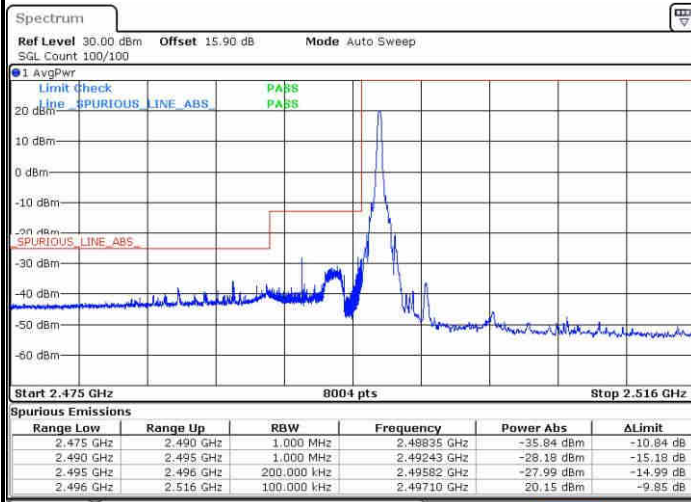




LTE Band 41 / 20MHz / 64QAM

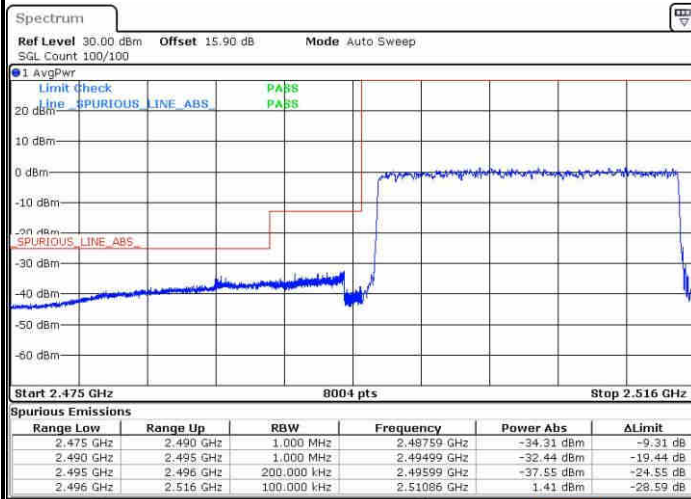
Lowest Band Edge / 1 RB



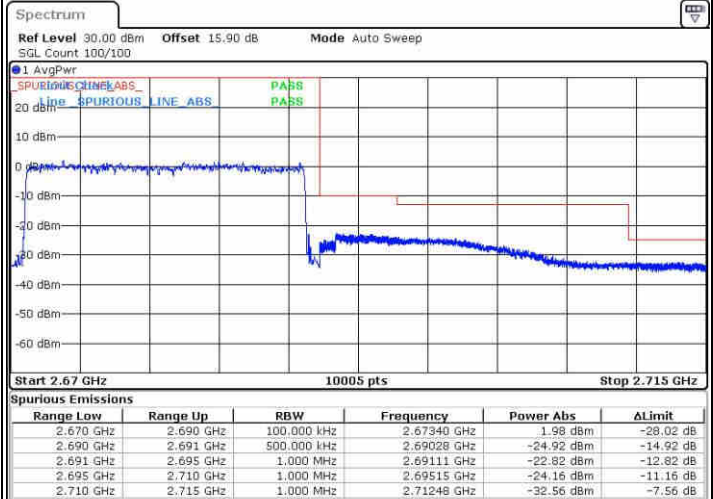
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

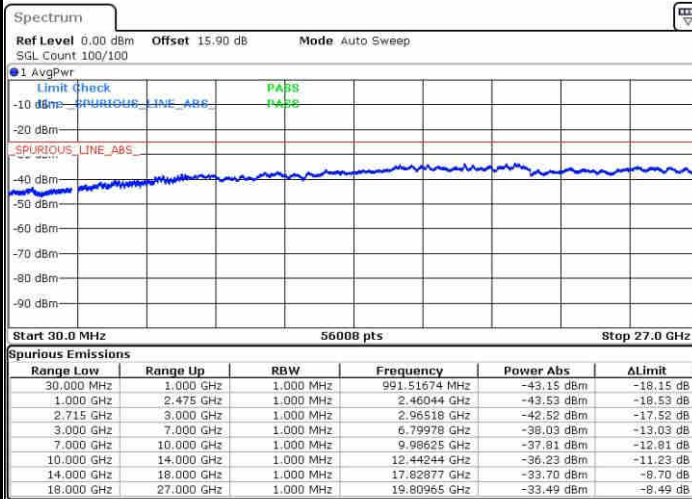




Conducted Spurious Emission

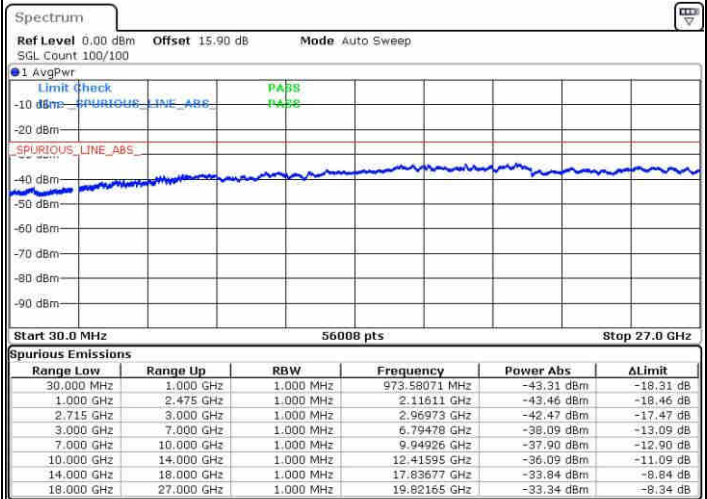
LTE Band 41 / 5MHz

Lowest Channel / QPSK



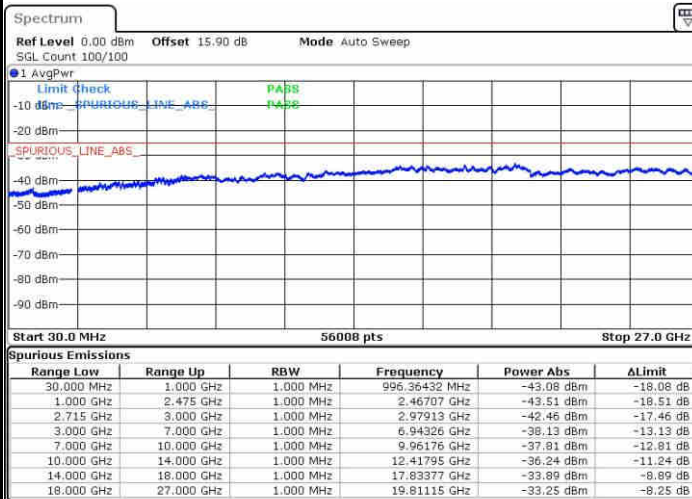
Date: 8 APR 2019 12:16:16

Lowest Channel / 16QAM



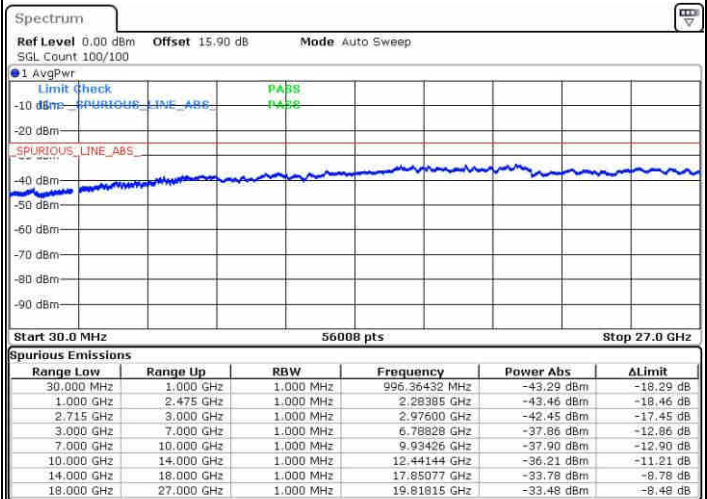
Date: 8 APR 2019 12:17:02

Middle Channel / QPSK



Date: 8 APR 2019 12:17:47

Middle Channel / 16QAM

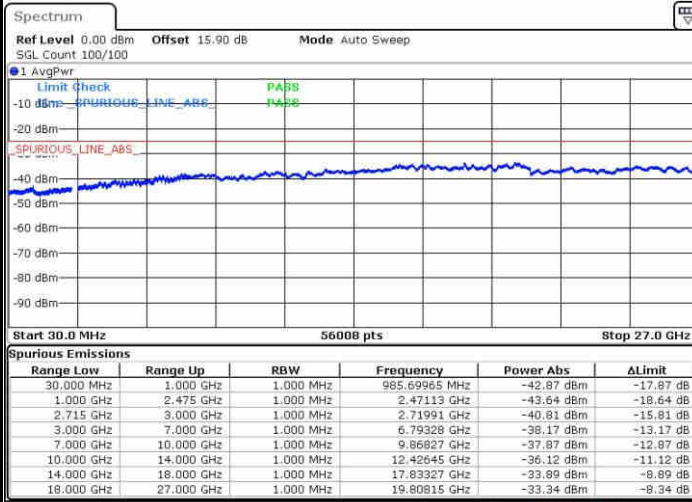


Date: 8 APR 2019 12:18:32



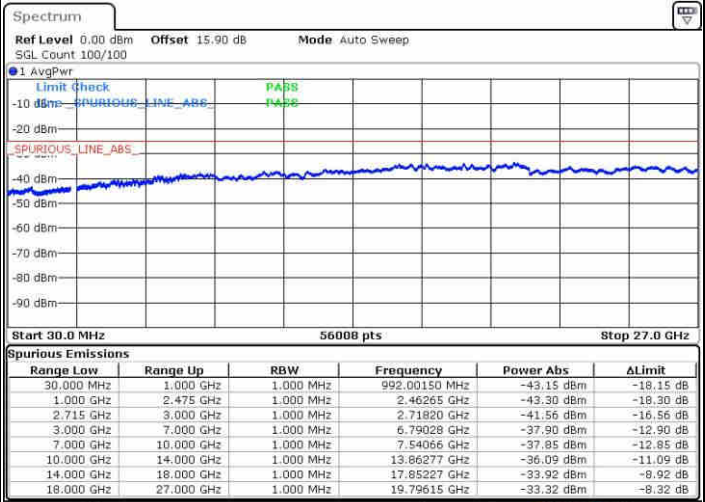
LTE Band 41 / 5MHz

Highest Channel / QPSK



Date: 8 APR 2019 12:19:18

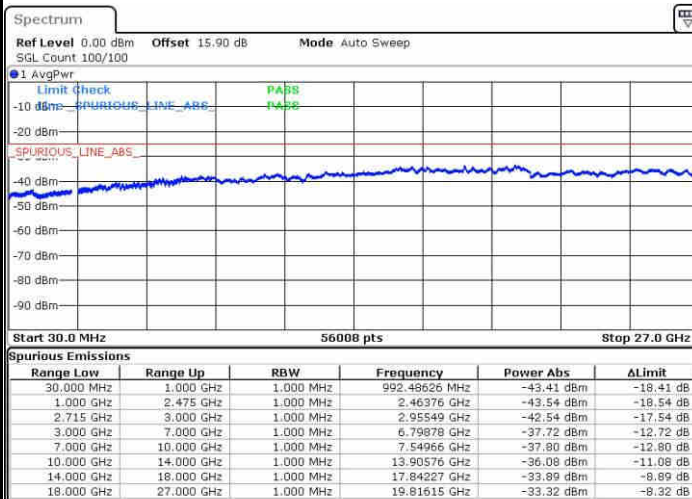
Highest Channel / 16QAM



Date: 8 APR 2019 12:20:03

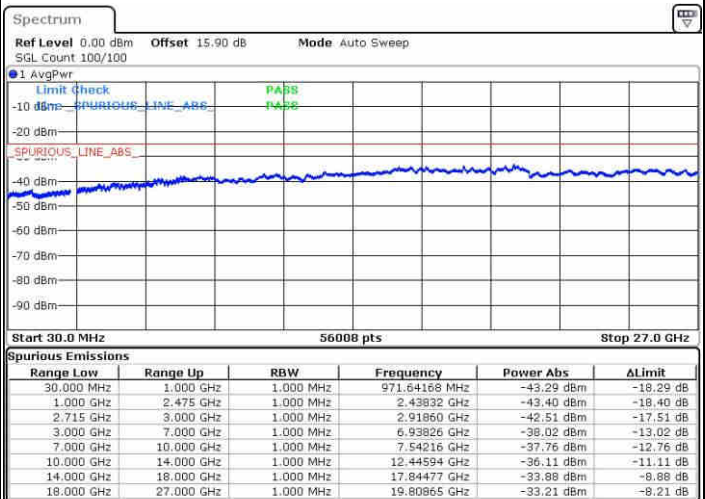
LTE Band 41 / 10MHz

Lowest Channel / QPSK



Date: 8 APR 2019 12:20:50

Lowest Channel / 16QAM

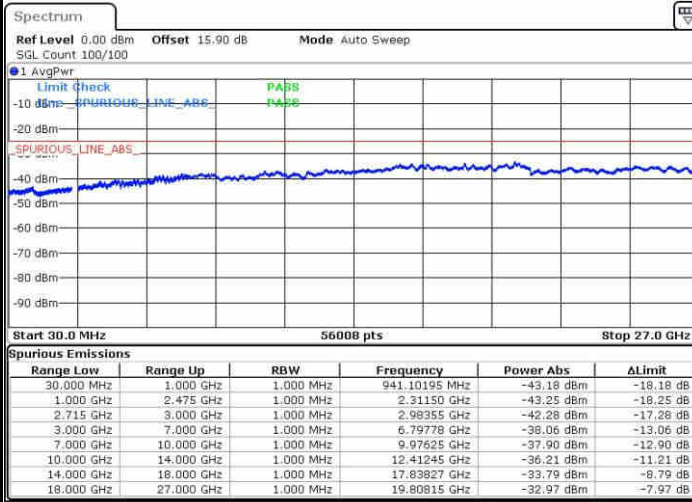


Date: 8 APR 2019 12:21:36



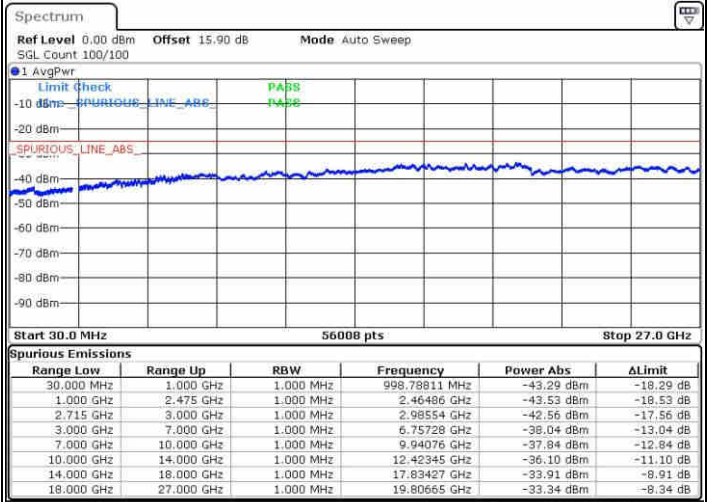
LTE Band 41 / 10MHz

Middle Channel / QPSK



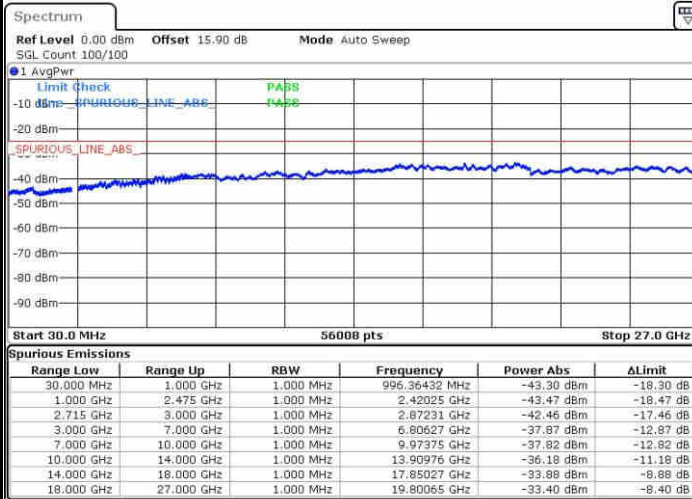
Date: 8 APR 2019 12:22:22

Middle Channel / 16QAM



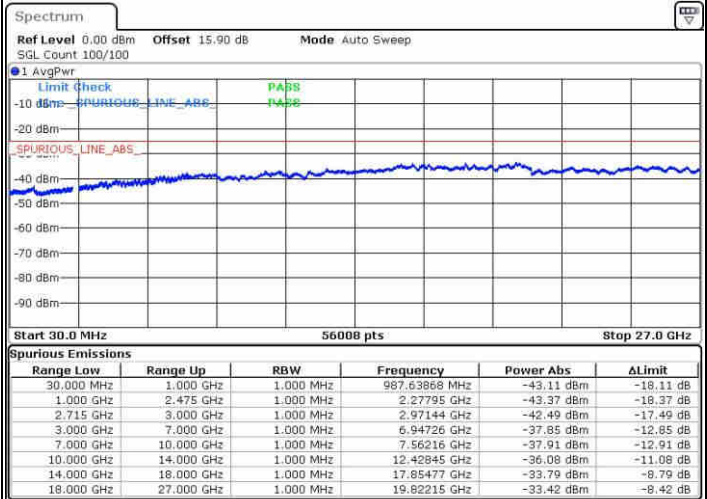
Date: 8 APR 2019 12:23:07

Highest Channel / QPSK



Date: 8 APR 2019 12:23:52

Highest Channel / 16QAM

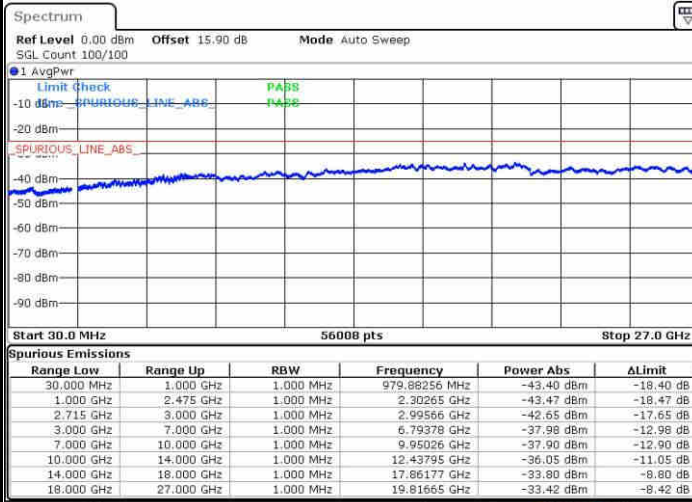


Date: 8 APR 2019 12:24:38



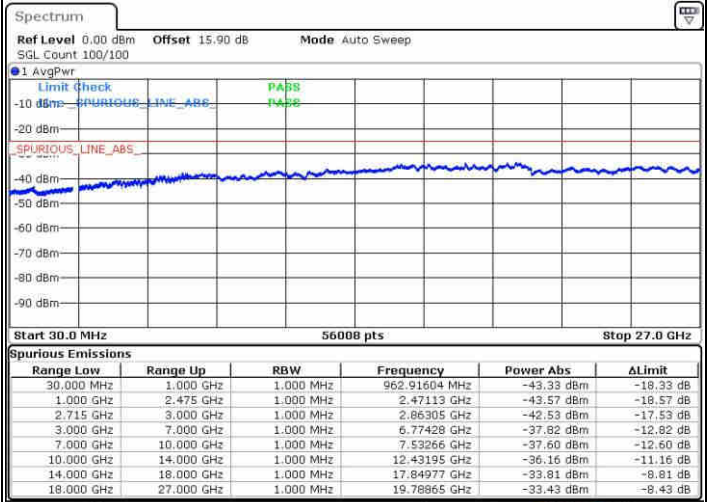
LTE Band 41 / 15MHz

Lowest Channel / QPSK



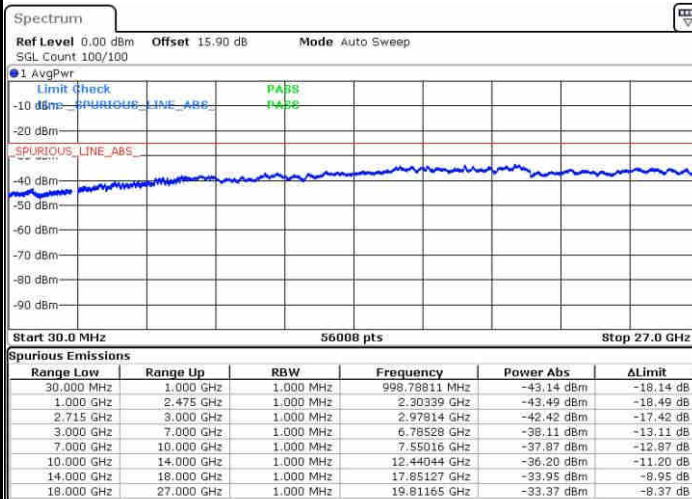
Date: 8 APR 2019 12:25:25

Lowest Channel / 16QAM



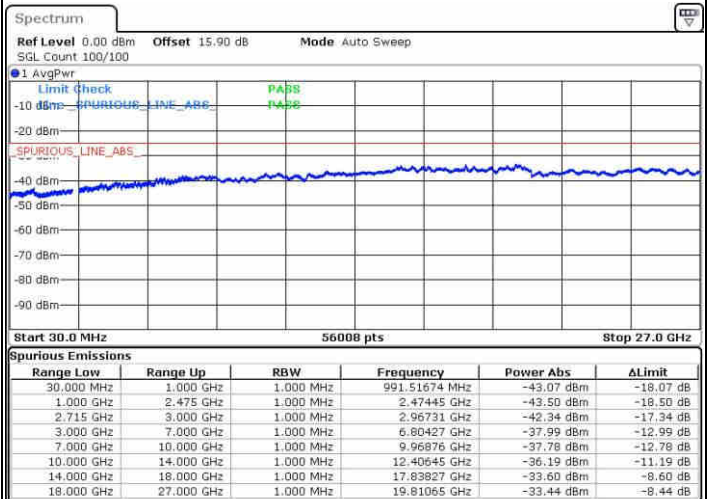
Date: 8 APR 2019 12:26:11

Middle Channel / QPSK



Date: 8 APR 2019 12:26:56

Middle Channel / 16QAM

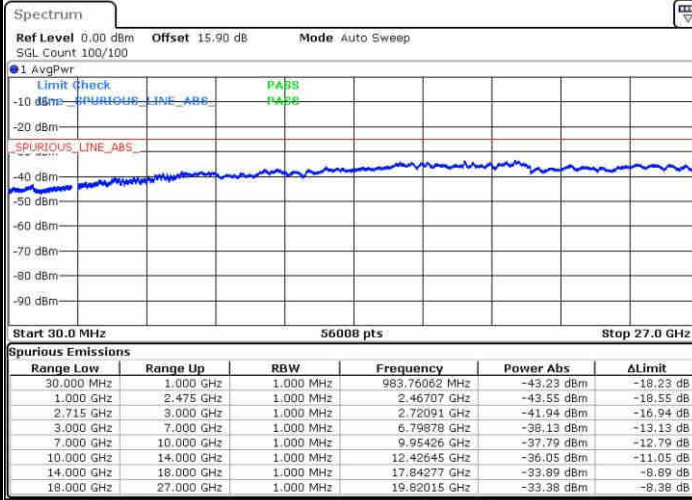


Date: 8 APR 2019 12:27:41



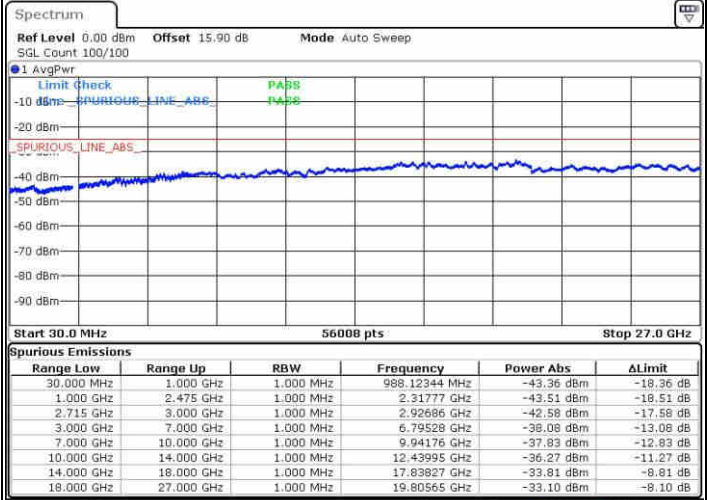
LTE Band 41 / 15MHz

Highest Channel / QPSK



Date: 8 APR 2019 12:28:27

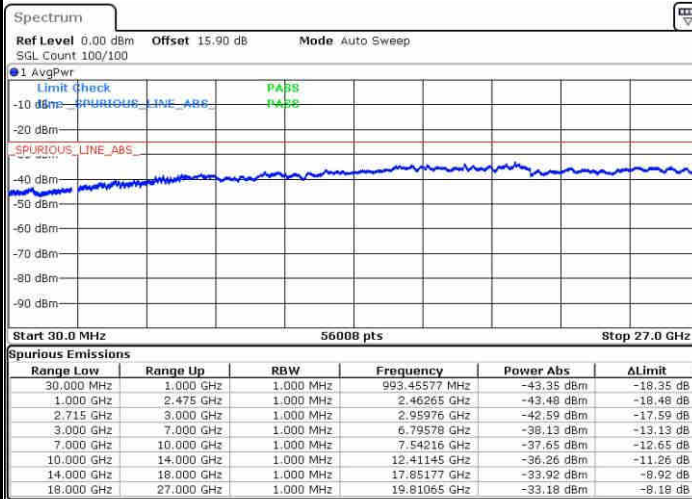
Highest Channel / 16QAM



Date: 8 APR 2019 12:28:12

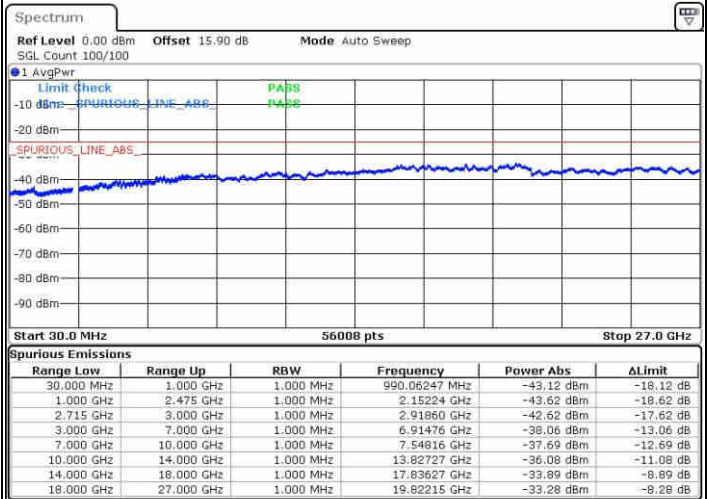
LTE Band 41 / 20MHz

Lowest Channel / QPSK



Date: 8 APR 2019 12:30:00

Lowest Channel / 16QAM

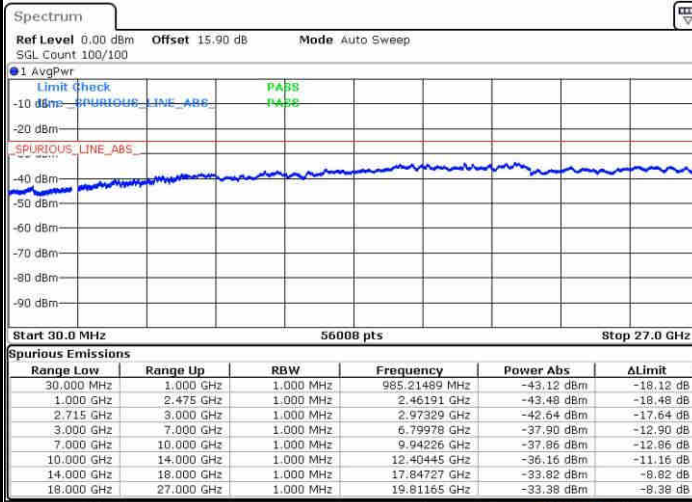


Date: 8 APR 2019 12:30:46



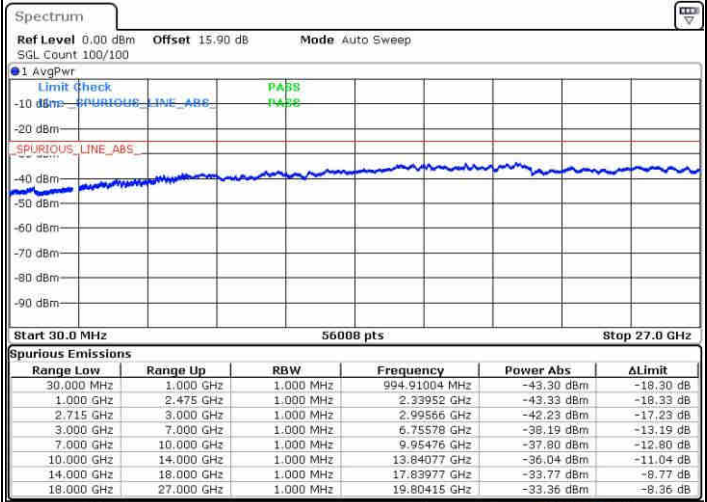
LTE Band 41 / 20MHz

Middle Channel / QPSK



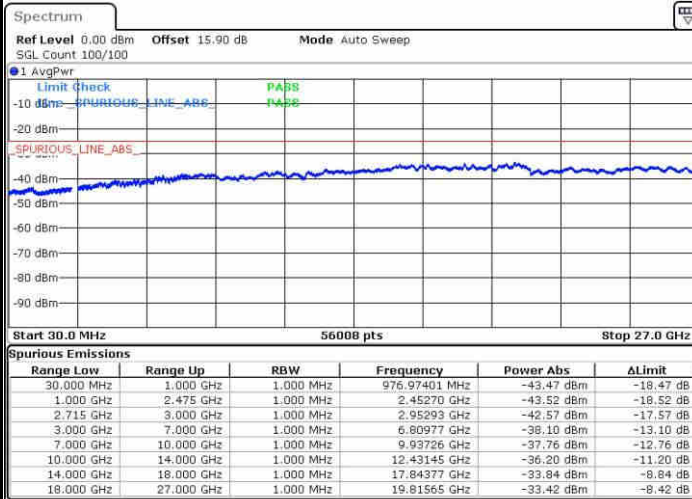
Date: 8 APR 2019 12:31:31

Middle Channel / 16QAM



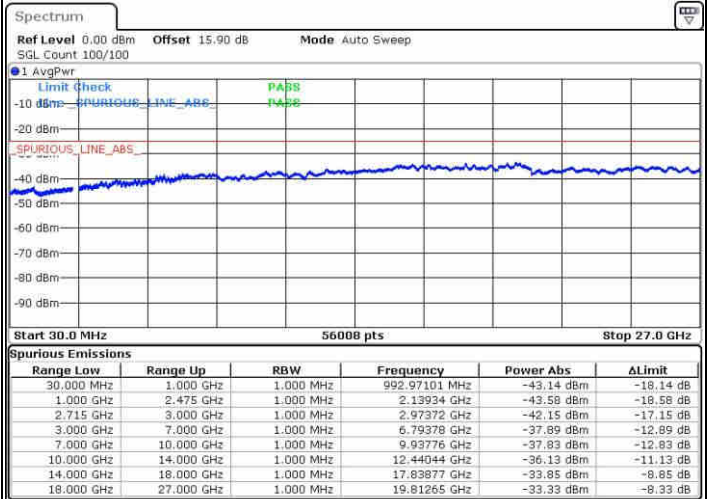
Date: 8 APR 2019 12:32:16

Highest Channel / QPSK



Date: 8 APR 2019 12:33:01

Highest Channel / 16QAM

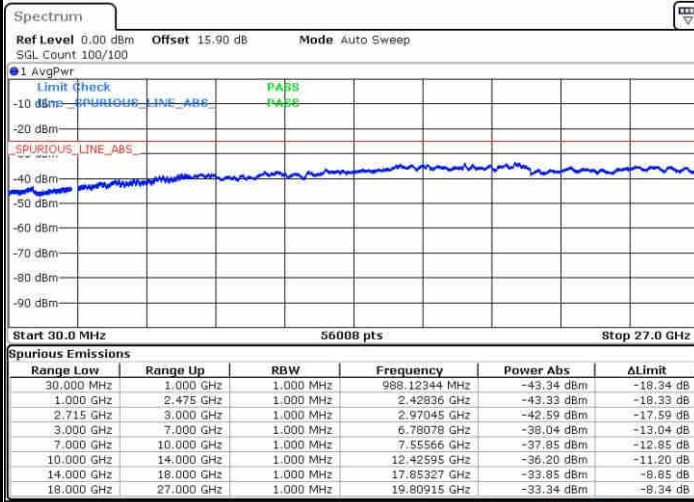


Date: 8 APR 2019 12:33:47



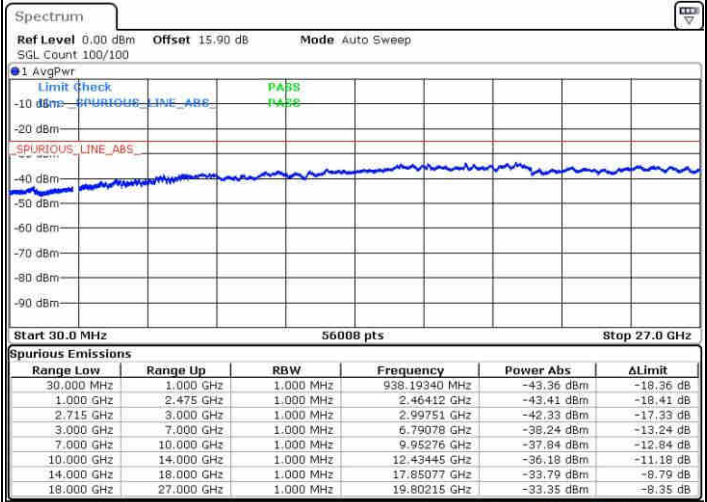
LTE Band 41 / 5MHz

Lowest Channel / 64QAM



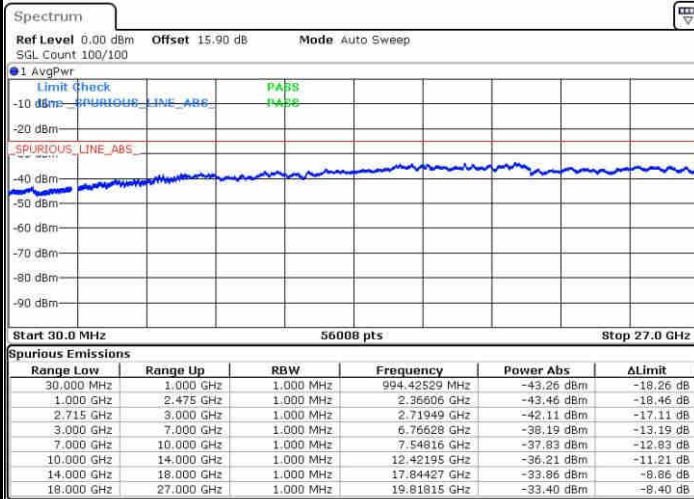
Date: 8 APR 2019 12:07:04

Middle Channel / 64QAM



Date: 8 APR 2019 12:07:49

Highest Channel / 64QAM

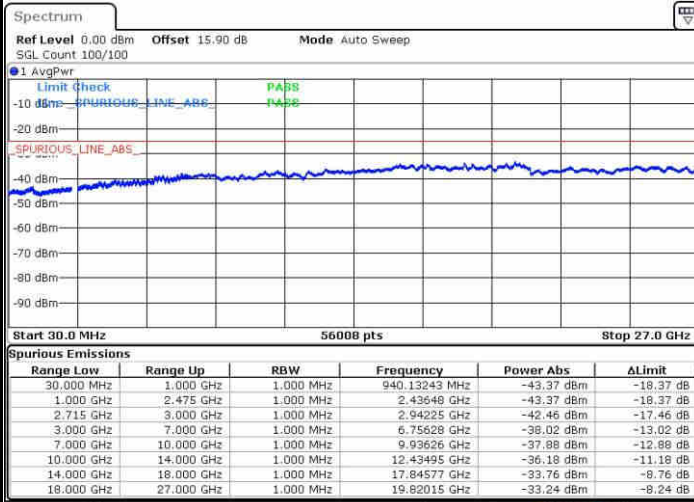


Date: 8 APR 2019 12:08:35



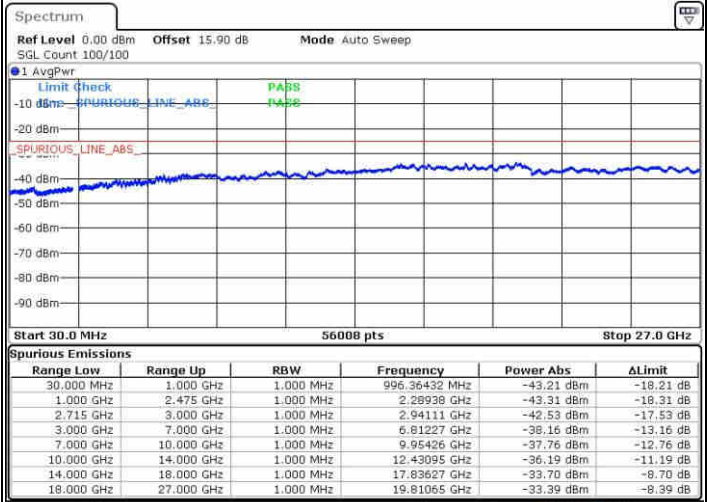
LTE Band 41 / 10MHz

Lowest Channel / 64QAM



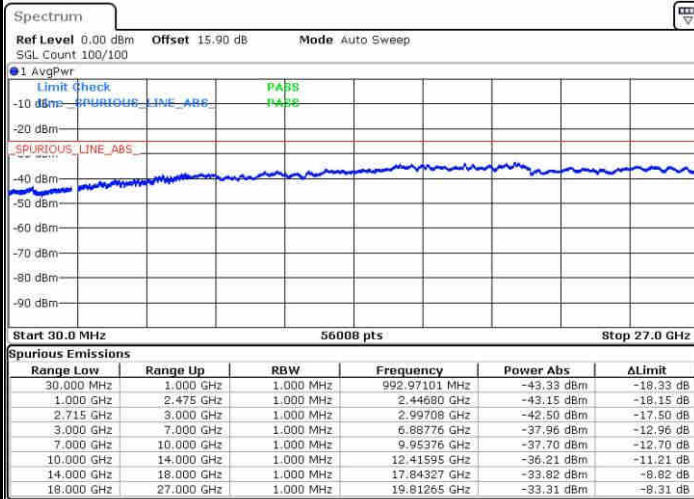
Date: 8 APR 2019 12:09:22

Middle Channel / 64QAM



Date: 8 APR 2019 12:10:07

Highest Channel / 64QAM

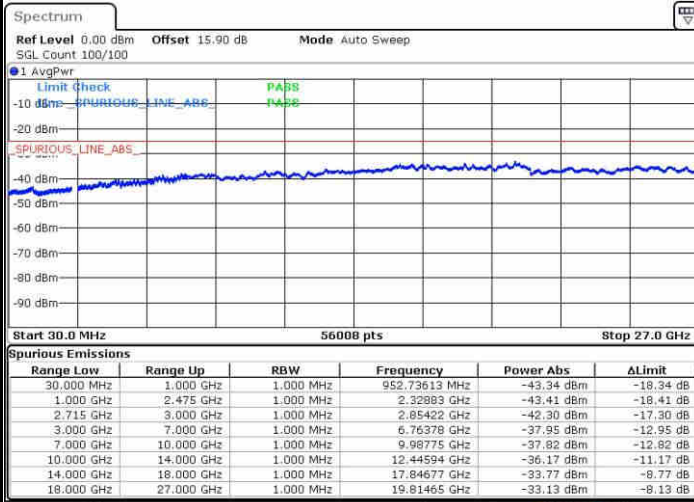


Date: 8 APR 2019 12:10:53



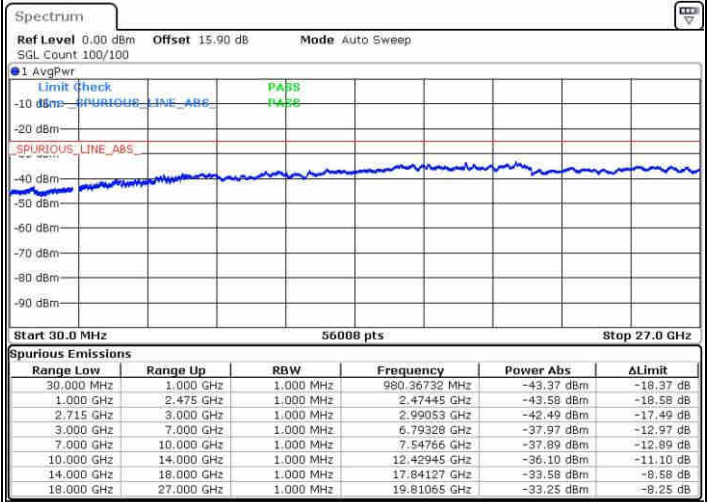
LTE Band 41 / 15MHz

Lowest Channel / 64QAM



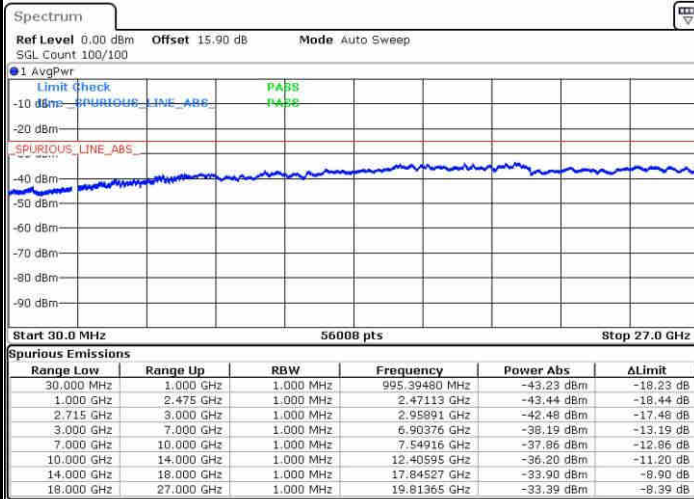
Date: 8 APR 2019 12:11:40

Middle Channel / 64QAM



Date: 8 APR 2019 12:12:25

Highest Channel / 64QAM

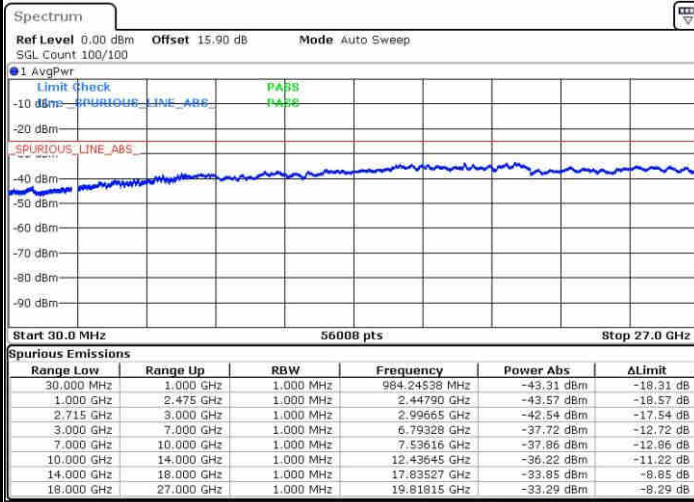


Date: 8 APR 2019 12:13:11



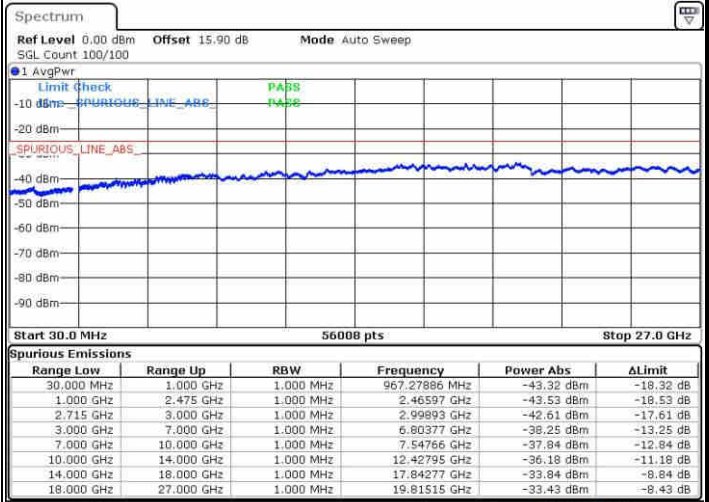
LTE Band 41 / 20MHz

Lowest Channel / 64QAM



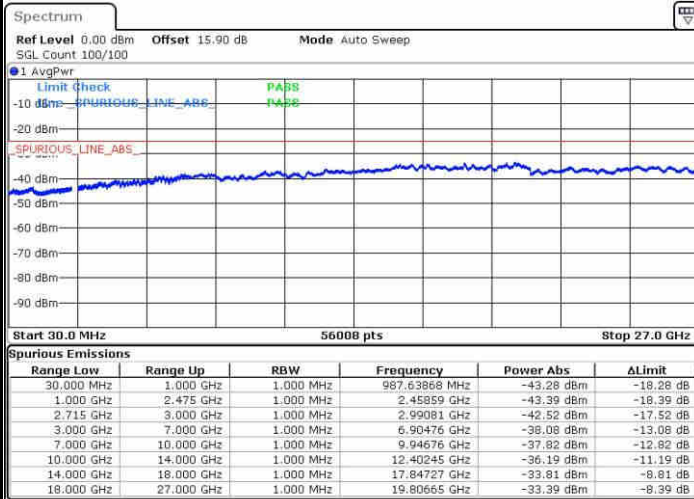
Date: 8 APR 2019 12:13:58

Middle Channel / 64QAM



Date: 8 APR 2019 12:14:43

Highest Channel / 64QAM



Date: 8 APR 2019 12:15:29

Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41_CA

26dB Bandwidth

Mode	LTE Band 41 : 26dB BW(MHz)				
QPSK					
BW	5MHz+20MHz	10MHz+15MHz	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	24.82	24.93	29.85	25.23	30.63
Middle CH	24.82	24.88	29.85	25.12	30.51
Highest CH	24.77	25.07	29.79	25.23	30.57
BW	15MHz+20MHz	20MHz+5MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	34.83	24.93	29.97	34.97	39.80
Middle CH	34.76	24.77	29.97	34.97	39.72
Highest CH	34.83	24.93	29.97	34.90	39.80

Mode	LTE Band 41 : 26dB BW(MHz)				
16QAM					
BW	5MHz+20MHz	10MHz+15MHz	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	24.73	25.07	29.79	25.12	30.69
Middle CH	24.68	24.98	30.03	25.12	30.51
Highest CH	24.68	25.07	29.85	25.12	30.51
BW	15MHz+20MHz	20MHz+5MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	34.69	24.93	30.03	34.83	39.88
Middle CH	34.76	24.82	30.03	34.97	39.88
Highest CH	34.83	24.88	30.09	34.83	39.72

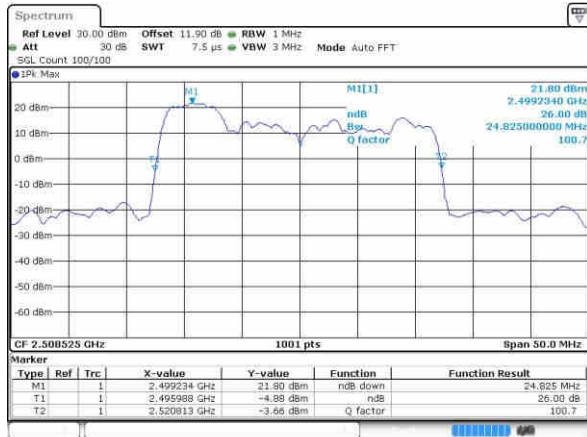
Mode	LTE Band 41 : 26dB BW(MHz)				
64QAM					
BW	5MHz+20MHz	10MHz+15MHz	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	24.73	24.98	29.73	25.12	30.57
Middle CH	24.77	24.98	29.97	25.12	30.45
Highest CH	24.77	24.98	29.67	25.07	30.45
BW	15MHz+20MHz	20MHz+5MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	34.90	24.77	29.91	34.83	39.72
Middle CH	34.83	24.73	30.03	34.83	39.80
Highest CH	35.03	24.82	29.97	34.97	39.72



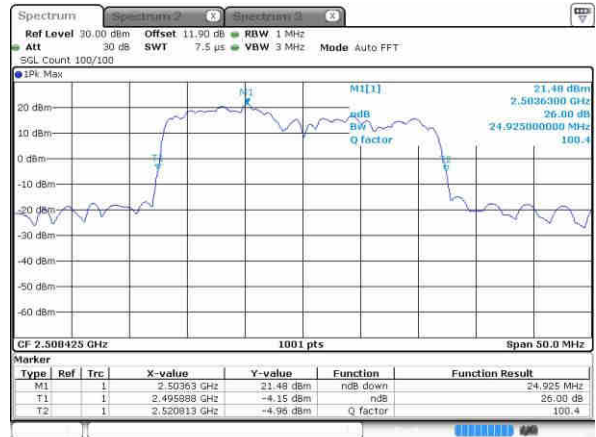
LTE Band 41

QPSK

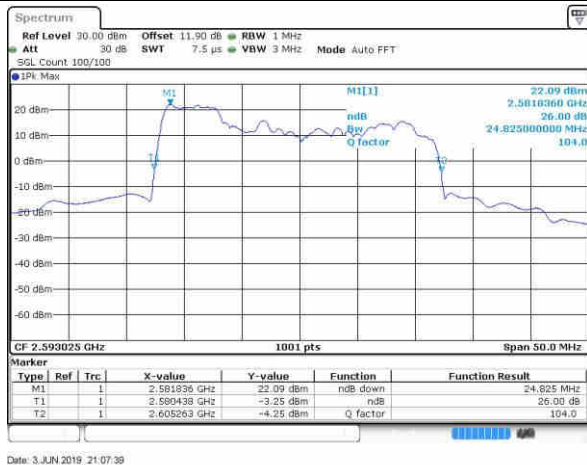
Lowest Channel / 5MHz+20MHz



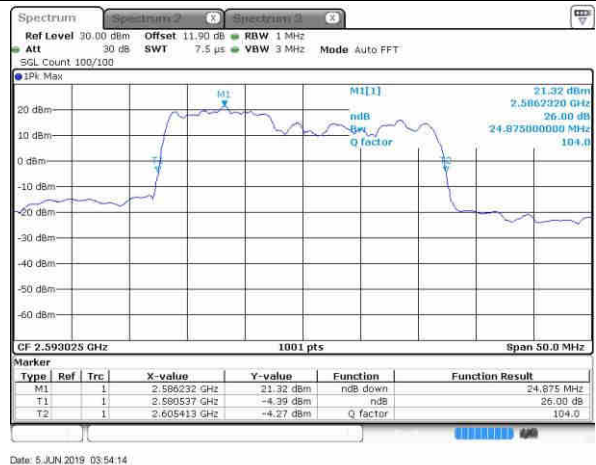
Lowest Channel / 10MHz+15MHz



Middle Channel / 5MHz+20MHz



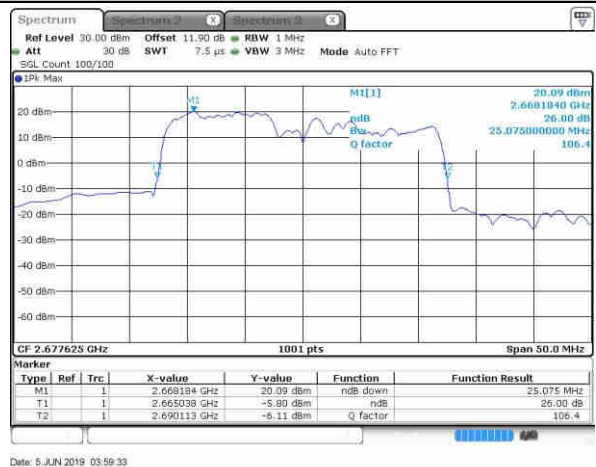
Middle Channel / 10MHz+15MHz



Highest Channel / 5MHz+20MHz



Highest Channel / 10MHz+15MHz

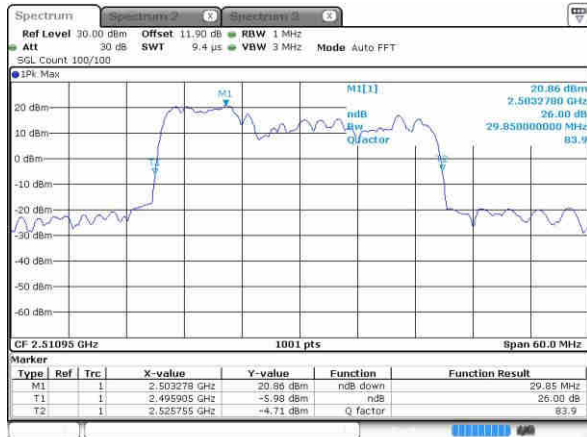




LTE Band 41

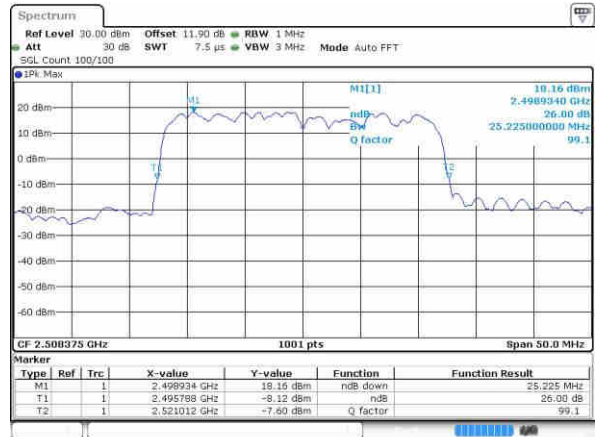
QPSK

Lowest Channel / 10MHz+20MHz



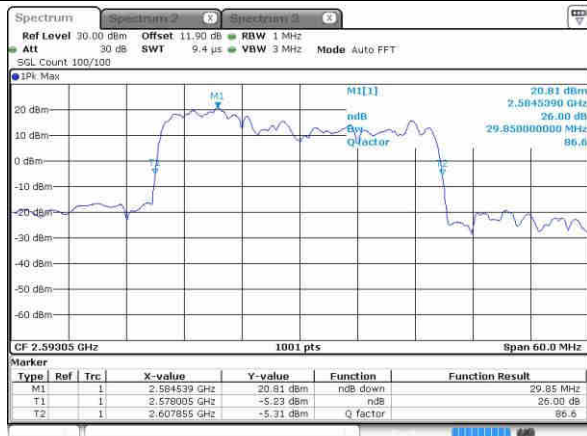
Date: 5 JUN 2019 02:31:38

Lowest Channel / 15MHz+10MHz



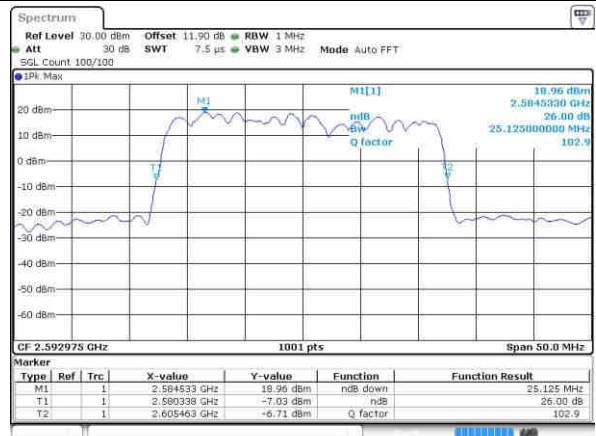
Date: 4 JUN 2019 16:02:43

Middle Channel / 10MHz+20MHz



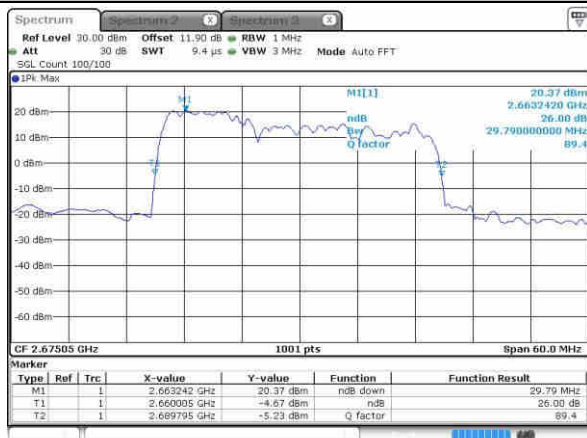
Date: 5 JUN 2019 03:03:17

Middle Channel / 15MHz+10MHz



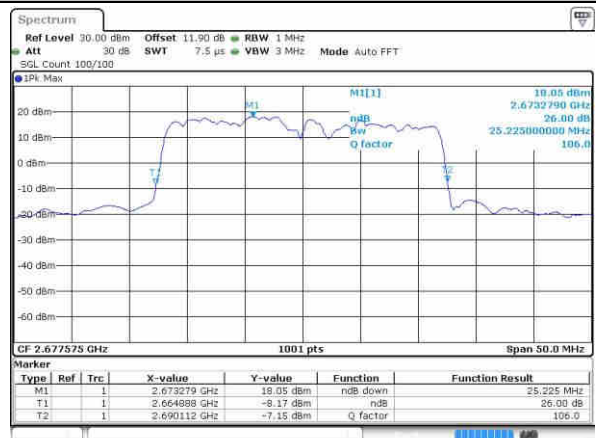
Date: 4 JUN 2019 16:12:28

Highest Channel / 10MHz+20MHz



Date: 5 JUN 2019 03:33:14

Highest Channel / 15MHz+10MHz



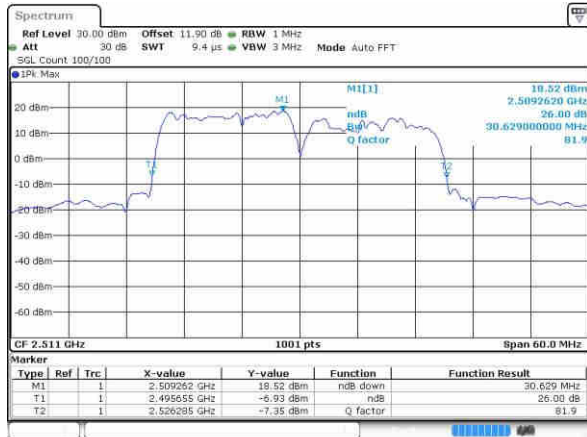
Date: 4 JUN 2019 16:50:32



LTE Band 41

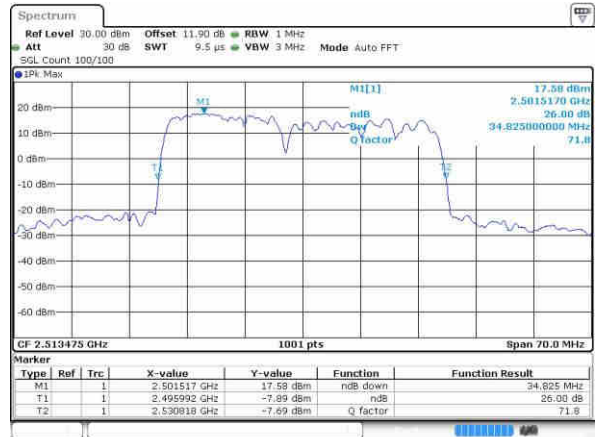
QPSK

Lowest Channel / 15MHz+15MHz



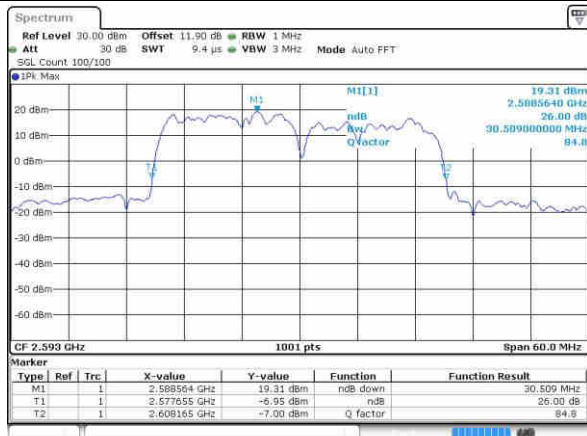
Date: 4 JUN 2019 14:03:41

Lowest Channel / 15MHz+20MHz



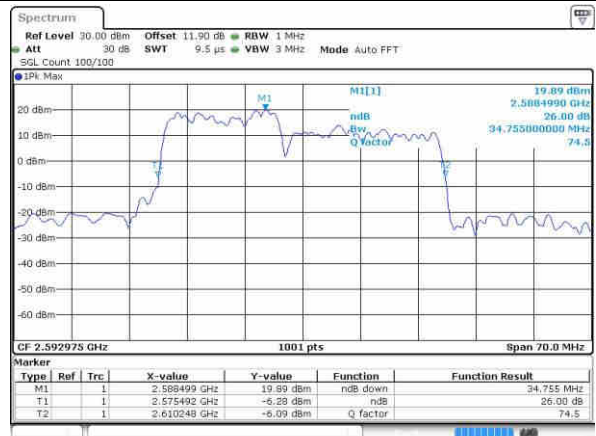
Date: 4 JUN 2019 14:30:55

Middle Channel / 15MHz+15MHz



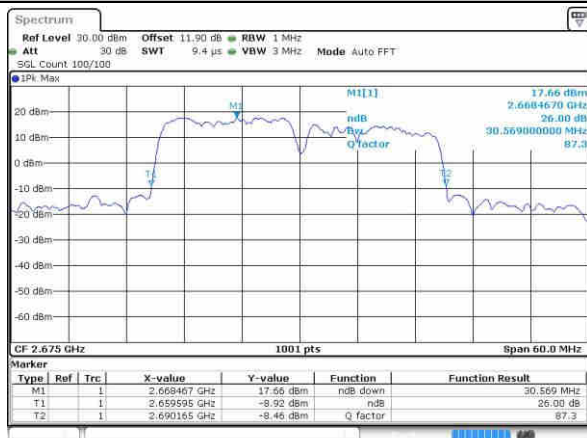
Date: 4 JUN 2019 11:59:23

Middle Channel / 15MHz+20MHz



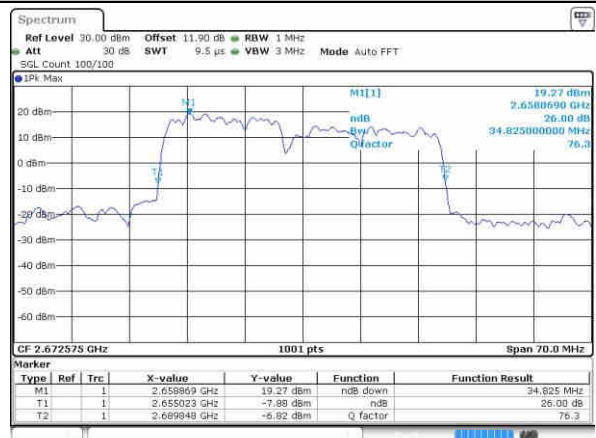
Date: 4 JUN 2019 15:11:56

Highest Channel / 15MHz+15MHz



Date: 4 JUN 2019 12:02:44

Highest Channel / 15MHz+20MHz



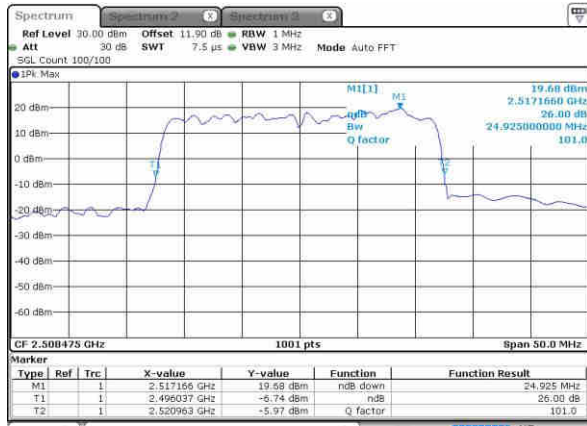
Date: 4 JUN 2019 15:14:42



LTE Band 41

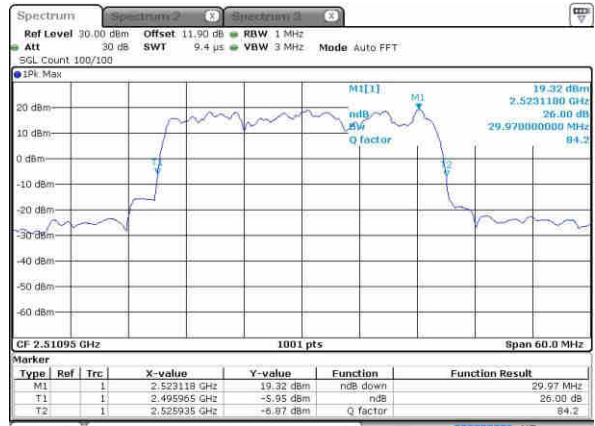
QPSK

Lowest Channel / 20MHz+5MHz



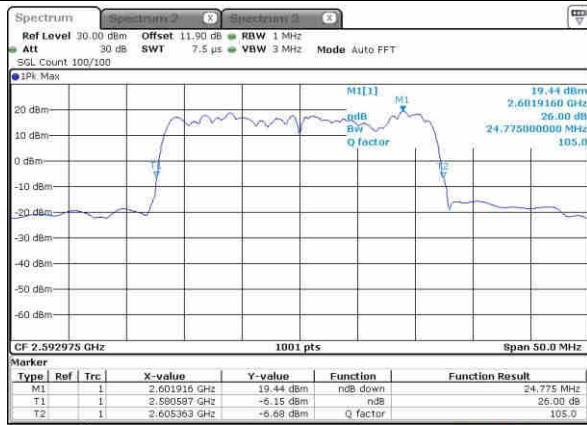
Date: 5 JUN 2019 01:19:30

Lowest Channel / 20MHz+10MHz



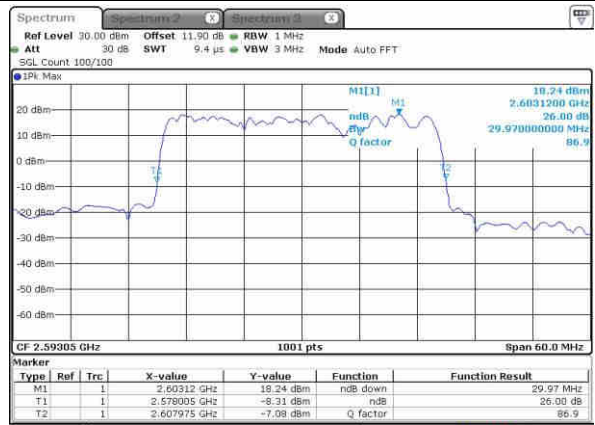
Date: 5 JUN 2019 00:41:01

Middle Channel / 20MHz+5MHz



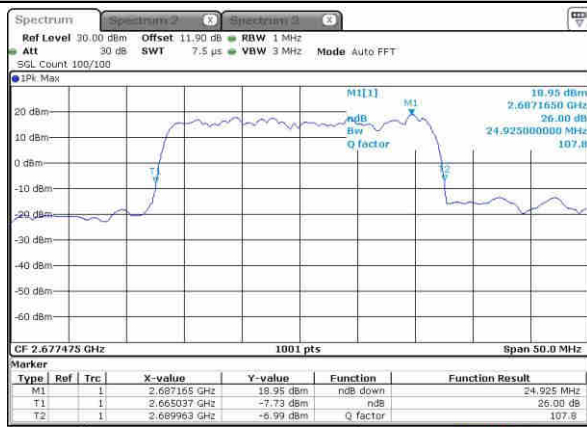
Date: 5 JUN 2019 01:44:28

Middle Channel / 20MHz+10MHz



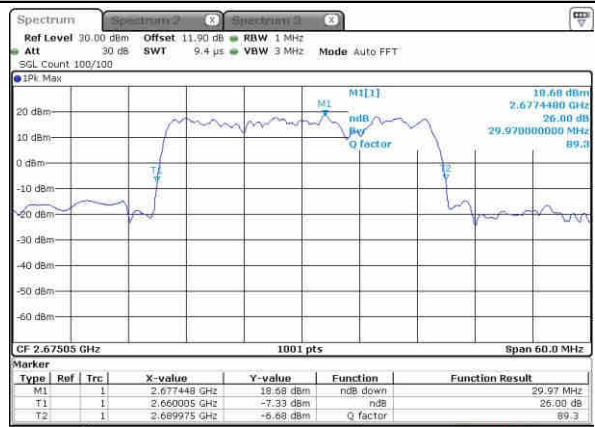
Date: 5 JUN 2019 00:56:19

Highest Channel / 20MHz+5MHz



Date: 5 JUN 2019 01:48:18

Highest Channel / 20MHz+10MHz



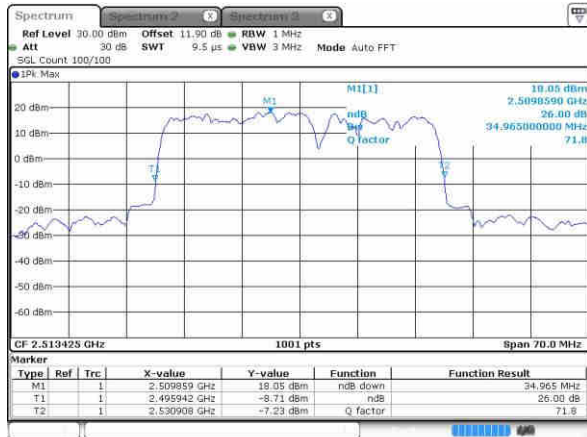
Date: 5 JUN 2019 00:59:04



LTE Band 41

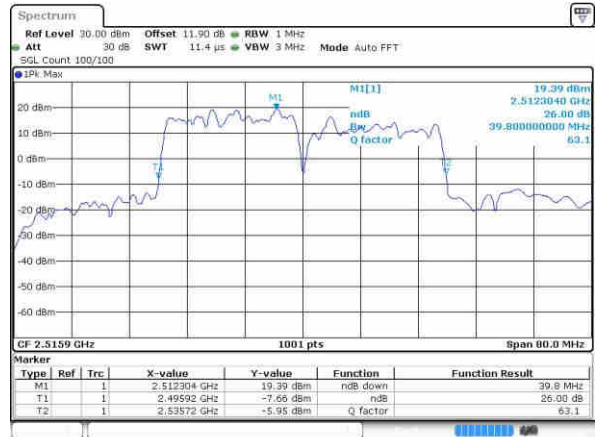
QPSK

Lowest Channel / 20MHz+15MHz



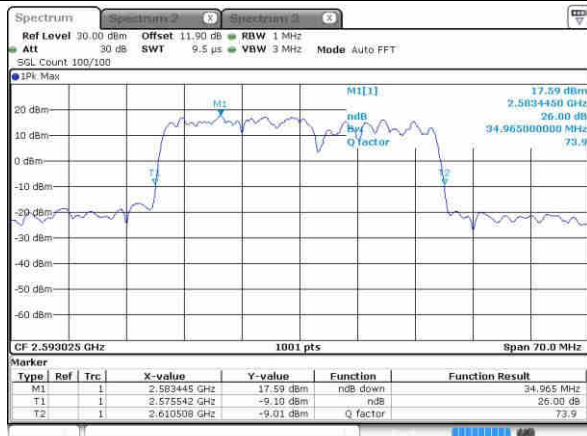
Date: 5 JUN 2019 04:09:12

Lowest Channel / 20MHz+20MHz



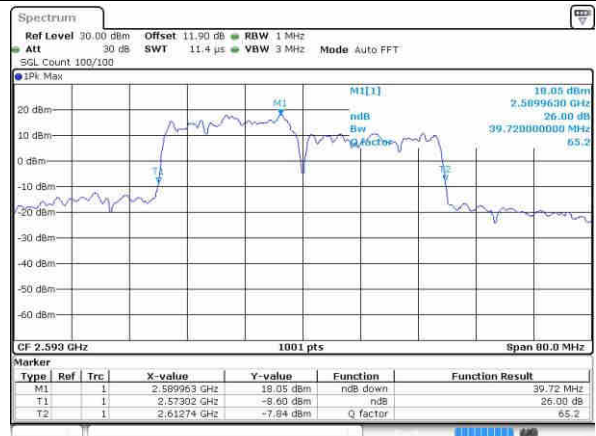
Date: 5 JUN 2019 10:16:06

Middle Channel / 20MHz+15MHz



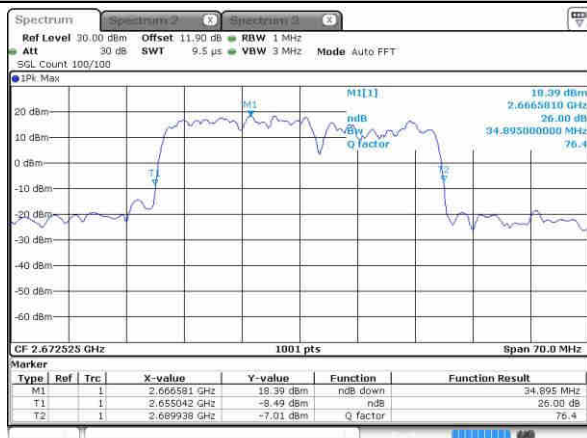
Date: 5 JUN 2019 04:15:12

Middle Channel / 20MHz+20MHz



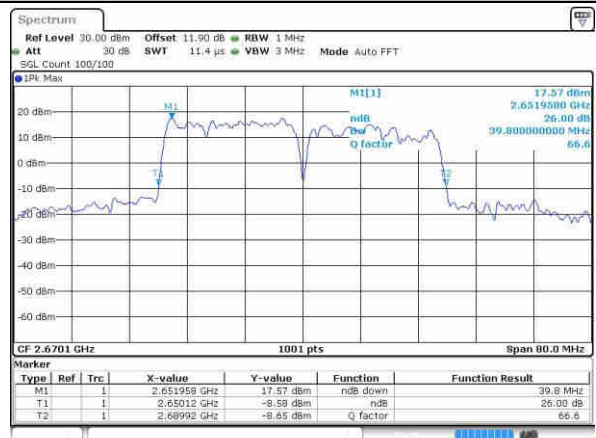
Date: 5 JUN 2019 10:26:18

Highest Channel / 20MHz+15MHz



Date: 5 JUN 2019 04:20:46

Highest Channel / 20MHz+20MHz



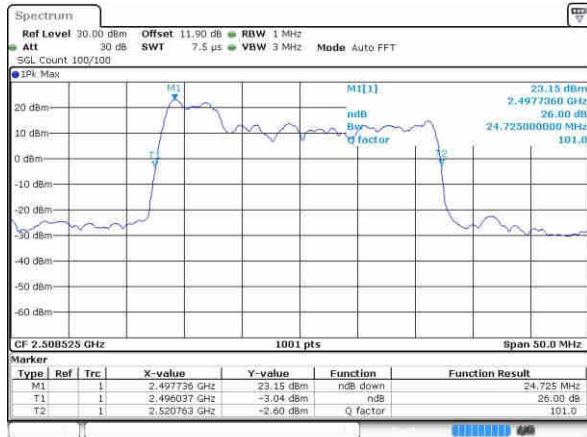
Date: 5 JUN 2019 10:32:55



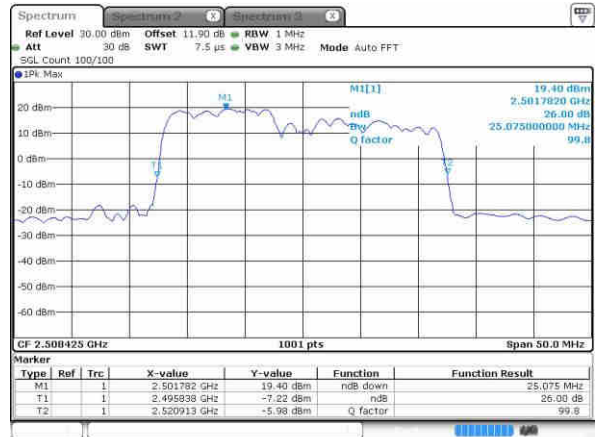
LTE Band 41

16QAM

Lowest Channel / 5MHz+20MHz



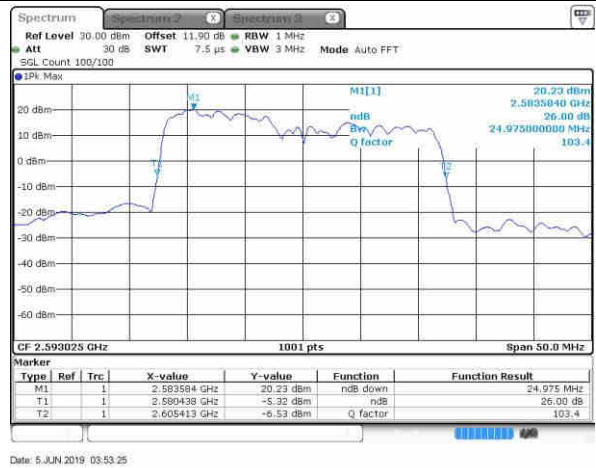
Lowest Channel / 10MHz+15MHz



Middle Channel / 5MHz+20MHz



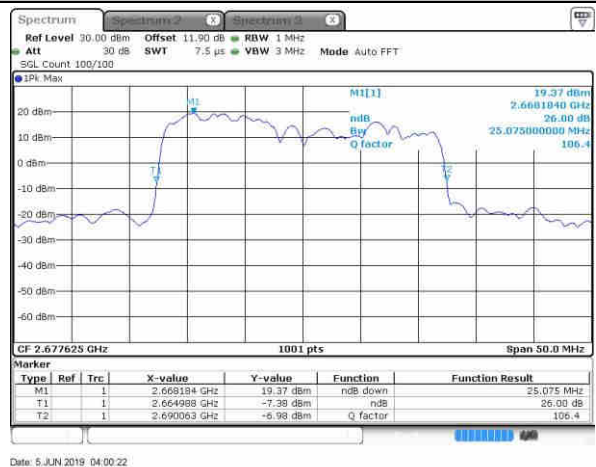
Middle Channel / 10MHz+15MHz



Highest Channel / 5MHz+20MHz



Highest Channel / 10MHz+15MHz

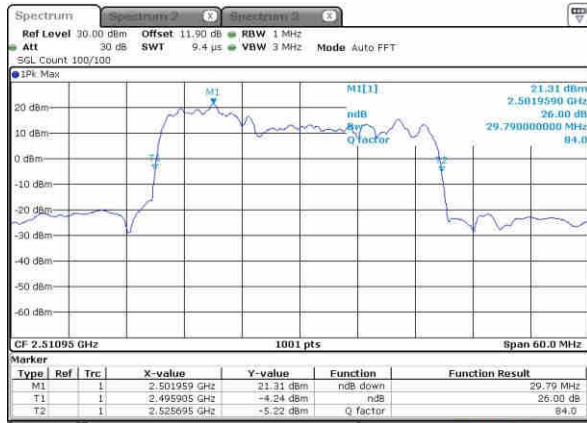




LTE Band 41

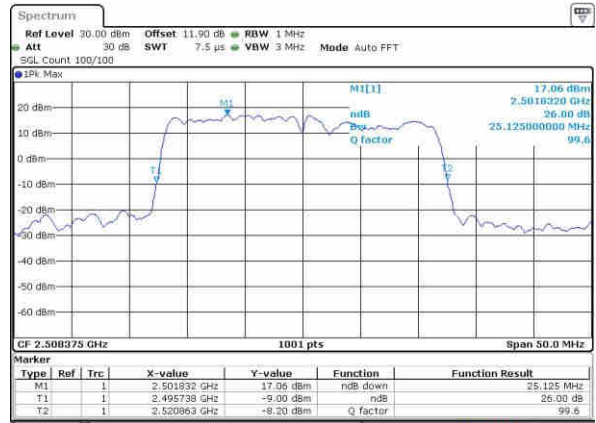
16QAM

Lowest Channel / 10MHz+20MHz



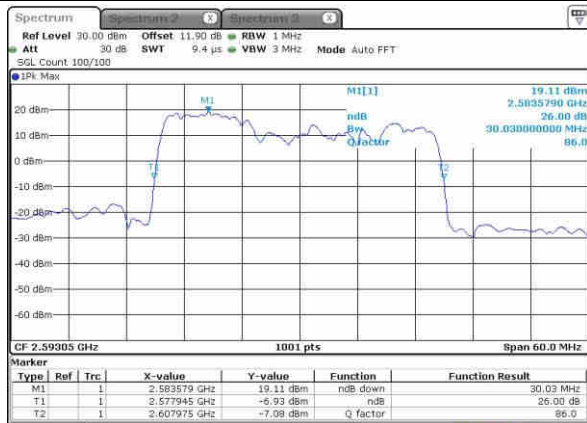
Date: 5 JUN 2019 02:30:49

Lowest Channel / 15MHz+10MHz



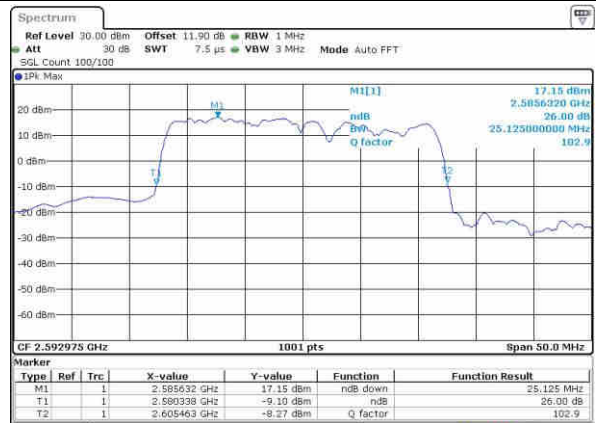
Date: 4 JUN 2019 16:02:21

Middle Channel / 10MHz+20MHz



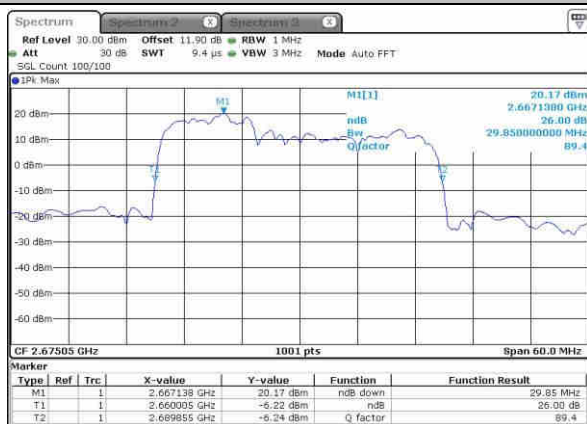
Date: 5 JUN 2019 03:02:28

Middle Channel / 15MHz+10MHz



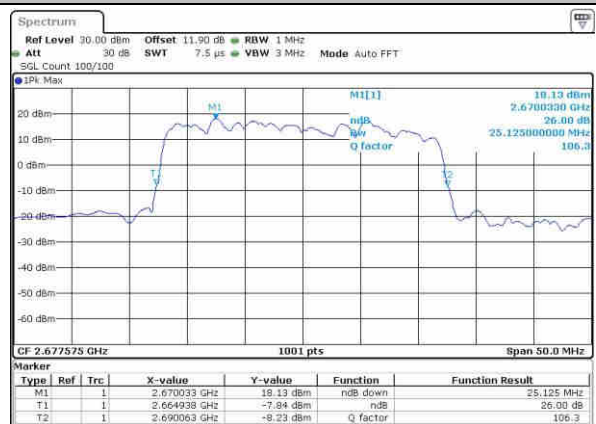
Date: 4 JUN 2019 16:12:05

Highest Channel / 10MHz+20MHz



Date: 5 JUN 2019 03:34:03

Highest Channel / 15MHz+10MHz



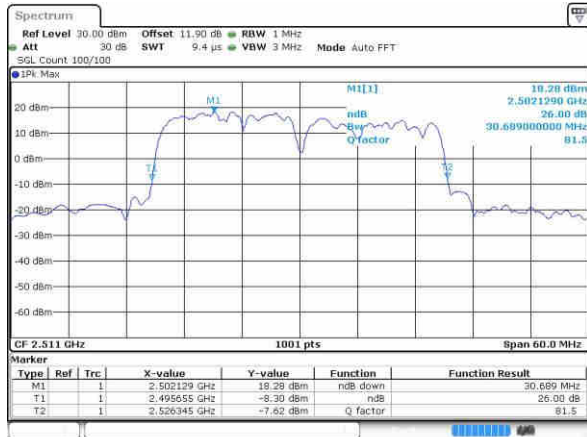
Date: 4 JUN 2019 16:50:54



LTE Band 41

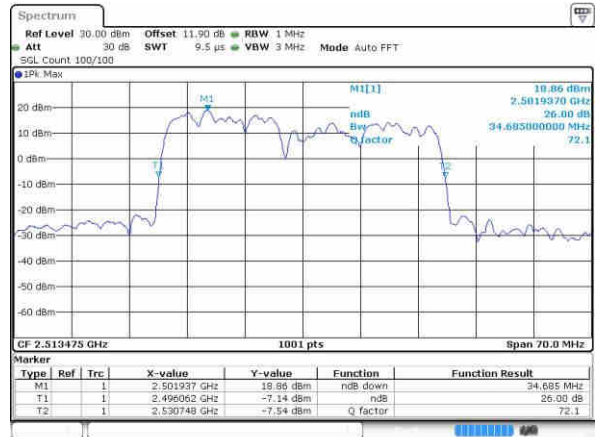
16QAM

Lowest Channel / 15MHz+15MHz



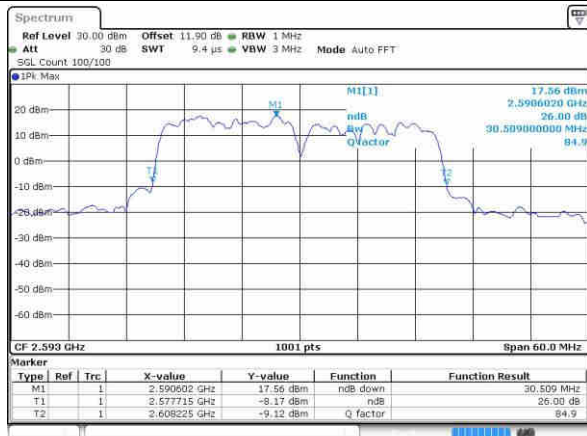
Date: 4 JUN 2019 14:03:18

Lowest Channel / 15MHz+20MHz



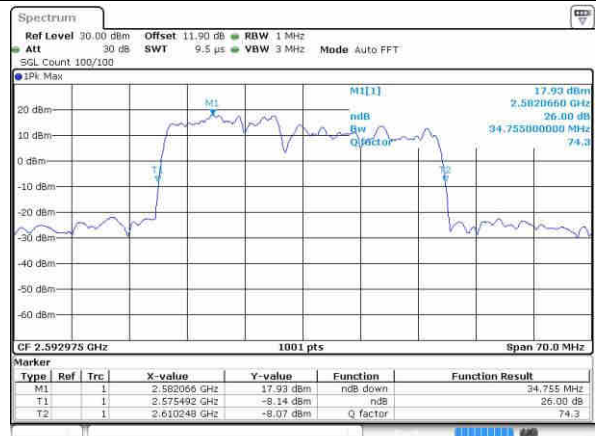
Date: 4 JUN 2019 14:30:32

Middle Channel / 15MHz+15MHz



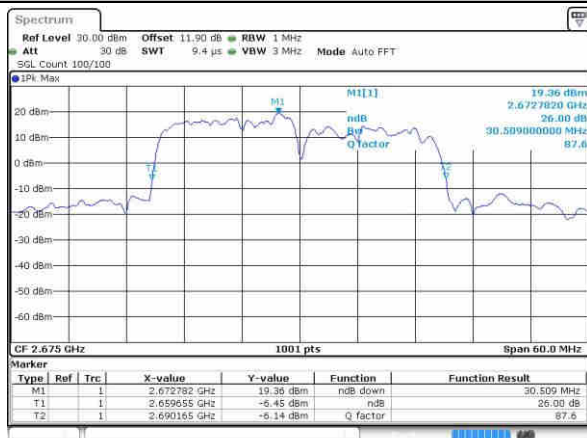
Date: 4 JUN 2019 11:58:59

Middle Channel / 15MHz+20MHz



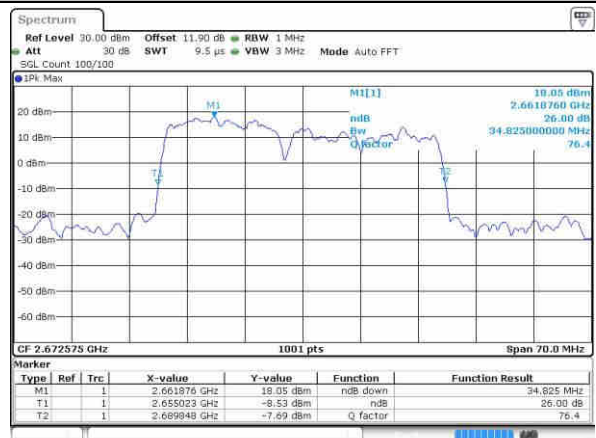
Date: 4 JUN 2019 15:11:33

Highest Channel / 15MHz+15MHz



Date: 4 JUN 2019 12:03:07

Highest Channel / 15MHz+20MHz



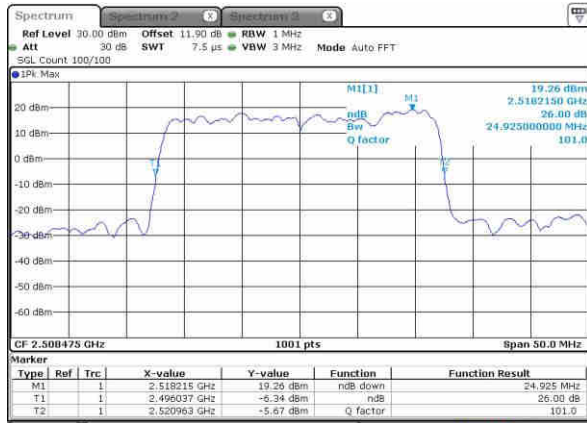
Date: 4 JUN 2019 15:15:04



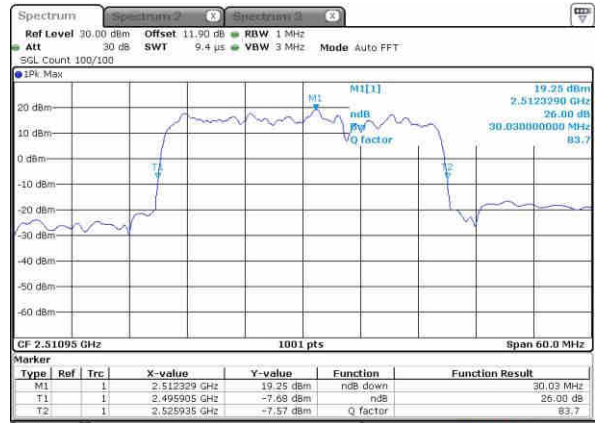
LTE Band 41

16QAM

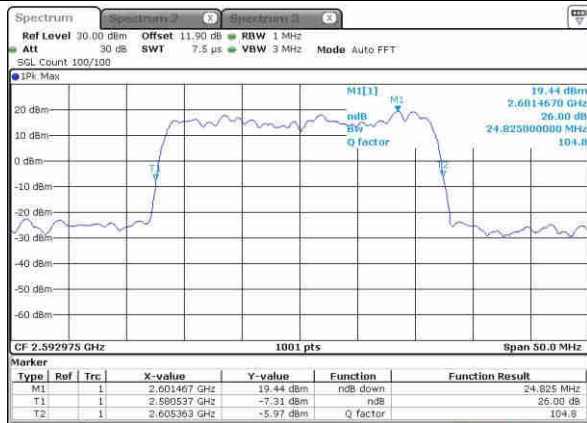
Lowest Channel / 20MHz+5MHz



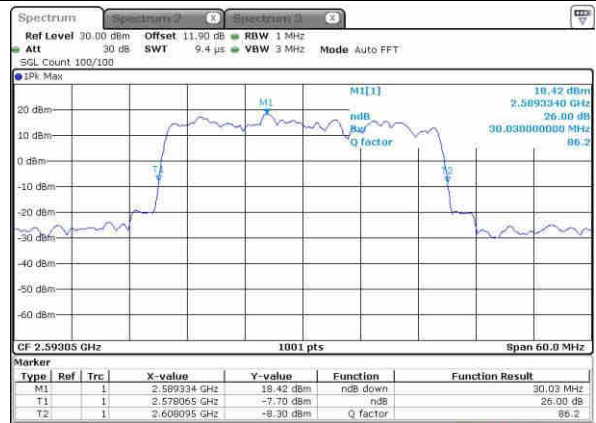
Lowest Channel / 20MHz+10MHz



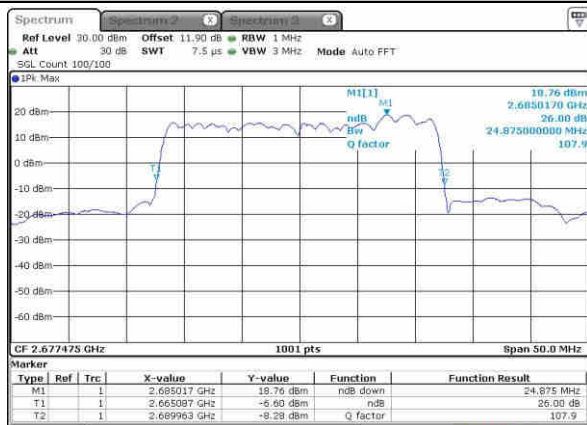
Middle Channel / 20MHz+5MHz



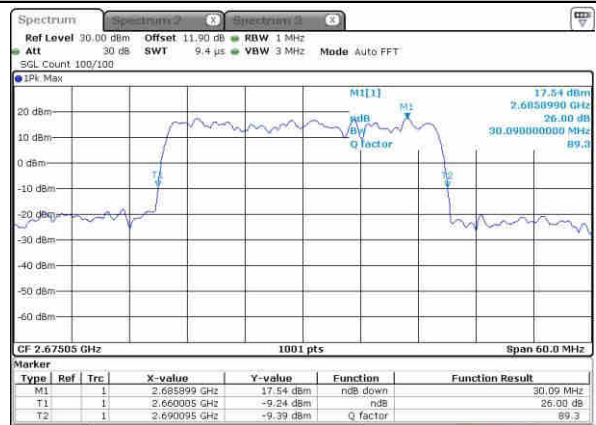
Middle Channel / 20MHz+10MHz



Highest Channel / 20MHz+5MHz



Highest Channel / 20MHz+10MHz

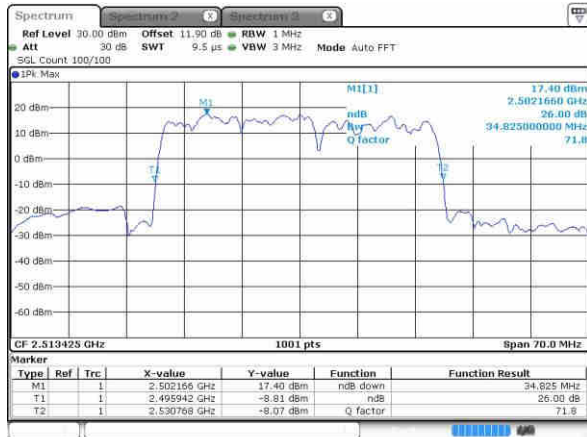




LTE Band 41

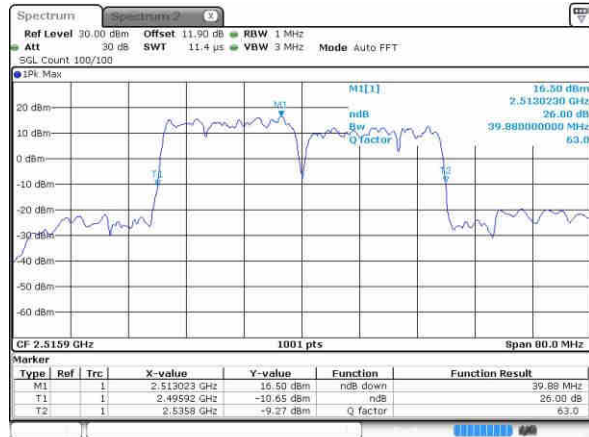
16QAM

Lowest Channel / 20MHz+15MHz



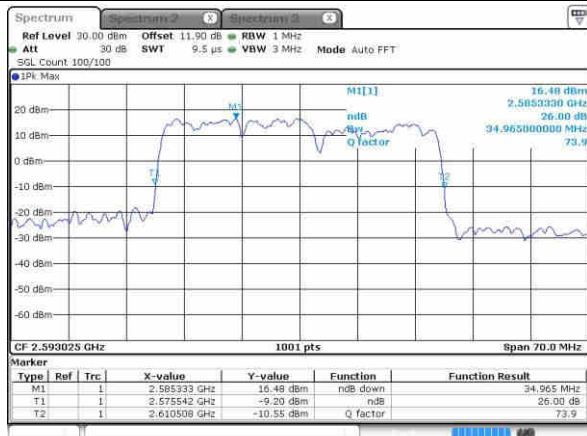
Date: 5 JUN 2019 04:08:23

Lowest Channel / 20MHz+20MHz



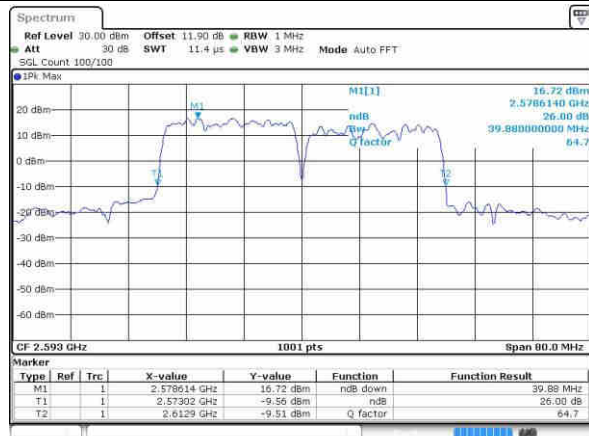
Date: 5 JUN 2019 23:48:19

Middle Channel / 20MHz+15MHz



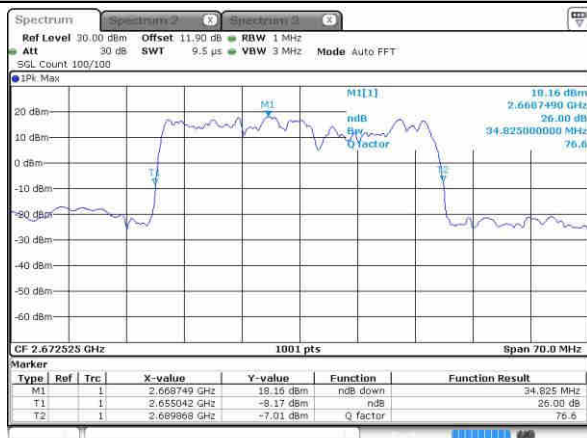
Date: 5 JUN 2019 04:14:24

Middle Channel / 20MHz+20MHz



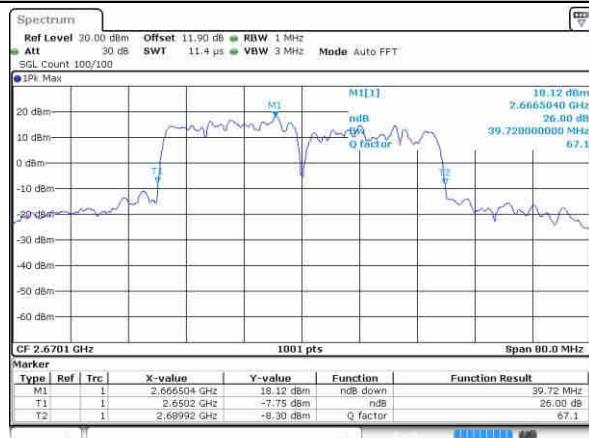
Date: 5 JUN 2019 10:25:56

Highest Channel / 20MHz+15MHz



Date: 5 JUN 2019 04:21:35

Highest Channel / 20MHz+20MHz



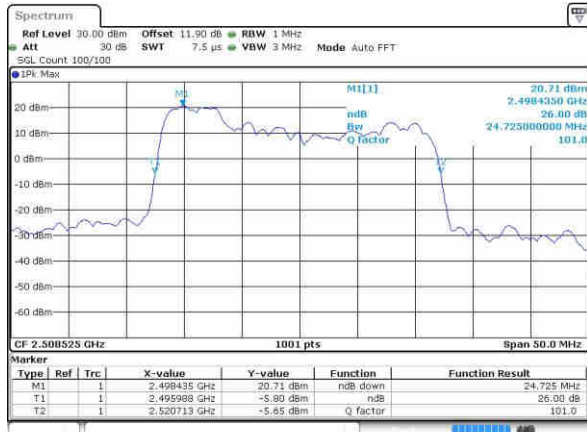
Date: 5 JUN 2019 10:33:19



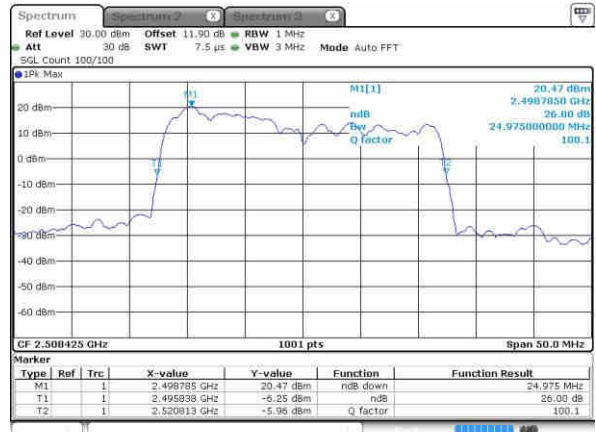
LTE Band 41

64QAM

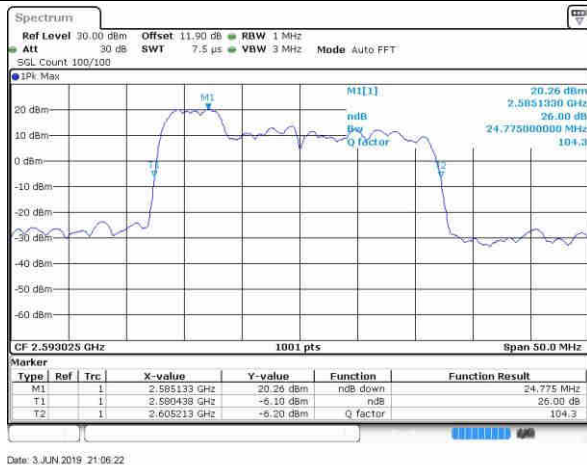
Lowest Channel / 5MHz+20MHz



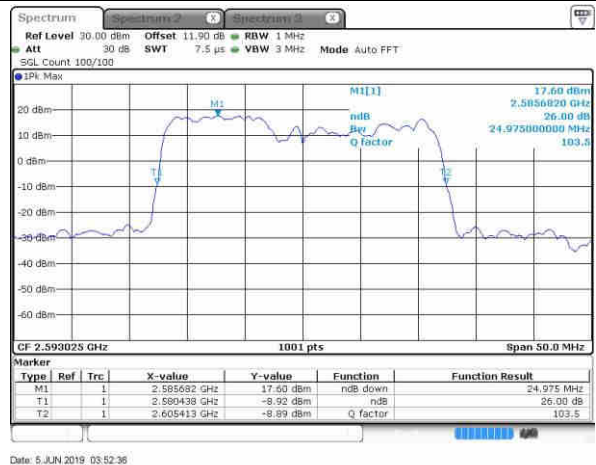
Lowest Channel / 10MHz+15MHz



Middle Channel / 5MHz+20MHz



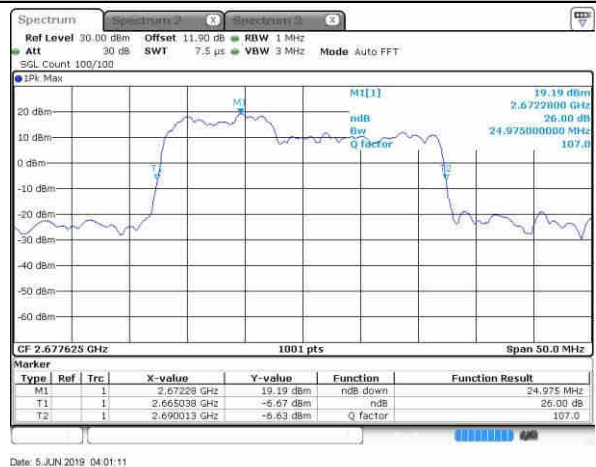
Middle Channel / 10MHz+15MHz



Highest Channel / 5MHz+20MHz



Highest Channel / 10MHz+15MHz

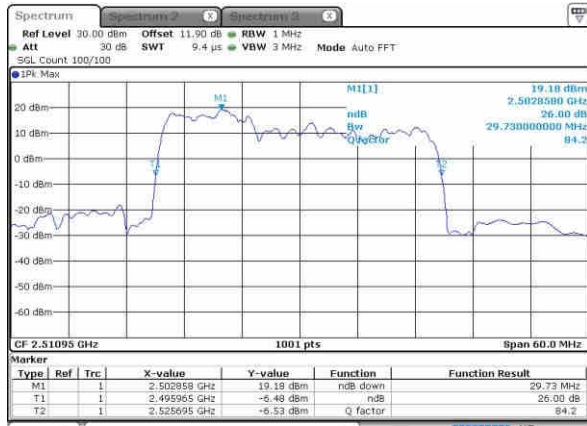




LTE Band 41

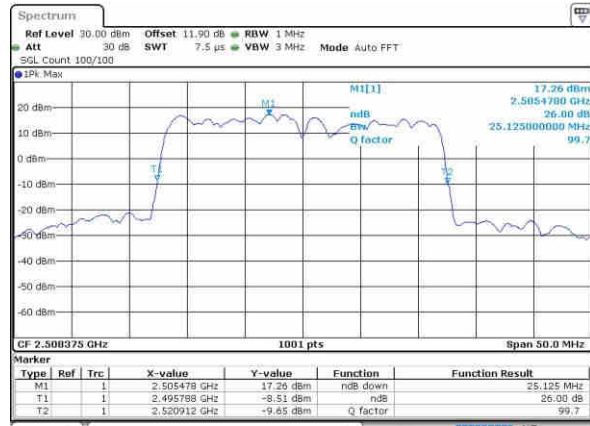
64QAM

Lowest Channel / 10MHz+20MHz



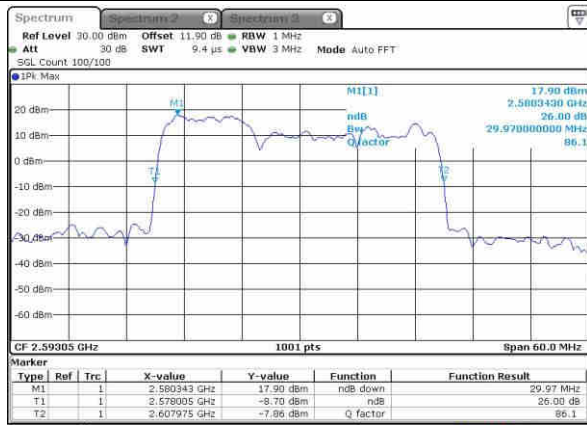
Date: 5 JUN 2019 02:30:01

Lowest Channel / 15MHz+10MHz



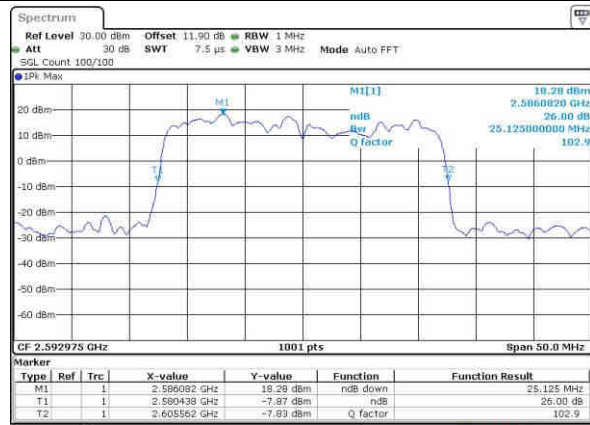
Date: 4 JUN 2019 16:01:58

Middle Channel / 10MHz+20MHz



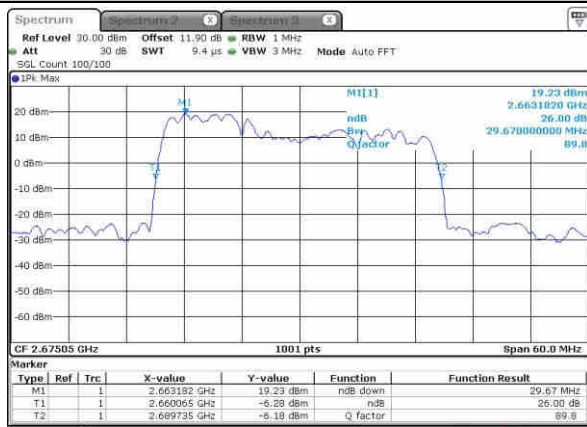
Date: 5 JUN 2019 03:01:39

Middle Channel / 15MHz+10MHz



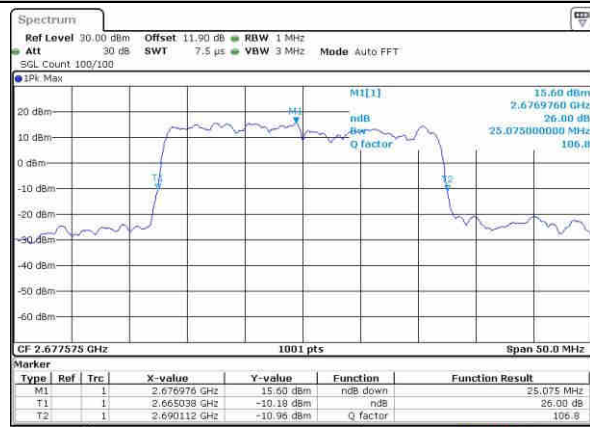
Date: 4 JUN 2019 16:11:42

Highest Channel / 10MHz+20MHz



Date: 5 JUN 2019 03:34:52

Highest Channel / 15MHz+10MHz



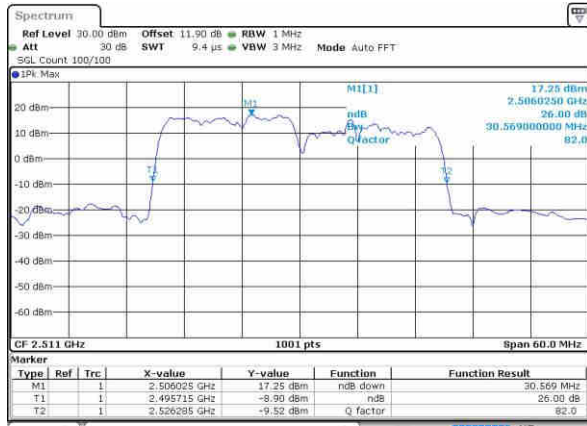
Date: 4 JUN 2019 16:51:17



LTE Band 41

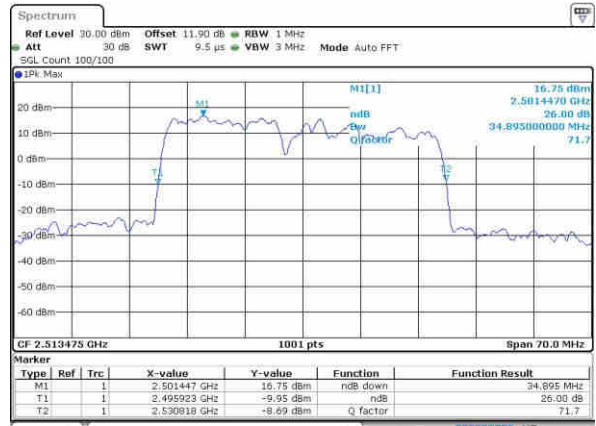
64QAM

Lowest Channel / 15MHz+15MHz



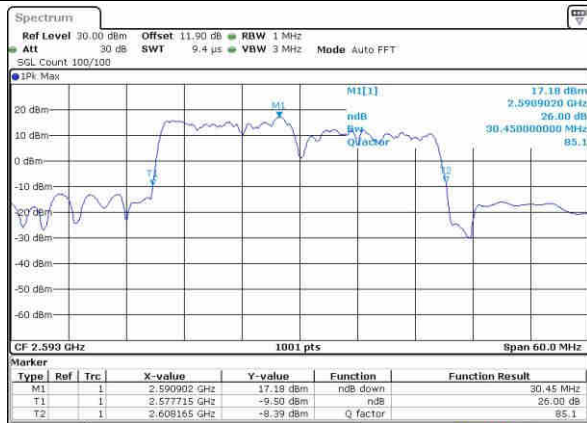
Date: 4 JUN 2019 14:02:55

Lowest Channel / 15MHz+20MHz



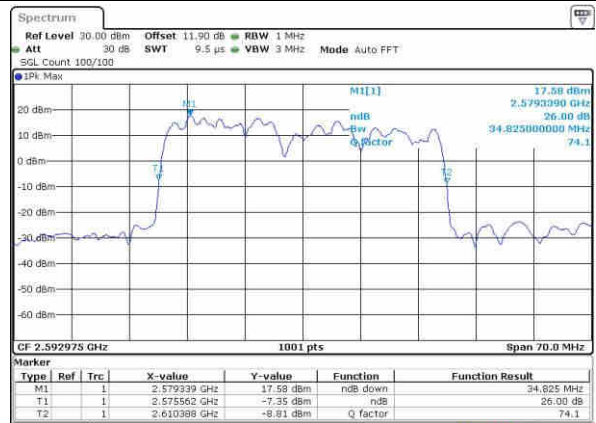
Date: 4 JUN 2019 14:30:09

Middle Channel / 15MHz+15MHz



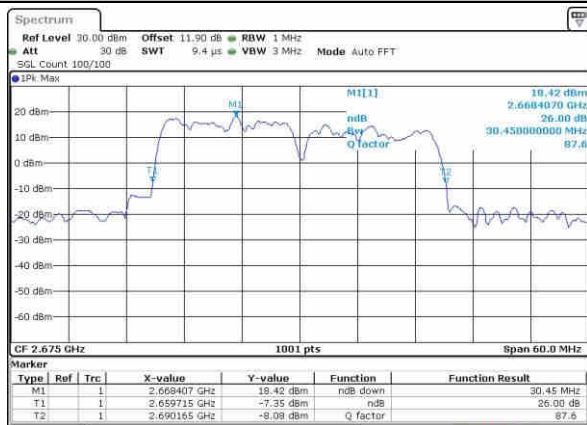
Date: 4 JUN 2019 11:58:35

Middle Channel / 15MHz+20MHz



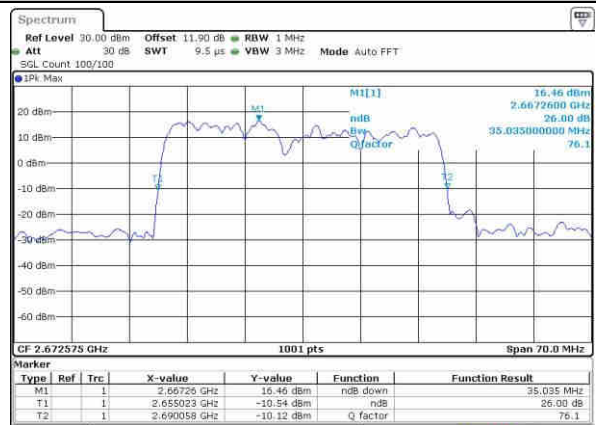
Date: 4 JUN 2019 15:11:11

Highest Channel / 15MHz+15MHz



Date: 4 JUN 2019 12:03:31

Highest Channel / 15MHz+20MHz



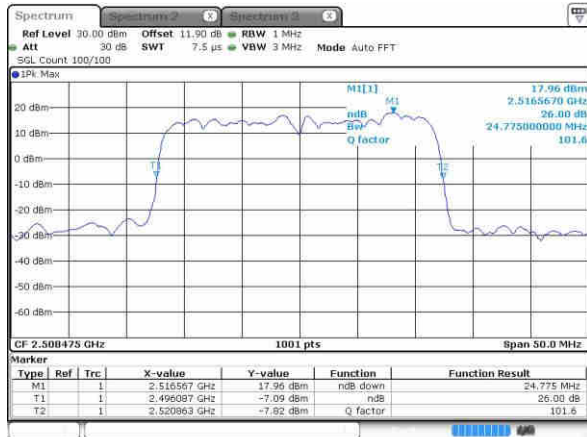
Date: 4 JUN 2019 15:15:27



LTE Band 41

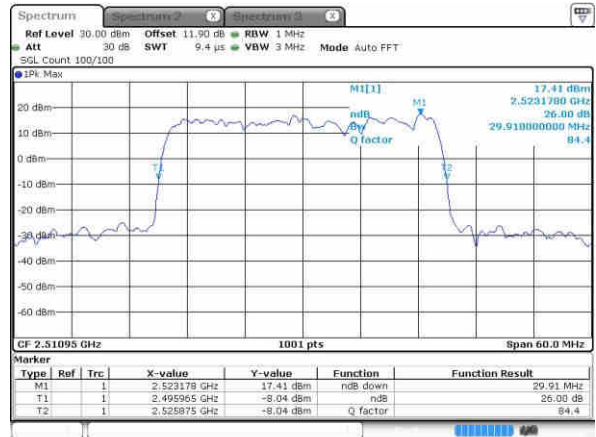
64QAM

Lowest Channel / 20MHz+5MHz



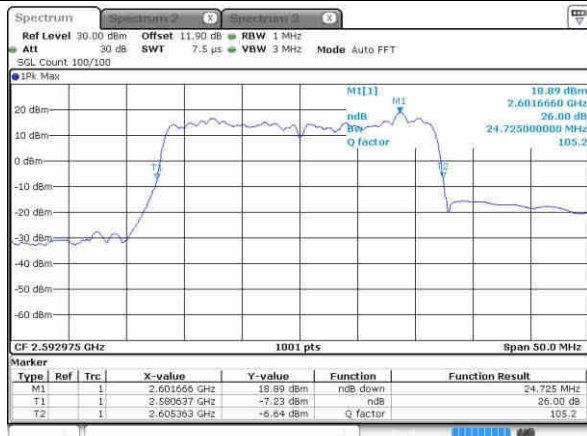
Date: 5 JUN 2019 01:17:47

Lowest Channel / 20MHz+10MHz



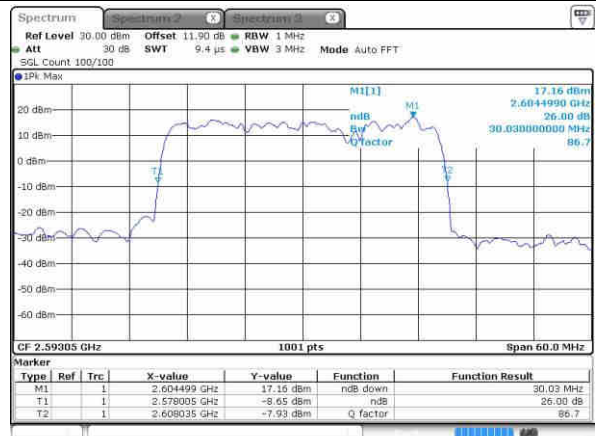
Date: 5 JUN 2019 00:39:38

Middle Channel / 20MHz+5MHz



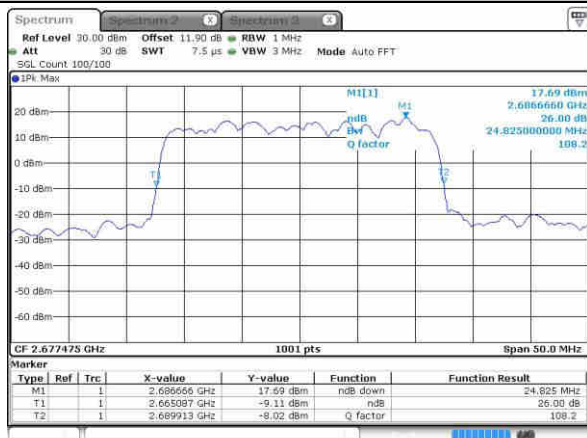
Date: 5 JUN 2019 01:43:10

Middle Channel / 20MHz+10MHz



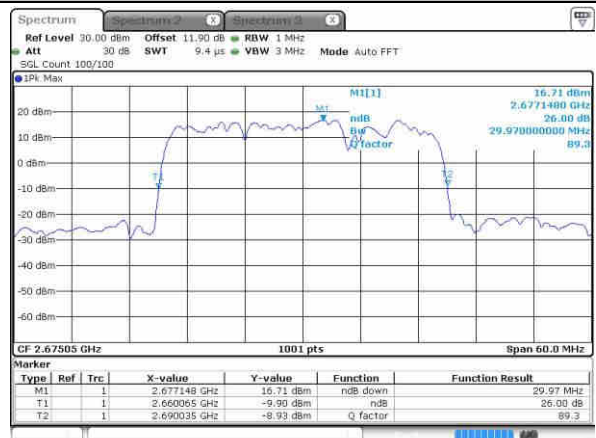
Date: 5 JUN 2019 00:50:25

Highest Channel / 20MHz+5MHz



Date: 5 JUN 2019 01:50:36

Highest Channel / 20MHz+10MHz



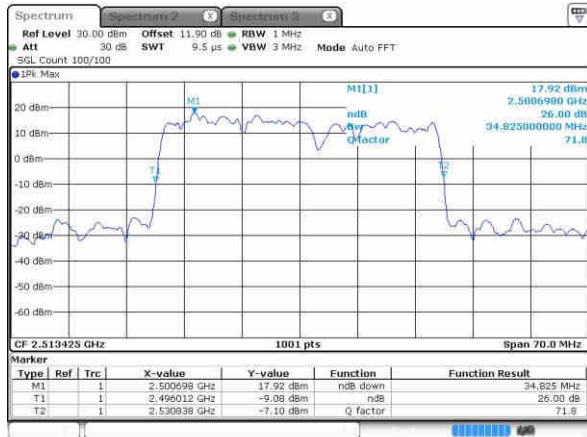
Date: 5 JUN 2019 01:00:27



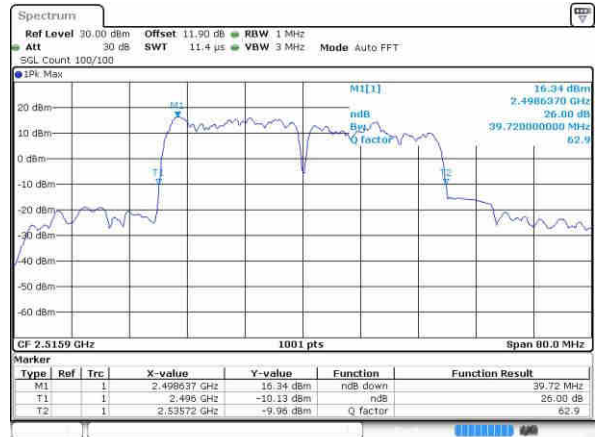
LTE Band 41

64QAM

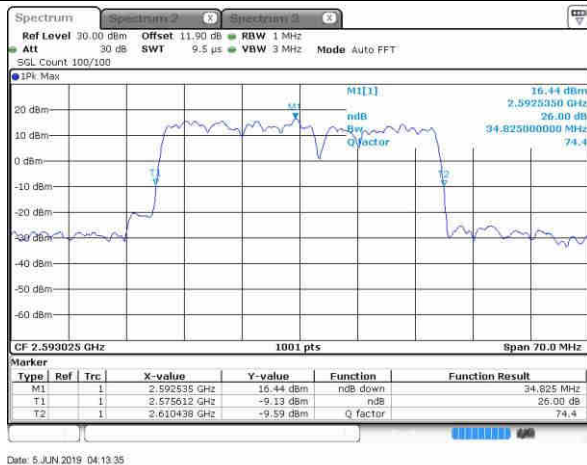
Lowest Channel / 20MHz+15MHz



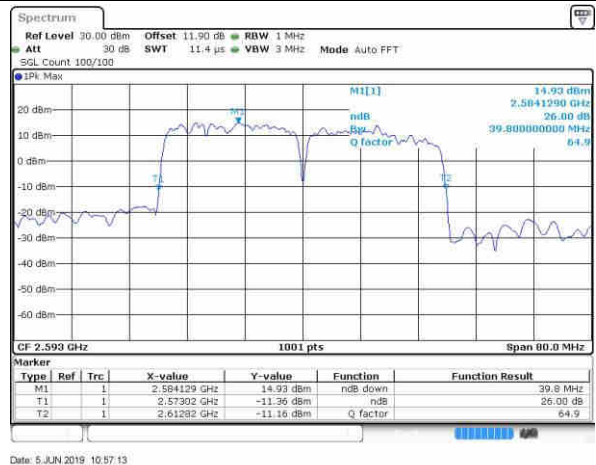
Lowest Channel / 20MHz+20MHz



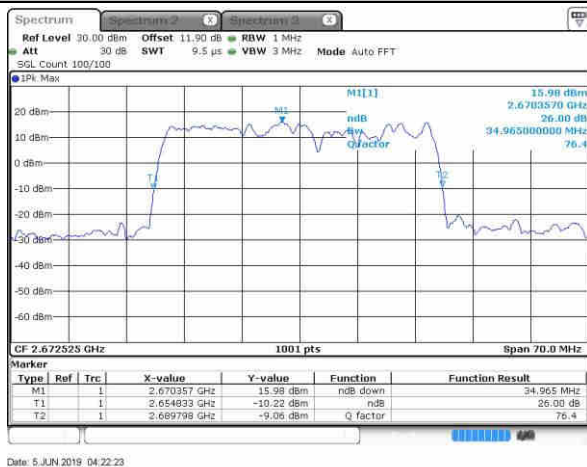
Middle Channel / 20MHz+15MHz



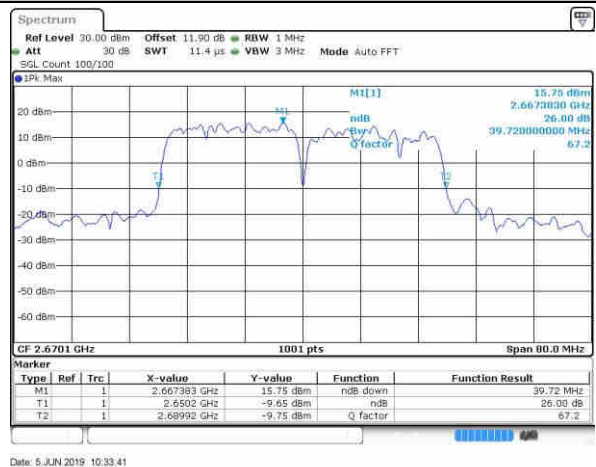
Middle Channel / 20MHz+20MHz



Highest Channel / 20MHz+15MHz



Highest Channel / 20MHz+20MHz



**Occupied Bandwidth**

Mode	LTE Band 41 : 99%OBW(MHz)				
QPSK					
BW	5MHz+20MHz	10MHz+15MHz	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	23.18	23.48	28.11	23.48	28.47
Middle CH	23.18	23.33	27.93	23.23	28.65
Highest CH	23.13	23.28	27.75	23.48	28.53
BW	15MHz+20MHz	20MHz+5MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.59	23.23	28.11	32.94	37.48
Middle CH	32.52	23.18	28.23	32.87	37.56
Highest CH	32.80	23.23	28.11	33.01	37.56

Mode	LTE Band 41 : 99%OBW(MHz)				
16QAM					
BW	5MHz+20MHz	10MHz+15MHz	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	23.08	23.33	27.99	23.58	28.53
Middle CH	22.88	23.33	27.99	23.53	28.59
Highest CH	22.83	23.38	28.11	23.33	28.23
BW	15MHz+20MHz	20MHz+5MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.80	23.28	27.93	32.52	37.48
Middle CH	32.66	23.38	28.23	32.80	37.64
Highest CH	32.52	23.23	27.93	32.87	37.88

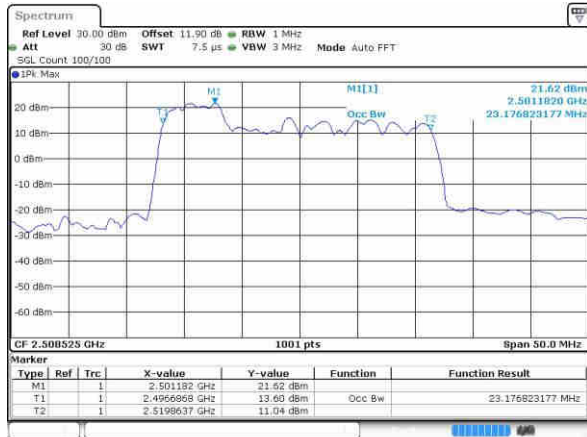
Mode	LTE Band 41 : 99%OBW(MHz)				
64QAM					
BW	5MHz+20MHz	10MHz+15MHz	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	23.13	23.13	27.69	23.38	28.41
Middle CH	23.33	23.23	27.93	23.33	28.53
Highest CH	23.28	23.33	28.23	23.23	28.47
BW	15MHz+20MHz	20MHz+5MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	32.94	23.33	27.93	32.80	37.88
Middle CH	32.66	23.43	28.11	32.66	37.72
Highest CH	32.87	23.23	28.05	32.73	37.72



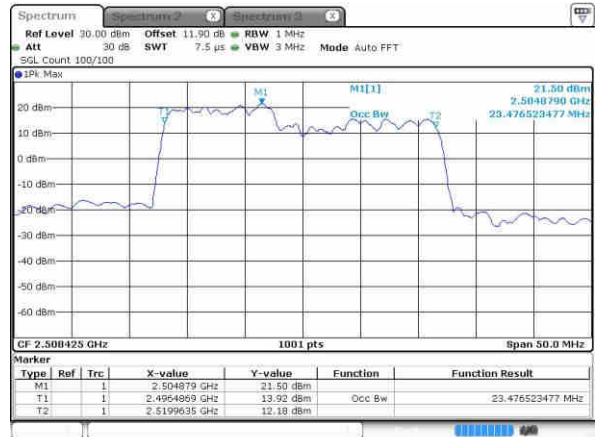
LTE Band 41

QPSK

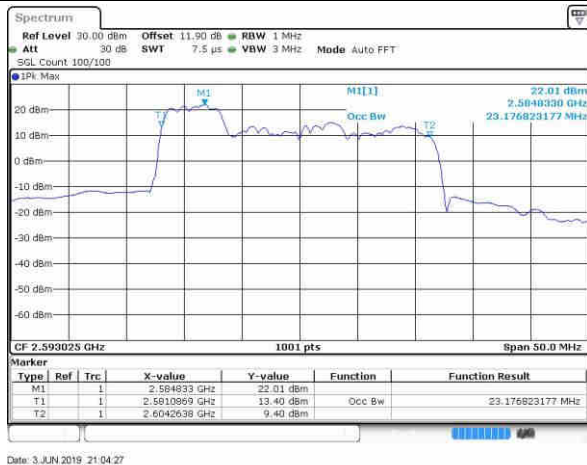
Lowest Channel / 5MHz+20MHz



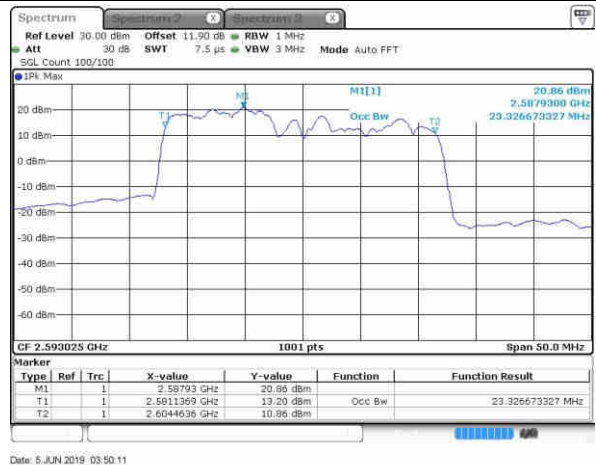
Lowest Channel / 10MHz+15MHz



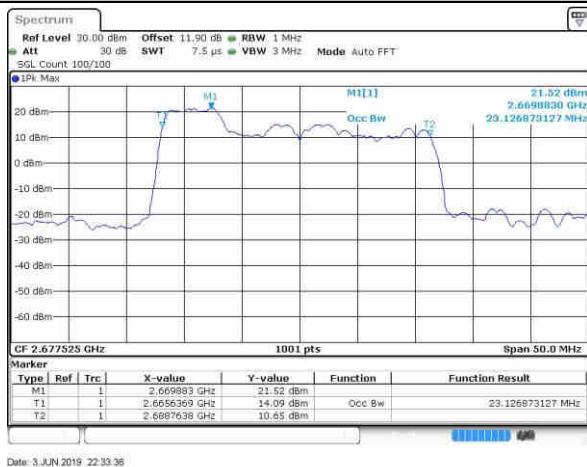
Middle Channel / 5MHz+20MHz



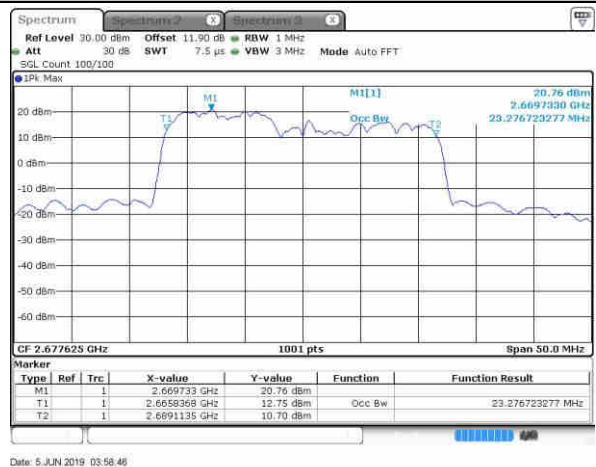
Middle Channel / 10MHz+15MHz



Highest Channel / 5MHz+20MHz



Highest Channel / 10MHz+15MHz

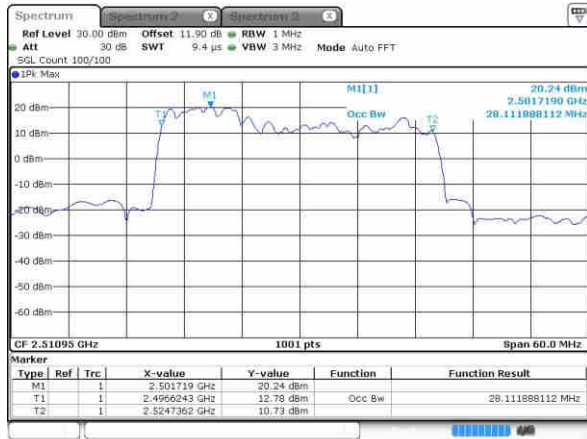




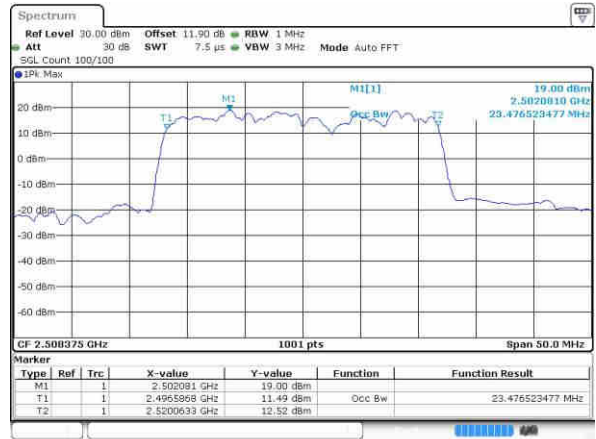
LTE Band 41

QPSK

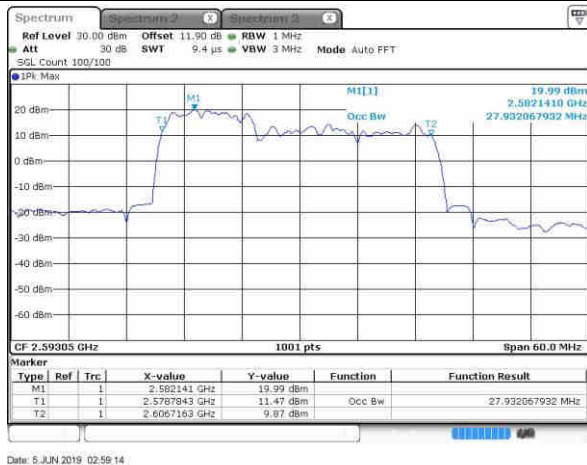
Lowest Channel / 10MHz+20MHz



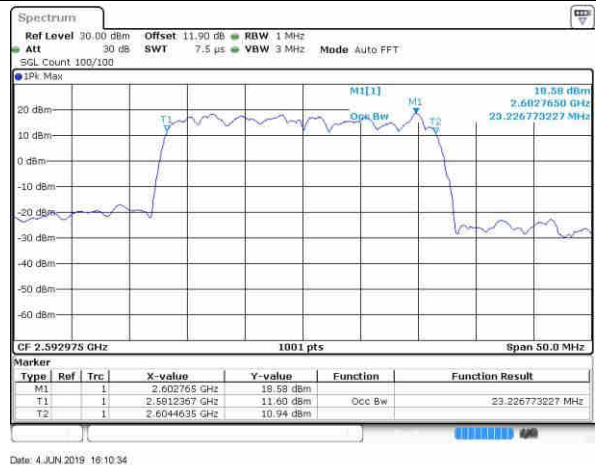
Lowest Channel / 15MHz+10MHz



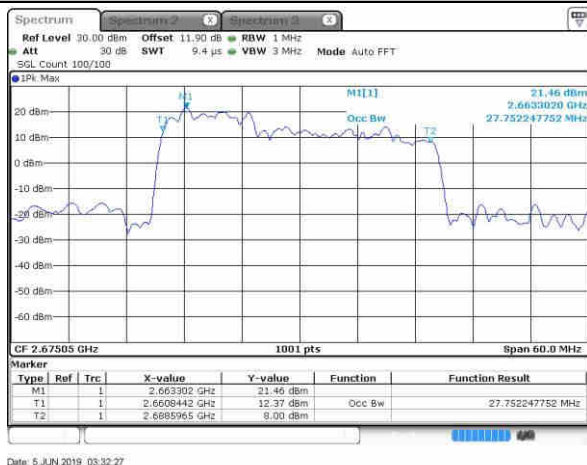
Middle Channel / 10MHz+20MHz



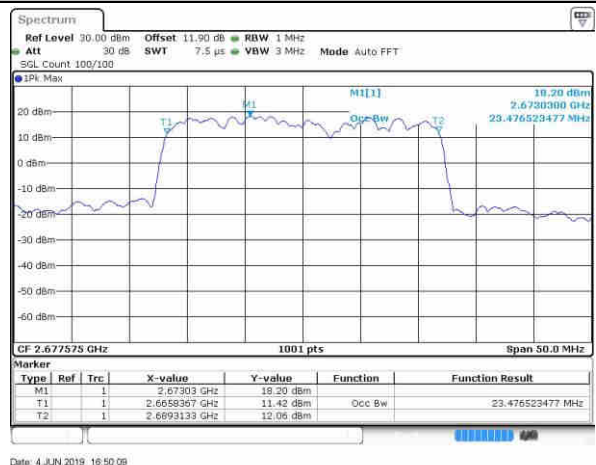
Middle Channel / 15MHz+10MHz



Highest Channel / 10MHz+20MHz



Highest Channel / 15MHz+10MHz

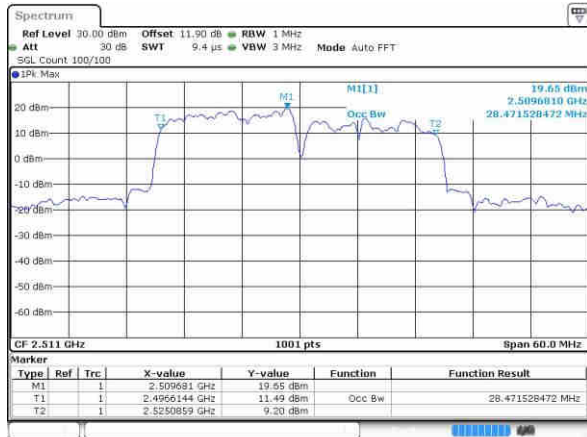




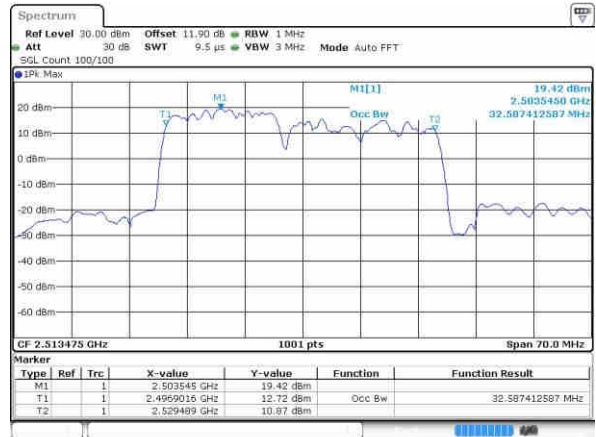
LTE Band 41

QPSK

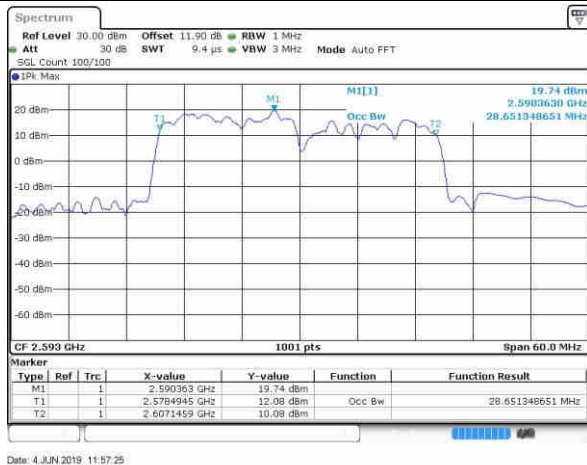
Lowest Channel / 15MHz+15MHz



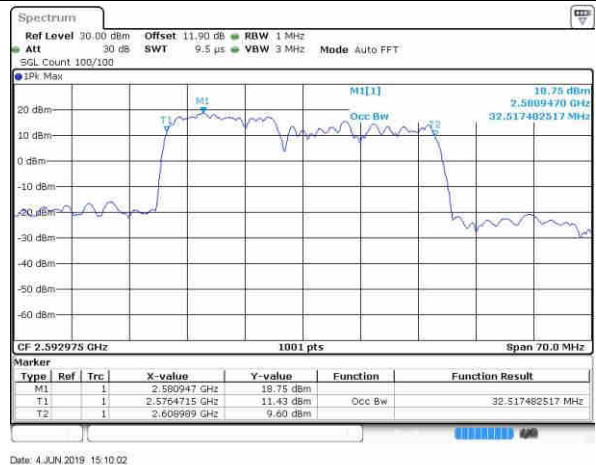
Lowest Channel / 15MHz+20MHz



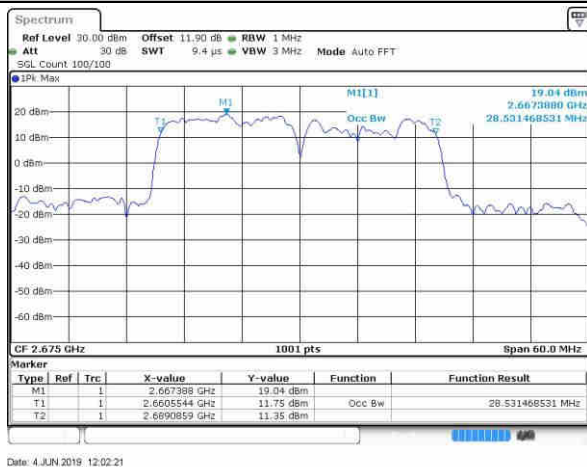
Middle Channel / 15MHz+15MHz



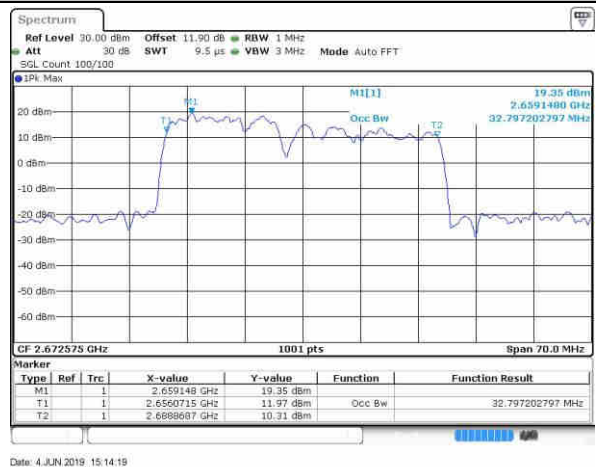
Middle Channel / 15MHz+20MHz



Highest Channel / 15MHz+15MHz



Highest Channel / 15MHz+20MHz

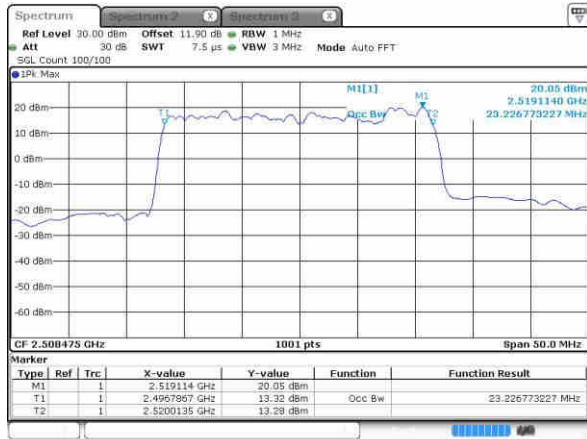




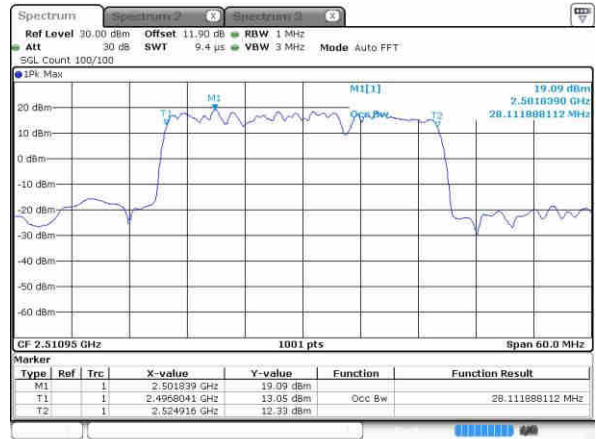
LTE Band 41

QPSK

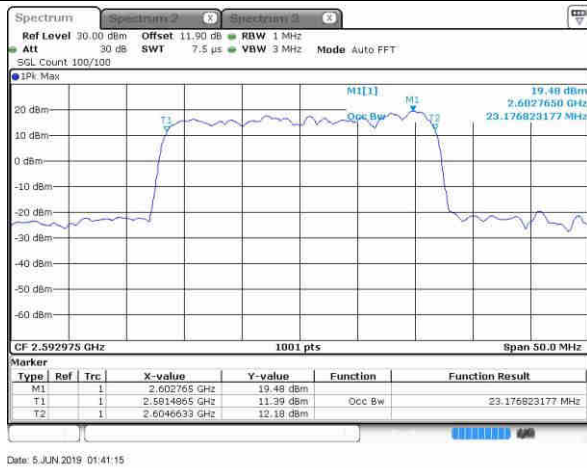
Lowest Channel / 20MHz+5MHz



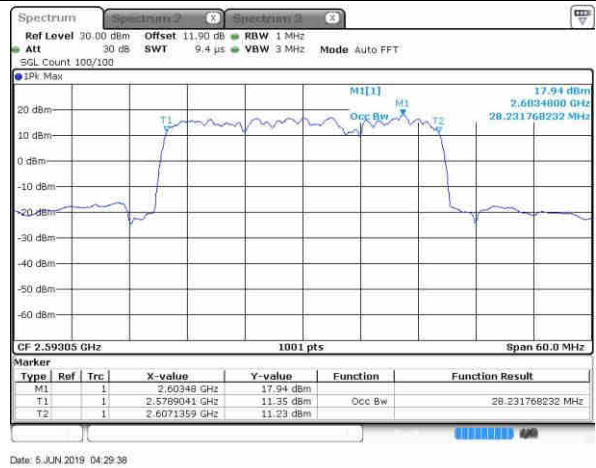
Lowest Channel / 20MHz+10MHz



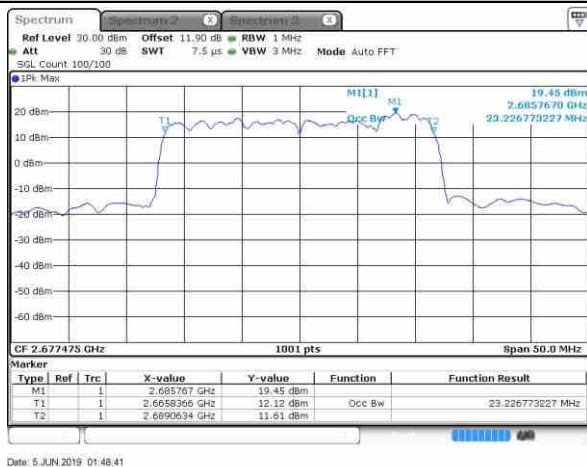
Middle Channel / 20MHz+5MHz



Middle Channel / 20MHz+10MHz



Highest Channel / 20MHz+5MHz



Highest Channel / 20MHz+10MHz

