

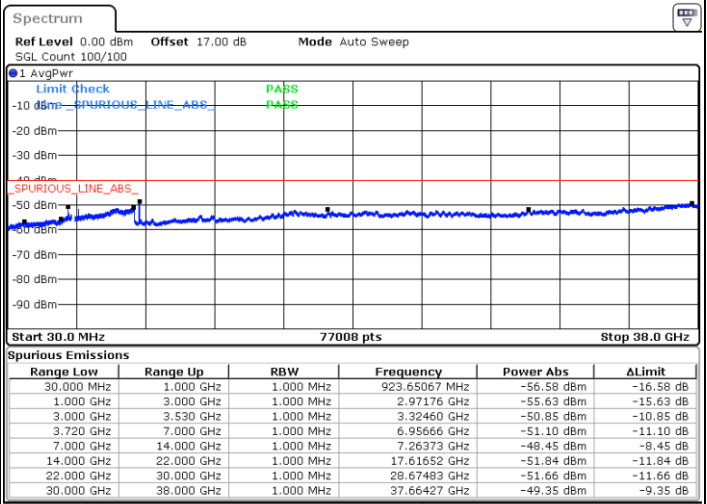
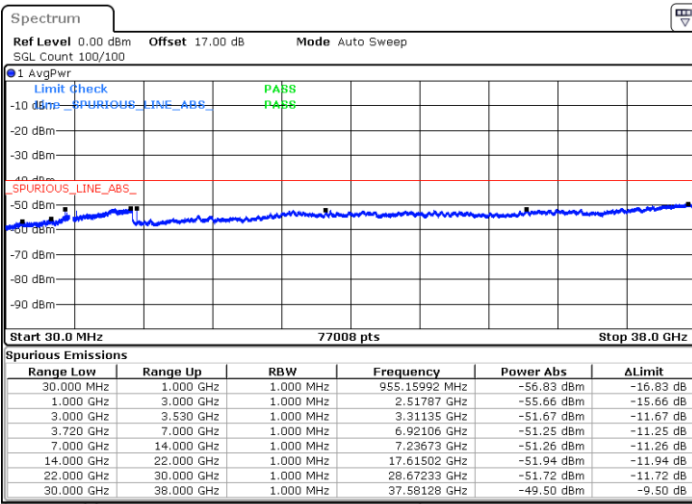


LTE Band 48 / 15MHz

64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

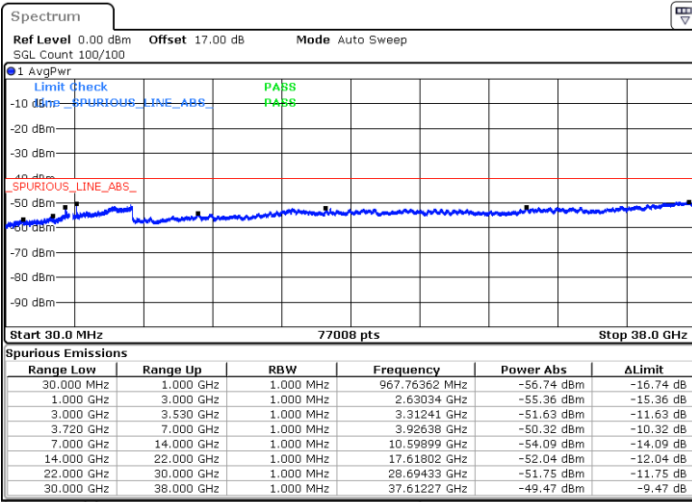


Date: 21.MAY.2020 23:25:35

Date: 21.MAY.2020 23:44:59

Middle Channel / FullIRB

N/A



Date: 21.MAY.2020 23:35:17

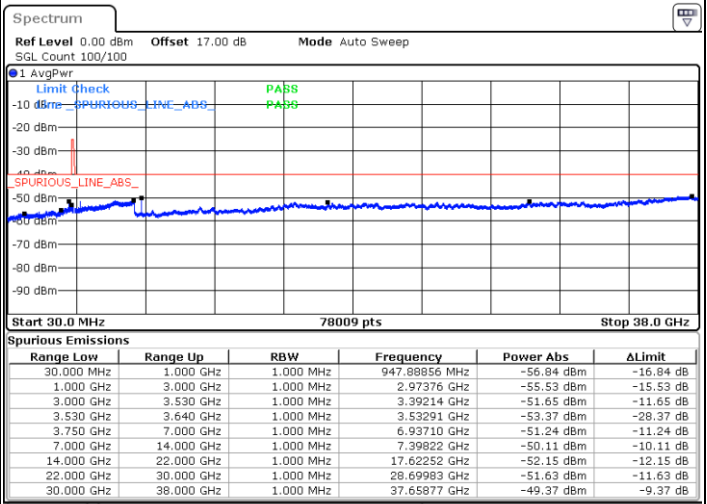
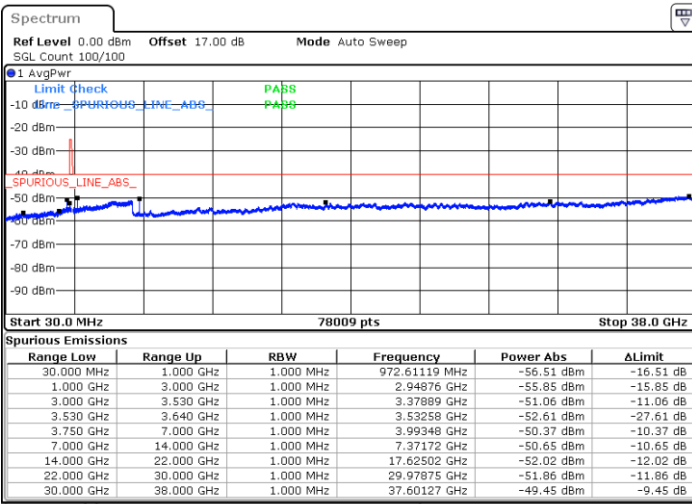


LTE Band 48 / 15MHz

64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

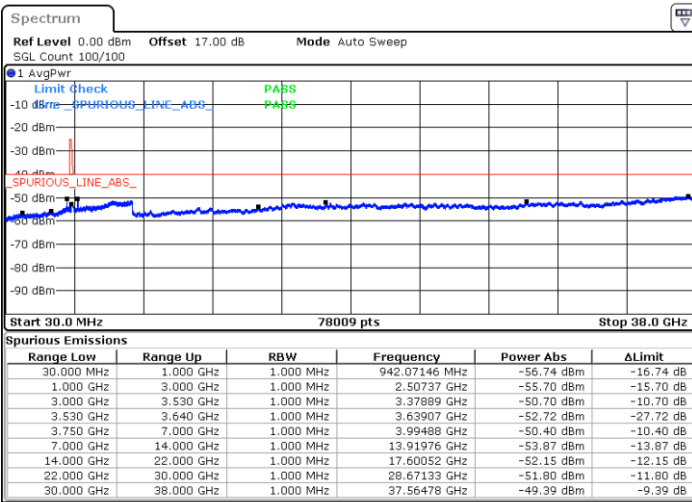


Date: 21.MAY.2020 23:30:58

Date: 21.MAY.2020 23:50:22

Highest Channel / FullIRB

N/A



Date: 21.MAY.2020 23:40:40

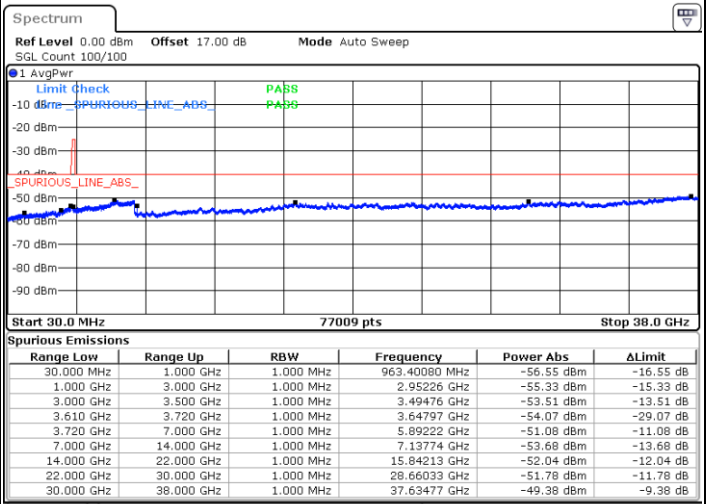
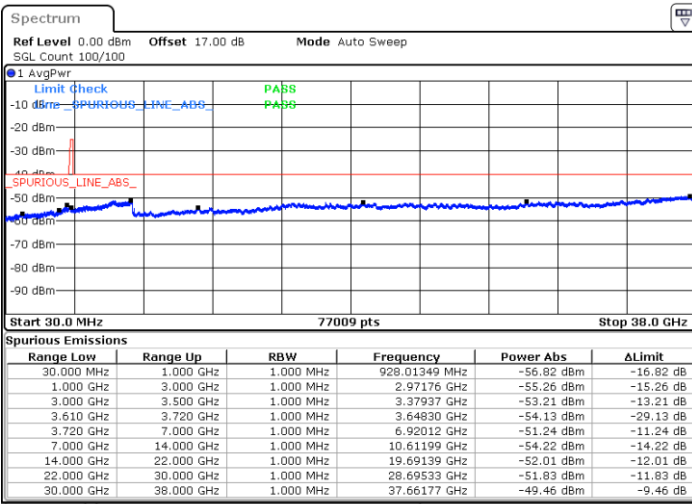


LTE Band 48 / 20MHz

64QAM

Lowest Channel / 1RB0

Lowest Channel / 1RBmax

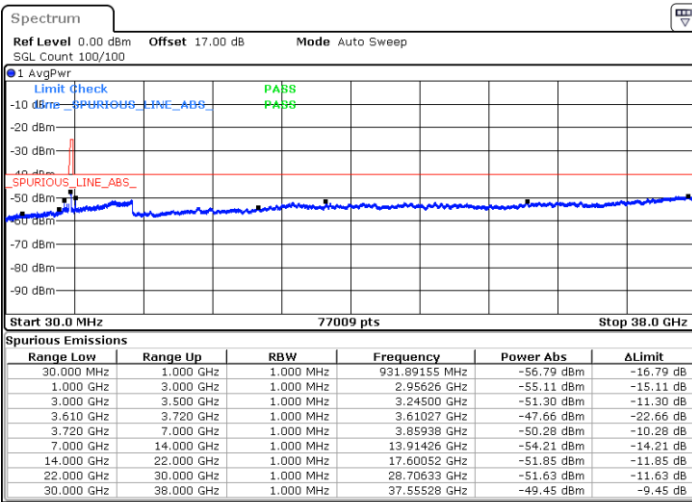


Date: 22.MAY.2020 00:01:09

Date: 22.MAY.2020 00:10:51

Lowest Channel / FullRB

N/A



Date: 21.MAY.2020 23:51:27

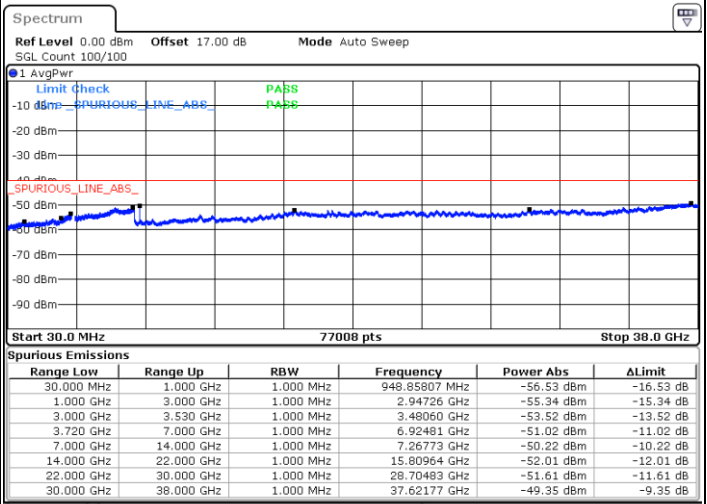
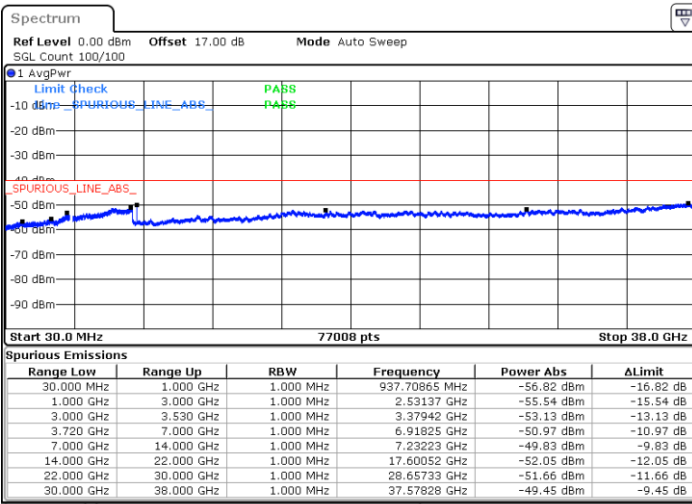


LTE Band 48 / 20MHz

64QAM

Middle Channel / 1RB0

Middle Channel / 1RBmax

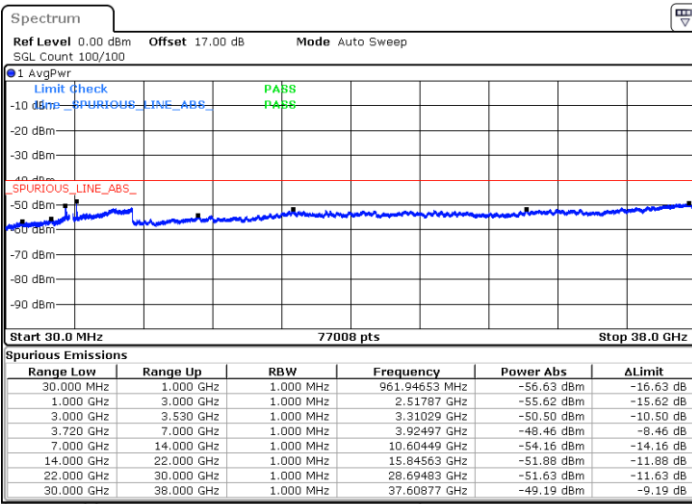


Date: 22.MAY.2020 00:06:31

Date: 22.MAY.2020 00:16:13

Middle Channel / FullIRB

N/A



Date: 21.MAY.2020 23:56:50

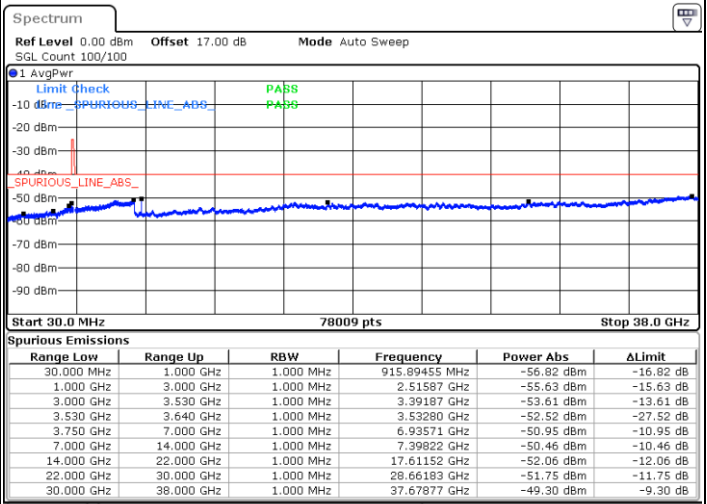
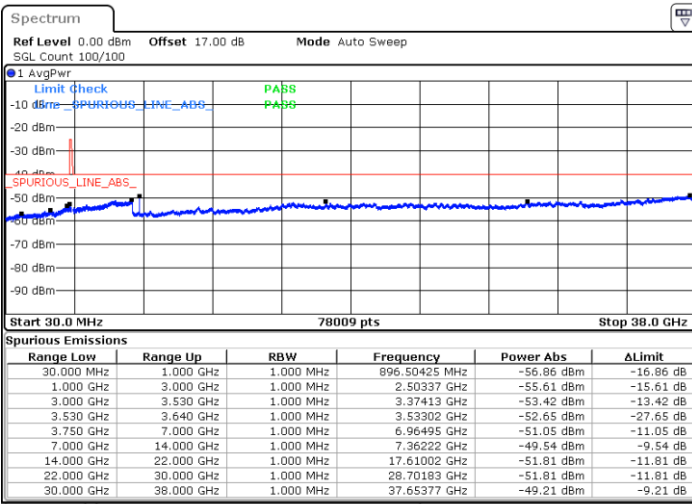


LTE Band 48 / 20MHz

64QAM

Highest Channel / 1RB0

Highest Channel / 1RBmax

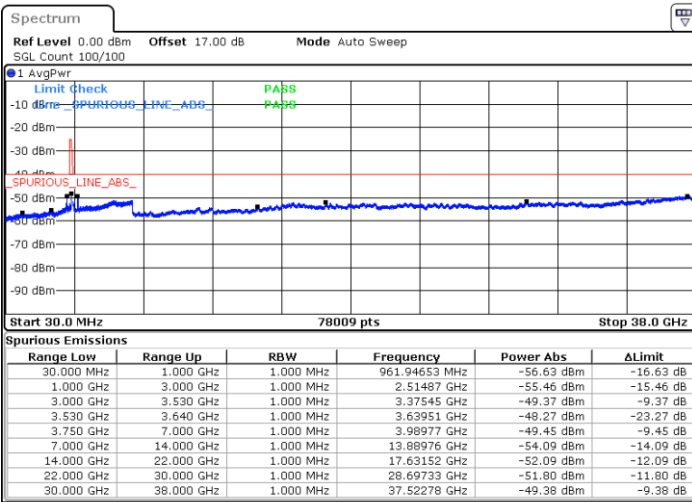


Date: 22.MAY.2020 00:07:36

Date: 22.MAY.2020 00:17:17

Highest Channel / FullIRB

N/A



Date: 21.MAY.2020 23:57:54



**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	0.0004	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0026	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

**Note:**

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.46V. ; Maximum Voltage =4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 48C

## 26dB Bandwidth

Mode	LTE Band 48C : 26dB BW(MHz)			
QPSK				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	24.78	29.97	34.90	24.98
Middle CH	24.83	29.85	34.97	24.83
Highest CH	24.83	29.97	34.83	24.88
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	30.09	34.97	39.88	-
Middle CH	29.97	34.90	39.96	-
Highest CH	30.09	34.97	39.80	-

Mode	LTE Band 48C : 26dB BW(MHz)			
16QAM				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	24.58	29.91	34.69	24.93
Middle CH	24.83	29.97	34.97	24.88
Highest CH	24.73	29.79	34.83	24.93
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	30.09	34.83	39.88	-
Middle CH	29.97	34.83	40.44	-
Highest CH	30.03	34.69	39.96	-

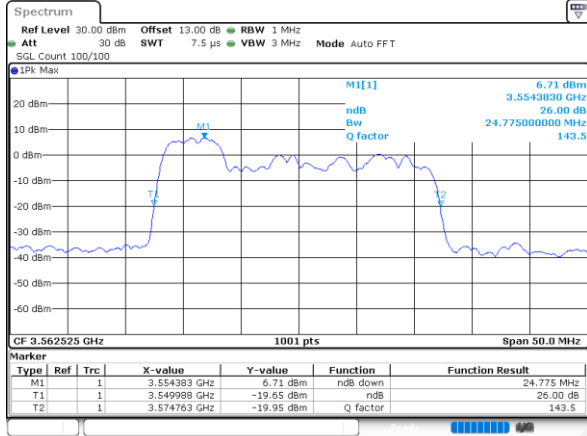
Mode	LTE Band 48C : 26dB BW(MHz)			
64QAM				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	24.68	29.73	34.90	24.88
Middle CH	24.68	29.73	34.83	24.88
Highest CH	24.78	29.85	34.76	24.78
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	30.03	34.90	39.72	-
Middle CH	29.79	34.83	39.80	-
Highest CH	29.91	35.25	39.64	-



LTE Band 48C

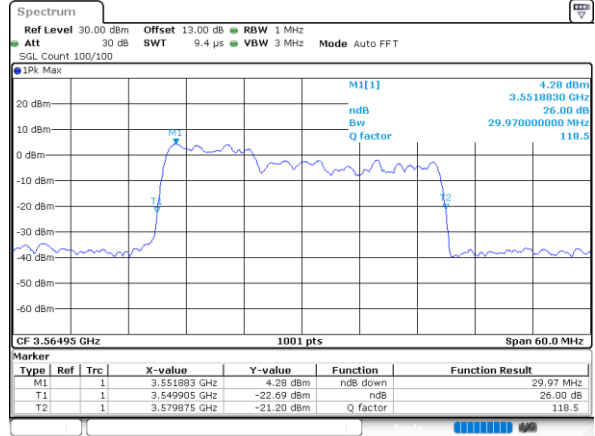
QPSK

Lowest Channel / 5MHz+20MHz



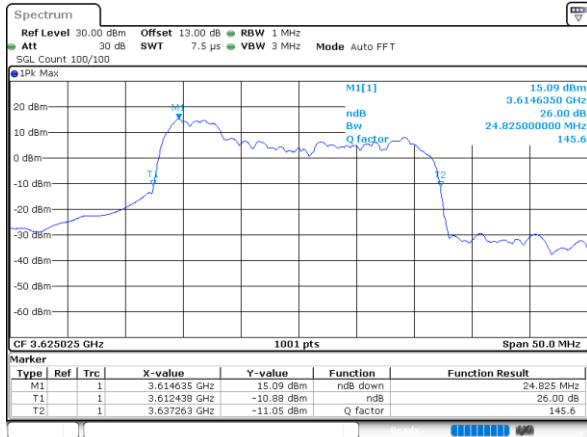
Date: 16 JUN 2020 00:04:33

Lowest Channel / 10MHz+20MHz



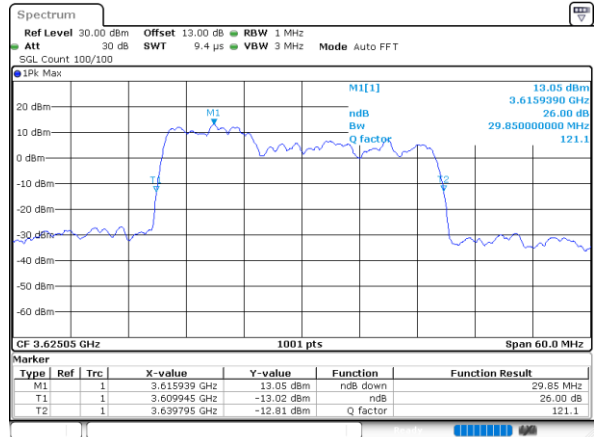
Date: 15 JUN 2020 23:53:33

Middle Channel / 5MHz+20MHz



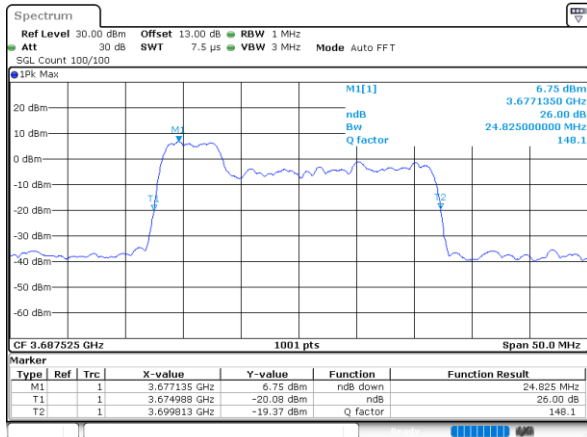
Date: 16 JUN 2020 00:07:51

Middle Channel / 10MHz+20MHz



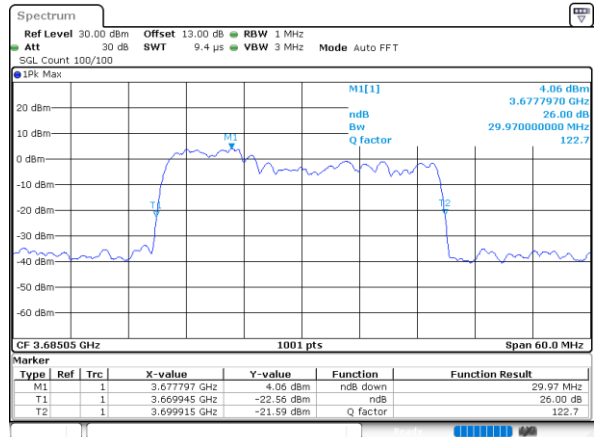
Date: 15 JUN 2020 23:56:52

Highest Channel / 5MHz+20MHz



Date: 16 JUN 2020 00:12:02

Highest Channel / 10MHz+20MHz



Date: 15 JUN 2020 23:59:19

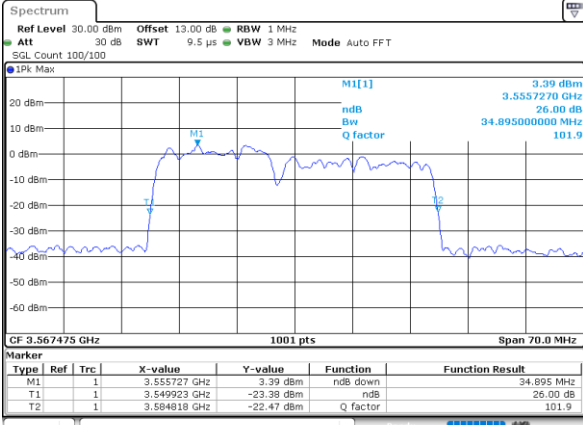




LTE Band 48C

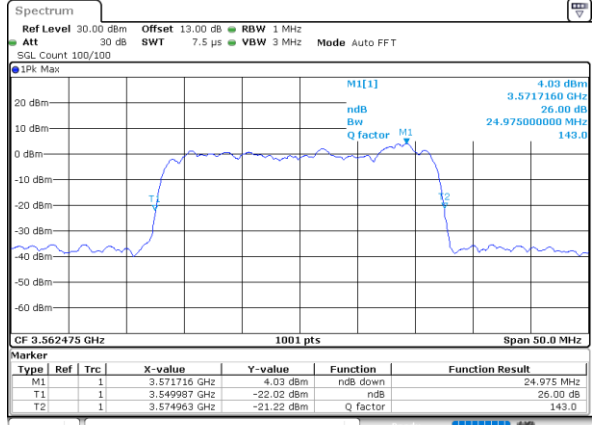
QPSK

Lowest Channel / 15MHz+20MHz



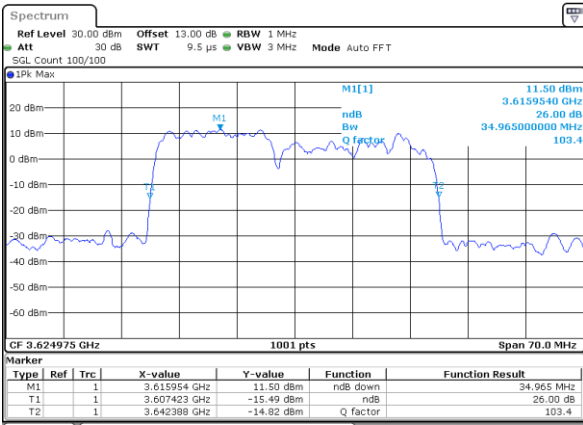
Date: 15 JUN 2020 23:32:23

Lowest Channel / 20MHz+5MHz



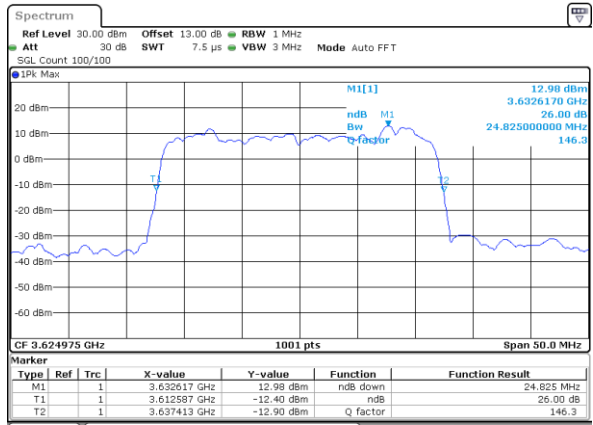
Date: 15 JUN 2020 23:10:22

Middle Channel / 15MHz+20MHz



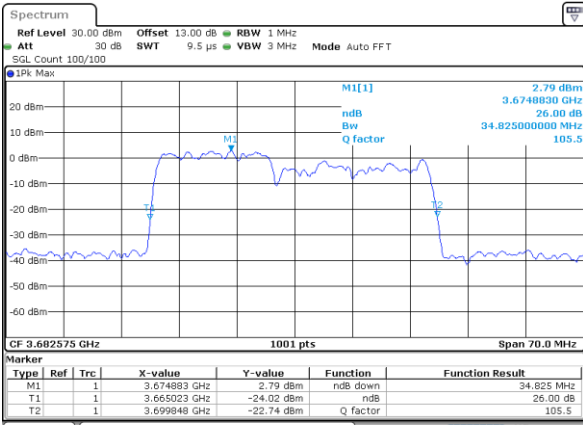
Date: 15 JUN 2020 23:44:23

Middle Channel / 20MHz+5MHz



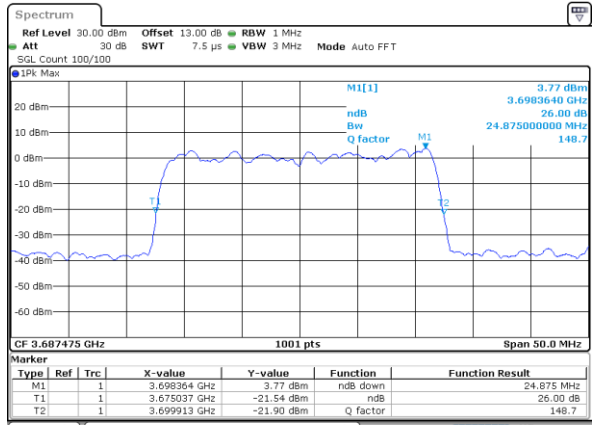
Date: 15 JUN 2020 23:17:22

Highest Channel / 15MHz+20MHz



Date: 15 JUN 2020 23:48:00

Highest Channel / 20MHz+5MHz



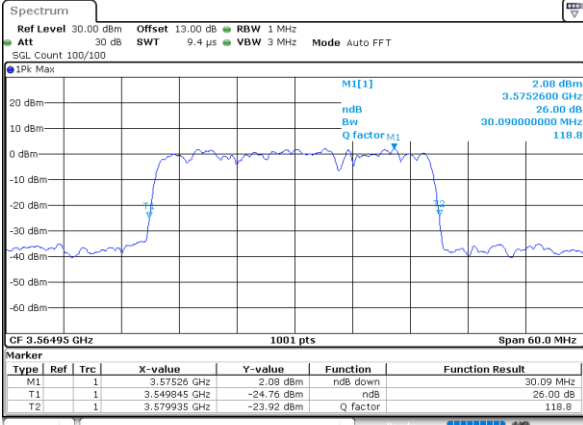
Date: 15 JUN 2020 23:26:12



LTE Band 48C

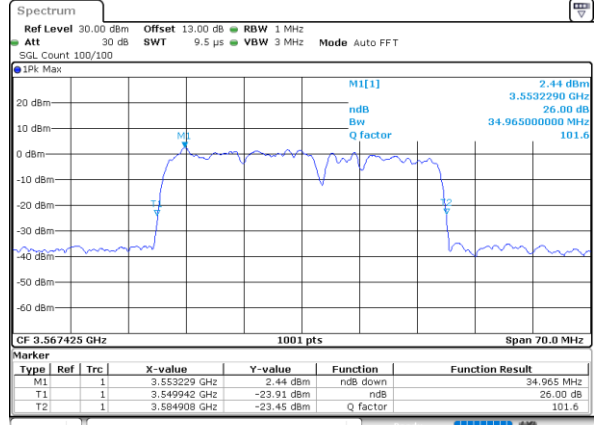
QPSK

Lowest Channel / 20MHz+10MHz



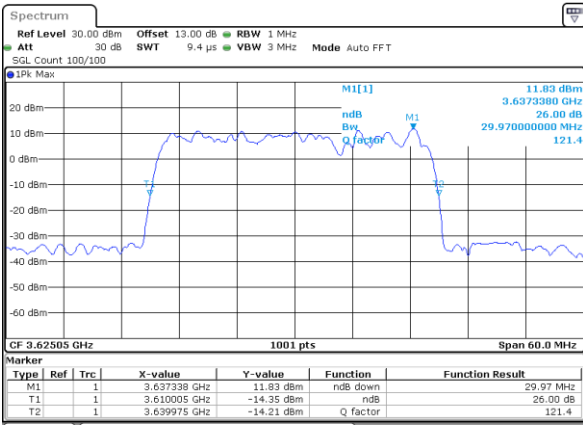
Date: 15 JUN 2020 22:15:02

Lowest Channel / 20MHz+15MHz



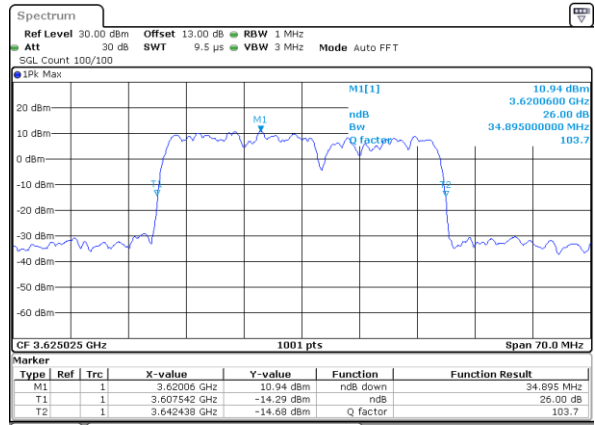
Date: 15 JUN 2020 22:13:36

Middle Channel / 20MHz+10MHz



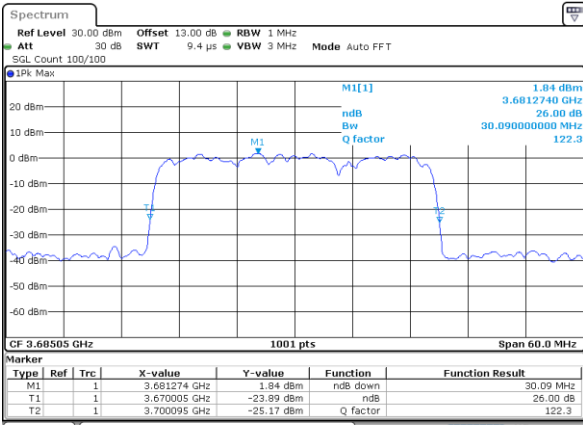
Date: 15 JUN 2020 22:15:51

Middle Channel / 20MHz+15MHz



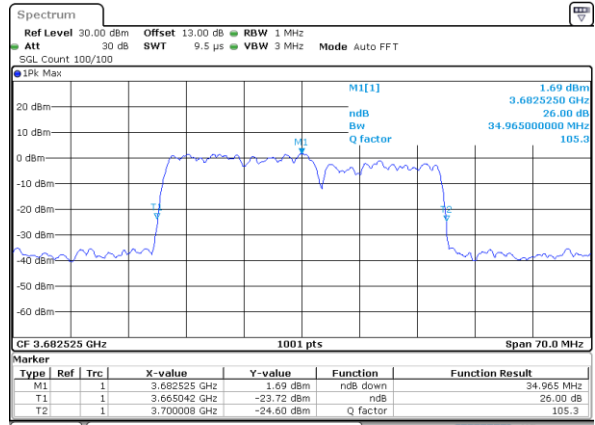
Date: 15 JUN 2020 22:14:29

Highest Channel / 20MHz+10MHz



Date: 15 JUN 2020 23:02:10

Highest Channel / 20MHz+15MHz



Date: 15 JUN 2020 22:14:32

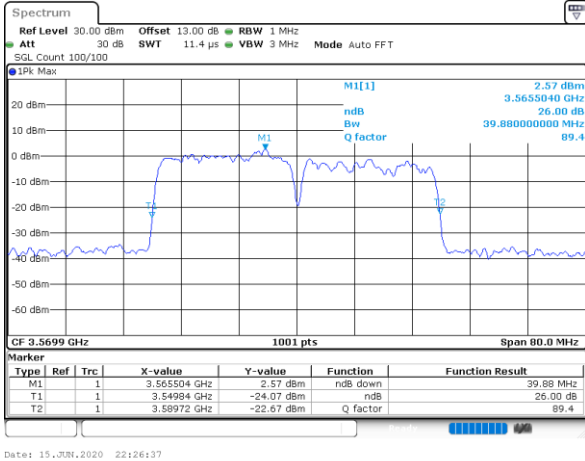


LTE Band 48C

QPSK

Lowest Channel / 20MHz+20MHz

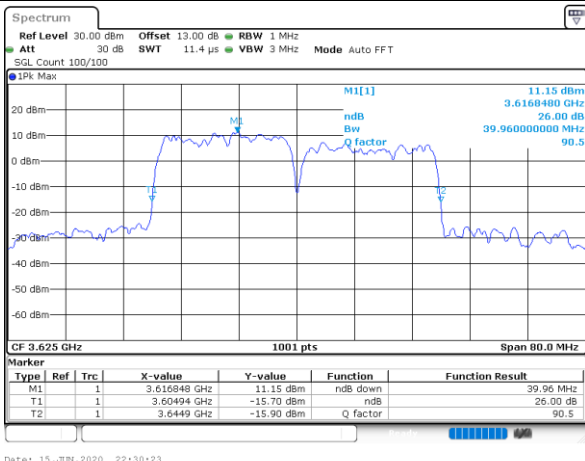
N/A



Date: 15 JUN 2020 22:26:37

Middle Channel / 20MHz+20MHz

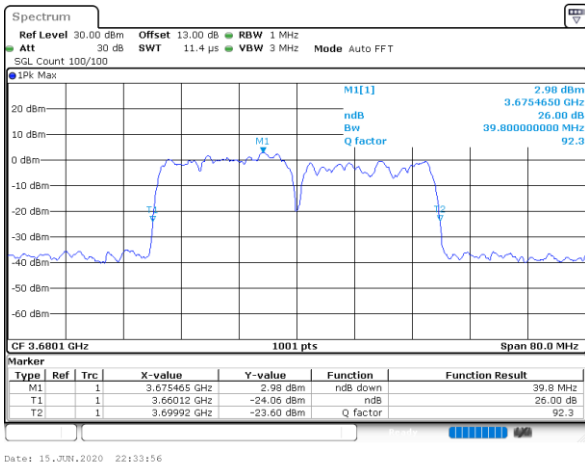
N/A



Date: 15 JUN 2020 22:30:23

Highest Channel / 20MHz+20MHz

N/A



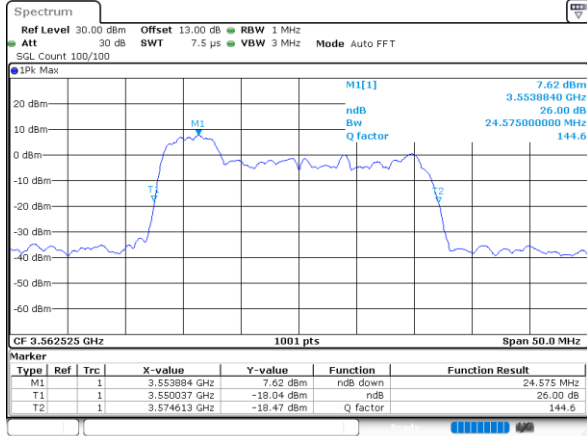
Date: 15 JUN 2020 22:33:56



LTE Band 48C

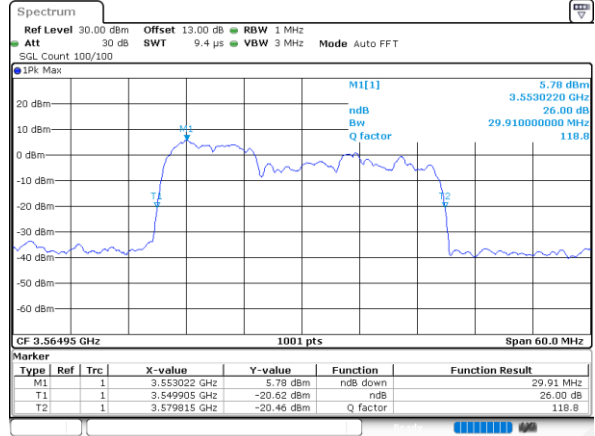
16QAM

Lowest Channel / 5MHz+20MHz



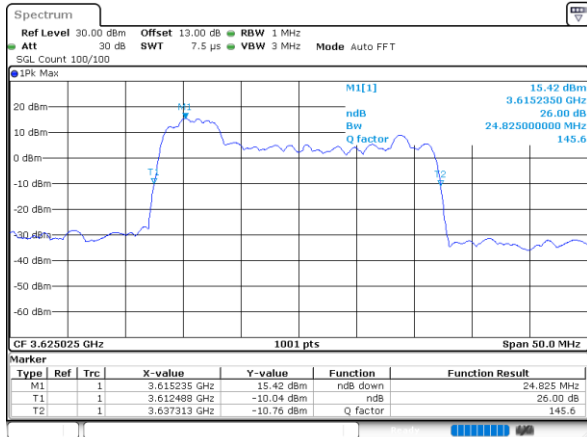
Date: 16 JUN 2020 00:04:09

Lowest Channel / 10MHz+15MHz



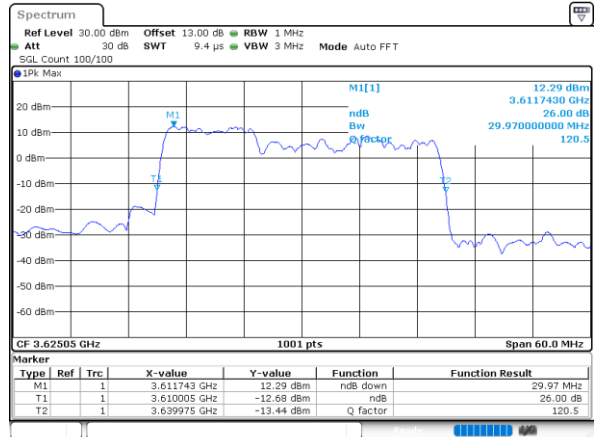
Date: 15 JUN 2020 23:53:11

Middle Channel / 5MHz+20MHz



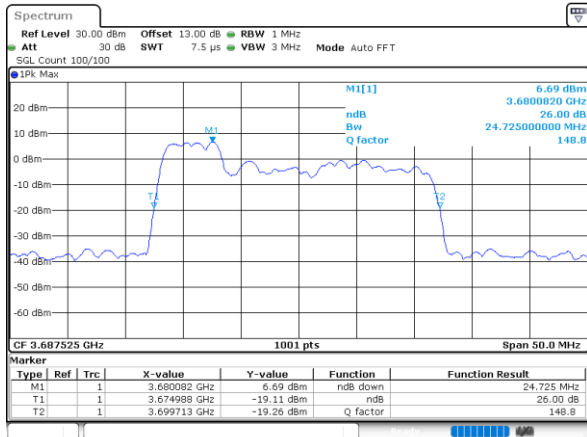
Date: 16 JUN 2020 00:07:29

Middle Channel / 10MHz+20MHz



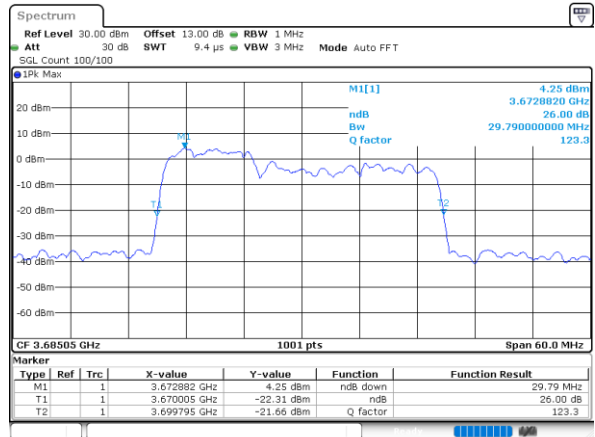
Date: 15 JUN 2020 23:56:30

Highest Channel / 5MHz+20MHz



Date: 16 JUN 2020 00:12:24

Highest Channel / 10MHz+20MHz



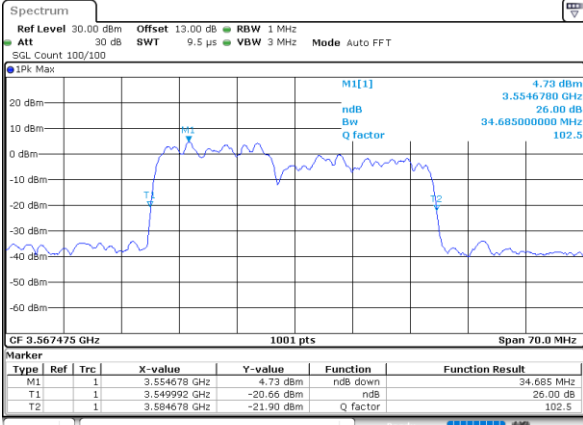
Date: 15 JUN 2020 23:59:41



LTE Band 48C

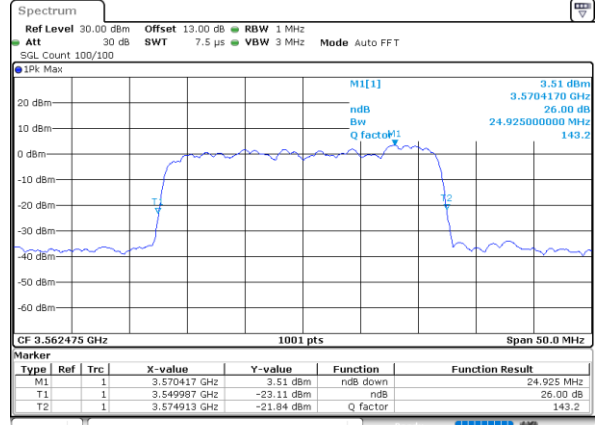
16QAM

Lowest Channel / 10MHz+20MHz



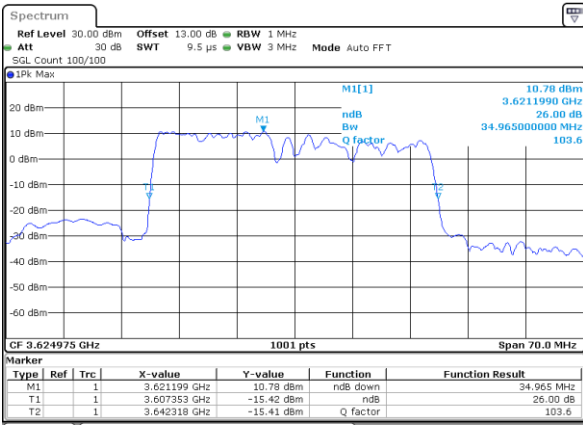
Date: 15 JUN 2020 23:32:00

Lowest Channel / 15MHz+10MHz



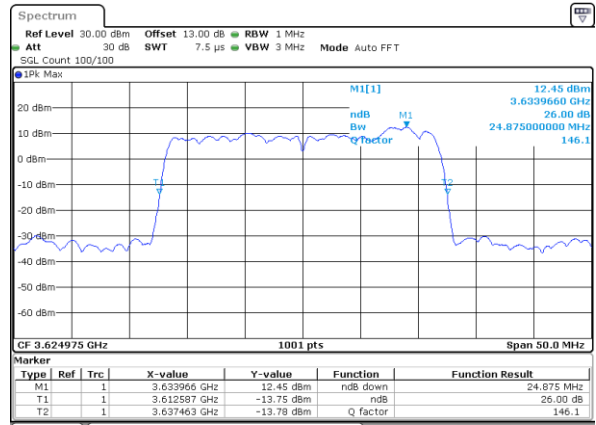
Date: 15 JUN 2020 23:05:59

Middle Channel / 15MHz+20MHz



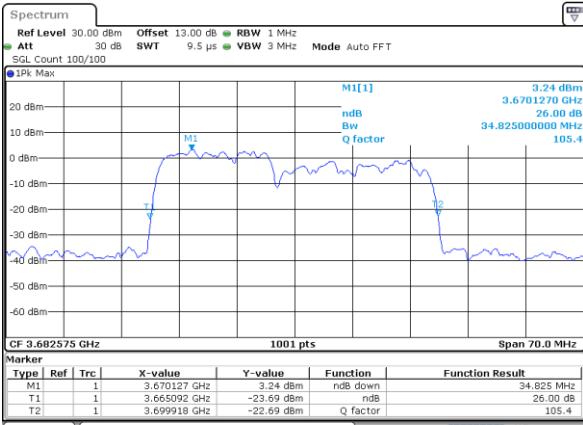
Date: 15 JUN 2020 23:44:00

Middle Channel / 20MHz+5MHz



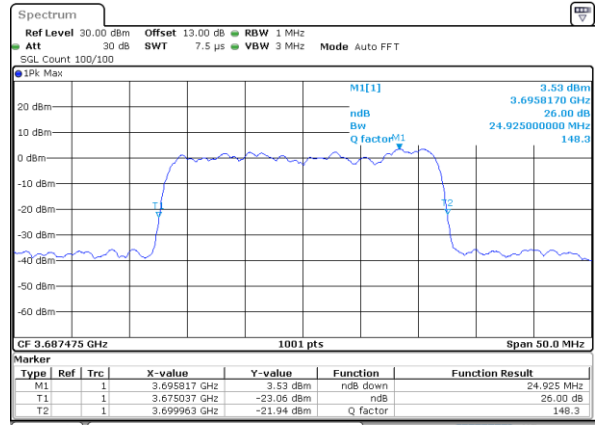
Date: 15 JUN 2020 23:17:00

Highest Channel / 15MHz+20MHz



Date: 15 JUN 2020 23:48:23

Highest Channel / 20MHz+5MHz



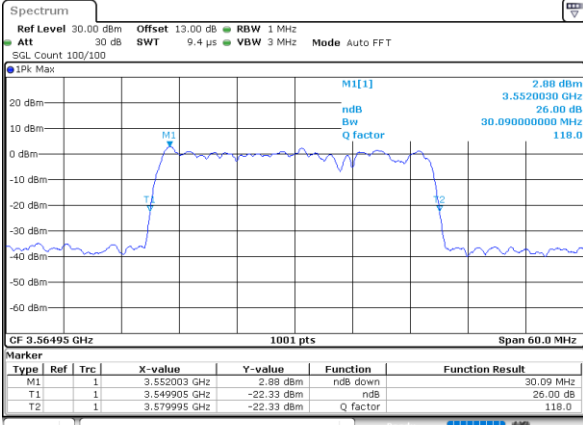
Date: 15 JUN 2020 23:26:35



LTE Band 48C

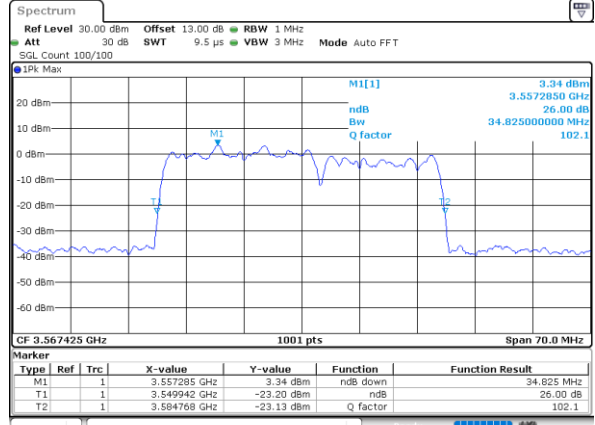
16QAM

Lowest Channel / 15MHz+15MHz



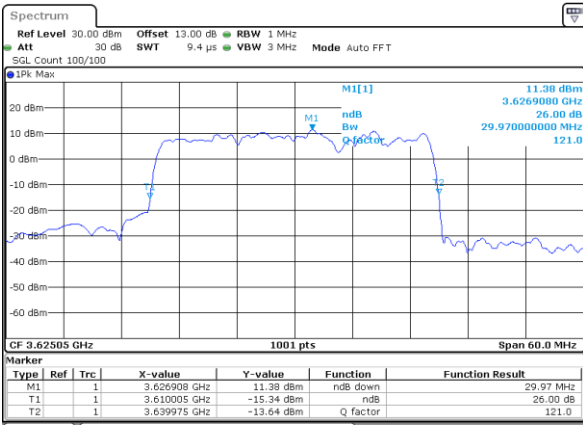
Date: 15 JUN 2020 22:53:39

Lowest Channel / 15MHz+20MHz



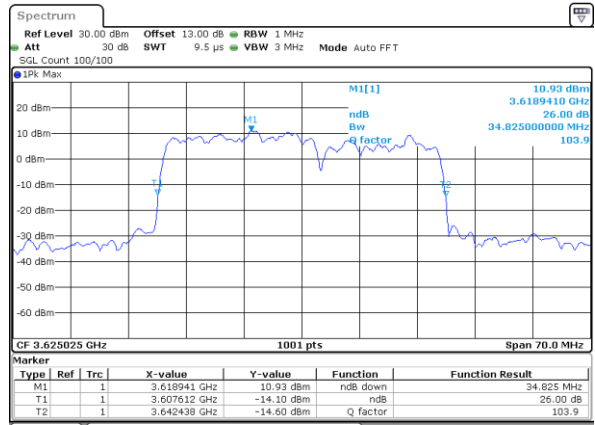
Date: 15 JUN 2020 22:13:13

Middle Channel / 20MHz+10MHz



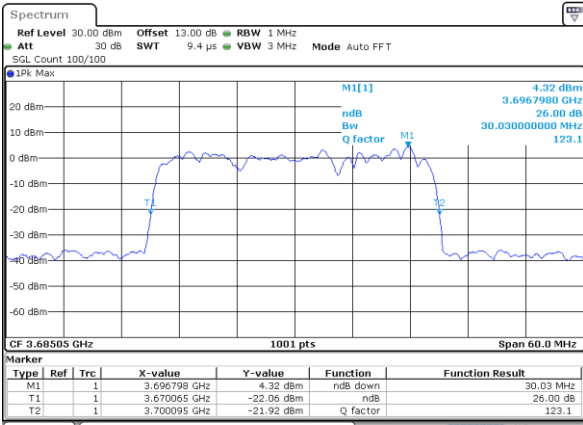
Date: 15 JUN 2020 22:57:28

Middle Channel / 20MHz+15MHz



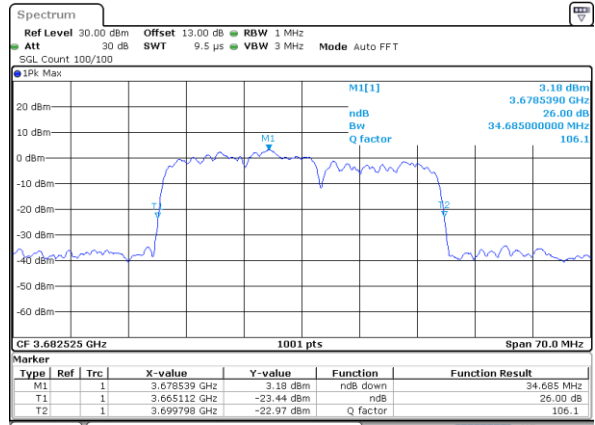
Date: 15 JUN 2020 22:42:06

Highest Channel / 20MHz+10MHz



Date: 15 JUN 2020 23:02:33

Highest Channel / 20MHz+15MHz



Date: 15 JUN 2020 22:45:55

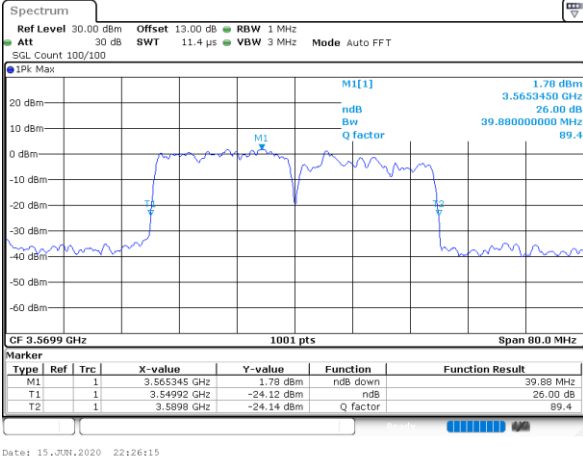


LTE Band 48C

16QAM

Lowest Channel / 20MHz+20MHz

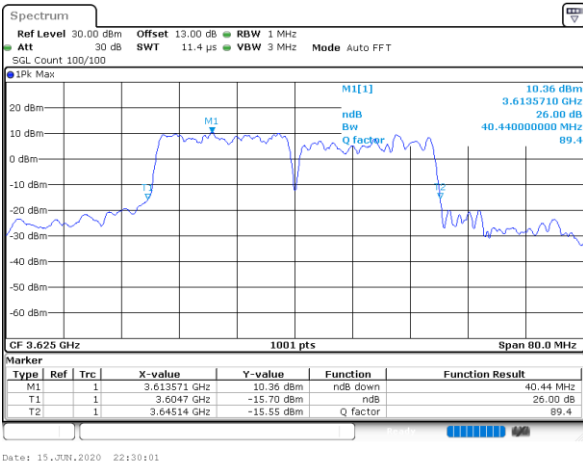
N/A



Date: 15 JUN 2020 22:26:15

Middle Channel / 20MHz+20MHz

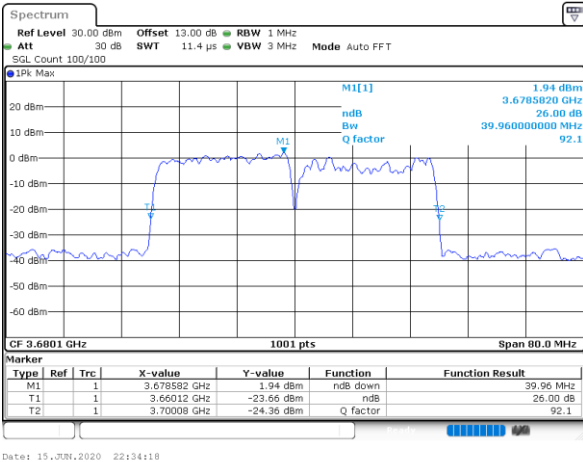
N/A



Date: 15 JUN 2020 22:30:01

Highest Channel / 20MHz+20MHz

N/A



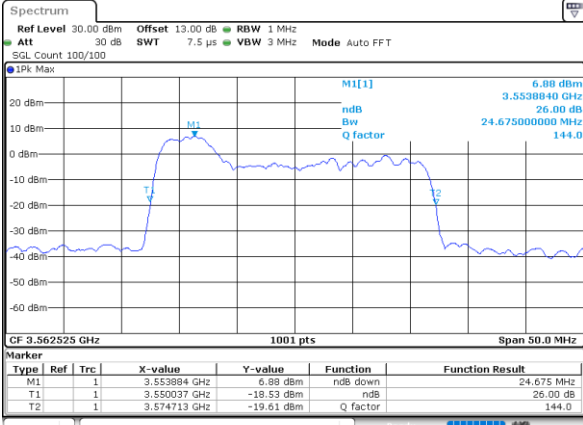
Date: 15 JUN 2020 22:34:18



LTE Band 48C

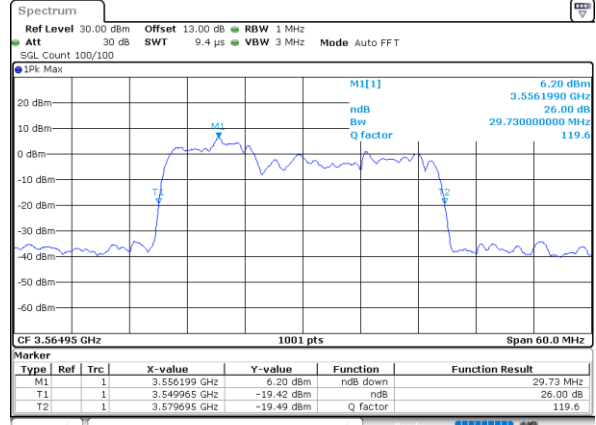
64QAM

Lowest Channel / 5MHz+20MHz



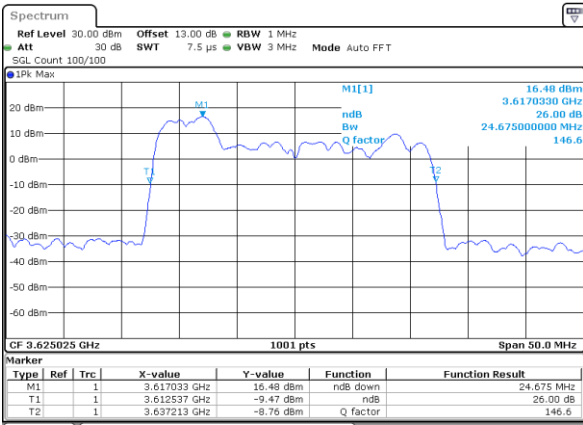
Date: 16 JUN 2020 00:03:47

Lowest Channel / 10MHz+15MHz



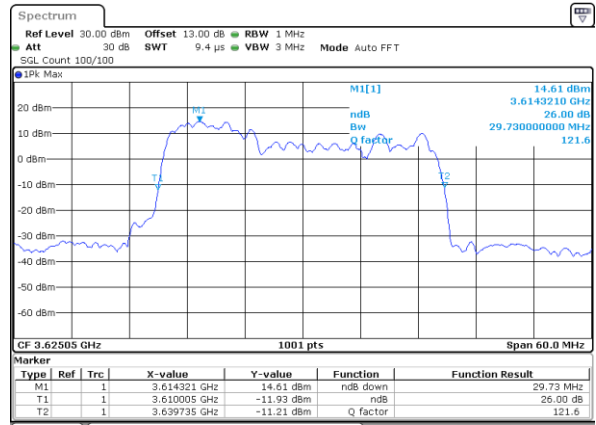
Date: 15 JUN 2020 23:52:48

Middle Channel / 5MHz+20MHz



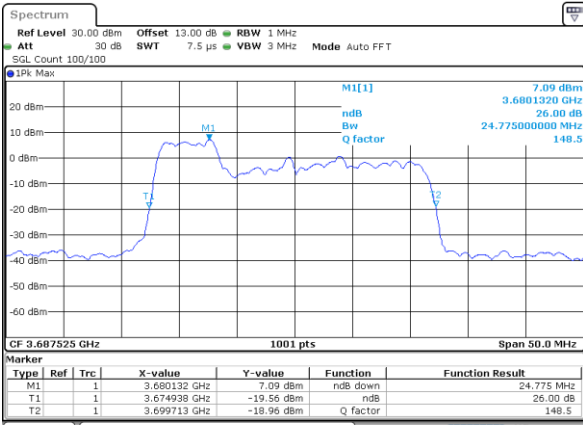
Date: 16 JUN 2020 00:07:06

Middle Channel / 10MHz+20MHz



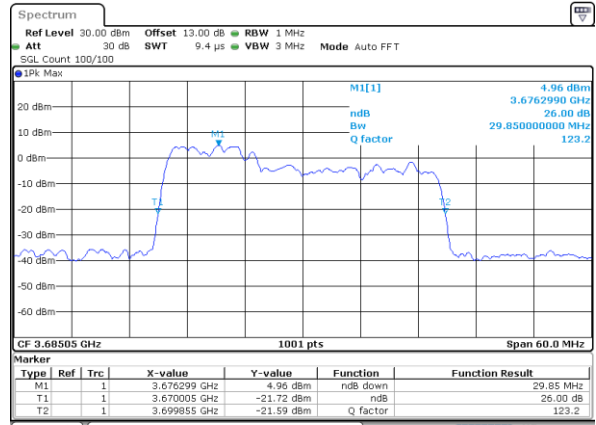
Date: 15 JUN 2020 23:56:07

Highest Channel / 5MHz+20MHz



Date: 16 JUN 2020 00:12:47

Highest Channel / 10MHz+20MHz



Date: 16 JUN 2020 00:00:04

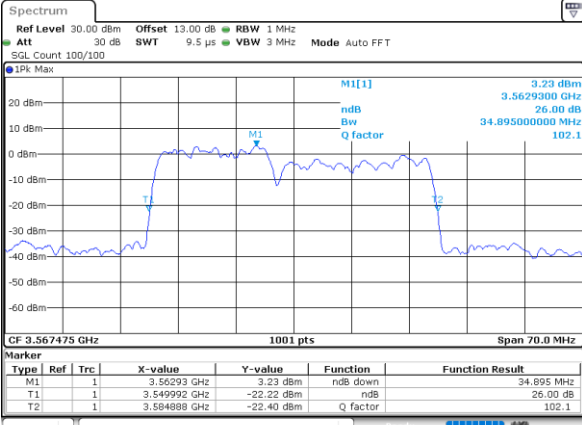




LTE Band 48C

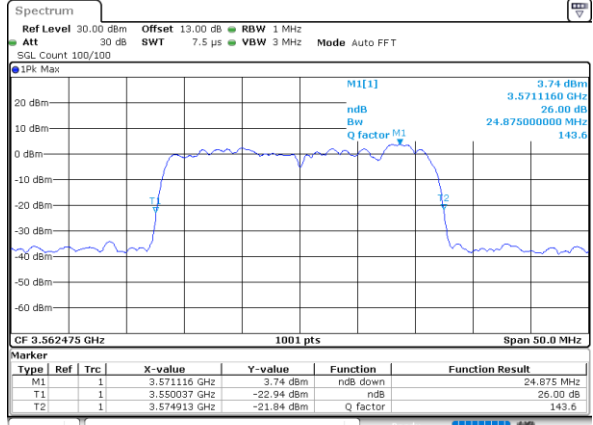
64QAM

Lowest Channel / 10MHz+20MHz



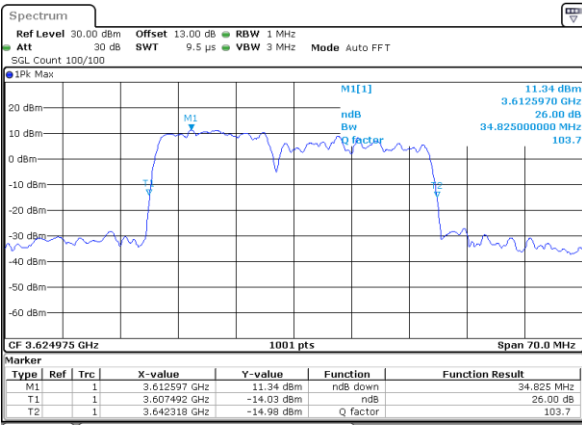
Date: 15 JUN 2020 23:31:37

Lowest Channel / 15MHz+10MHz



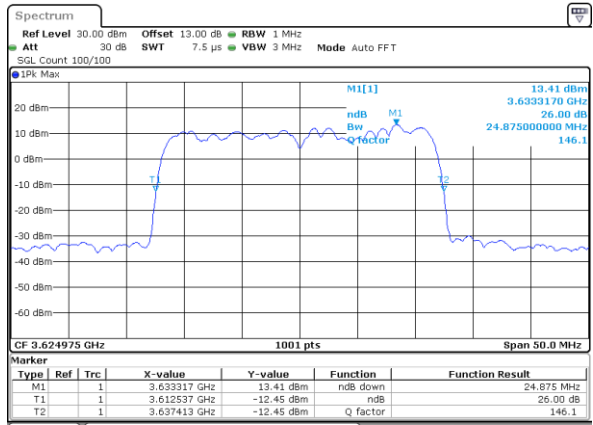
Date: 15 JUN 2020 23:05:37

Middle Channel / 15MHz+20MHz



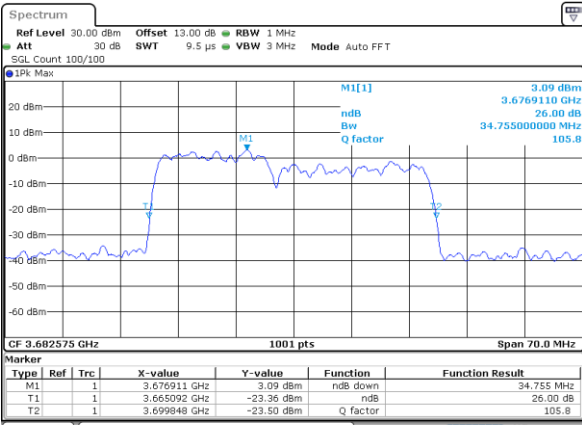
Date: 15 JUN 2020 23:43:38

Middle Channel / 20MHz+5MHz



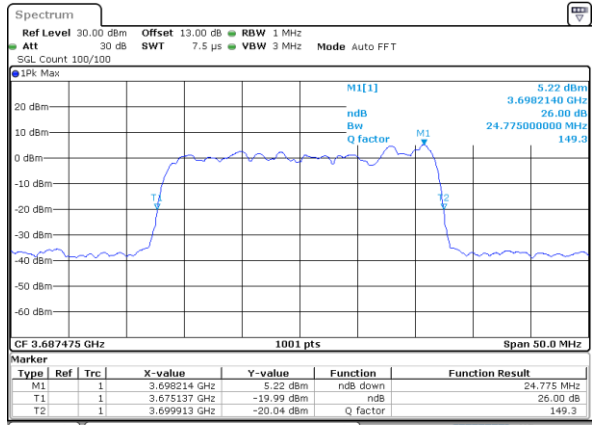
Date: 15 JUN 2020 23:16:37

Highest Channel / 15MHz+20MHz



Date: 15 JUN 2020 23:48:46

Highest Channel / 20MHz+5MHz



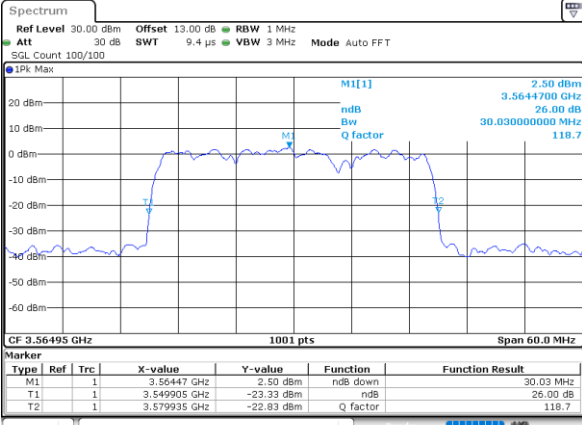
Date: 15 JUN 2020 23:26:57



LTE Band 48C

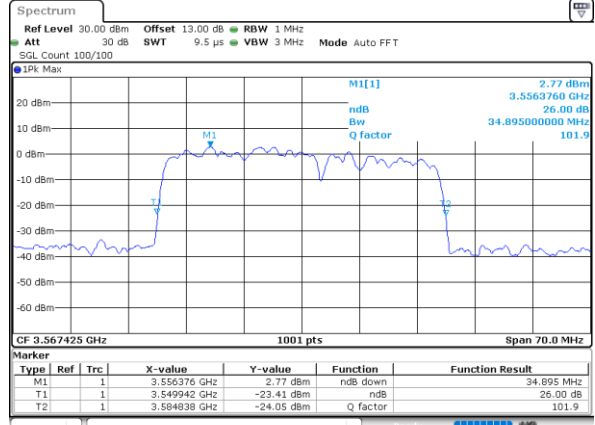
64QAM

Lowest Channel / 15MHz+15MHz



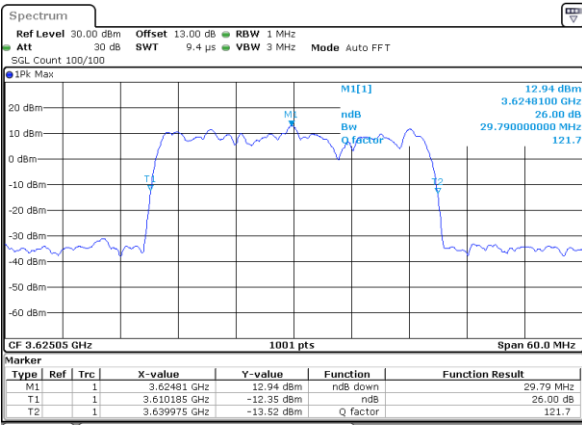
Date: 15 JUN 2020 22:53:17

Lowest Channel / 15MHz+20MHz



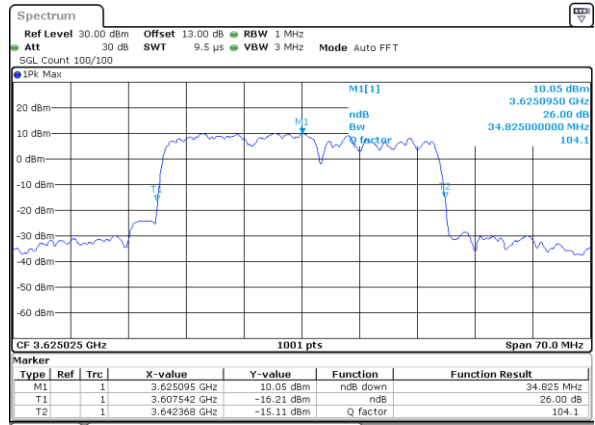
Date: 15 JUN 2020 22:57:51

Middle Channel / 20MHz+10MHz



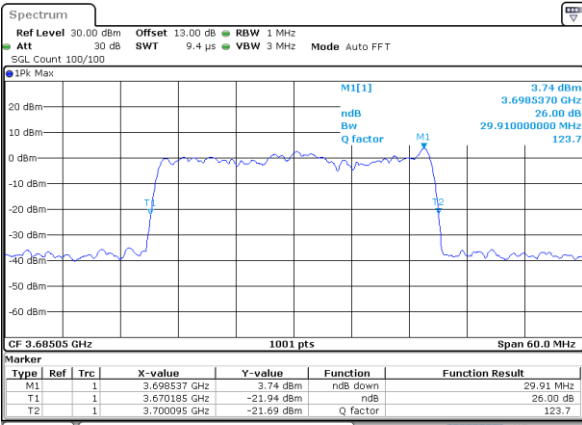
Date: 15 JUN 2020 22:57:05

Middle Channel / 20MHz+15MHz



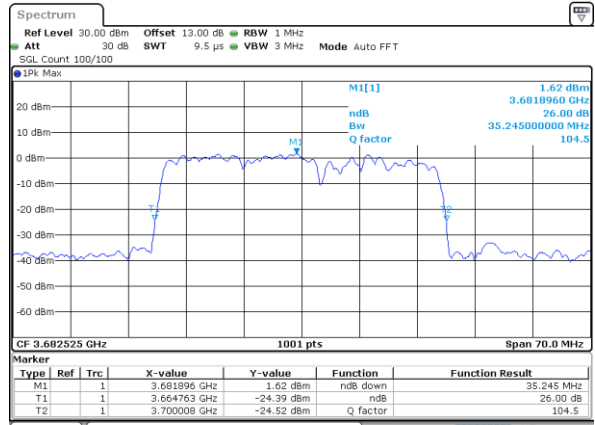
Date: 15 JUN 2020 22:41:44

Highest Channel / 20MHz+10MHz



Date: 15 JUN 2020 23:02:55

Highest Channel / 20MHz+15MHz



Date: 15 JUN 2020 22:46:17

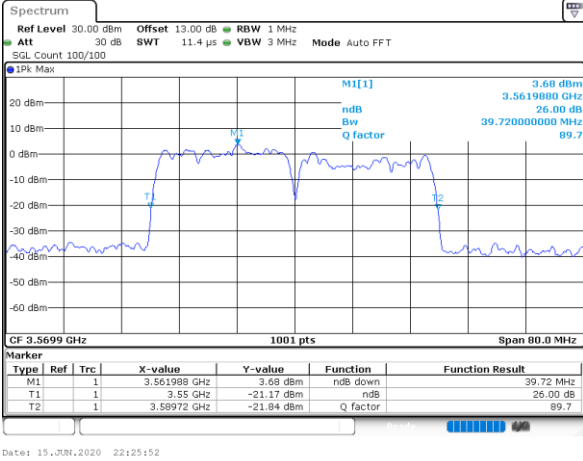


LTE Band 48C

64QAM

Lowest Channel / 20MHz+20MHz

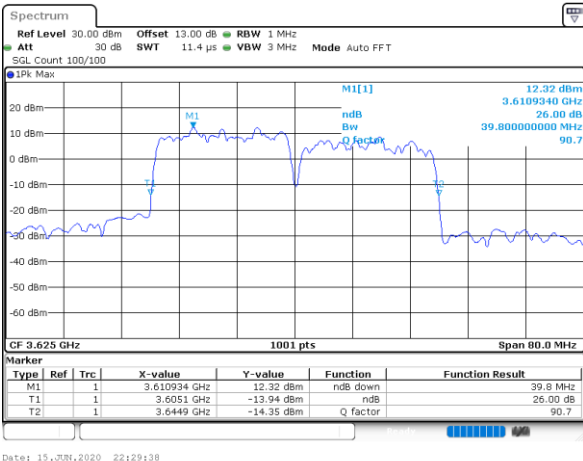
N/A



Date: 15 JUN 2020 22:25:52

Middle Channel / 20MHz+20MHz

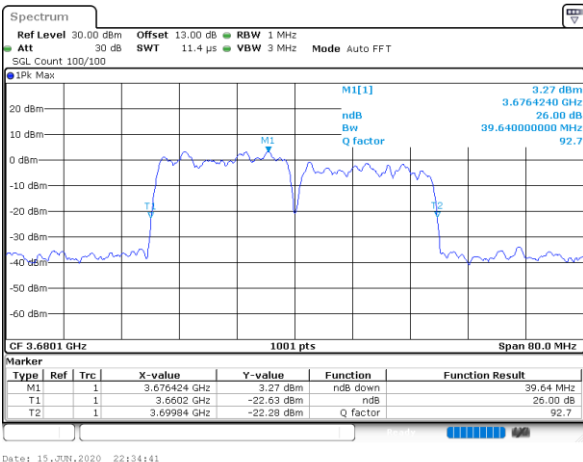
N/A



Date: 15 JUN 2020 22:29:38

Highest Channel / 20MHz+20MHz

N/A



Date: 15 JUN 2020 22:34:43



## Occupied Bandwidth

Mode	LTE Band 48C : 99%OBW(MHz)			
QPSK				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	23.48	27.57	32.80	23.08
Middle CH	23.18	28.23	33.01	23.38
Highest CH	23.18	28.17	32.87	23.38
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	27.99	32.80	37.24	-
Middle CH	27.93	32.52	37.56	-
Highest CH	27.87	32.87	37.64	-

Mode	LTE Band 48C : 99%OBW(MHz)			
16QAM				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	23.33	27.99	32.73	23.43
Middle CH	23.33	27.87	32.80	23.28
Highest CH	23.03	27.81	32.80	23.23
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	27.75	32.87	37.40	-
Middle CH	28.05	33.08	37.56	-
Highest CH	27.75	32.80	37.64	-

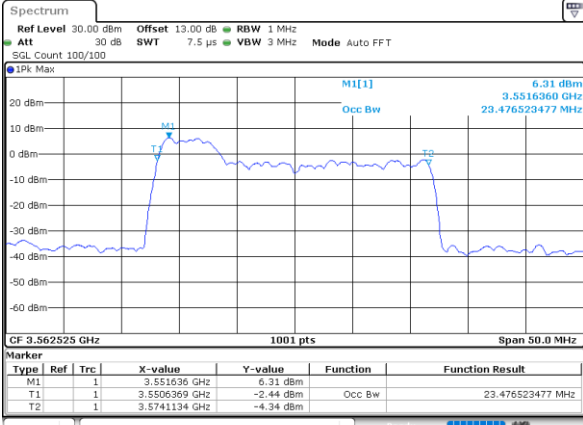
Mode	LTE Band 48C : 99%OBW(MHz)			
64QAM				
BW	5MHz+20MHz	10MHz+20MHz	15MHz+20MHz	20MHz+5MHz
Lowest CH	23.08	27.99	32.80	23.28
Middle CH	22.78	27.87	32.73	23.23
Highest CH	23.28	28.17	32.66	23.23
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Lowest CH	28.17	32.80	37.56	-
Middle CH	28.23	32.87	37.48	-
Highest CH	27.99	32.73	37.56	-



LTE Band 48C

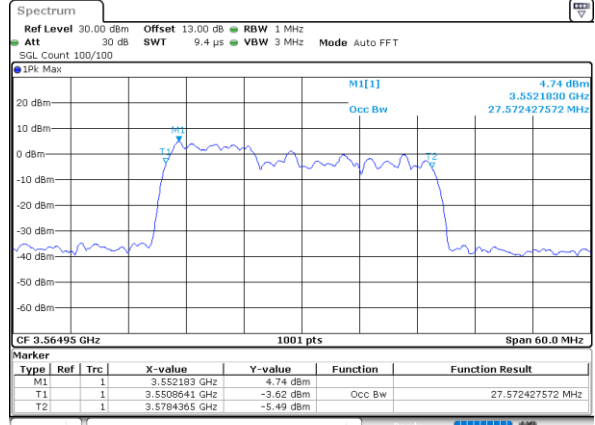
QPSK

Lowest Channel / 5MHz+20MHz



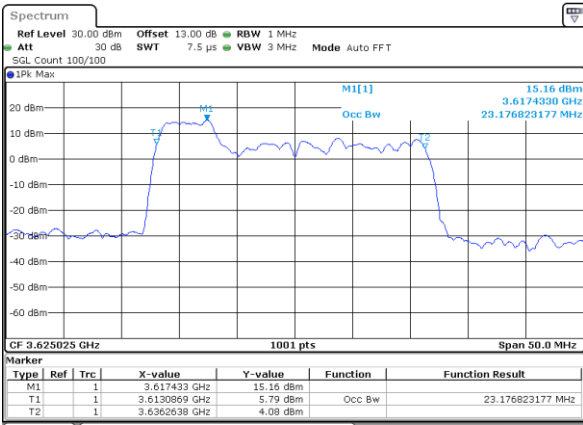
Date: 16 JUN 2020 00:02:40

Lowest Channel / 10MHz+20MHz



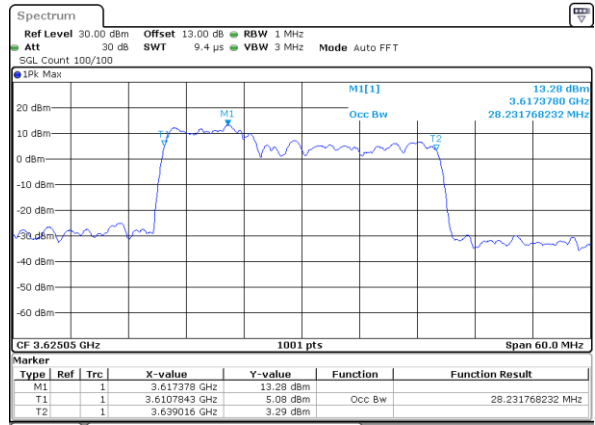
Date: 15 JUN 2020 23:51:42

Middle Channel / 5MHz+20MHz



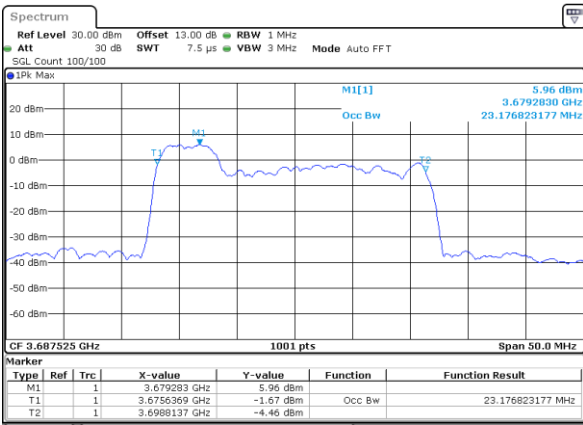
Date: 16 JUN 2020 00:05:59

Middle Channel / 10MHz+20MHz



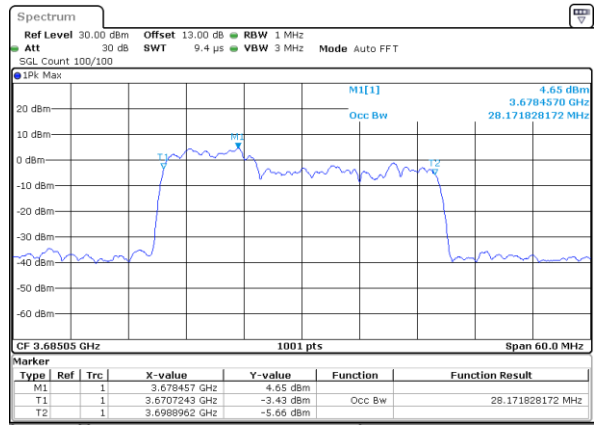
Date: 15 JUN 2020 23:55:00

Highest Channel / 5MHz+20MHz



Date: 16 JUN 2020 00:11:40

Highest Channel / 10MHz+20MHz



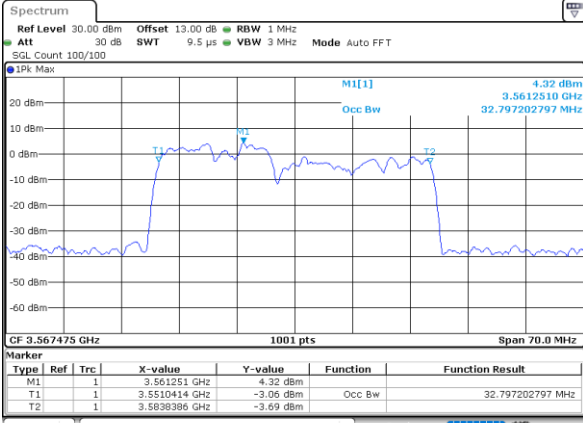
Date: 15 JUN 2020 23:58:57



LTE Band 48C

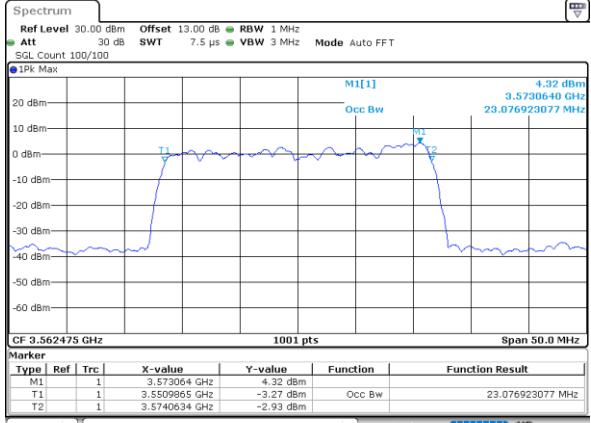
QPSK

Lowest Channel / 15MHz+20MHz



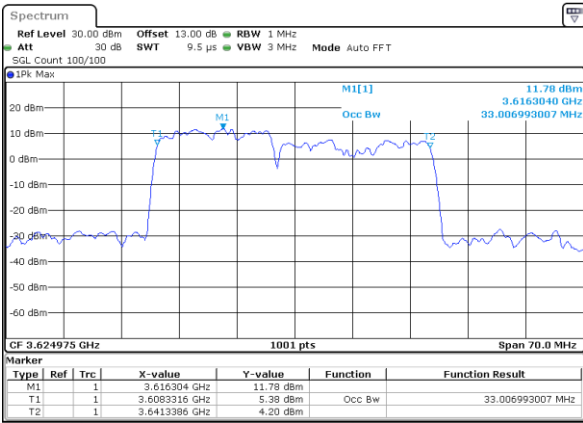
Date: 15 JUN 2020 23:30:30

Lowest Channel / 20MHz+5MHz



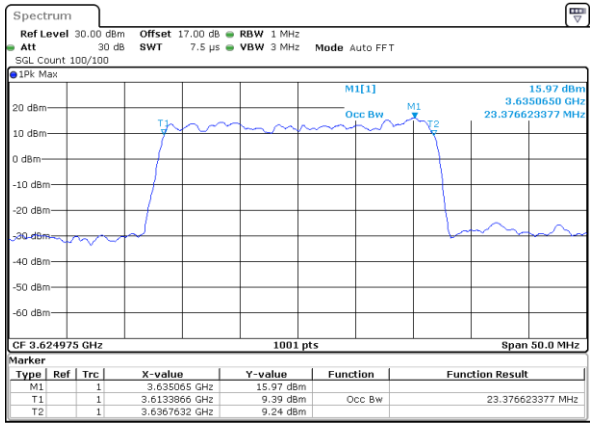
Date: 15 JUN 2020 23:04:30

Middle Channel / 15MHz+20MHz



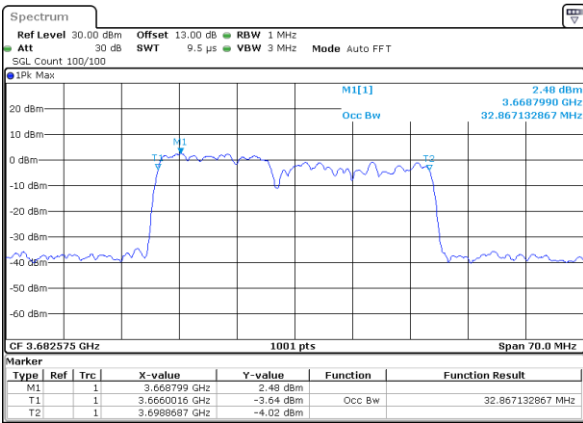
Date: 15 JUN 2020 23:42:30

Middle Channel / 20MHz+5MHz



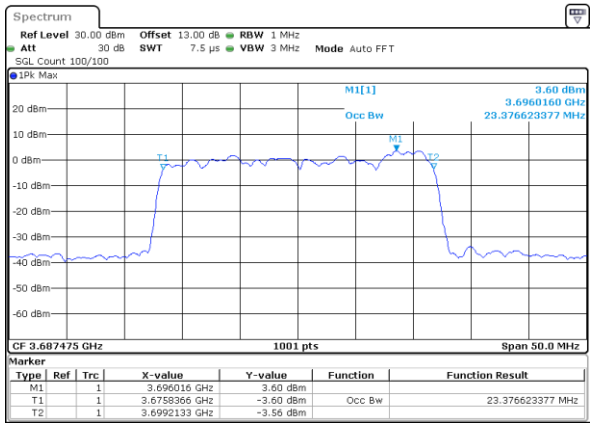
Date: 16 JUN 2020 00:22:05

Highest Channel / 15MHz+20MHz



Date: 15 JUN 2020 23:47:38

Highest Channel / 20MHz+5MHz



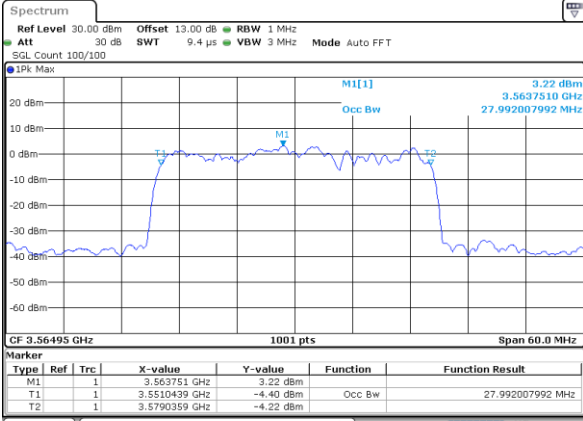
Date: 15 JUN 2020 23:25:50



LTE Band 48C

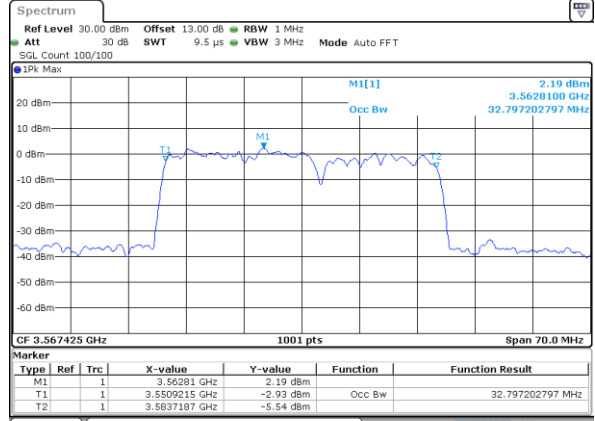
QPSK

Lowest Channel / 20MHz+10MHz



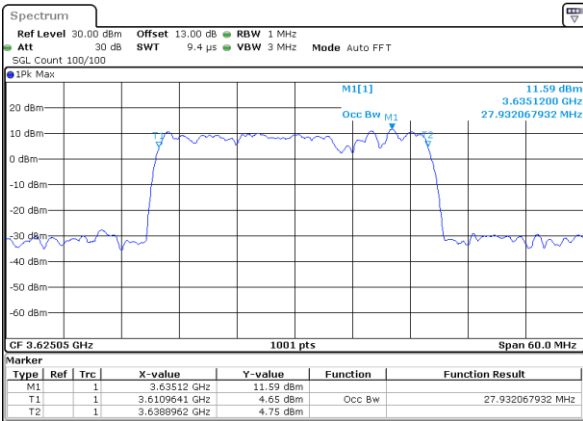
Date: 15 JUN 2020 22:52:10

Lowest Channel / 20MHz+15MHz



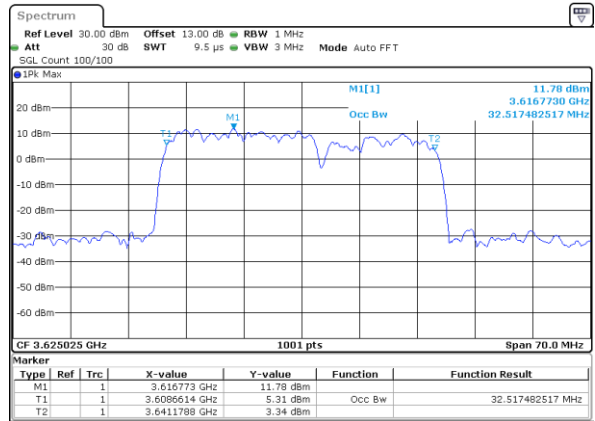
Date: 15 JUN 2020 22:56:44

Middle Channel / 20MHz+10MHz



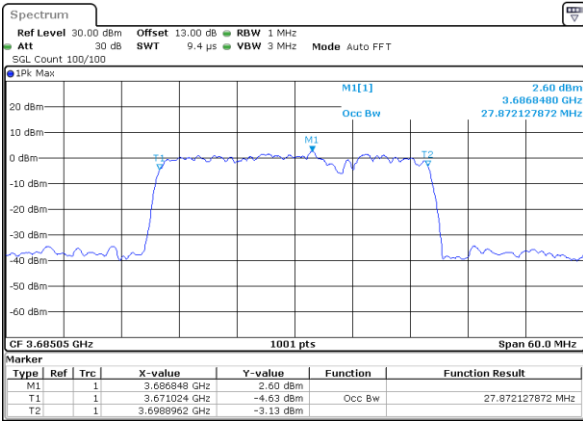
Date: 15 JUN 2020 22:55:59

Middle Channel / 20MHz+15MHz



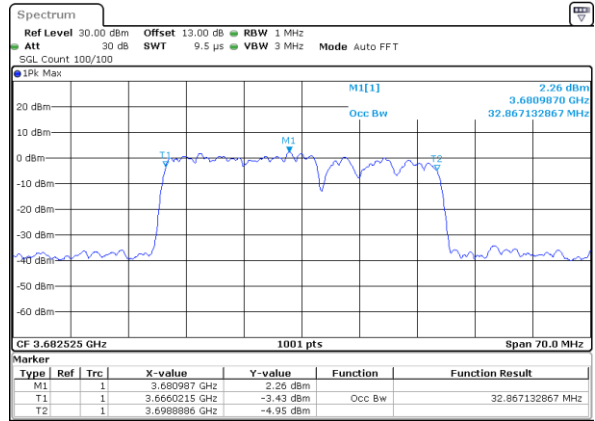
Date: 15 JUN 2020 22:40:37

Highest Channel / 20MHz+10MHz



Date: 15 JUN 2020 23:01:48

Highest Channel / 20MHz+15MHz



Date: 15 JUN 2020 22:45:10

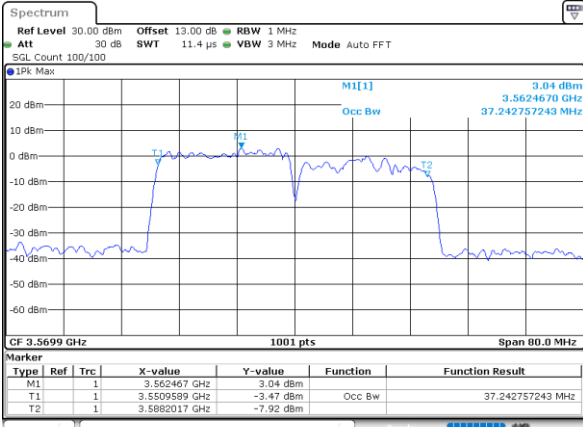


LTE Band 48C

QPSK

Lowest Channel / 20MHz+20MHz

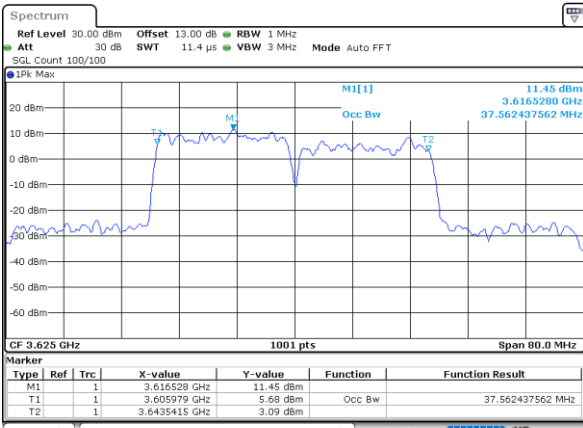
N/A



Date: 15 JUN 2020 22:24:45

Middle Channel / 20MHz+20MHz

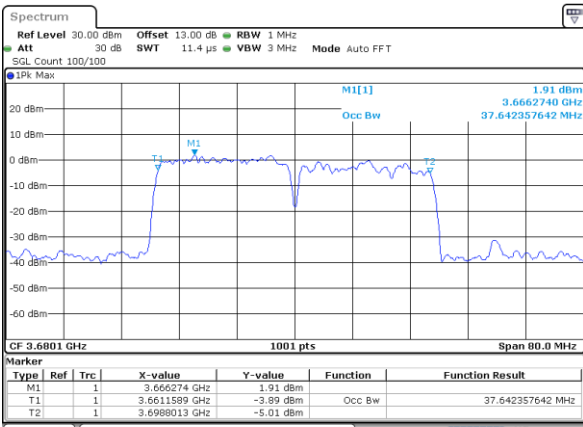
N/A



Date: 15 JUN 2020 22:28:31

Highest Channel / 20MHz+20MHz

N/A



Date: 15 JUN 2020 22:33:34

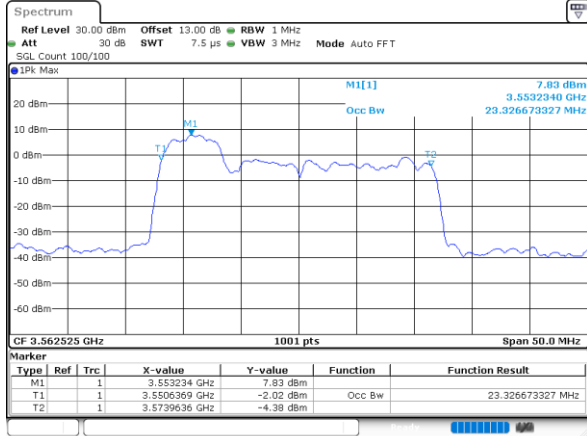




LTE Band 48C

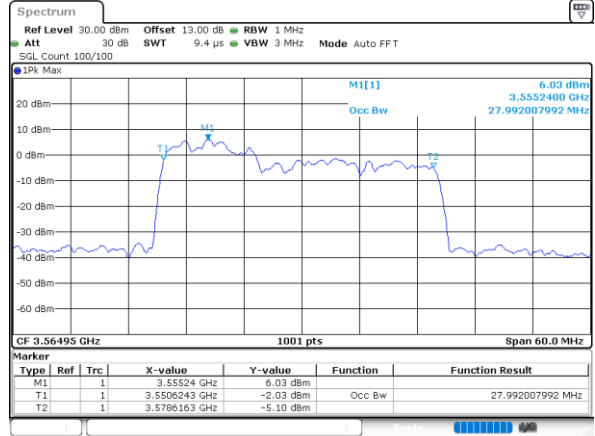
16QAM

Lowest Channel / 5MHz+20MHz



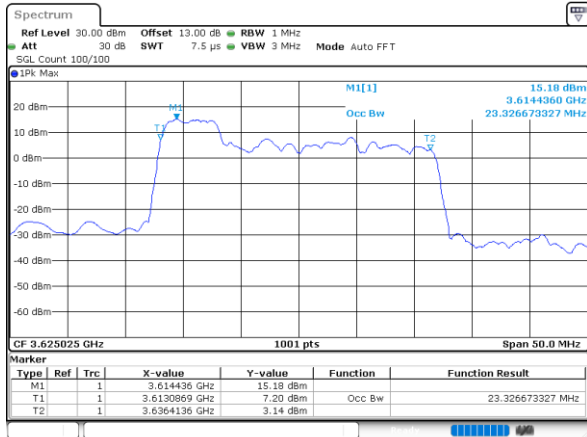
Date: 16 JUN 2020 00:03:02

Lowest Channel / 10MHz+20MHz



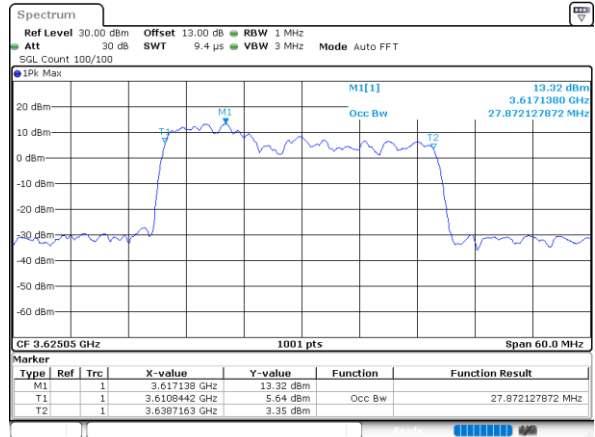
Date: 15 JUN 2020 23:52:04

Middle Channel / 5MHz+20MHz



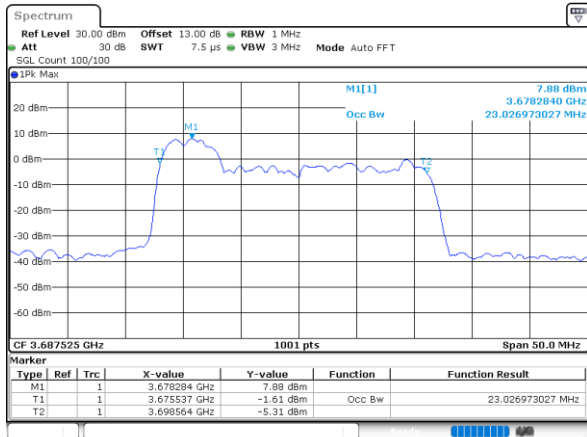
Date: 16 JUN 2020 00:06:22

Middle Channel / 10MHz+20MHz



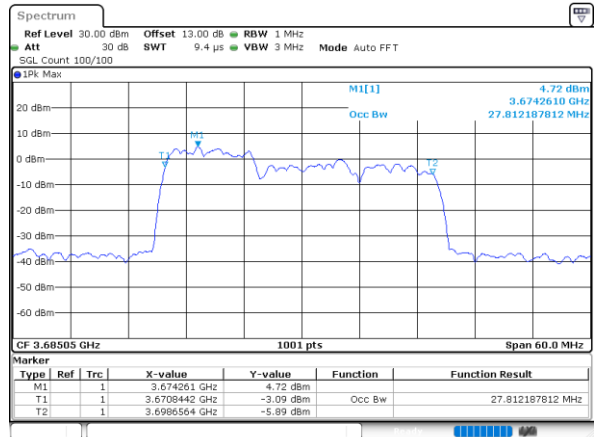
Date: 15 JUN 2020 23:55:23

Highest Channel / 5MHz+20MHz



Date: 16 JUN 2020 00:11:18

Highest Channel / 10MHz+20MHz



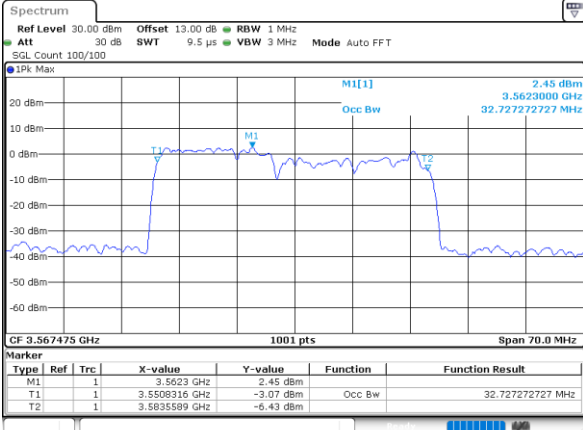
Date: 15 JUN 2020 23:58:35



LTE Band 48C

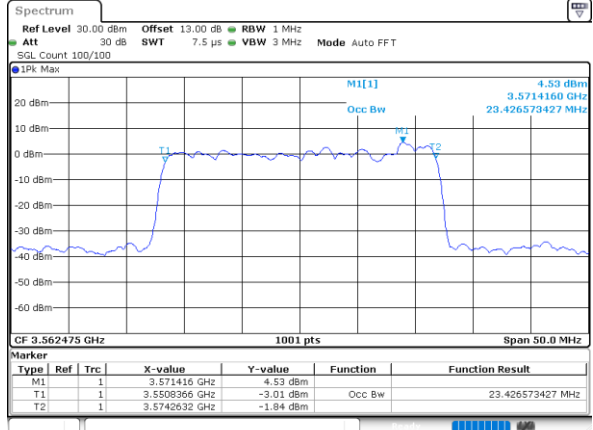
16QAM

Lowest Channel / 15MHz+20MHz



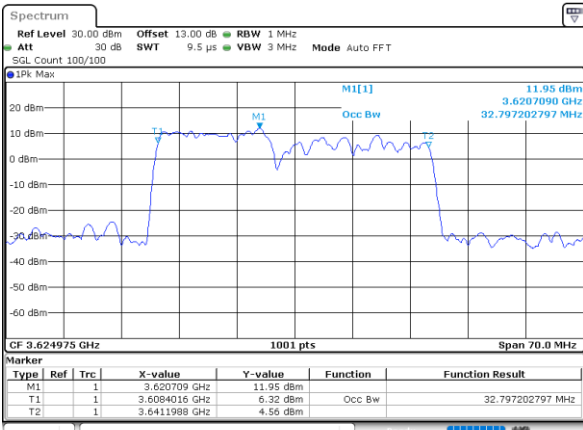
Date: 15 JUN 2020 23:30:53

Lowest Channel / 20MHz+5MHz



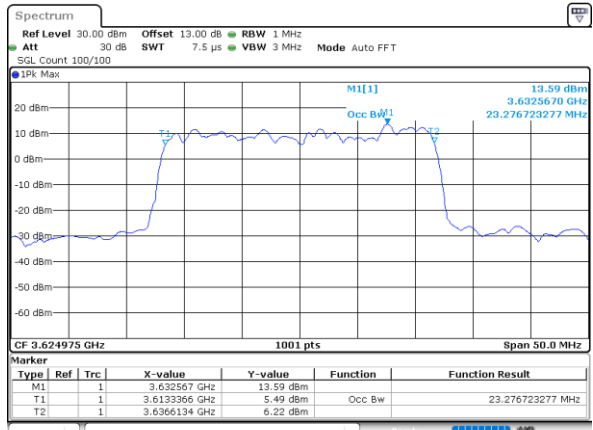
Date: 15 JUN 2020 23:04:52

Middle Channel / 15MHz+20MHz



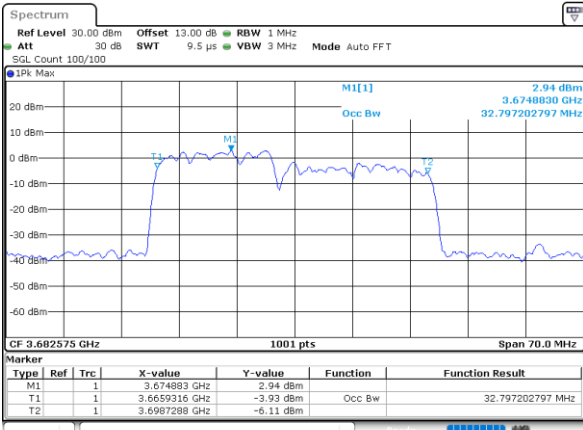
Date: 15 JUN 2020 23:42:53

Middle Channel / 20MHz+5MHz



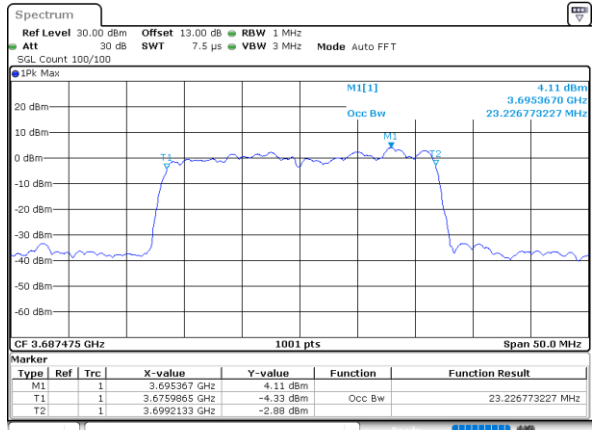
Date: 15 JUN 2020 23:15:53

Highest Channel / 15MHz+20MHz



Date: 15 JUN 2020 23:47:16

Highest Channel / 20MHz+5MHz



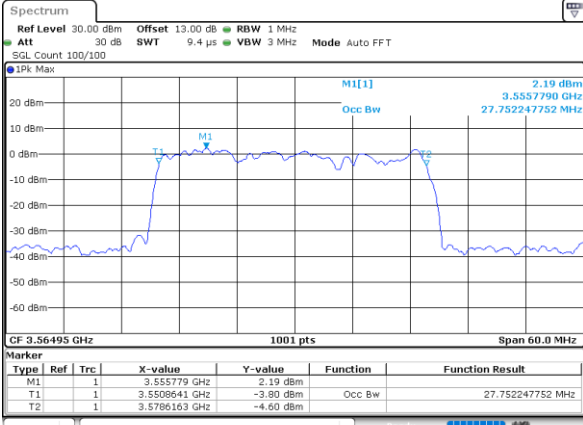
Date: 15 JUN 2020 23:25:28



LTE Band 48C

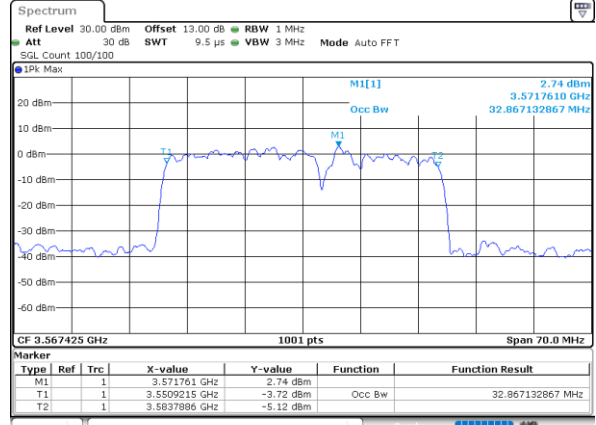
16QAM

Lowest Channel / 20MHz+10MHz



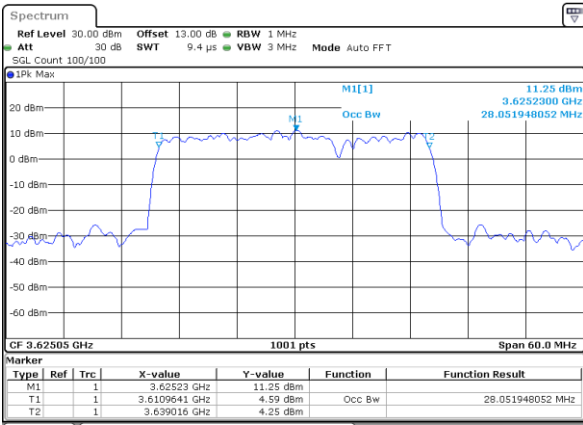
Date: 15 JUN 2020 22:52:32

Lowest Channel / 20MHz+15MHz



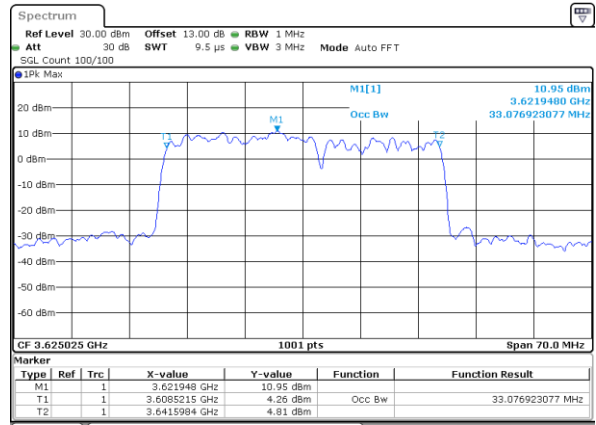
Date: 15 JUN 2020 22:37:06

Middle Channel / 20MHz+10MHz



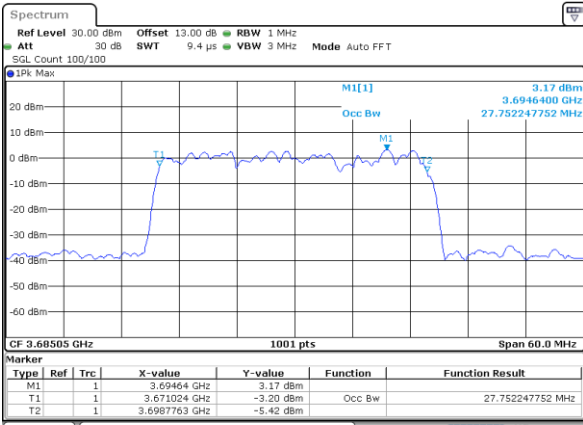
Date: 15 JUN 2020 22:56:21

Middle Channel / 20MHz+15MHz



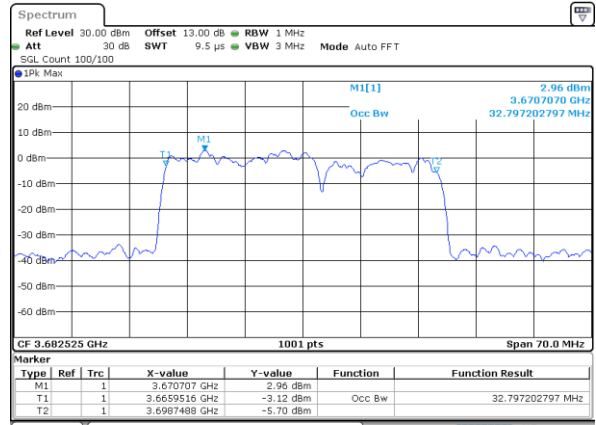
Date: 15 JUN 2020 22:41:00

Highest Channel / 20MHz+10MHz



Date: 15 JUN 2020 23:01:26

Highest Channel / 20MHz+15MHz



Date: 15 JUN 2020 22:44:48

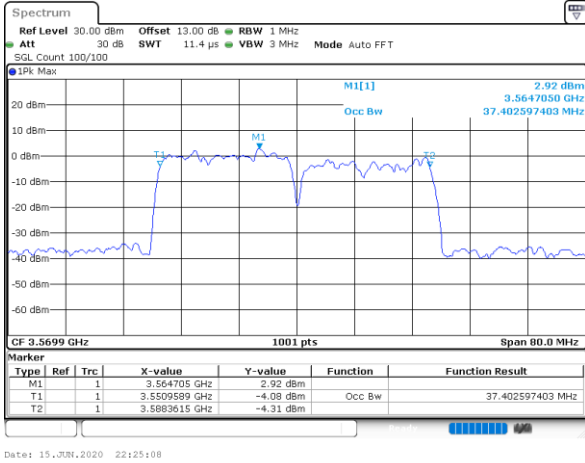


LTE Band 48C

16QAM

Lowest Channel / 20MHz+20MHz

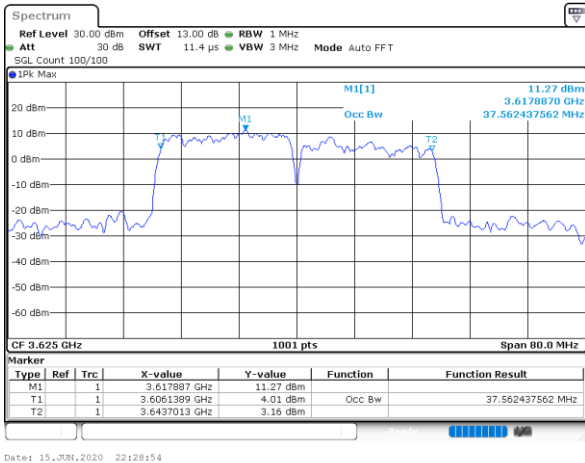
N/A



Date: 15 JUN 2020 22:25:08

Middle Channel / 20MHz+20MHz

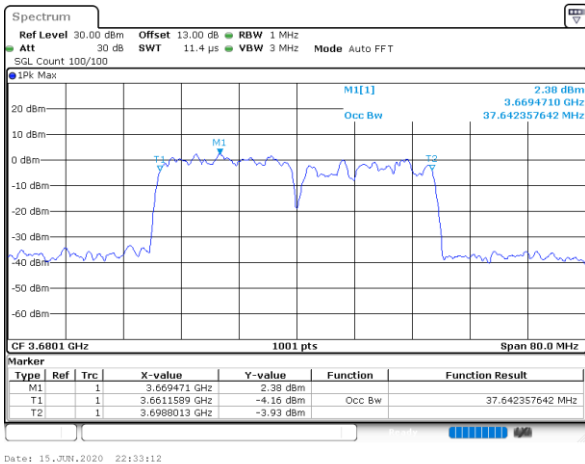
N/A



Date: 15 JUN 2020 22:28:54

Highest Channel / 20MHz+20MHz

N/A



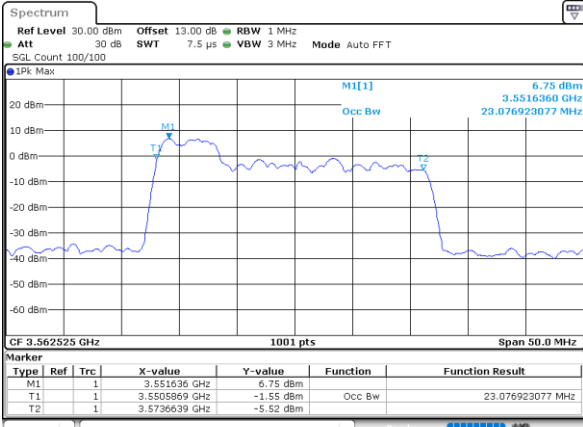
Date: 15 JUN 2020 22:33:12



LTE Band 48C

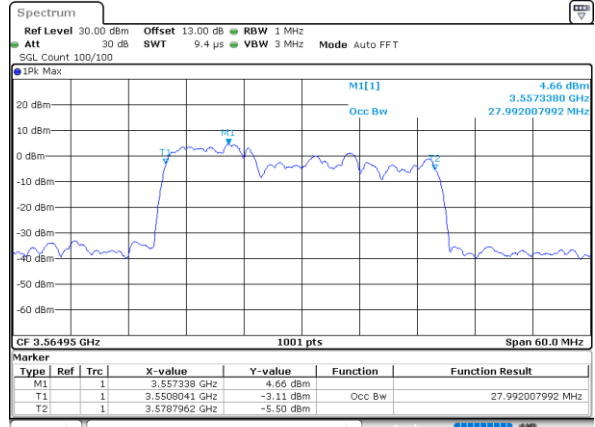
64QAM

Lowest Channel / 5MHz+20MHz



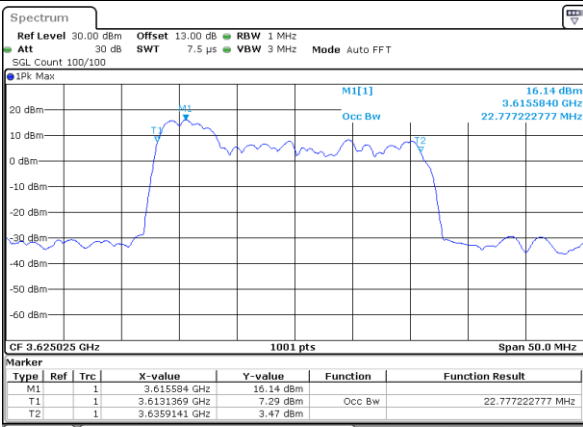
Date: 16 JUN 2020 00:03:25

Lowest Channel / 10MHz+20MHz



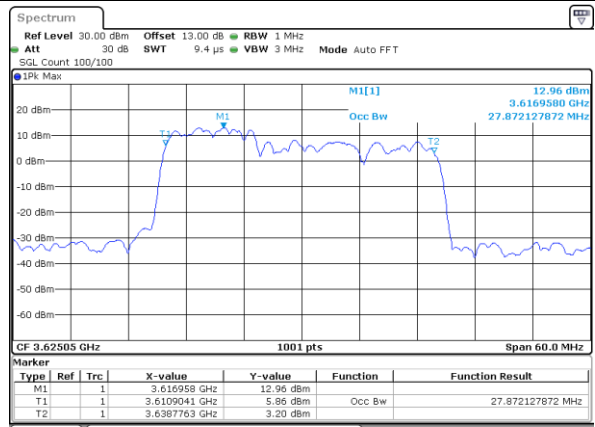
Date: 15 JUN 2020 23:52:26

Middle Channel / 5MHz+20MHz



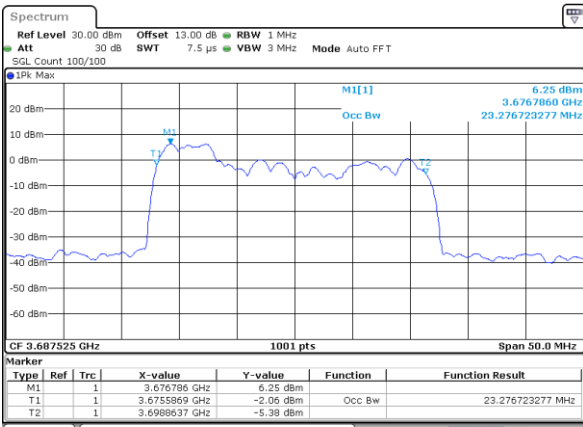
Date: 16 JUN 2020 00:06:44

Middle Channel / 10MHz+20MHz



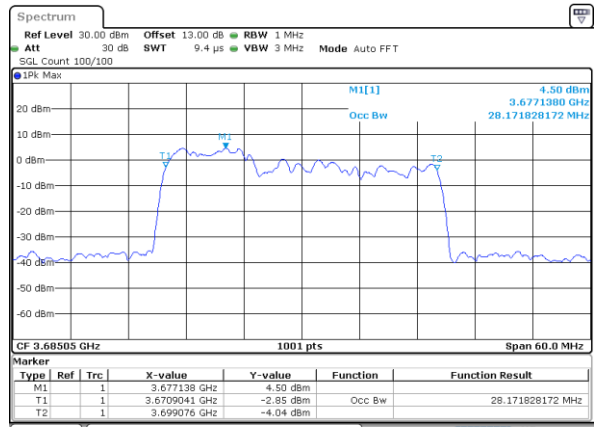
Date: 15 JUN 2020 23:55:45

Highest Channel / 5MHz+20MHz



Date: 16 JUN 2020 00:10:55

Highest Channel / 10MHz+20MHz



Date: 15 JUN 2020 23:58:12