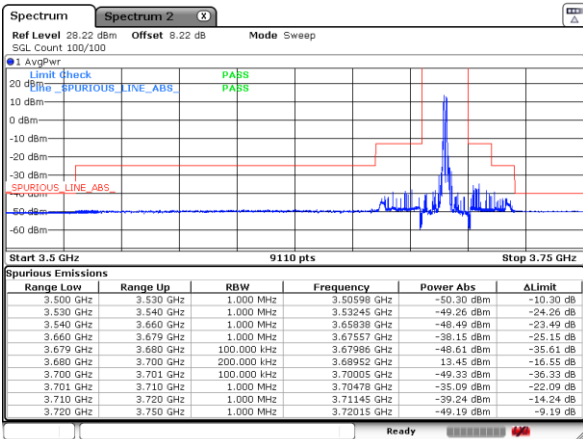
256QAM

Highest Band Edge / 1RB0 and 1RB49



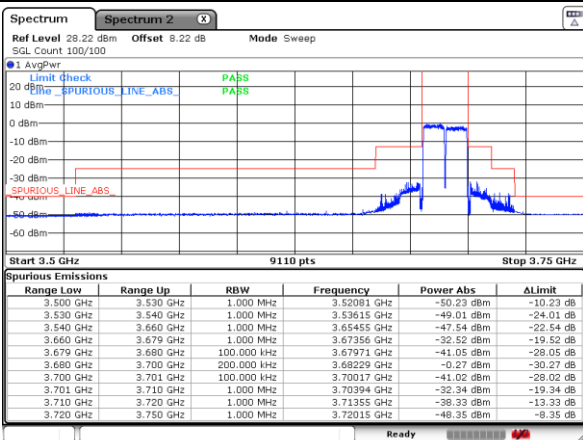
Date: 14 MAY 2022 02:54:31

Highest Band Edge / 1RB49 and 1RB0



Date: 14 MAY 2022 02:54:50

Highest Band Edge / Full RB



Date: 14 MAY 2022 02:54:05



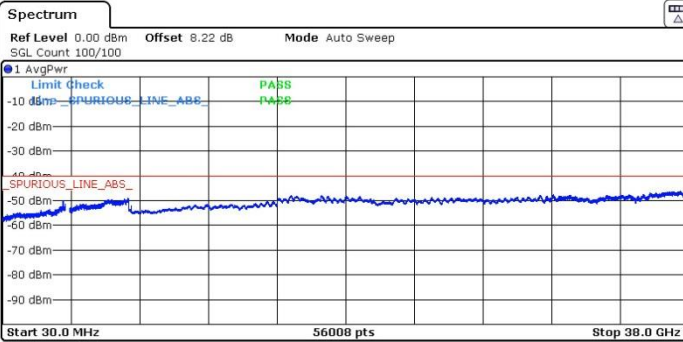
# Conducted Spurious Emission

## LTE Band 48B / 10MHz+10MHz

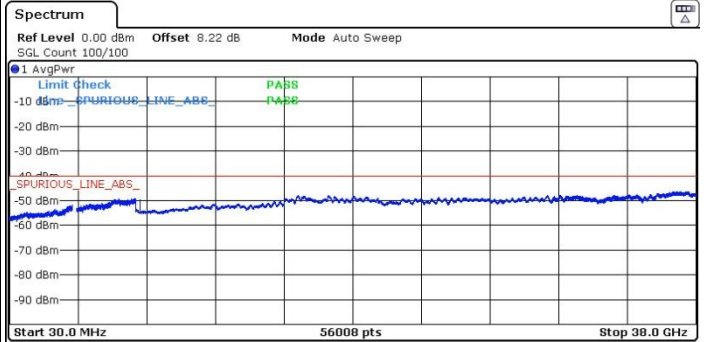
### QPSK

#### Lowest Channel / 1RB49 and 1RB0

#### Middle Channel / 1RB49 and 1RB0



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.27286 MHz	-54.78 dBm	-14.78 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97526 GHz	-53.58 dBm	-13.58 dB
3.000 GHz	3.500 GHz	1.000 MHz	3.40592 GHz	-50.04 dBm	-10.04 dB
3.750 GHz	7.000 GHz	1.000 MHz	6.97218 GHz	-49.11 dBm	-9.11 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.99592 GHz	-51.05 dBm	-11.05 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.67004 GHz	-47.97 dBm	-7.97 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.76053 GHz	-48.01 dBm	-8.01 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.51003 GHz	-46.23 dBm	-6.23 dB

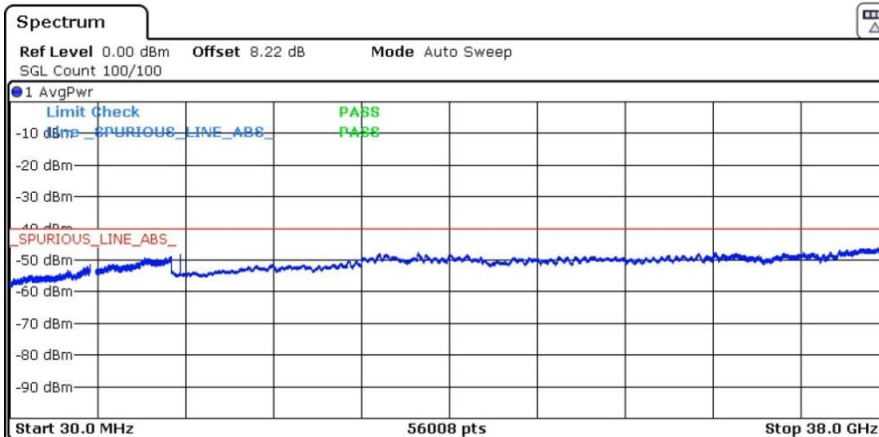


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	968.73313 MHz	-54.75 dBm	-14.75 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.54836 GHz	-53.62 dBm	-13.62 dB
3.000 GHz	3.500 GHz	1.000 MHz	3.47539 GHz	-51.81 dBm	-11.81 dB
3.750 GHz	7.000 GHz	1.000 MHz	6.95349 GHz	-49.24 dBm	-9.24 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.25021 GHz	-49.58 dBm	-9.58 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.66204 GHz	-47.82 dBm	-7.82 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.79253 GHz	-47.99 dBm	-7.99 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.50158 GHz	-46.31 dBm	-6.31 dB

Date: 12.MAY.2022 15:11:34

Date: 12.MAY.2022 15:09:15

#### Highest Channel / 1RB99 and 1RB0



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	882.93103 MHz	-54.97 dBm	-14.97 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.54036 GHz	-53.32 dBm	-13.32 dB
3.000 GHz	3.500 GHz	1.000 MHz	3.47514 GHz	-51.49 dBm	-11.49 dB
3.750 GHz	7.000 GHz	1.000 MHz	6.98842 GHz	-49.08 dBm	-9.08 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.37969 GHz	-48.30 dBm	-8.30 dB
14.000 GHz	22.000 GHz	1.000 MHz	17.66804 GHz	-47.70 dBm	-7.70 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.80052 GHz	-47.95 dBm	-7.95 dB
30.000 GHz	38.000 GHz	1.000 MHz	37.50247 GHz	-46.07 dBm	-6.07 dB

Date: 12.MAY.2022 15:07:23



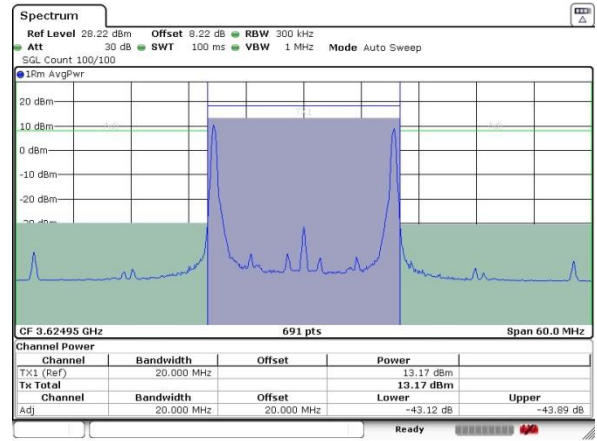
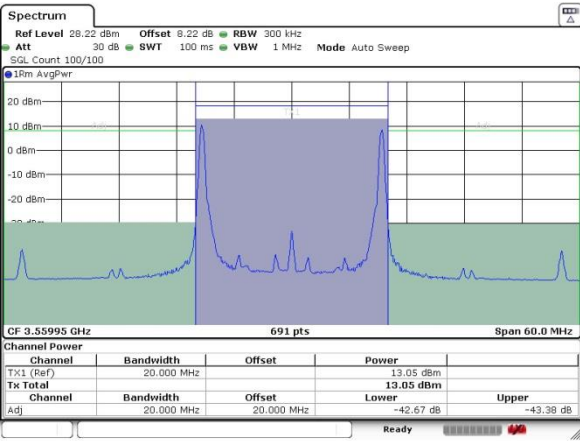
ACLR

LTE Band 48B / 10MHz+10MHz

QPSK

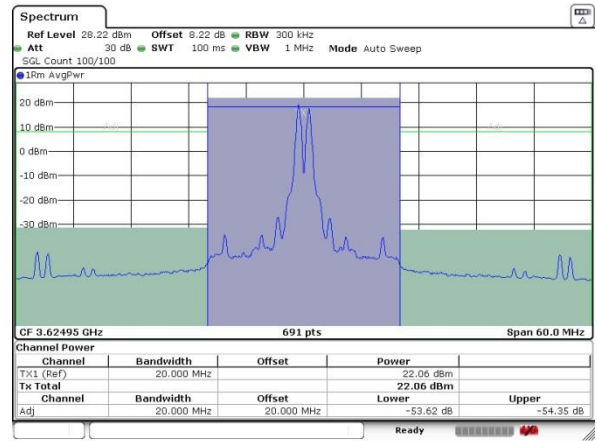
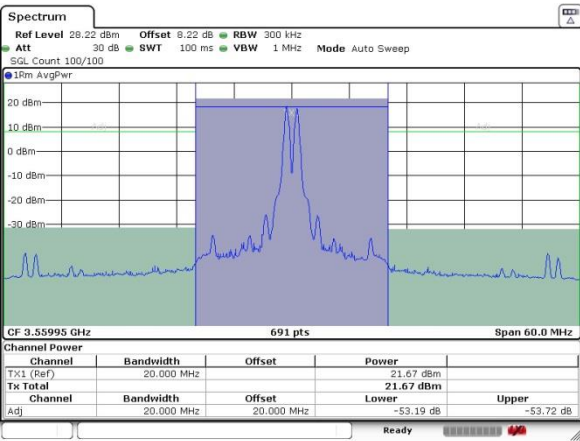
Lowest Band Edge / 1RB0 and 1RB99

Middle Band Edge / 1RB0 and 1RB99



Lowest Band Edge / 1RB99 and 1RB0

Middle Band Edge / 1RB99 and 1RB0





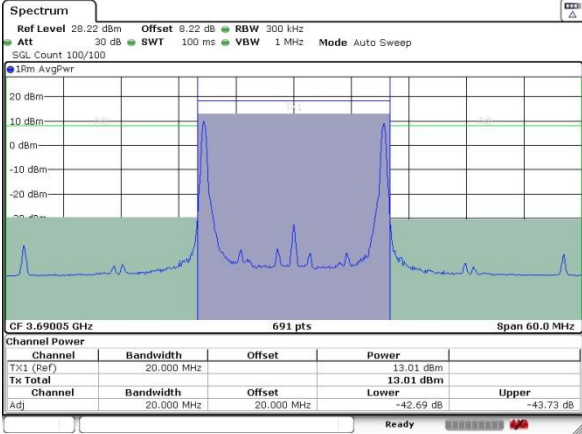


LTE Band 48B / 10MHz+10MHz

QPSK

Highest Band Edge / 1RB0 and 1RB99

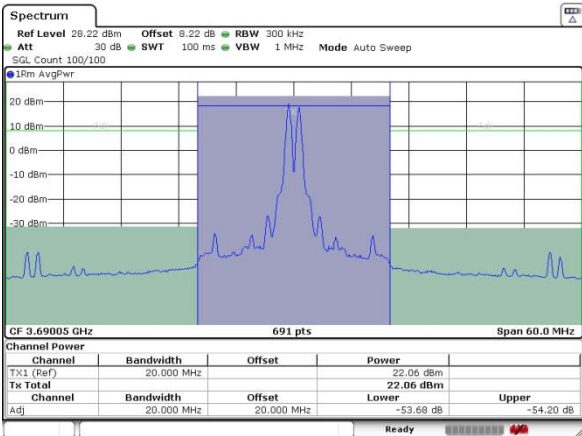
N/A



Date: 12.MAY.2022 14:54:41

Highest Band Edge / 1RB99 and 1RB0

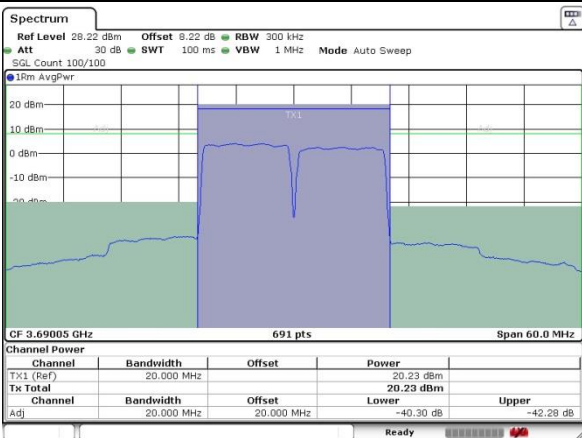
N/A



Date: 12.MAY.2022 14:55:25

Highest Band Edge / Full RB

N/A



Date: 12.MAY.2022 14:51:21

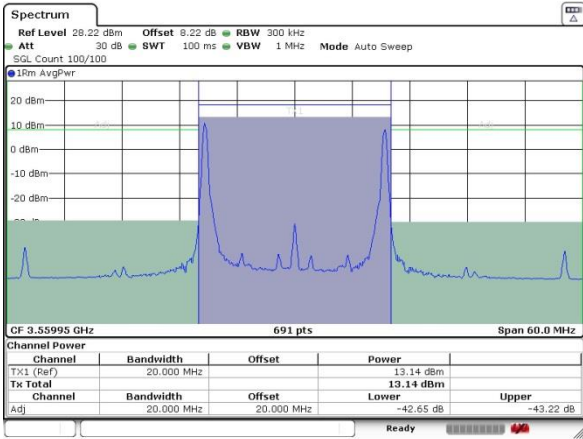




LTE Band 48B/ 10MHz+10MHz

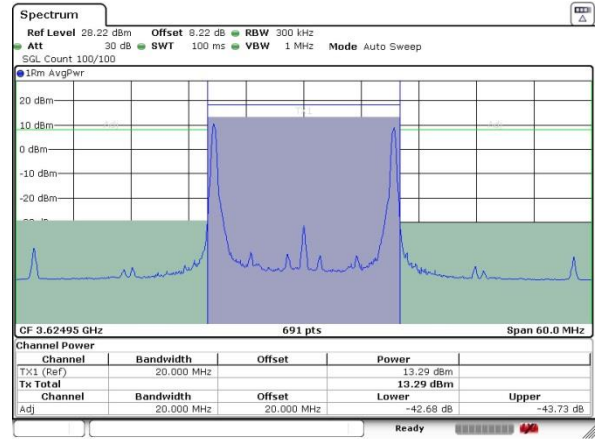
16QAM

Lowest Band Edge / 1RB0 and 1RB99



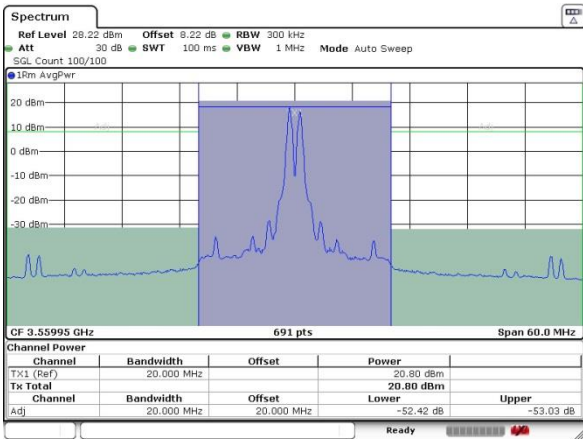
Date: 12.MAY.2022 14:38:52

Middle Band Edge / 1RB0 and 1RB99



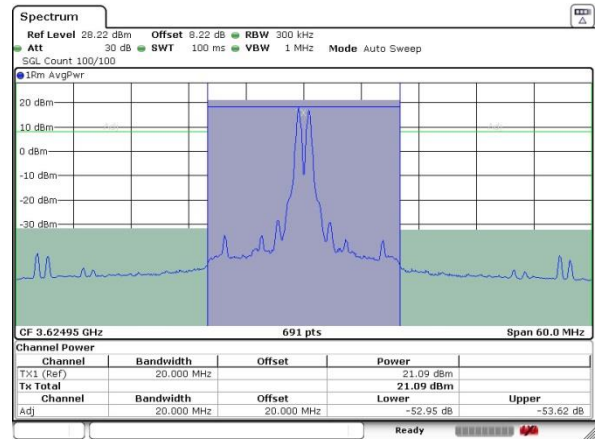
Date: 12.MAY.2022 14:46:56

Lowest Band Edge / 1RB99 and 1RB0



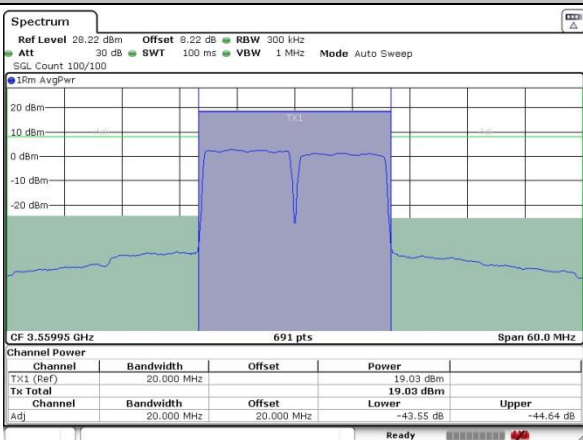
Date: 12.MAY.2022 14:41:19

Middle Band Edge / 1RB99 and 1RB0



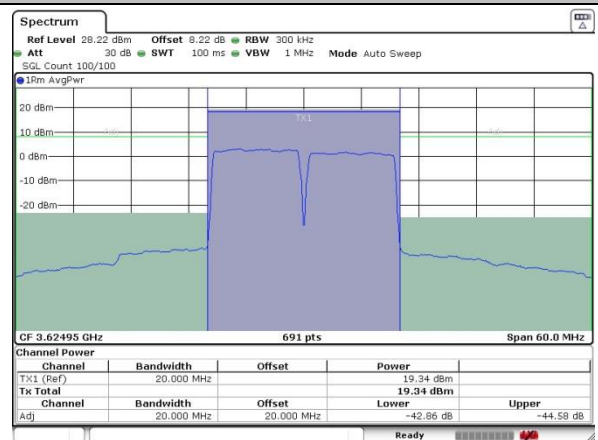
Date: 12.MAY.2022 14:44:25

Lowest Band Edge / Full RB



Date: 12.MAY.2022 14:28:12

Middle Band Edge / Full RB



Date: 12.MAY.2022 14:48:54

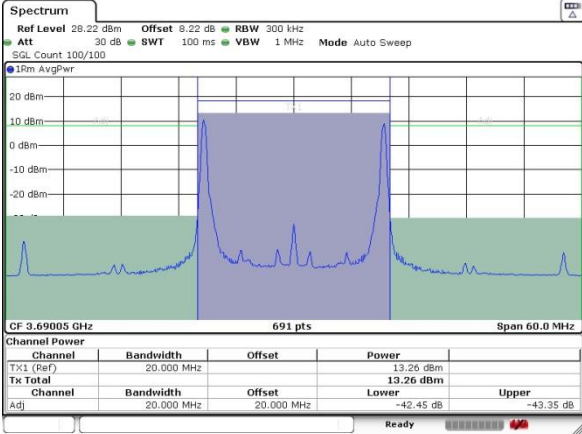


LTE Band 48B / 10MHz+10MHz

16QAM

Highest Band Edge / 1RB0 and 1RB99

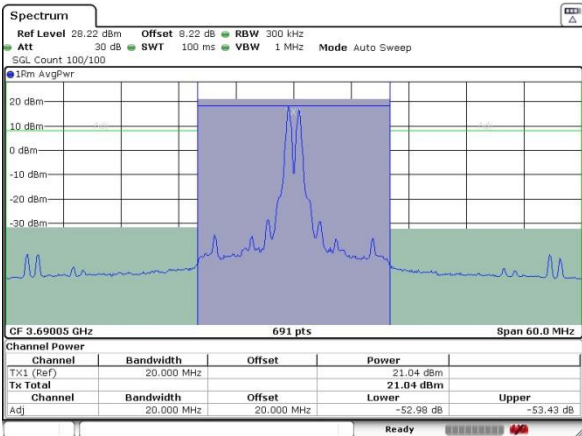
N/A



Date: 12.MAY.2022 14:54:05

Highest Band Edge / 1RB99 and 1RB0

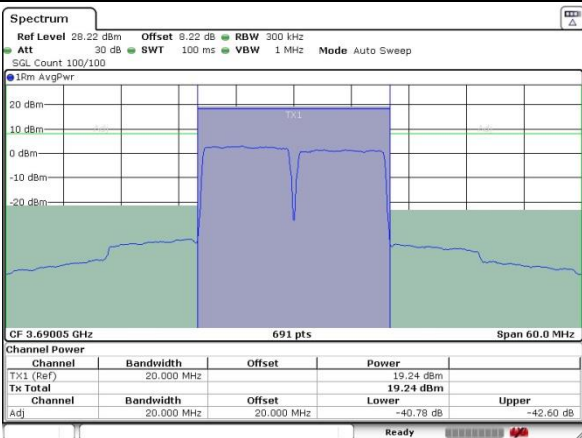
N/A



Date: 12.MAY.2022 14:56:02

Highest Band Edge / Full RB

N/A



Date: 12.MAY.2022 14:52:05

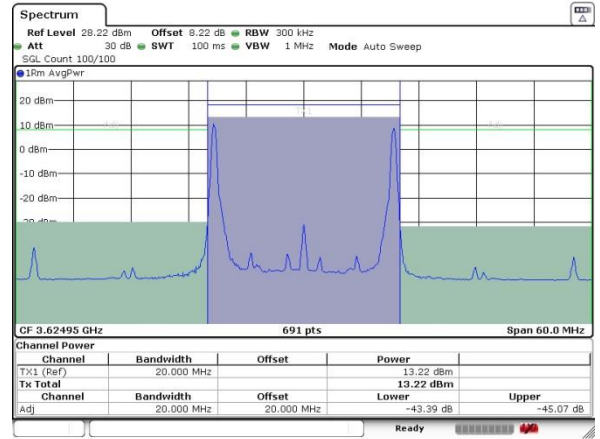
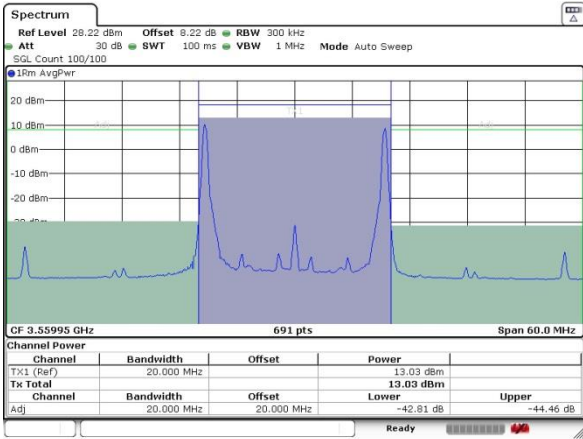


LTE Band 48B / 10MHz+10MHz

64QAM

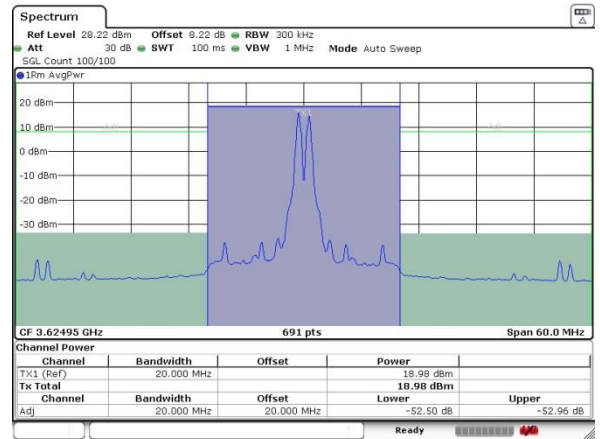
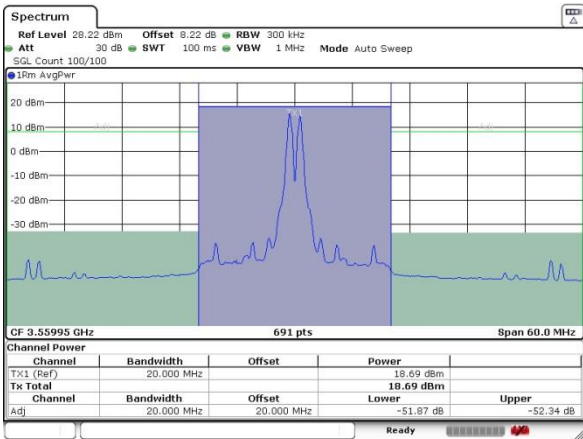
Lowest Band Edge / 1RB0 and 1RB9

Middle Band Edge / 1RB0 and 1RB9



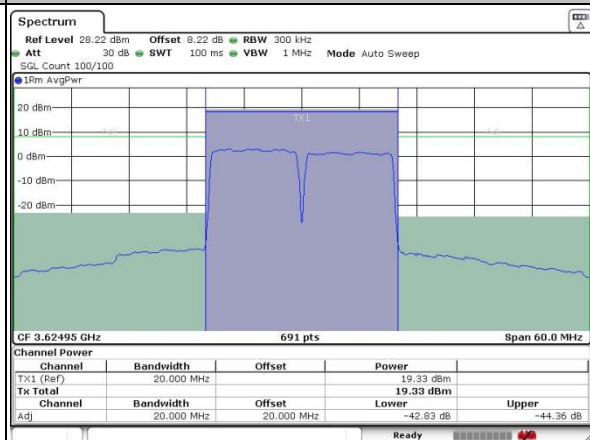
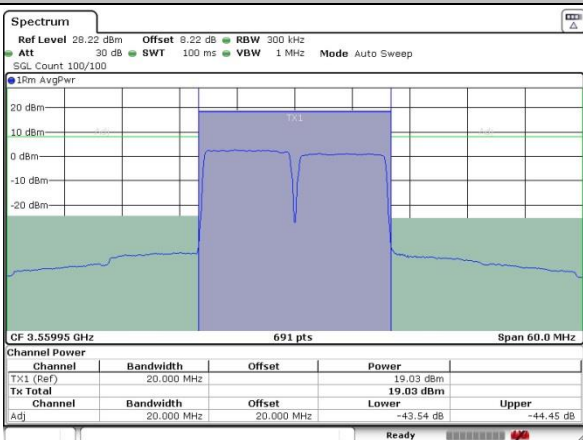
Lowest Band Edge / 1RB9 and 1RB0

Middle Band Edge / 1RB9 and 1RB0



Lowest Band Edge / Full RB

Middle Band Edge / Full RB



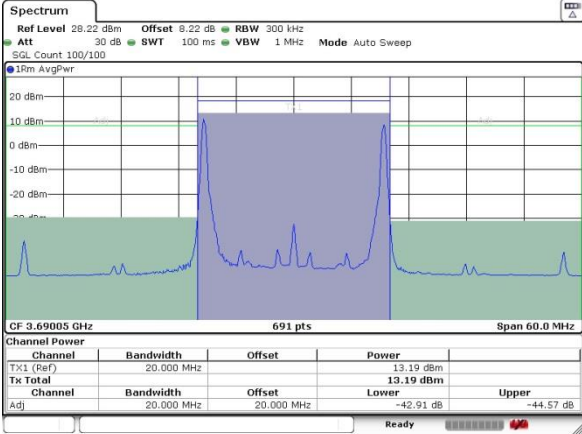


LTE Band 48B / 10MHz+10MHz

64QAM

Highest Band Edge / 1RB0 and 1RB99

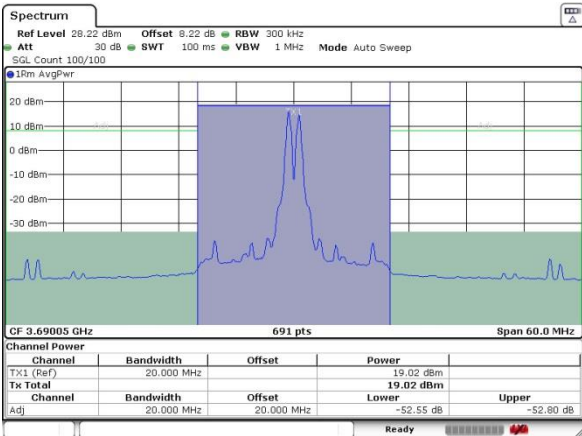
N/A



Date: 12.MAY.2022 14:53:27

Highest Band Edge / 1RB99 and 1RB0

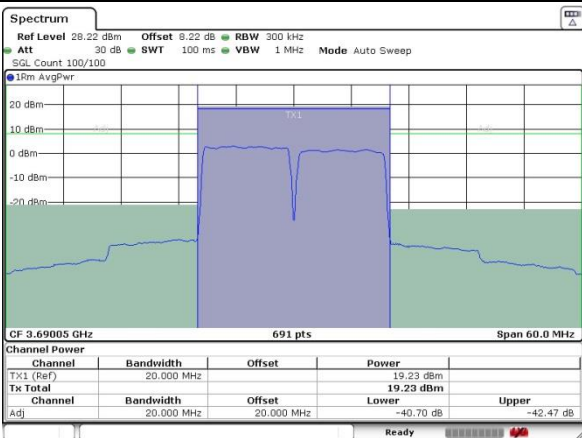
N/A



Date: 12.MAY.2022 14:56:33

Highest Band Edge / Full RB

N/A



Date: 12.MAY.2022 14:52:41