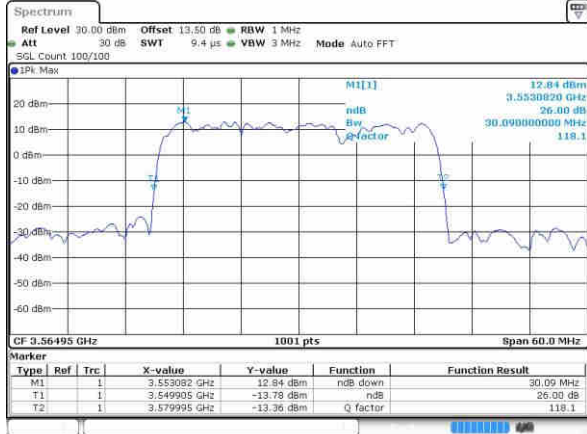




LTE Band 48

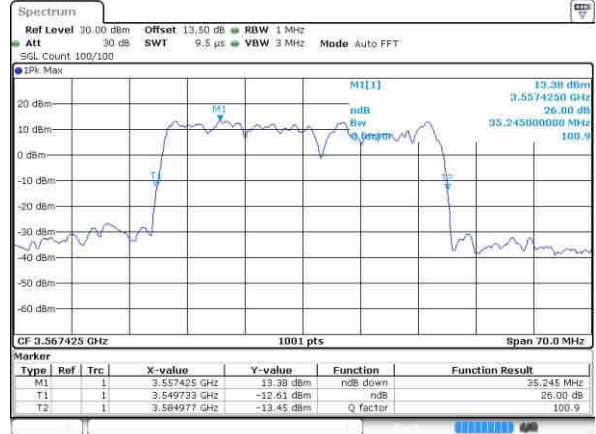
64QAM

Lowest Channel / 15MHz+15MHz



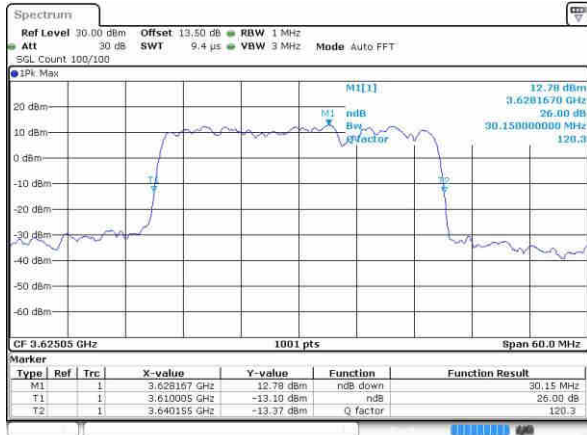
Date: 15 MAY 2019 04:19:48

Lowest Channel / 15MHz+20MHz



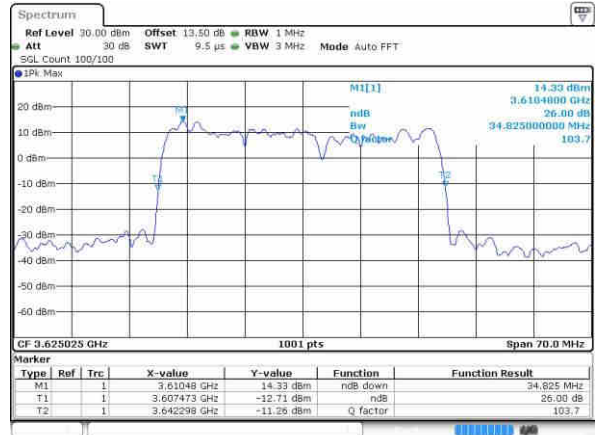
Date: 15 MAY 2019 15:43:16

Middle Channel / 20MHz+10MHz



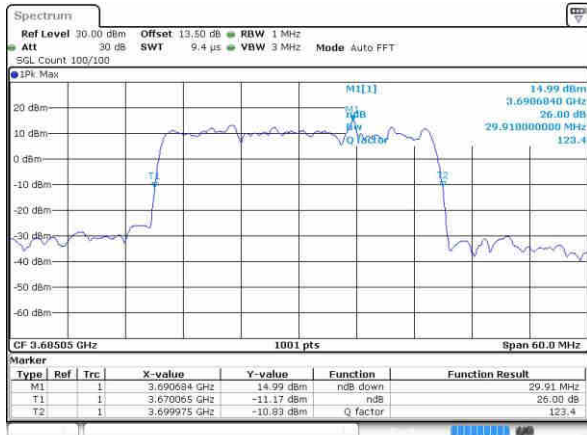
Date: 15 MAY 2019 06:05:32

Middle Channel / 20MHz+15MHz



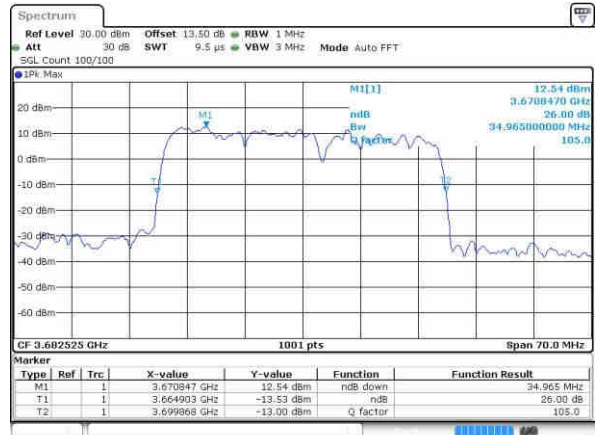
Date: 15 MAY 2019 17:14:02

Highest Channel / 20MHz+10MHz



Date: 15 MAY 2019 06:41:35

Highest Channel / 20MHz+15MHz



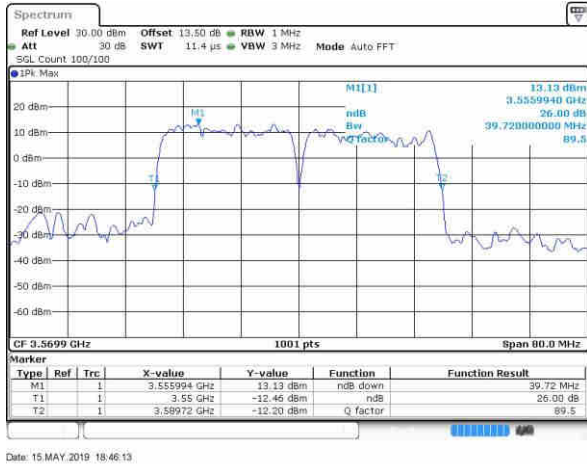
Date: 15 MAY 2019 18:40:22



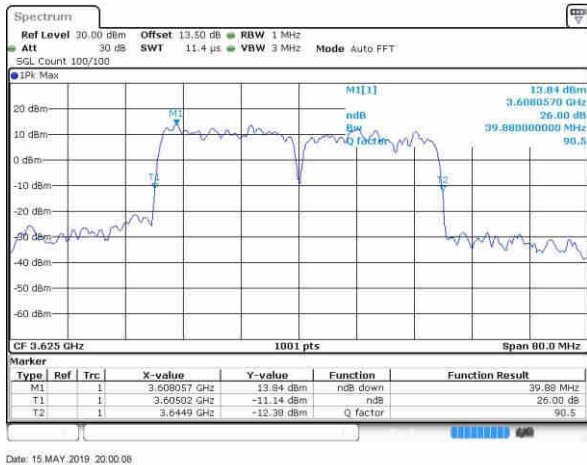
LTE Band 48

64QAM

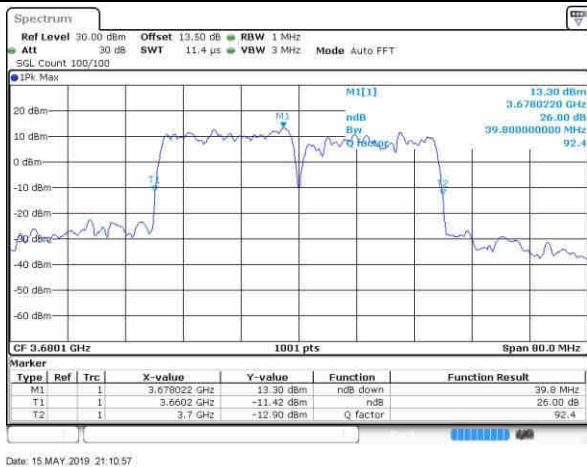
Lowest Channel / 20MHz+20MHz



Middle Channel / 20MHz+20MHz



Highest Channel / 20MHz+20MHz





Occupied Bandwidth

Mode	LTE Band 48 : 99%OBW(MHz)			
QPSK				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	23.23	27.75	32.80	23.38
Middle CH	23.18	27.87	33.08	23.43
Highest CH	23.48	27.75	32.87	23.08
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	
Lowest CH	27.99	32.80	37.56	
Middle CH	28.05	33.01	37.80	
Highest CH	27.99	32.94	37.72	

Mode	LTE Band 48 : 99%OBW(MHz)			
16QAM				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	23.13	27.87	32.94	23.38
Middle CH	22.78	28.17	32.52	23.18
Highest CH	23.08	28.05	32.66	23.28
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	
Lowest CH	28.29	33.01	37.64	
Middle CH	28.17	32.94	37.96	
Highest CH	27.99	32.73	37.32	

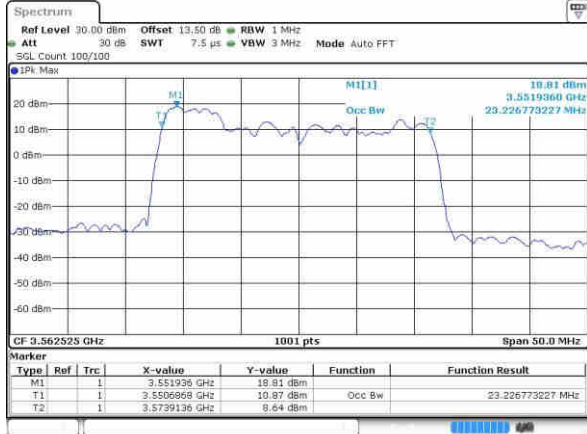
Mode	LTE Band 48 : 99%OBW(MHz)			
64QAM				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	23.08	28.05	32.94	23.33
Middle CH	22.78	28.17	32.73	23.18
Highest CH	23.23	28.17	33.08	23.13
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	
Lowest CH	28.35	32.87	38.04	
Middle CH	28.17	32.80	37.80	
Highest CH	28.11	33.08	37.64	



LTE Band 48

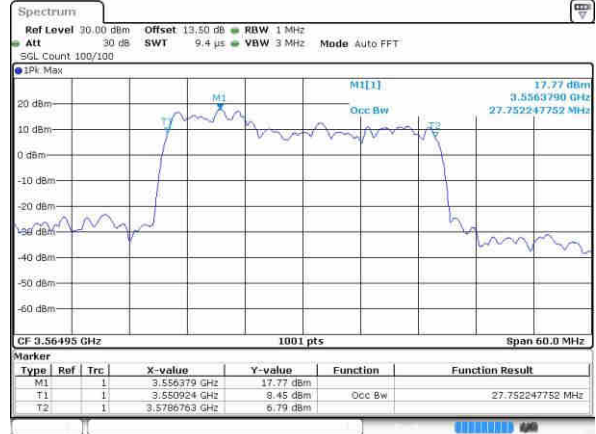
QPSK

Lowest Channel / 5MHz+20MHz



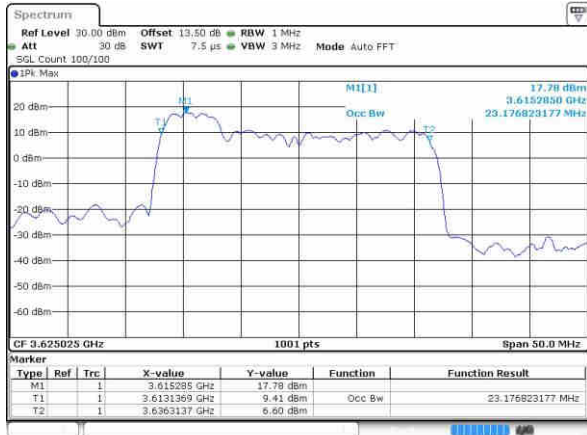
Date: 14 MAY 2019 17:22:58

Lowest Channel / 10MHz+20MHz



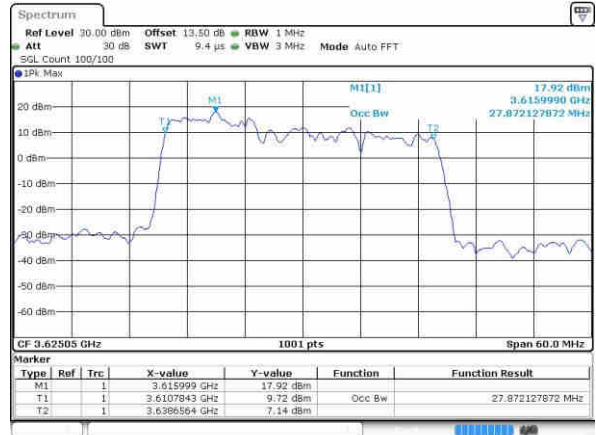
Date: 15 MAY 2019 02:16:09

Middle Channel / 5MHz+20MHz



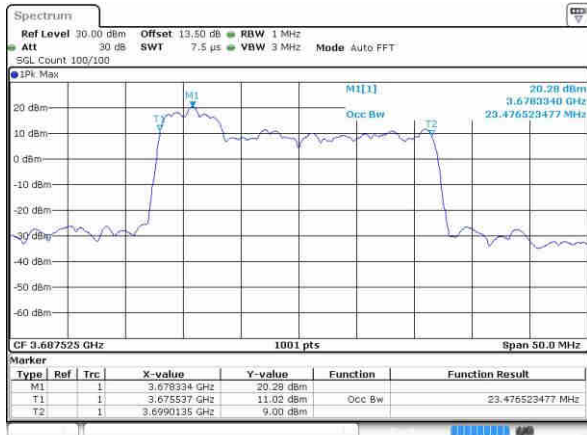
Date: 14 MAY 2019 17:30:08

Middle Channel / 10MHz+20MHz



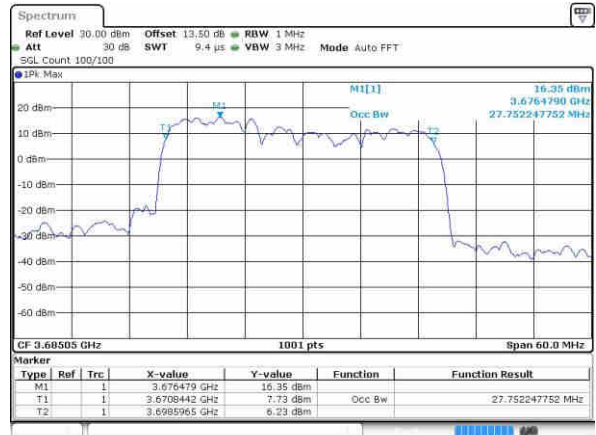
Date: 15 MAY 2019 03:45:32

Highest Channel / 5MHz+20MHz



Date: 14 MAY 2019 17:35:27

Highest Channel / 10MHz+20MHz



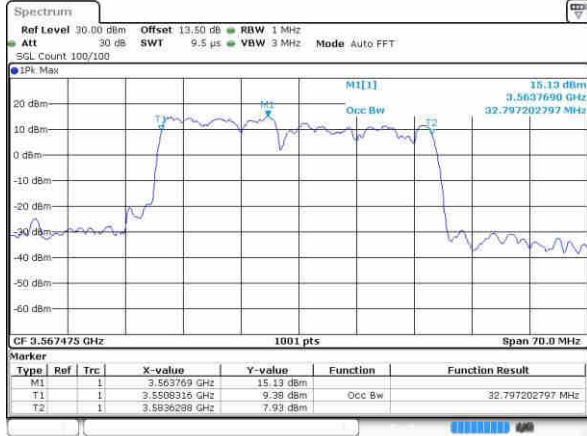
Date: 15 MAY 2019 03:31:18



LTE Band 48

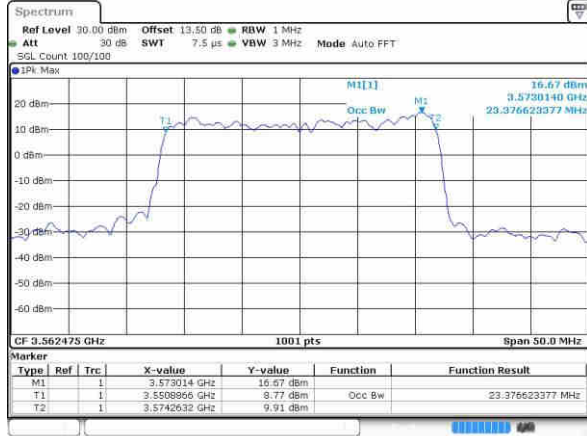
QPSK

Lowest Channel / 15MHz+20MHz



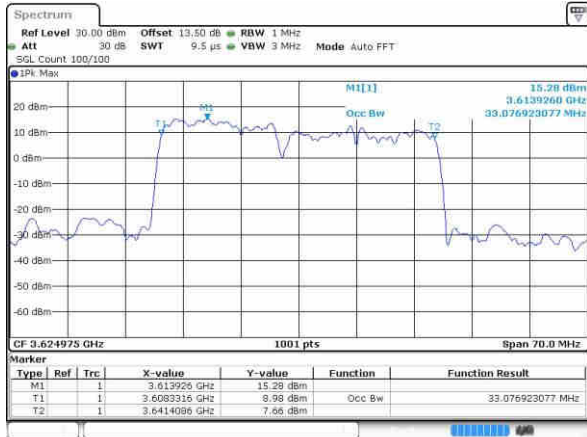
Date: 15 MAY 2019 06:18:25

Lowest Channel / 20MHz+5MHz



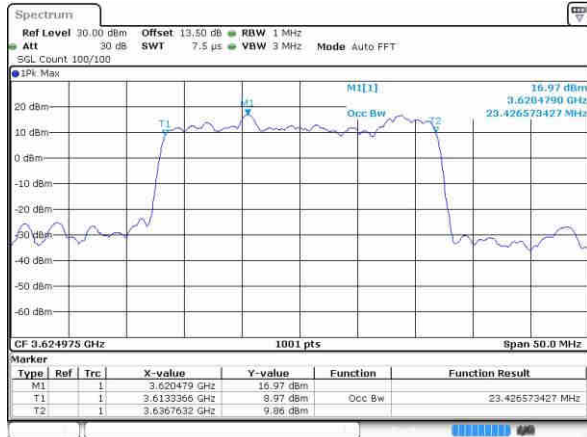
Date: 14 MAY 2019 17:47:04

Middle Channel / 15MHz+20MHz



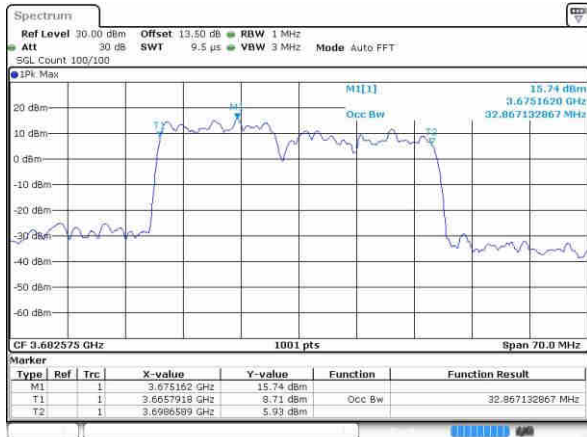
Date: 15 MAY 2019 07:32:01

Middle Channel / 20MHz+5MHz



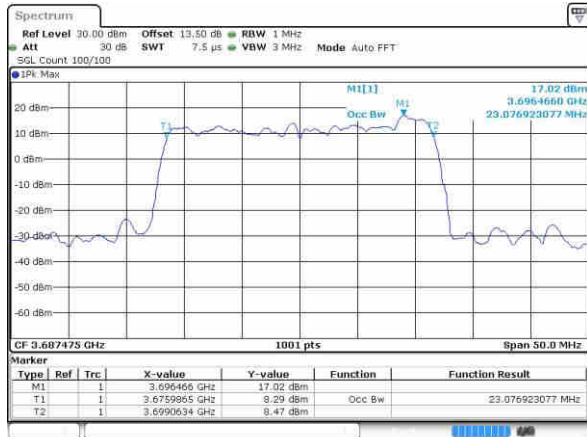
Date: 14 MAY 2019 18:06:43

Highest Channel / 15MHz+20MHz



Date: 15 MAY 2019 07:48:03

Highest Channel / 20MHz+5MHz



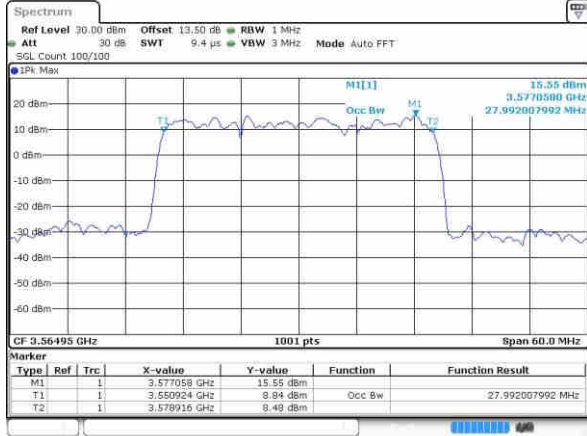
Date: 14 MAY 2019 18:13:41



LTE Band 48

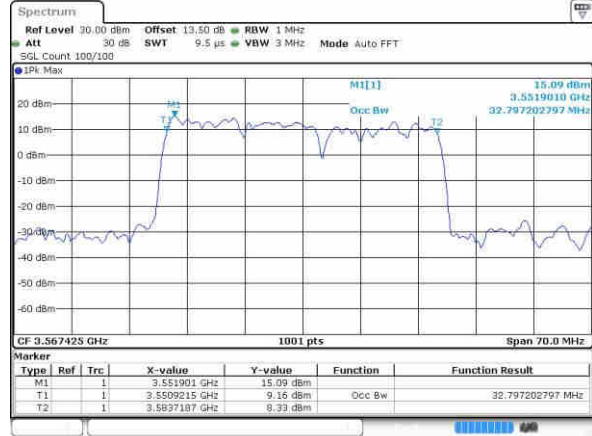
QPSK

Lowest Channel / 20MHz+10MHz



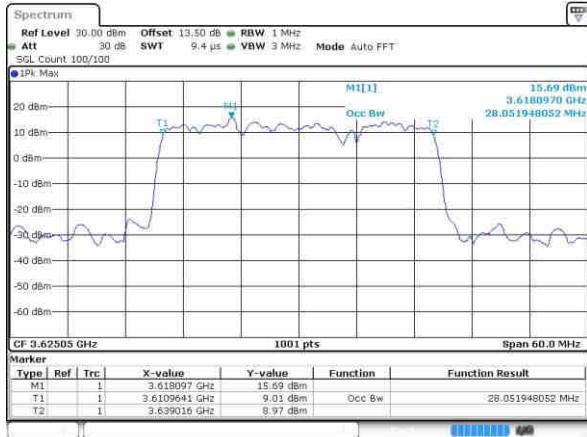
Date: 15 MAY 2019 04:17:04

Lowest Channel / 20MHz+15MHz



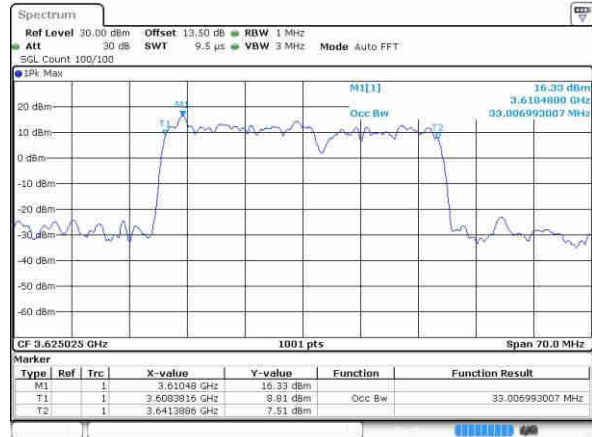
Date: 15 MAY 2019 17:05:07

Middle Channel / 20MHz+10MHz



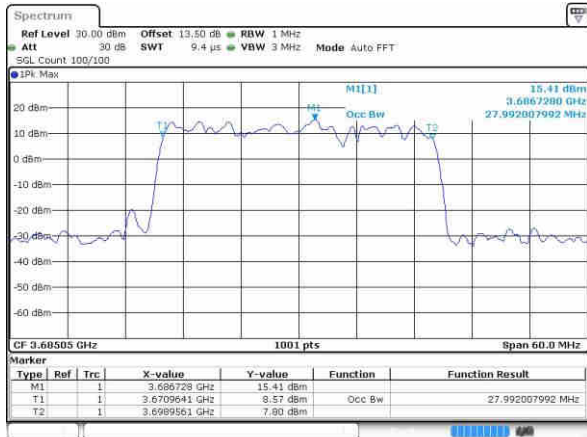
Date: 15 MAY 2019 06:04:22

Middle Channel / 20MHz+15MHz



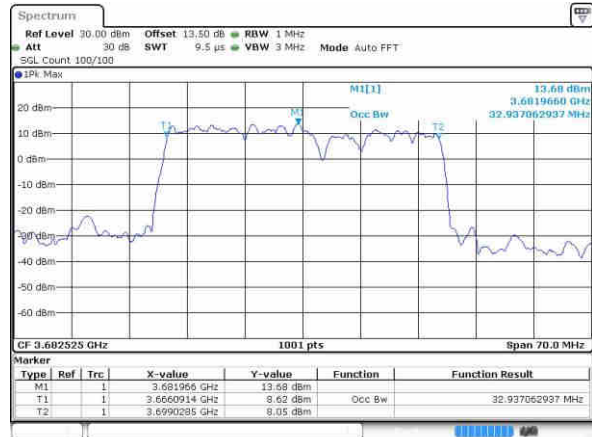
Date: 15 MAY 2019 17:12:53

Highest Channel / 20MHz+10MHz



Date: 15 MAY 2019 06:40:25

Highest Channel / 20MHz+15MHz



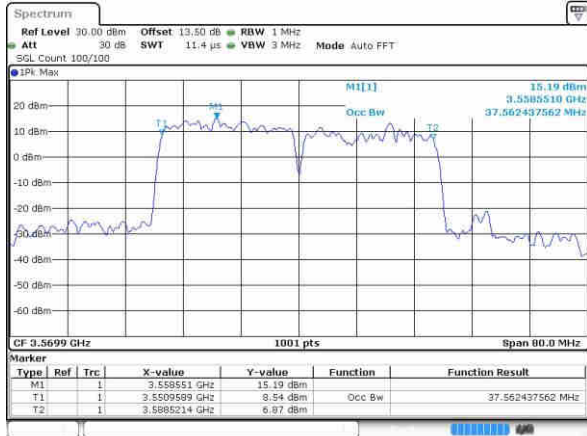
Date: 15 MAY 2019 18:38:14



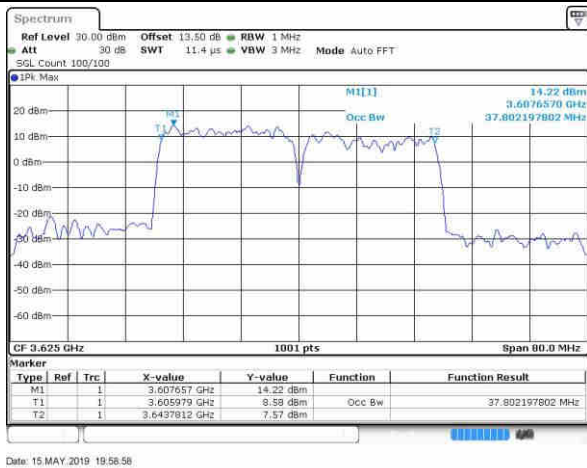
LTE Band 48

QPSK

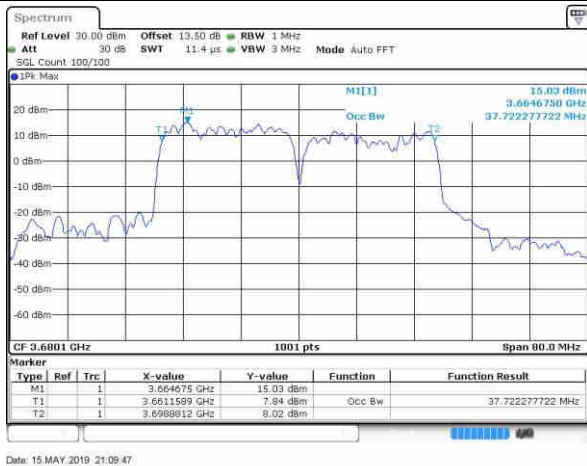
Lowest Channel / 20MHz+20MHz



Middle Channel / 20MHz+20MHz



Highest Channel / 20MHz+20MHz

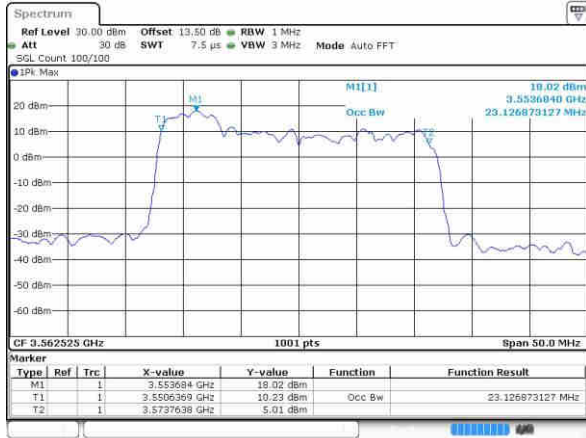




LTE Band 48

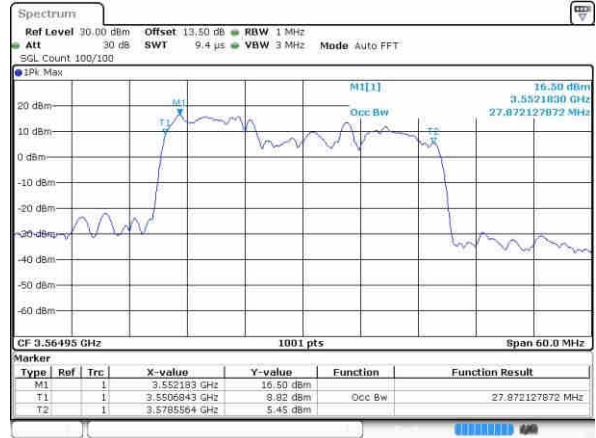
16QAM

Lowest Channel / 5MHz+20MHz



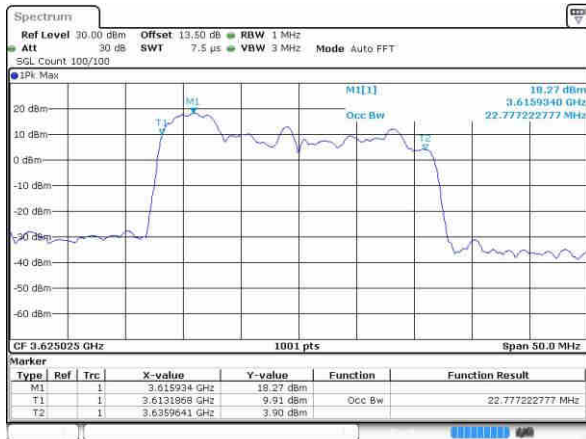
Date: 14 MAY 2019 17:23:29

Lowest Channel / 10MHz+20MHz



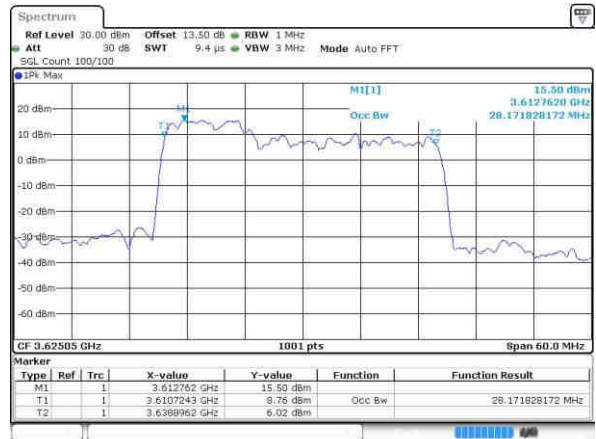
Date: 15 MAY 2019 02:18:33

Middle Channel / 5MHz+20MHz



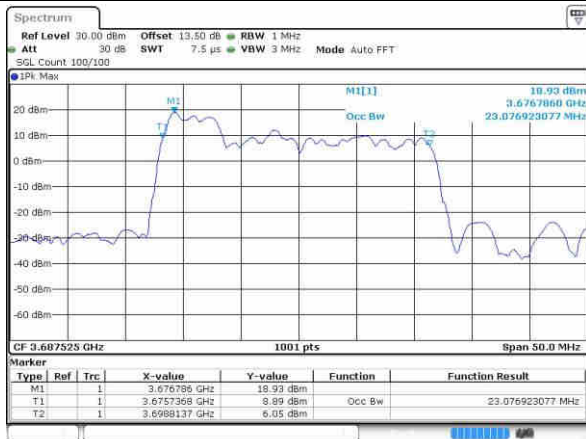
Date: 14 MAY 2019 17:44:59

Middle Channel / 10MHz+20MHz



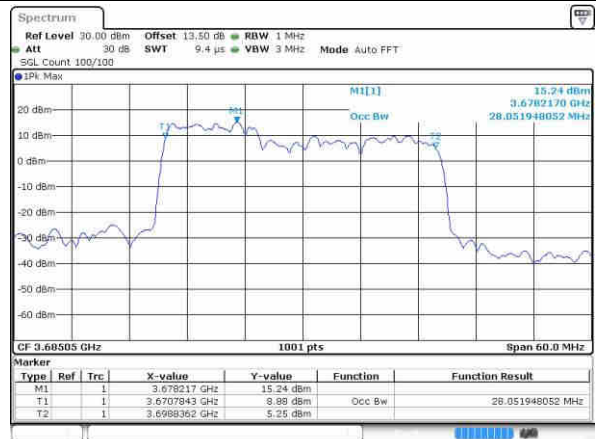
Date: 15 MAY 2019 03:45:55

Highest Channel / 5MHz+20MHz



Date: 14 MAY 2019 17:34:46

Highest Channel / 10MHz+20MHz



Date: 15 MAY 2019 03:30:54

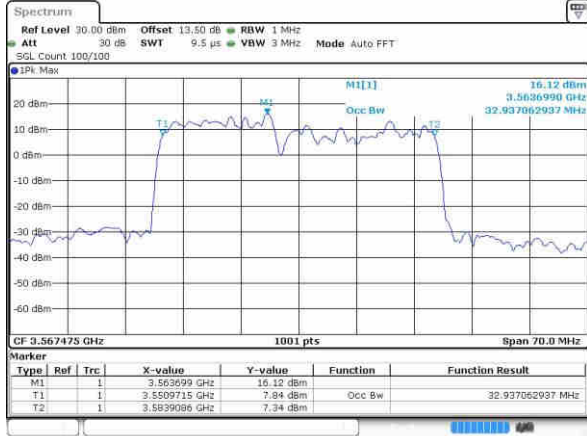




LTE Band 48

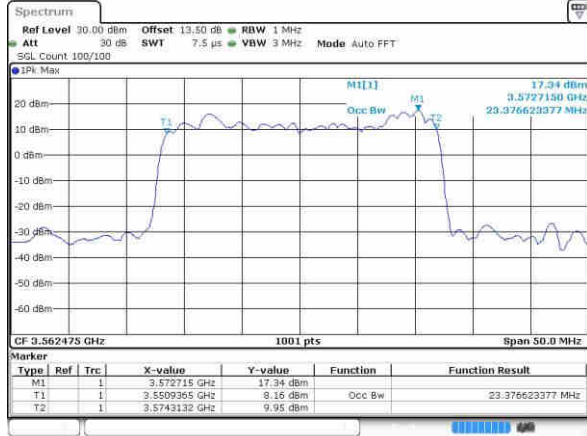
16QAM

Lowest Channel / 15MHz+20MHz



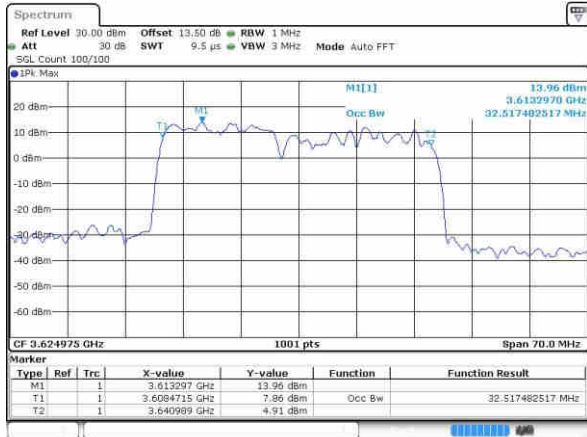
Date: 15 MAY 2019 06:18:48

Lowest Channel / 20MHz+5MHz



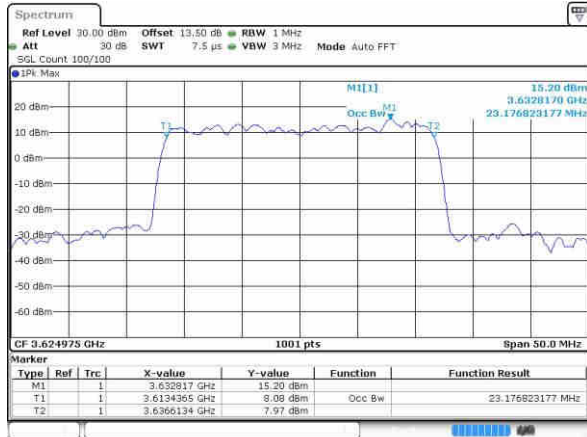
Date: 14 MAY 2019 17:47:45

Middle Channel / 15MHz+20MHz



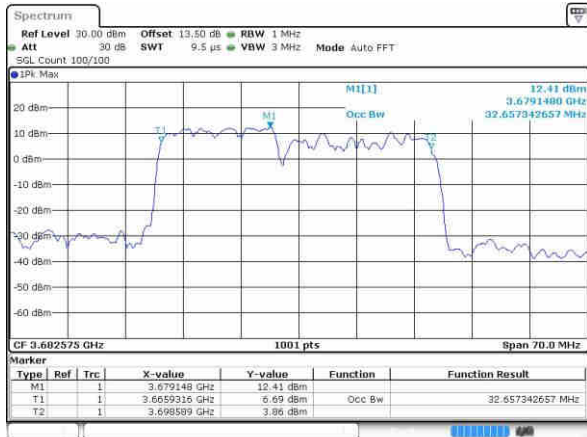
Date: 15 MAY 2019 07:32:40

Middle Channel / 20MHz+5MHz



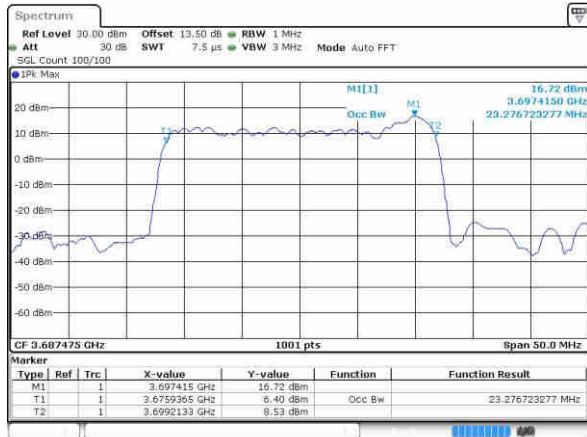
Date: 14 MAY 2019 18:07:07

Highest Channel / 15MHz+20MHz



Date: 15 MAY 2019 07:47:25

Highest Channel / 20MHz+5MHz



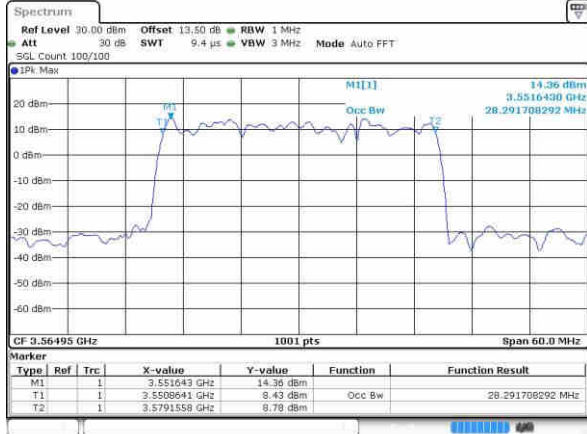
Date: 14 MAY 2019 18:13:18



LTE Band 48

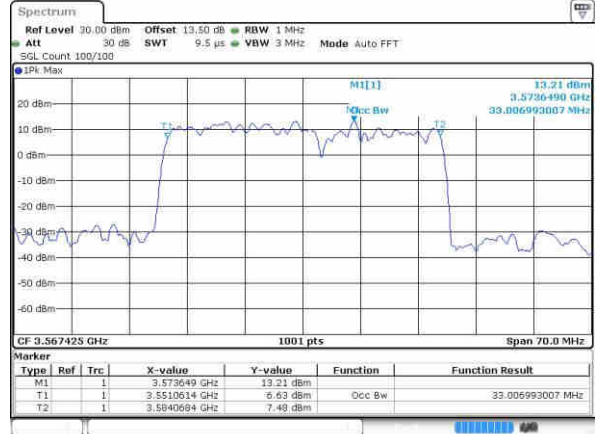
16QAM

Lowest Channel / 20MHz+10MHz



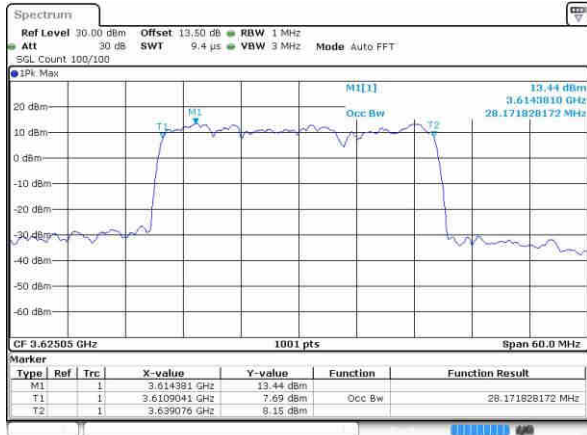
Date: 15 MAY 2019 04:17:28

Lowest Channel / 20MHz+15MHz



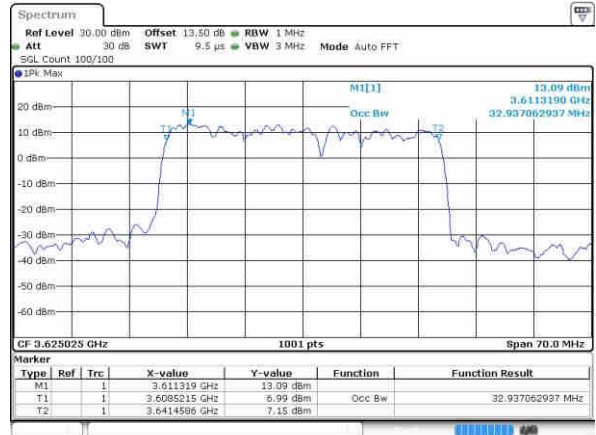
Date: 15 MAY 2019 15:42:31

Middle Channel / 20MHz+10MHz



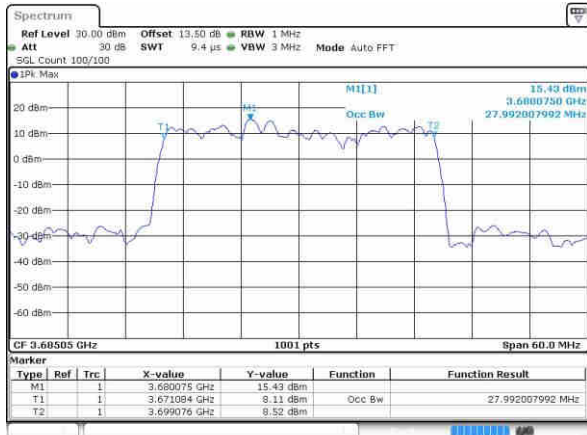
Date: 15 MAY 2019 06:04:46

Middle Channel / 20MHz+15MHz



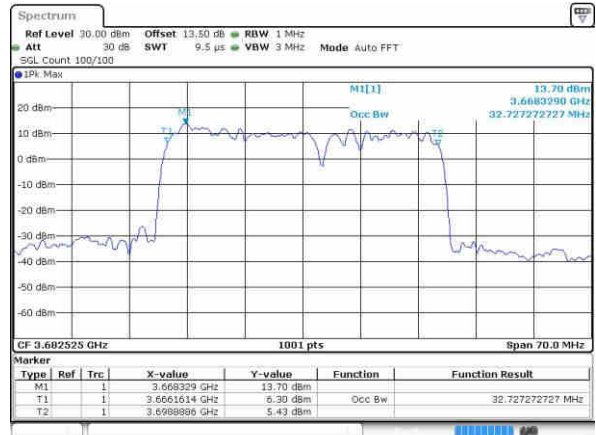
Date: 15 MAY 2019 17:13:17

Highest Channel / 20MHz+10MHz



Date: 15 MAY 2019 06:40:01

Highest Channel / 20MHz+15MHz



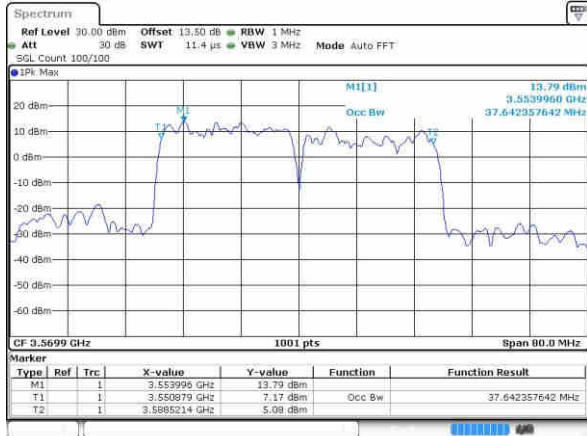
Date: 15 MAY 2019 18:38:51



LTE Band 48

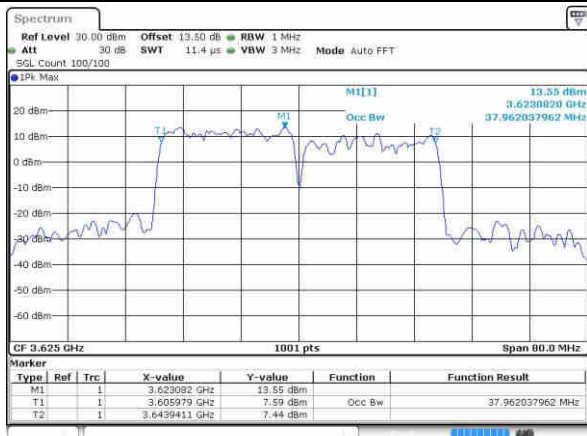
16QAM

Lowest Channel / 20MHz+20MHz



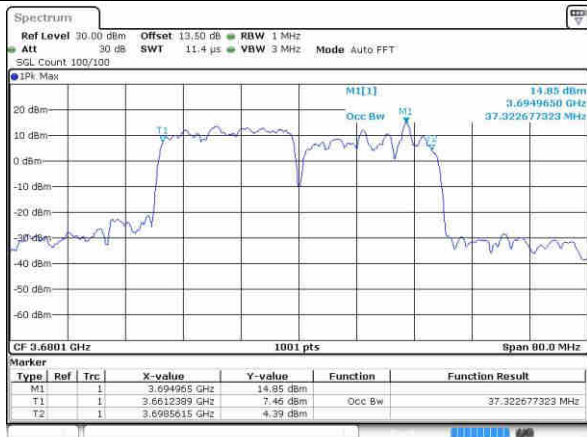
Date: 15 MAY 2019 18:45:28

Middle Channel / 20MHz+20MHz



Date: 15 MAY 2019 19:59:21

Highest Channel / 20MHz+20MHz



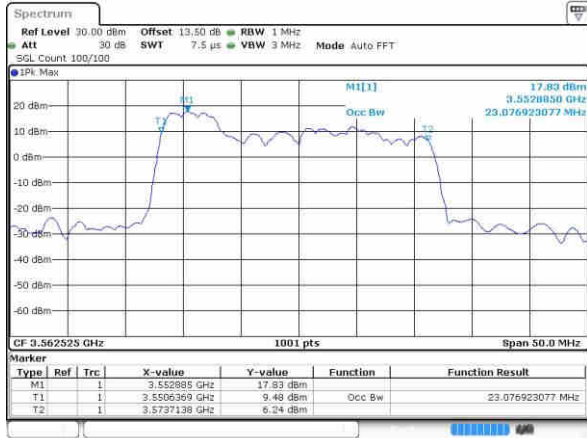
Date: 15 MAY 2019 21:09:23



LTE Band 48

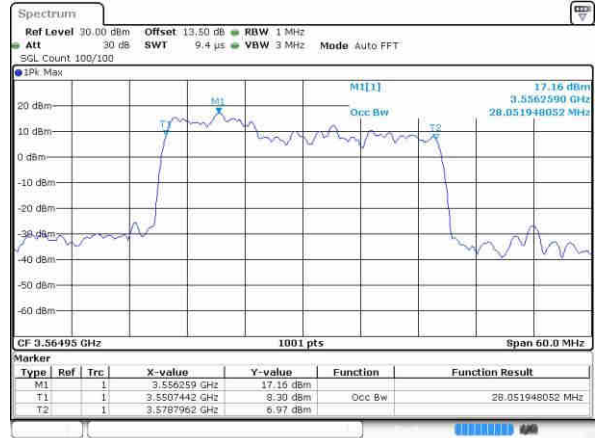
64QAM

Lowest Channel / 5MHz+20MHz



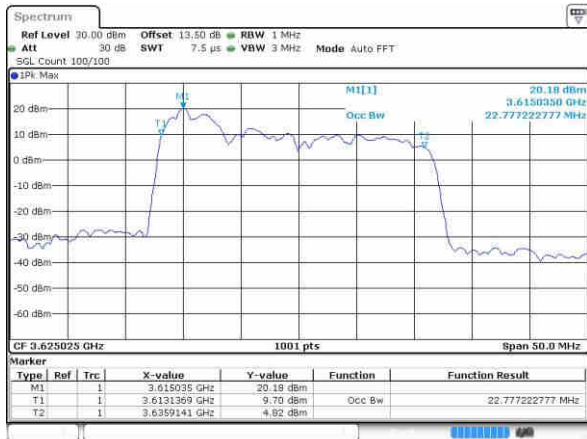
Date: 14 MAY 2019 17:24:00

Lowest Channel / 10MHz+20MHz



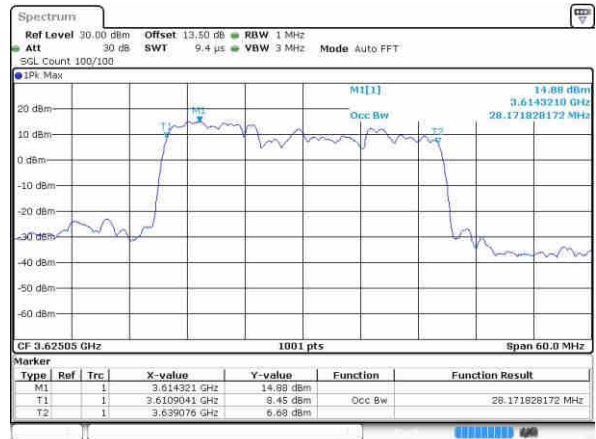
Date: 15 MAY 2019 02:18:56

Middle Channel / 5MHz+20MHz



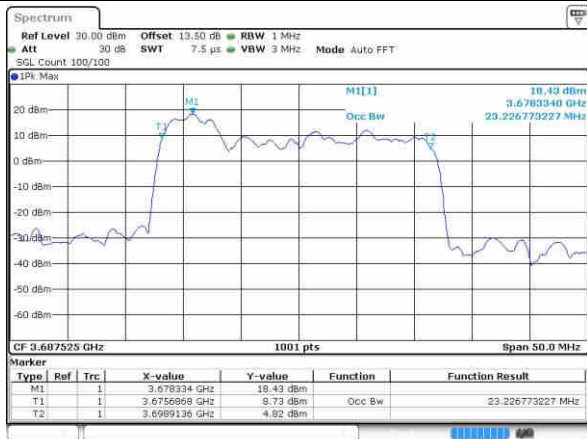
Date: 14 MAY 2019 17:31:20

Middle Channel / 10MHz+20MHz



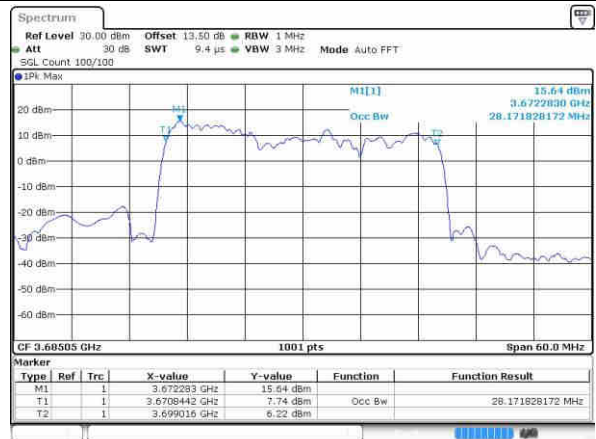
Date: 15 MAY 2019 03:46:19

Highest Channel / 5MHz+20MHz



Date: 14 MAY 2019 17:34:05

Highest Channel / 10MHz+20MHz



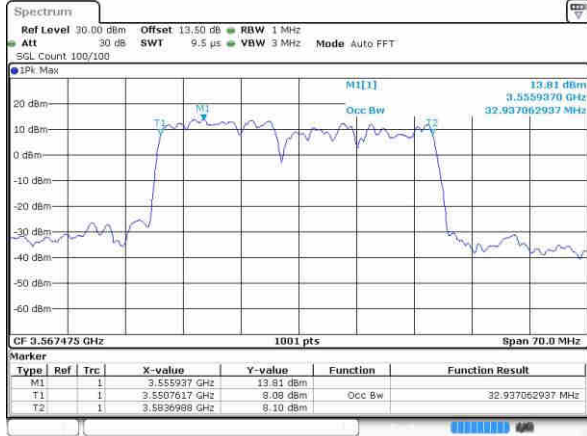
Date: 15 MAY 2019 03:30:30



LTE Band 48

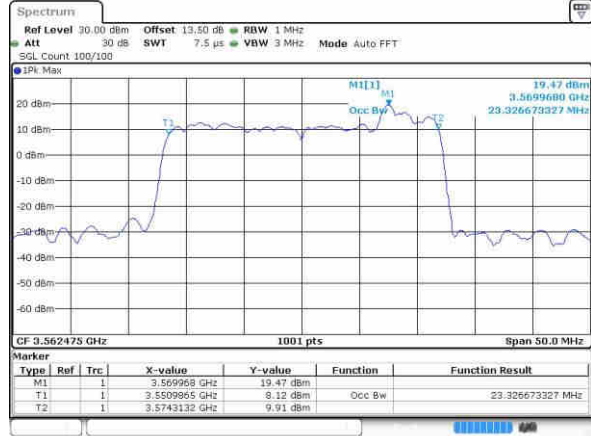
64QAM

Lowest Channel / 15MHz+20MHz



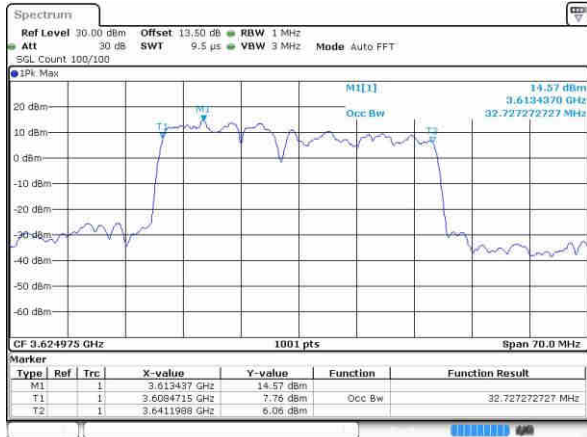
Date: 15 MAY 2019 06:19:12

Lowest Channel / 20MHz+5MHz



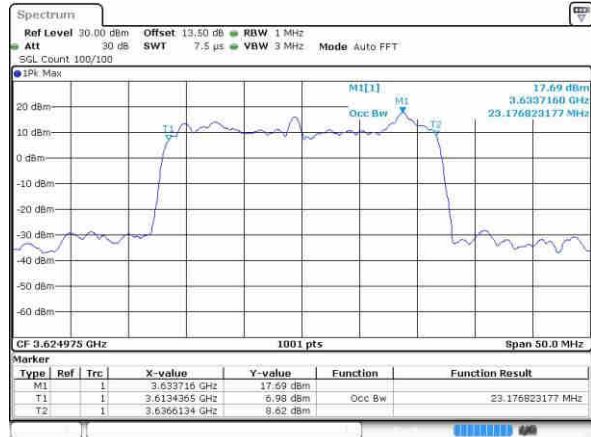
Date: 14 MAY 2019 17:48:27

Middle Channel / 15MHz+20MHz



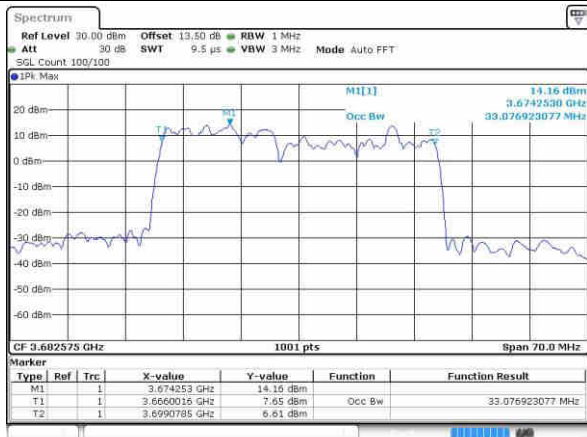
Date: 15 MAY 2019 07:33:18

Middle Channel / 20MHz+5MHz



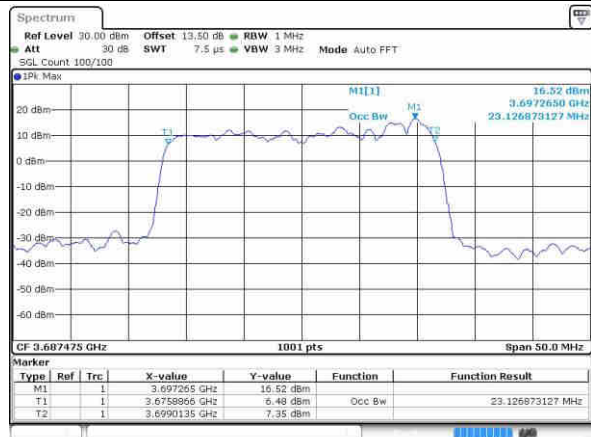
Date: 14 MAY 2019 18:07:30

Highest Channel / 15MHz+20MHz



Date: 15 MAY 2019 07:46:46

Highest Channel / 20MHz+5MHz



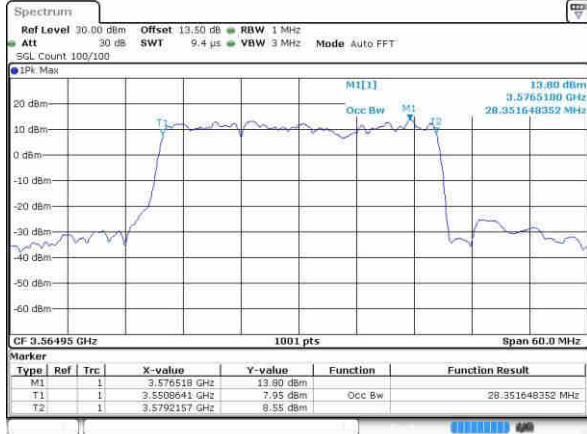
Date: 14 MAY 2019 18:12:54



LTE Band 48

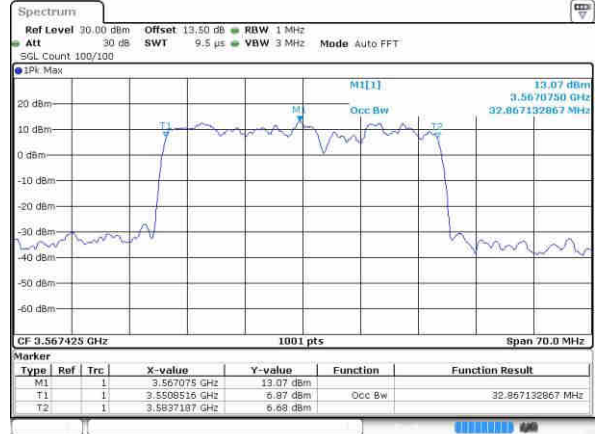
64QAM

Lowest Channel / 20MHz+10MHz



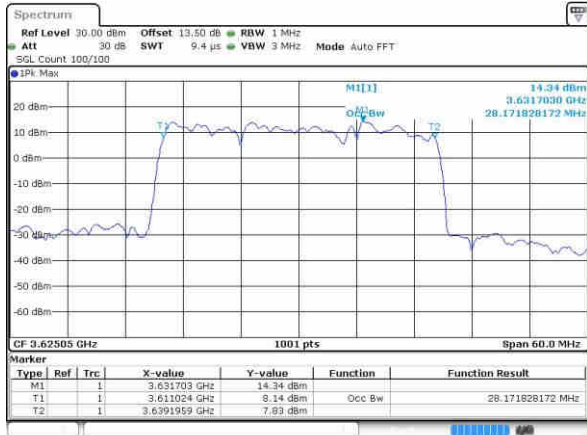
Date: 15 MAY 2019 04:17:52

Lowest Channel / 20MHz+15MHz



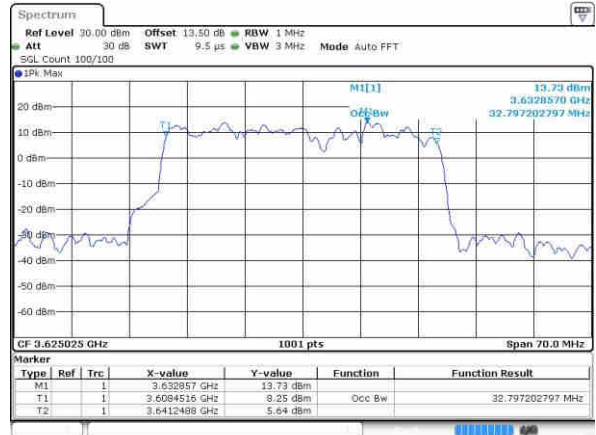
Date: 15 MAY 2019 15:42:54

Middle Channel / 20MHz+10MHz



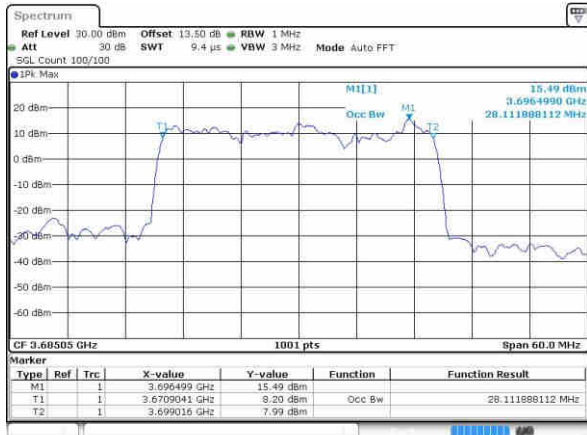
Date: 15 MAY 2019 06:05:06

Middle Channel / 20MHz+15MHz



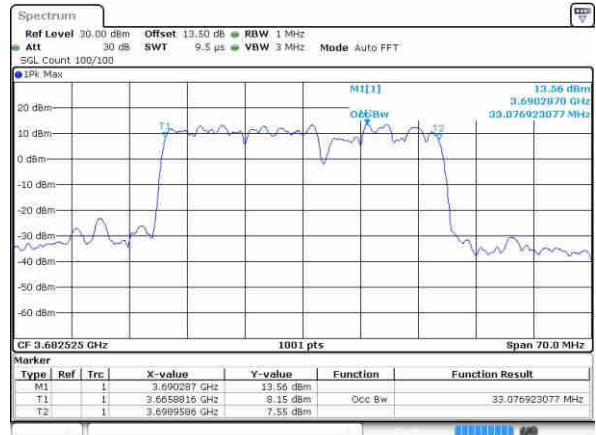
Date: 15 MAY 2019 17:13:39

Highest Channel / 20MHz+10MHz



Date: 15 MAY 2019 06:39:37

Highest Channel / 20MHz+15MHz



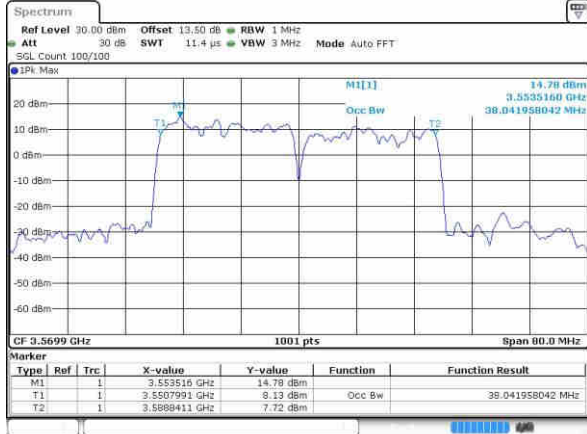
Date: 15 MAY 2019 18:38:28



LTE Band 48

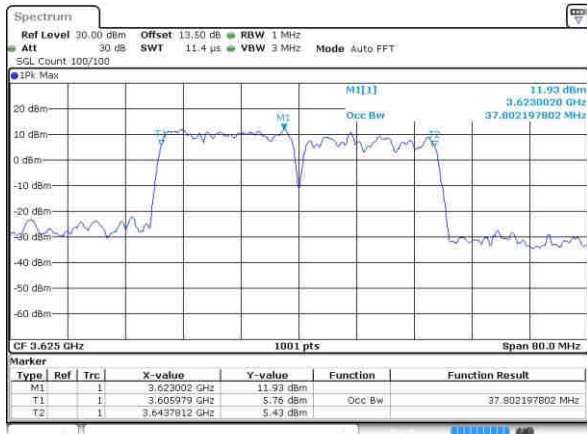
64QAM

Lowest Channel / 20MHz+20MHz



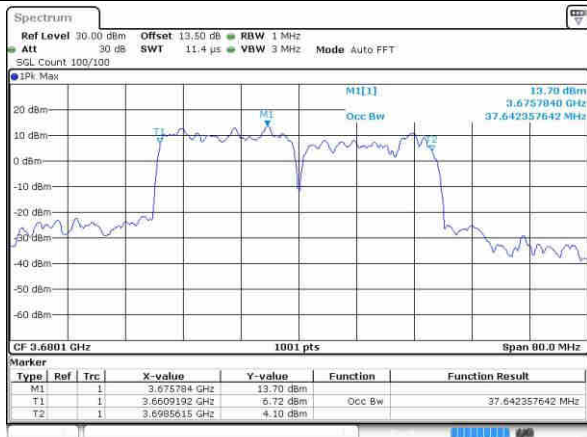
Date: 15 MAY 2019 18:45:51

Middle Channel / 20MHz+20MHz



Date: 15 MAY 2019 19:58:45

Highest Channel / 20MHz+20MHz



Date: 15 MAY 2019 21:08:58



**Conducted Band Edge**



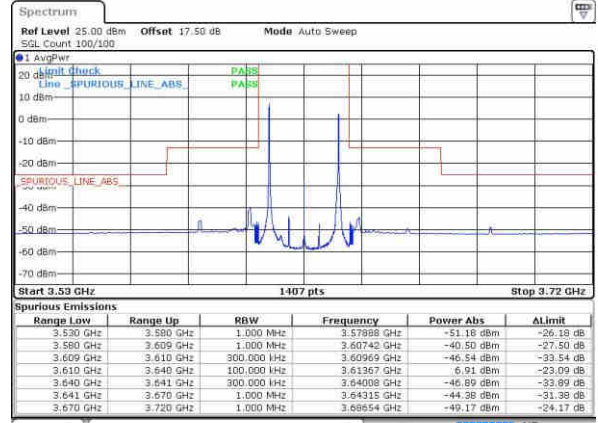
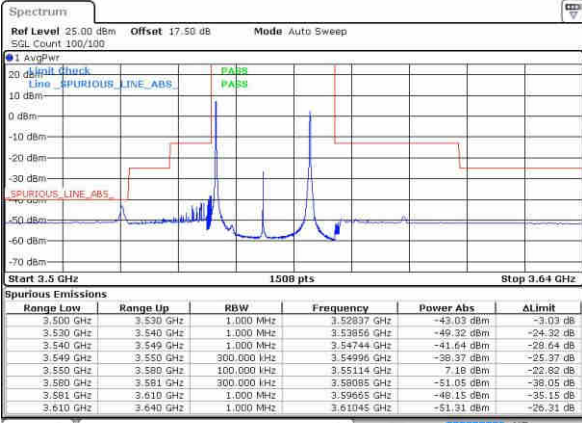


LTE Band 48 / 5MHz+20MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB9

Middle Band Edge / 1RB0 and 1RB9

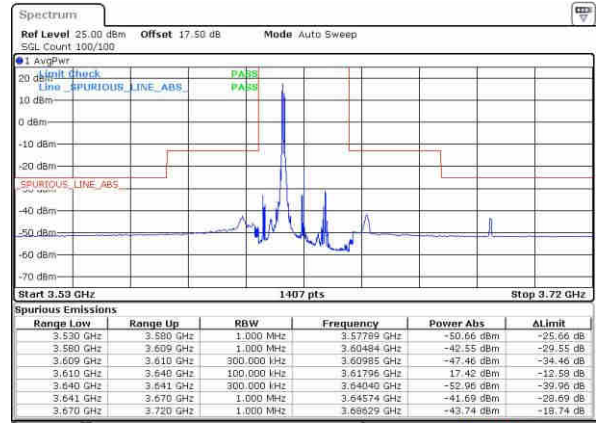
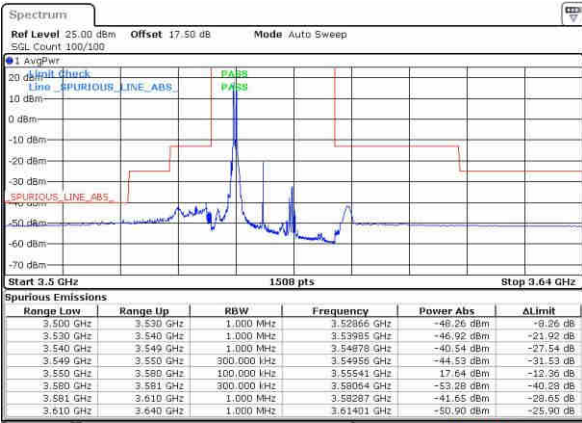


Date: 14 MAY 2019 22:09:43

Date: 14 MAY 2019 22:37:53

Lowest Band Edge / 1RB24 and 1RB0

Middle Band Edge / 1RB24 and 1RB0

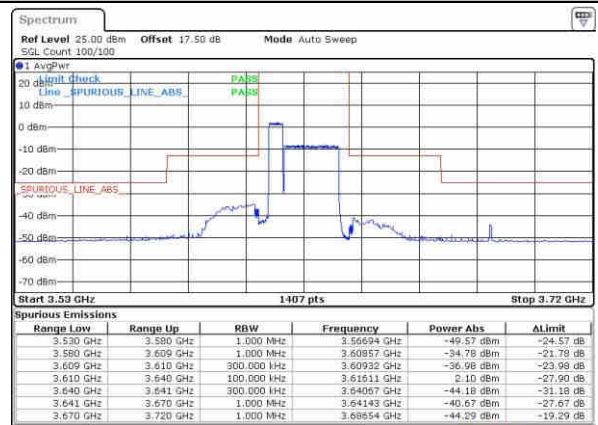
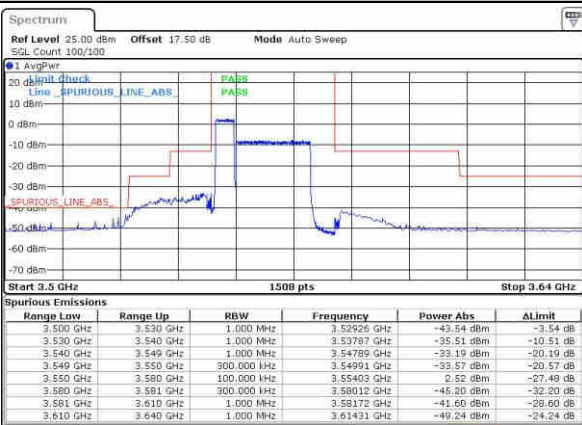


Date: 14 MAY 2019 22:11:25

Date: 14 MAY 2019 22:38:34

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 14 MAY 2019 22:01:07

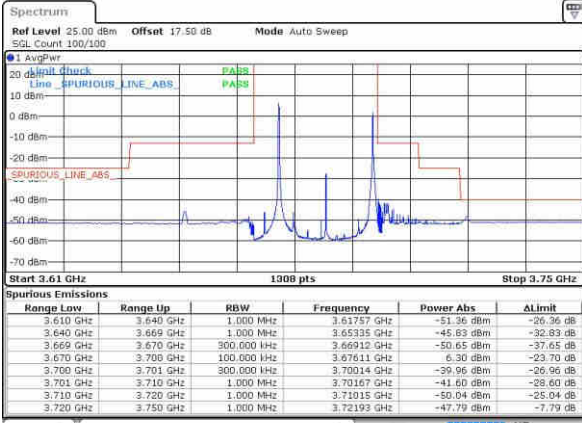
Date: 14 MAY 2019 22:28:20



LTE Band 48 / 5MHz+20MHz

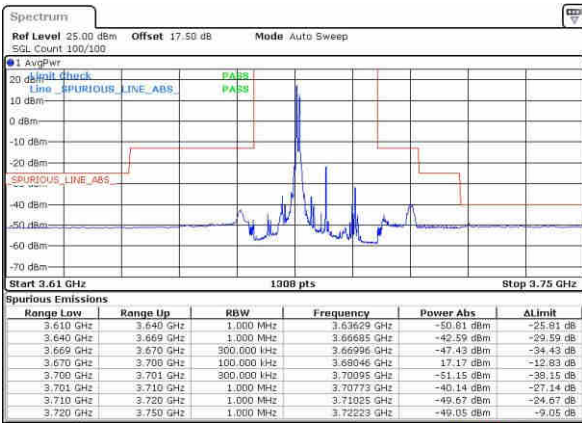
QPSK

Highest Band Edge / 1RB0 and 1RB99



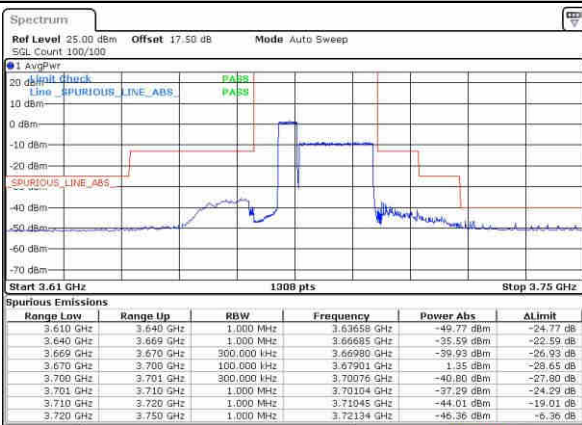
Date: 15 MAY 2019 01:10:43

Highest Band Edge / 1RB24 and 1RB0



Date: 15 MAY 2019 01:18:16

Highest Band Edge / Full RB



Date: 15 MAY 2019 01:08:01

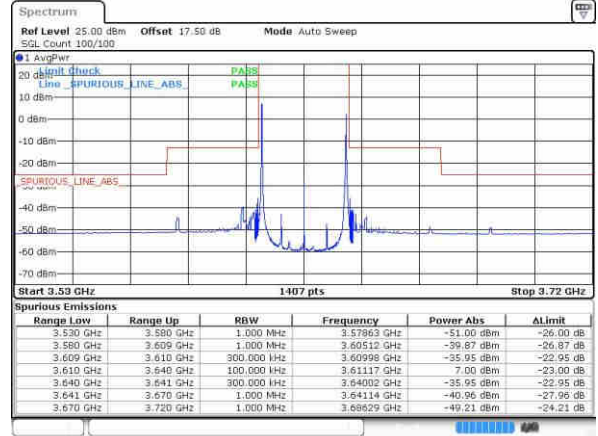
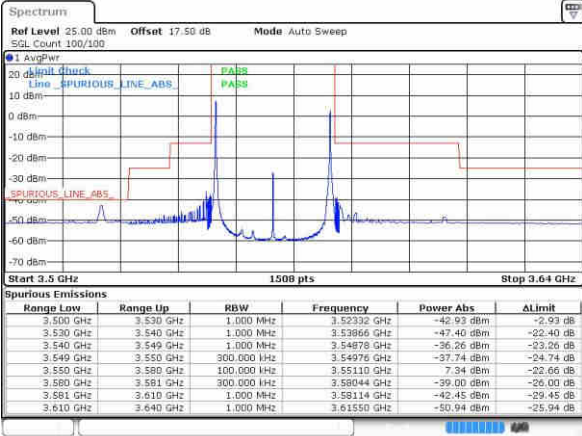


LTE Band 48 / 10MHz+20MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB9

Middle Band Edge / 1RB0 and 1RB9

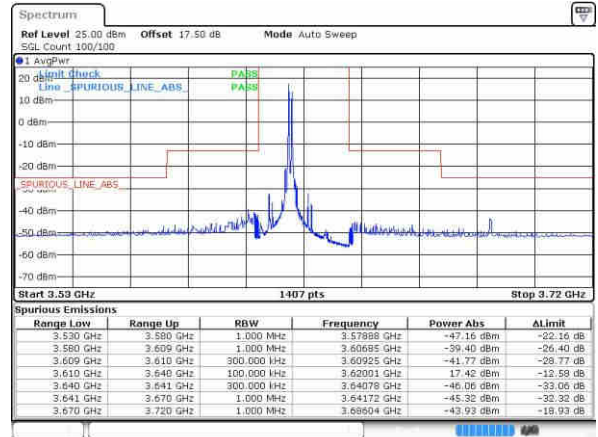
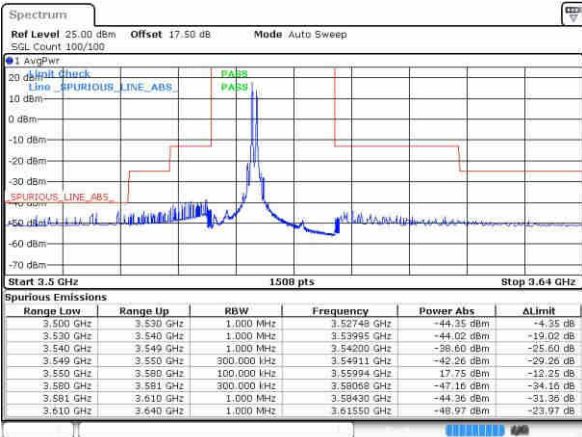


Date: 15 MAY 2019 02:00:19

Date: 15 MAY 2019 02:37:25

Lowest Band Edge / 1RB49 and 1RB0

Middle Band Edge / 1RB49 and 1RB0

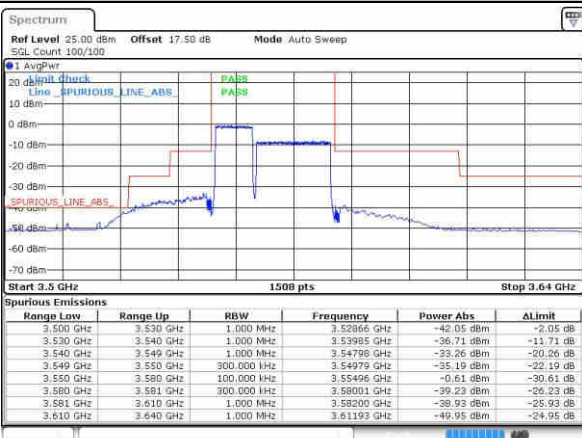


Date: 15 MAY 2019 02:02:00

Date: 15 MAY 2019 02:38:07

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 15 MAY 2019 01:51:46

Date: 15 MAY 2019 02:28:53



LTE Band 48 / 10MHz+20MHz

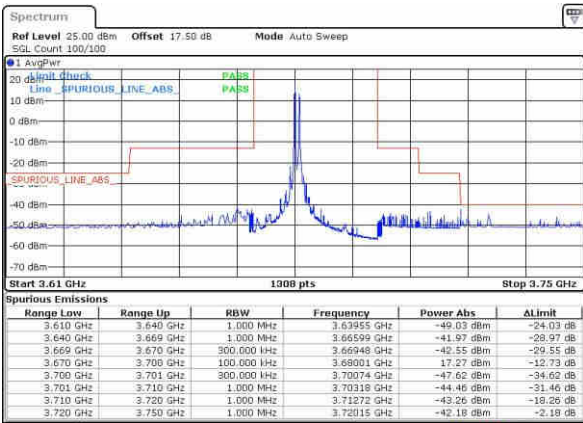
QPSK

Highest Band Edge / 1RB0 and 1RB99



Date: 15 MAY 2019 03:09:23

Highest Band Edge / 1RB49 and 1RB0



Date: 15 MAY 2019 03:17:55

Highest Band Edge / Full RB



Date: 15 MAY 2019 03:07:40

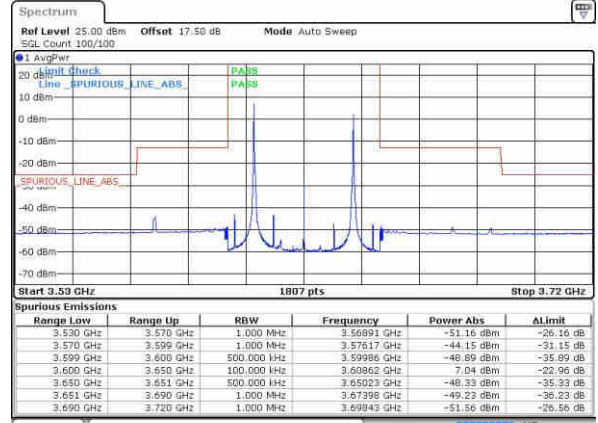
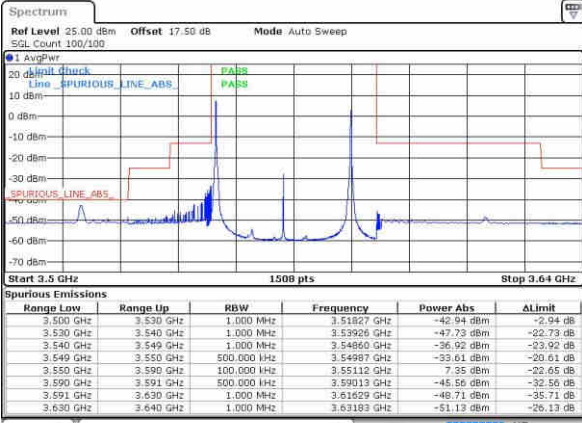


LTE Band 48 / 15MHz+20MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB9

Middle Band Edge / 1RB0 and 1RB9

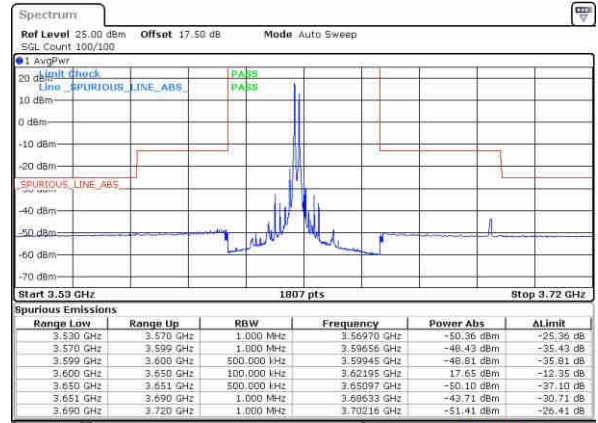
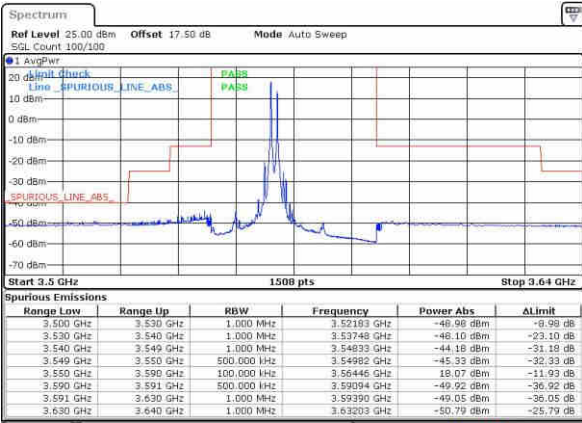


Date: 15 MAY 2019 06:57:23

Date: 15 MAY 2019 07:09:20

Lowest Band Edge / 1RB74 and 1RB0

Middle Band Edge / 1RB74 and 1RB0



Date: 15 MAY 2019 05:59:34

Date: 15 MAY 2019 07:11:46

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 15 MAY 2019 06:53:25

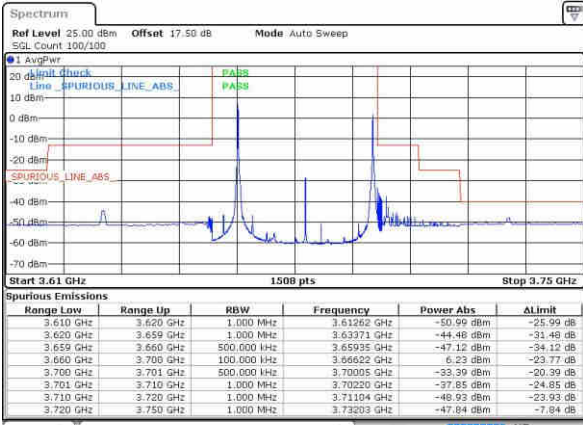
Date: 15 MAY 2019 06:57:02



LTE Band 48 / 15MHz+20MHz

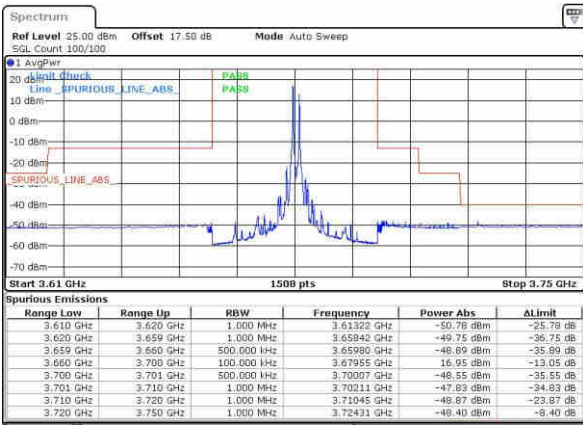
QPSK

Highest Band Edge / 1RB0 and 1RB99



Date: 15 MAY 2019 08:01:30

Highest Band Edge / 1RB74 and 1RB0



Date: 15 MAY 2019 08:13:46

Highest Band Edge / Full RB



Date: 15 MAY 2019 07:58:02

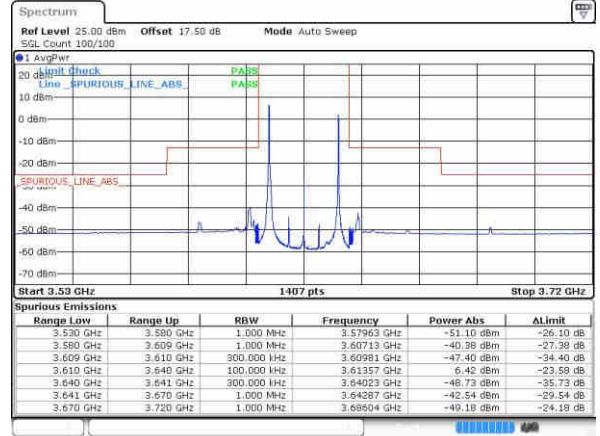
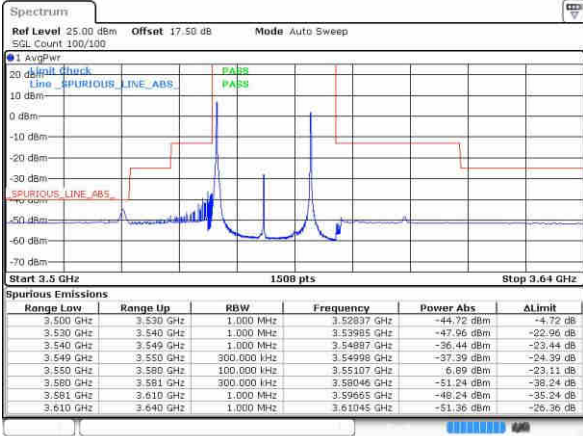


LTE Band 48/ 20MHz+5MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB24

Middle Band Edge / 1RB0 and 1RB24

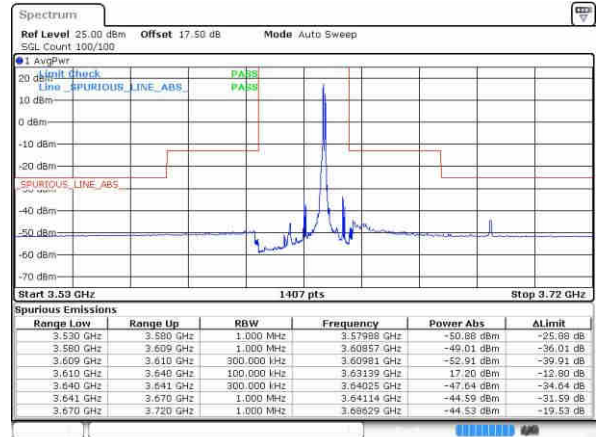
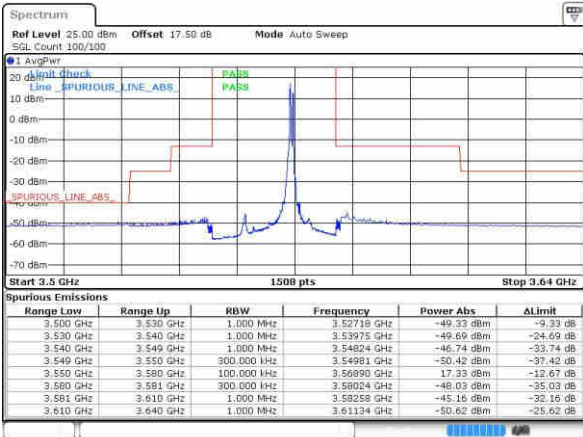


Date: 14 MAY 2019 21:41:48

Date: 14 MAY 2019 19:05:57

Lowest Band Edge / 1RB99 and 1RB0

Middle Band Edge / 1RB99 and 1RB0

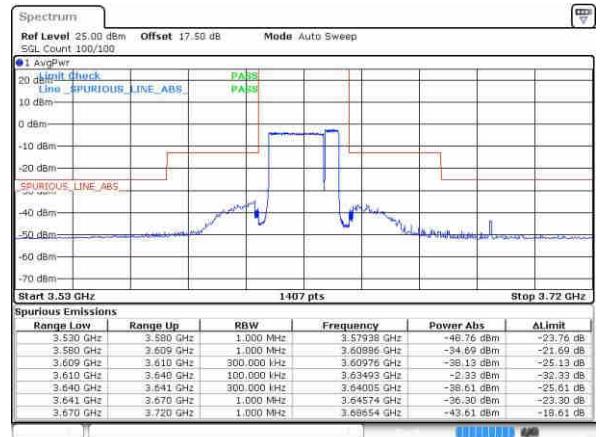
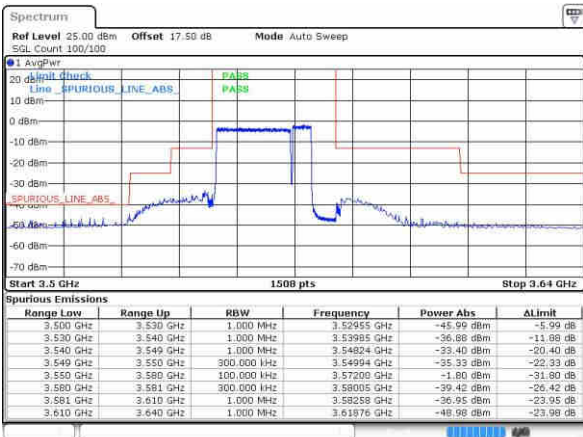


Date: 14 MAY 2019 21:43:30

Date: 14 MAY 2019 19:10:38

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 14 MAY 2019 21:33:15

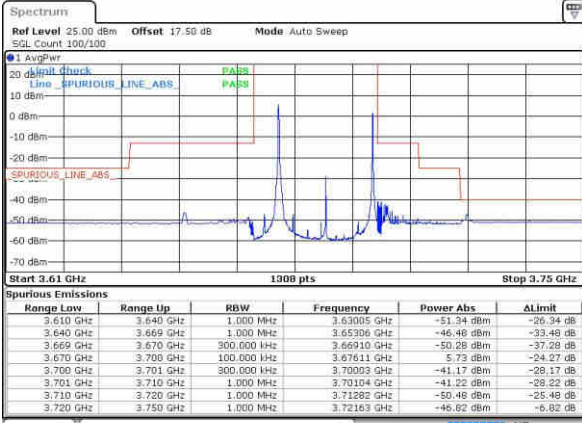
Date: 14 MAY 2019 19:00:22



LTE Band 48 / 20MHz+5MHz

QPSK

Highest Band Edge / 1RB0 and 1RB24



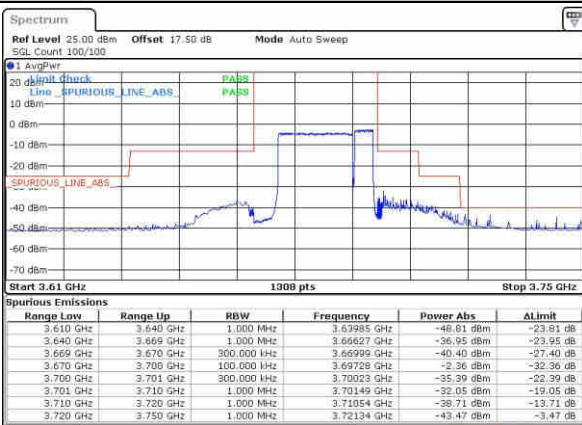
Date: 14 MAY 2019 18:26:17

Highest Band Edge / 1RB99 and 1RB0



Date: 14 MAY 2019 18:37:20

Highest Band Edge / Full RB



Date: 14 MAY 2019 18:24:04



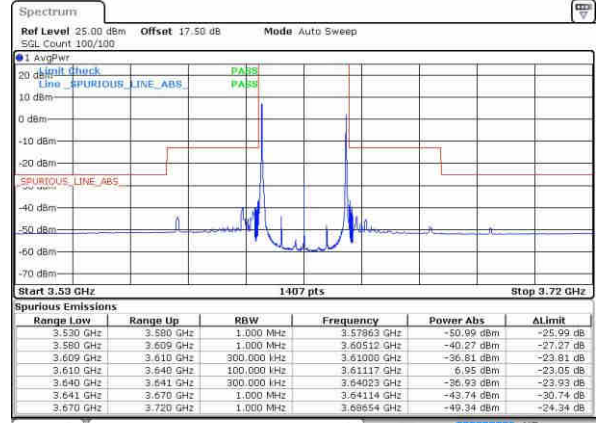
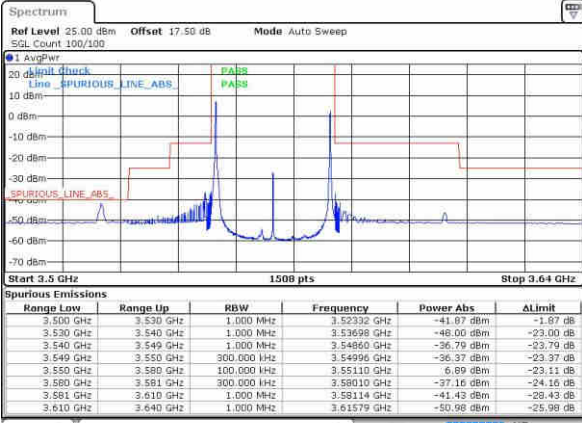


LTE Band 48 / 20MHz+10MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB49

Middle Band Edge / 1RB0 and 1RB49

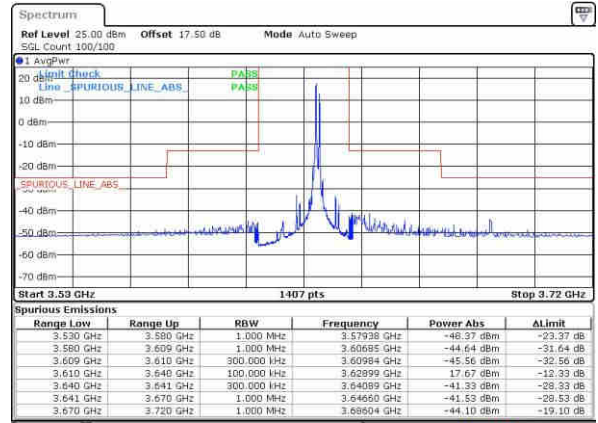
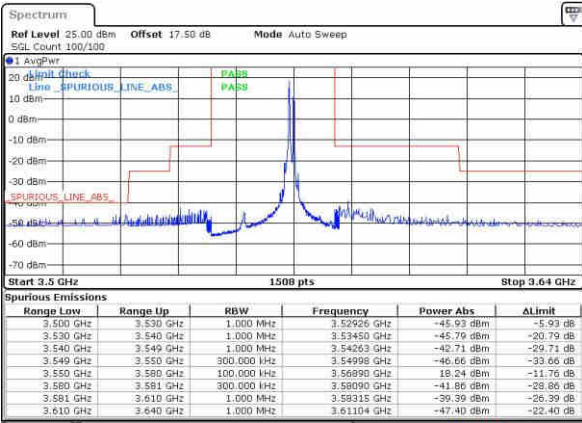


Date: 15 MAY 2019 03:58:48

Date: 15 MAY 2019 04:43:23

Lowest Band Edge / 1RB99 and 1RB0

Middle Band Edge / 1RB99 and 1RB0



Date: 15 MAY 2019 04:00:29

Date: 15 MAY 2019 04:45:05

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 15 MAY 2019 03:50:15

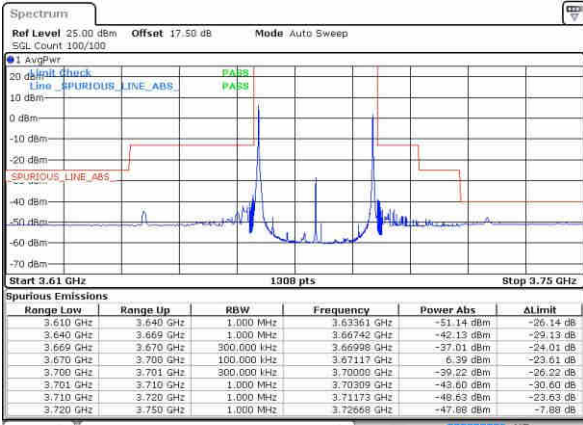
Date: 15 MAY 2019 04:34:50



LTE Band 48 / 20MHz+10MHz

QPSK

Highest Band Edge / 1RB0 and 1RB49



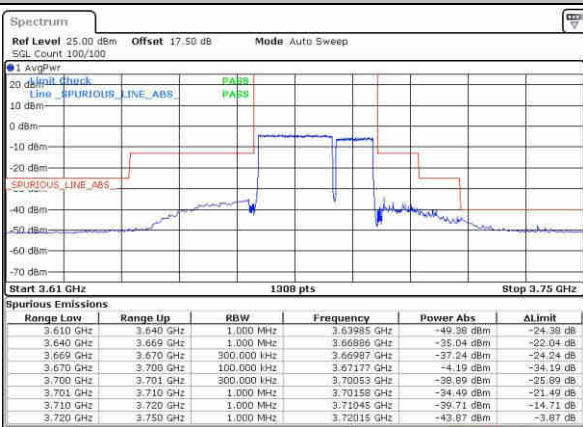
Date: 15 MAY 2019 05:18:34

Highest Band Edge / 1RB99 and 1RB0



Date: 15 MAY 2019 05:27:06

Highest Band Edge / Full RB



Date: 15 MAY 2019 05:16:51

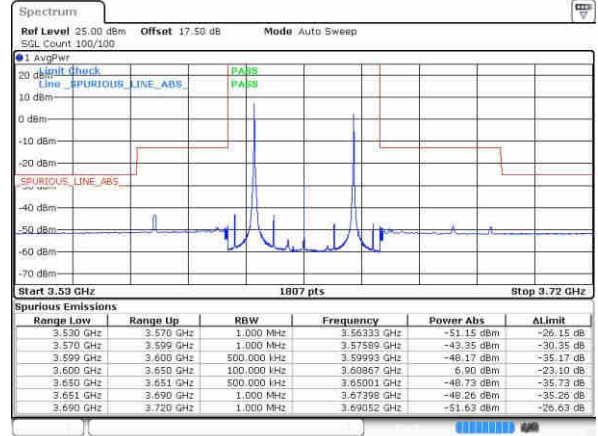
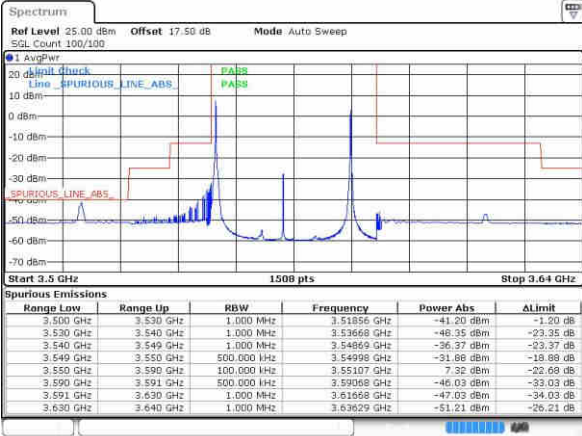


LTE Band 48 / 20MHz+15MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB74

Middle Band Edge / 1RB0 and 1RB74

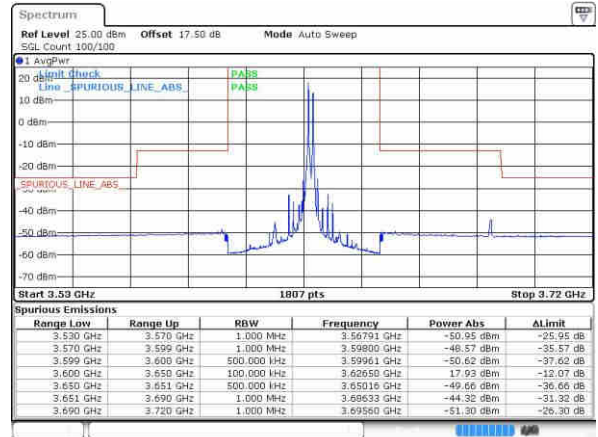
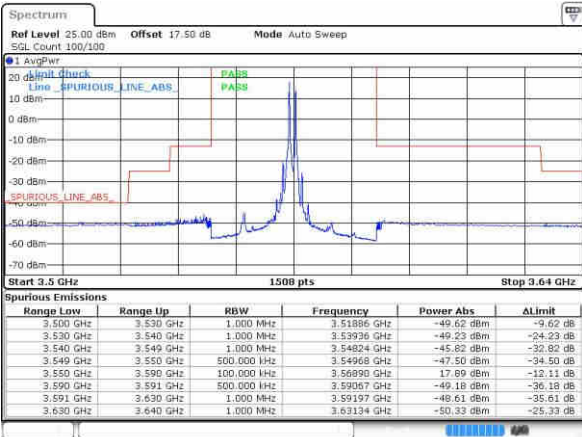


Date: 15 MAY 2019 15:59:21

Date: 15 MAY 2019 17:33:45

Lowest Band Edge / 1RB99 and 1RB0

Middle Band Edge / 1RB99 and 1RB0

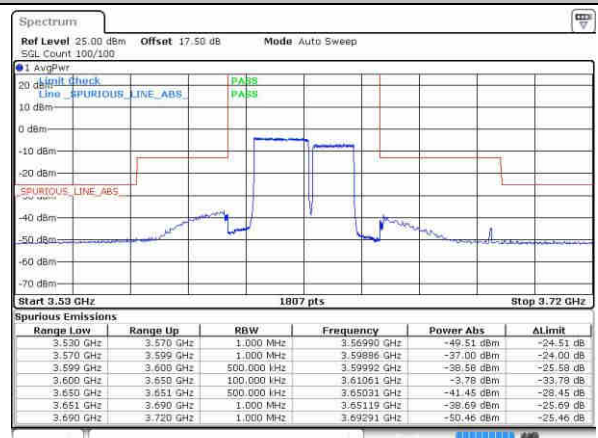


Date: 15 MAY 2019 18:01:33

Date: 15 MAY 2019 17:35:56

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 15 MAY 2019 18:57:20

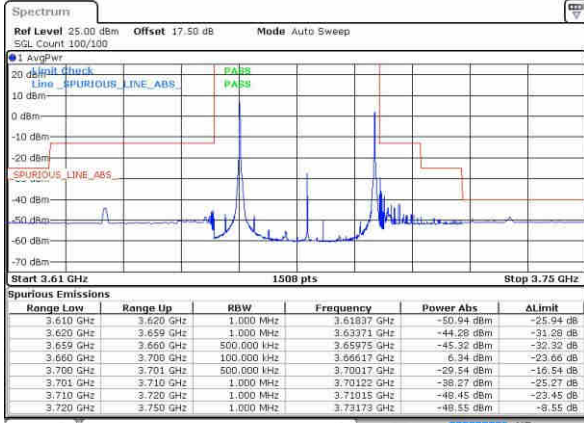
Date: 15 MAY 2019 17:22:45



LTE Band 48 / 20MHz+15MHz

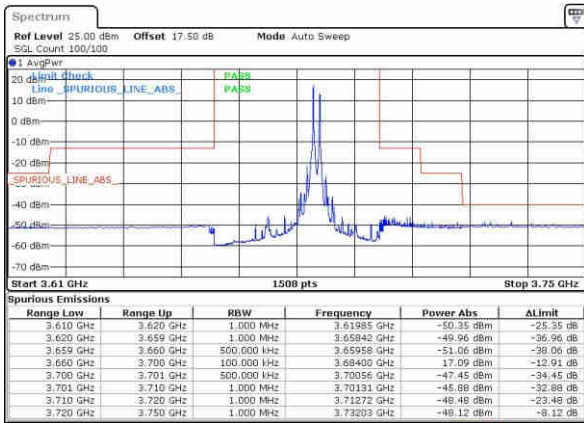
QPSK

Highest Band Edge / 1RB0 and 1RB74



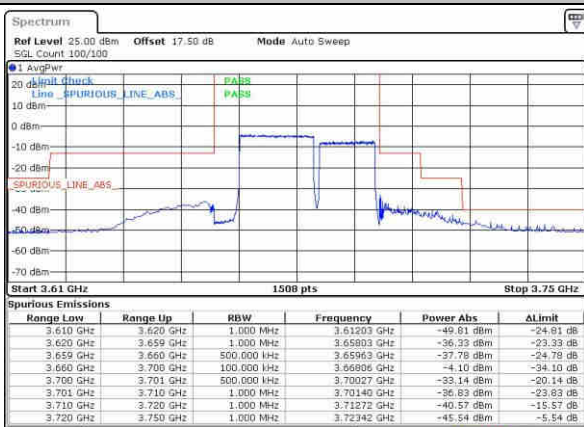
Date: 15 MAY 2019 18:09:44

Highest Band Edge / 1RB99 and 1RB0



Date: 15 MAY 2019 18:20:42

Highest Band Edge / Full RB



Date: 15 MAY 2019 18:07:32

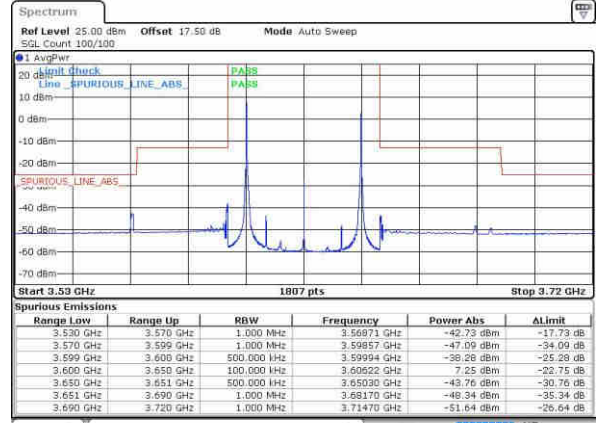
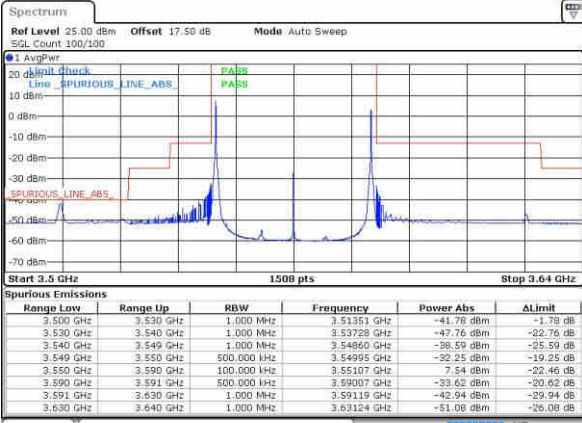


LTE Band 48 / 20MHz+20MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB9

Middle Band Edge / 1RB0 and 1RB9

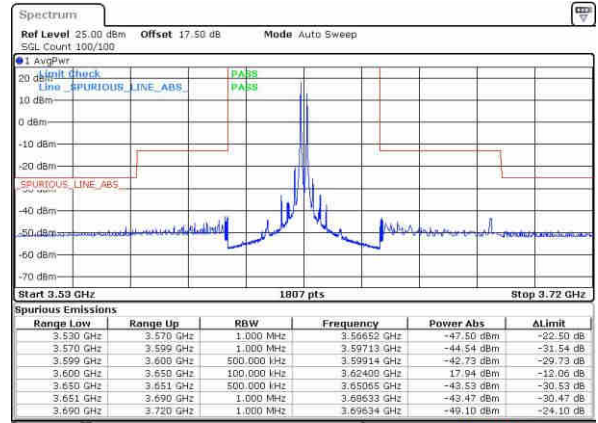
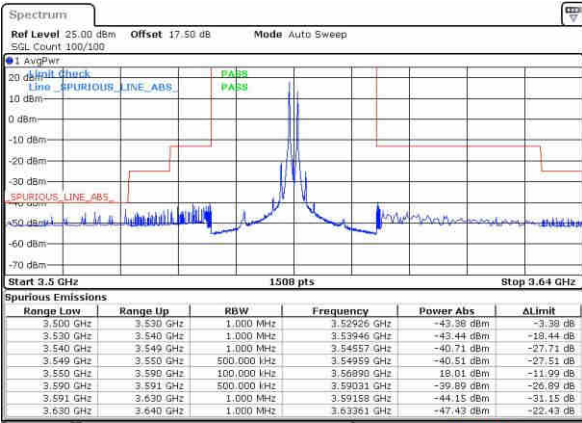


Date: 15 MAY 2019 18:02:13

Date: 15 MAY 2019 20:15:26

Lowest Band Edge / 1RB99 and 1RB0

Middle Band Edge / 1RB99 and 1RB0



Date: 15 MAY 2019 18:04:25

Date: 15 MAY 2019 20:17:37

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 14 MAY 2019 17:02:10

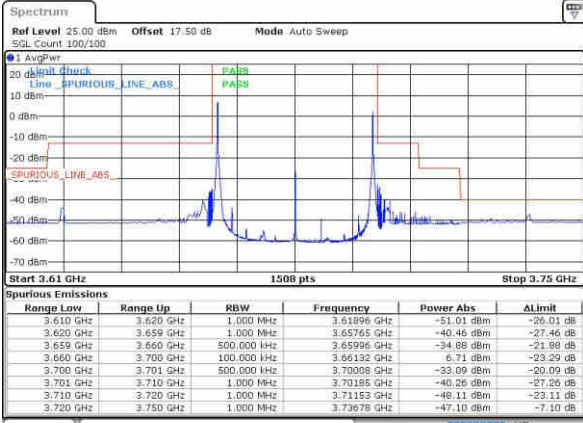
Date: 15 MAY 2019 20:04:23



LTE Band 48 / 20MHz+20MHz

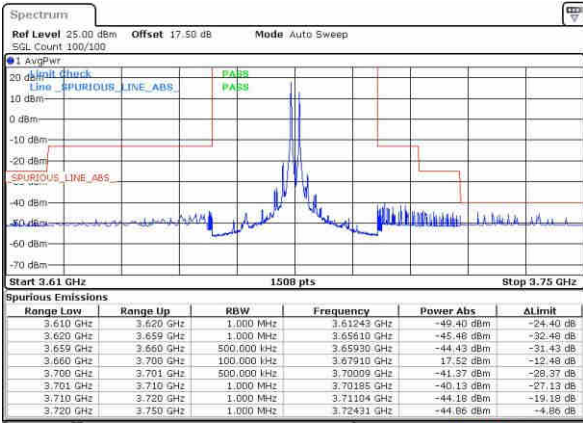
QPSK

Highest Band Edge / 1RB0 and 1RB9



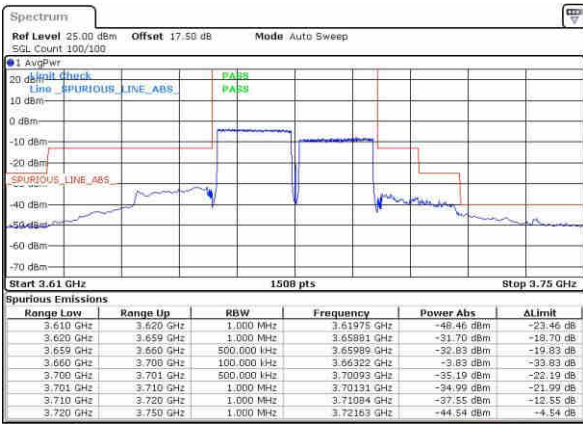
Date: 15 MAY 2019 21:20:22

Highest Band Edge / 1RB99 and 1RB0



Date: 15 MAY 2019 21:31:24

Highest Band Edge / Full RB



Date: 15 MAY 2019 21:18:10

Lowest Band Edge / Full RB (worst, at least 30dB)



Date: 27 JUN 2019 10:58:13

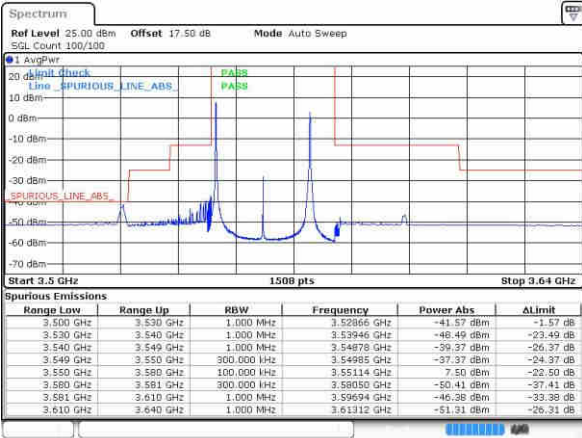


LTE Band 48 / 5MHz+20MHz

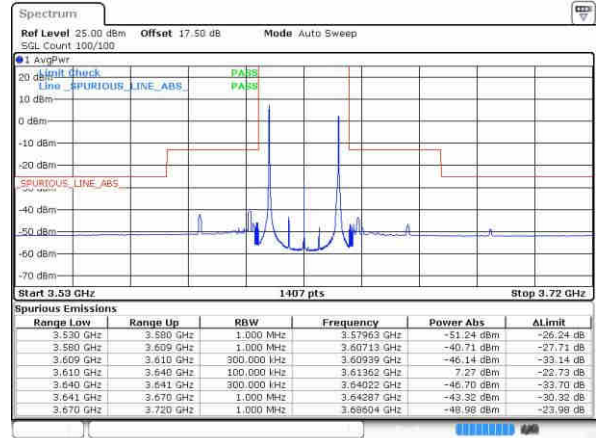
16QAM

Lowest Band Edge / 1RB0 and 1RB9

Middle Band Edge / 1RB0 and 1RB9



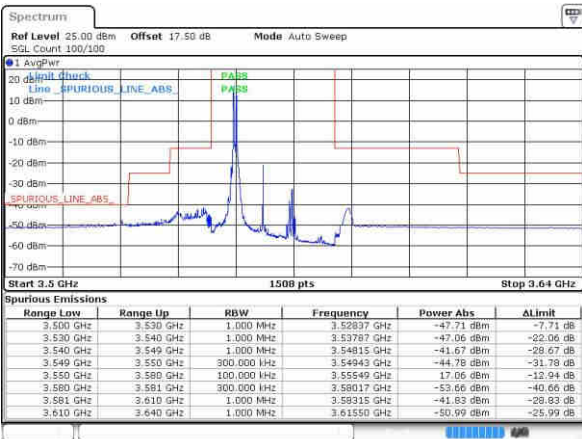
Date: 15 MAY 2019 01:42:28



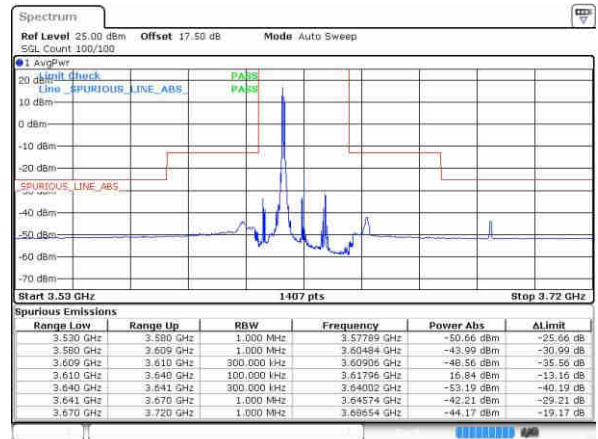
Date: 14 MAY 2019 22:36:10

Lowest Band Edge / 1RB24 and 1RB0

Middle Band Edge / 1RB24 and 1RB0



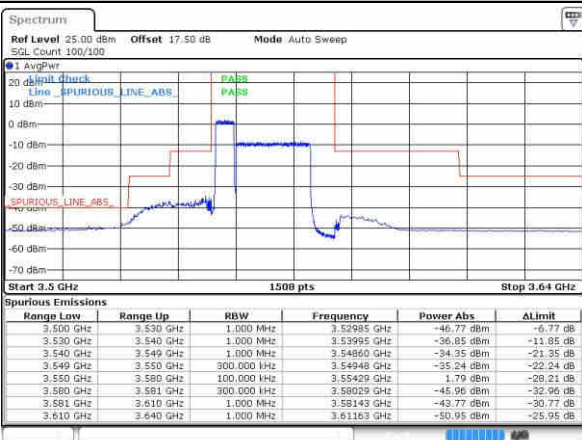
Date: 14 MAY 2019 22:13:06



Date: 14 MAY 2019 22:41:17

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 14 MAY 2019 22:02:50



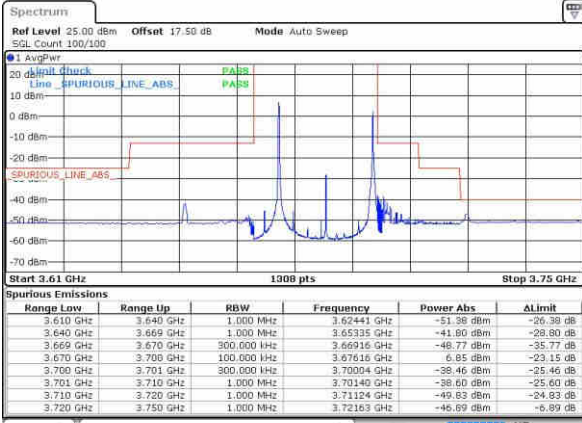
Date: 14 MAY 2019 22:31:03



LTE Band 48 / 5MHz+20MHz

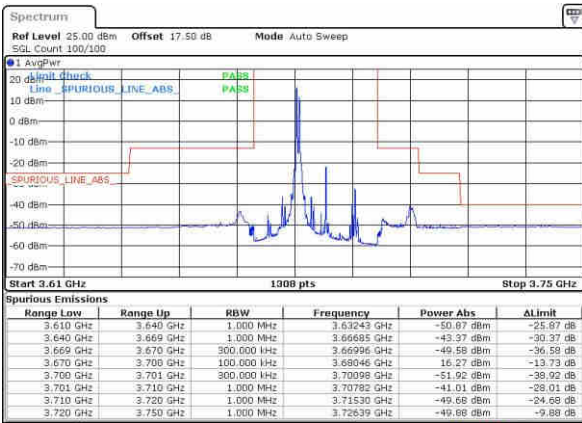
16QAM

Highest Band Edge / 1RB0 and 1RB99



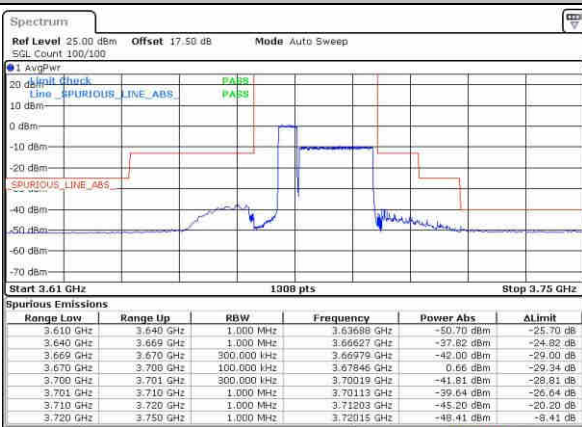
Date: 15 MAY 2019 01:35:08

Highest Band Edge / 1RB24 and 1RB0



Date: 15 MAY 2019 01:17:34

Highest Band Edge / Full RB



Date: 15 MAY 2019 01:07:18



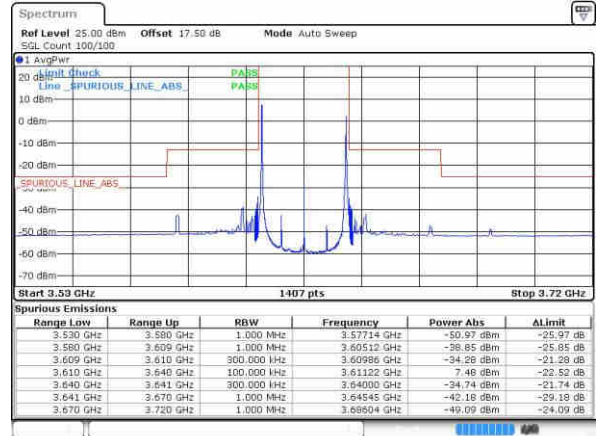
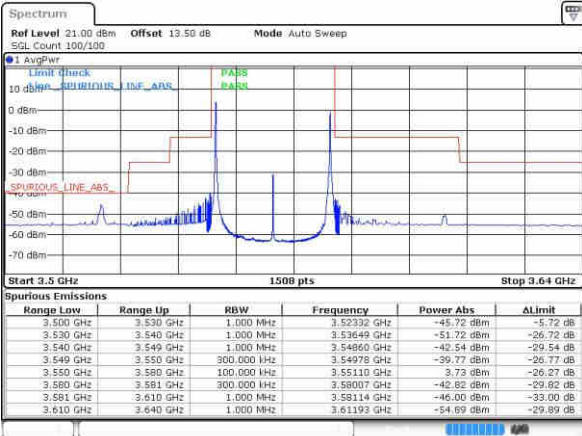


LTE Band 48 / 10MHz+20MHz

16QAM

Lowest Band Edge / 1RB0 and 1RB9

Middle Band Edge / 1RB0 and 1RB9

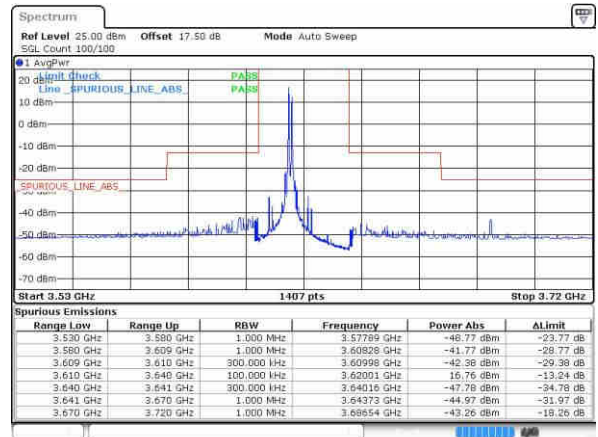
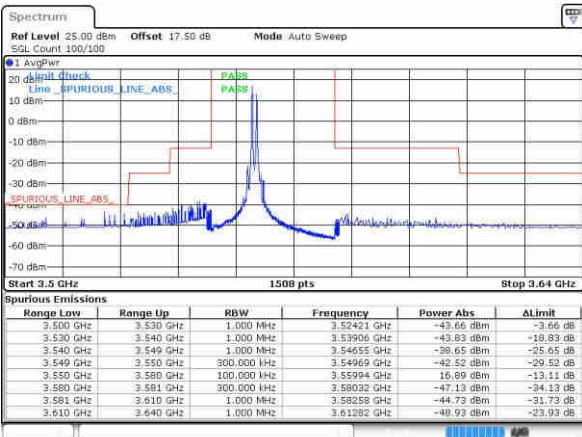


Date: 15 MAY 2019 02:22:04

Date: 15 MAY 2019 02:35:43

Lowest Band Edge / 1RB49 and 1RB0

Middle Band Edge / 1RB49 and 1RB0

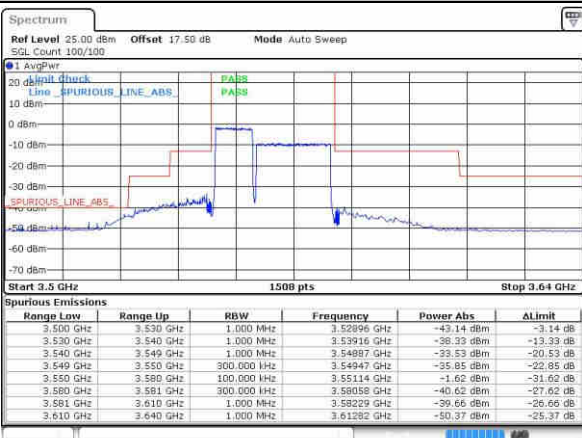


Date: 15 MAY 2019 02:03:43

Date: 15 MAY 2019 02:40:49

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 15 MAY 2019 01:53:29

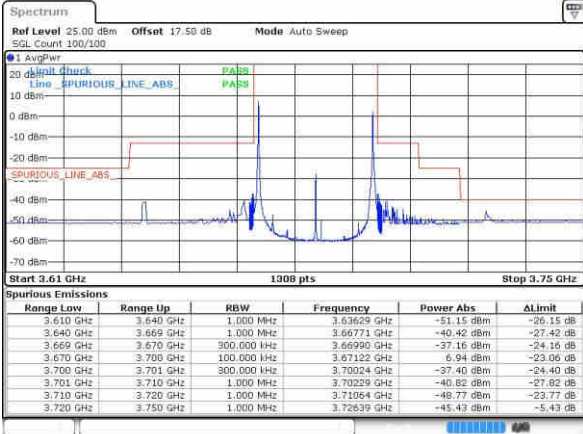
Date: 15 MAY 2019 02:30:35



LTE Band 48 / 10MHz+20MHz

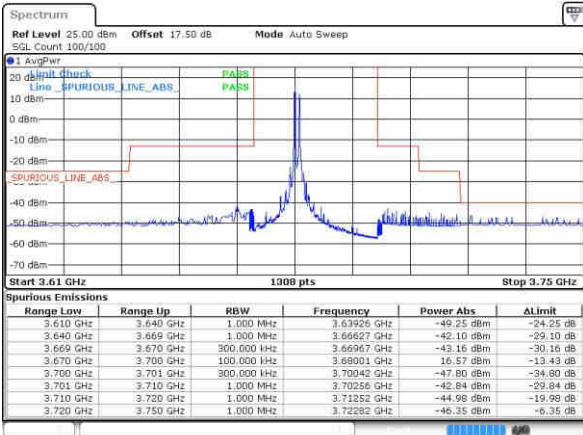
16QAM

Highest Band Edge / 1RB0 and 1RB99



Date: 15 MAY 2019 03:11:05

Highest Band Edge / 1RB49 and 1RB0



Date: 15 MAY 2019 03:16:12

Highest Band Edge / Full RB



Date: 15 MAY 2019 03:05:58

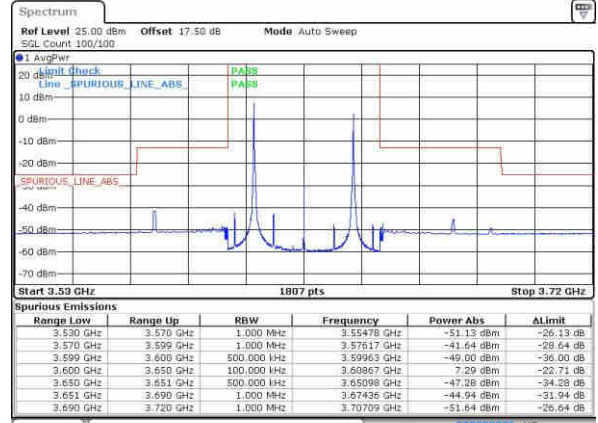
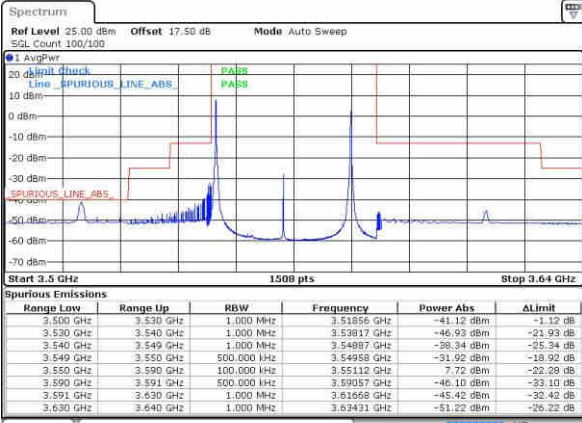


LTE Band 48 / 15MHz+20MHz

16QAM

Lowest Band Edge / 1RB0 and 1RB9

Middle Band Edge / 1RB0 and 1RB9

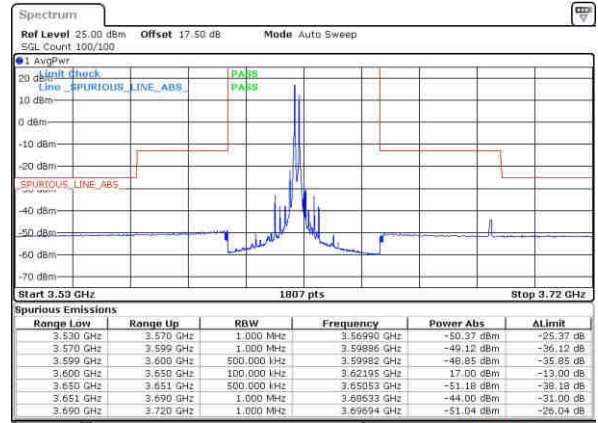
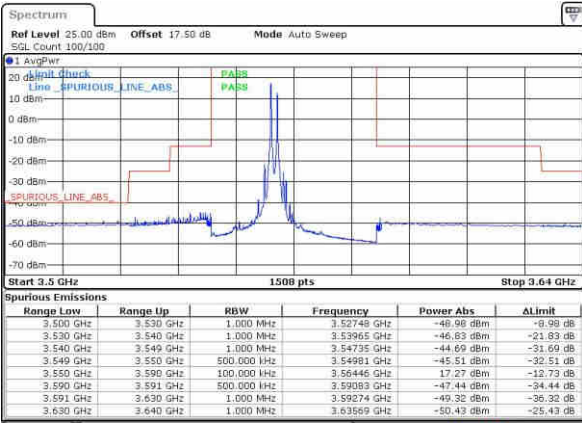


Date: 15 MAY 2019 06:26:36

Date: 15 MAY 2019 07:06:52

Lowest Band Edge / 1RB74 and 1RB0

Middle Band Edge / 1RB74 and 1RB0

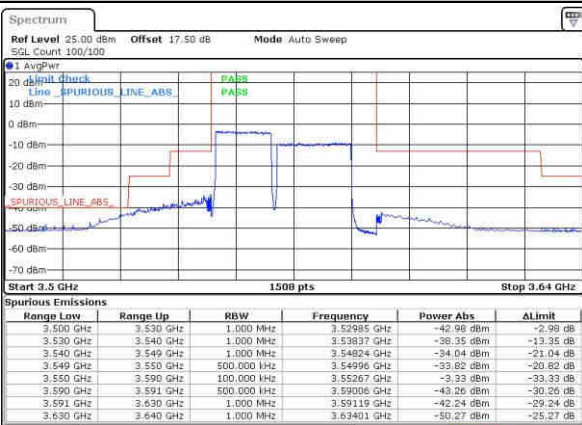


Date: 15 MAY 2019 06:01:47

Date: 15 MAY 2019 07:14:14

Lowest Band Edge / Full RB

Middle Band Edge / Full RB



Date: 15 MAY 2019 05:48:32

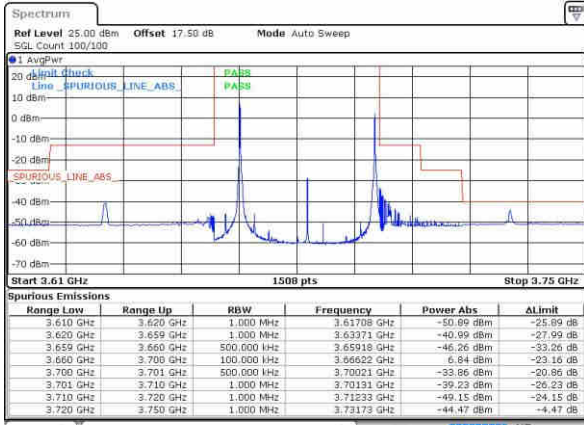
Date: 15 MAY 2019 06:59:29



LTE Band 48 / 15MHz+20MHz

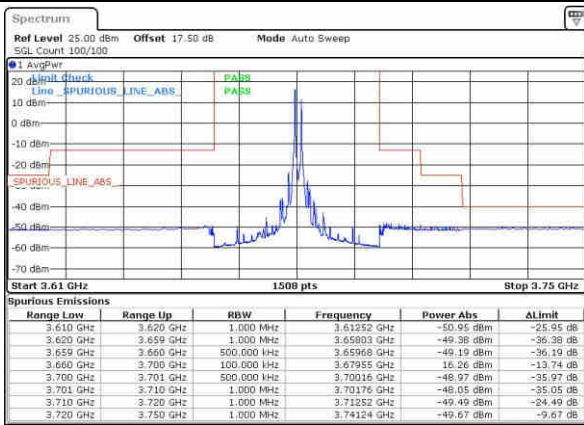
16QAM

Highest Band Edge / 1RB0 and 1RB99



Date: 15 MAY 2019 08:03:57

Highest Band Edge / 1RB74 and 1RB0



Date: 15 MAY 2019 08:11:19

Highest Band Edge / Full RB



Date: 15 MAY 2019 07:56:35