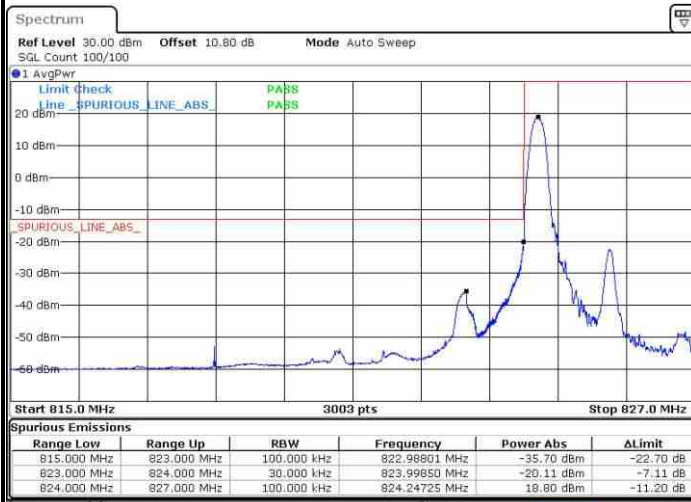




LTE Band 5 / 3MHz / 16QAM

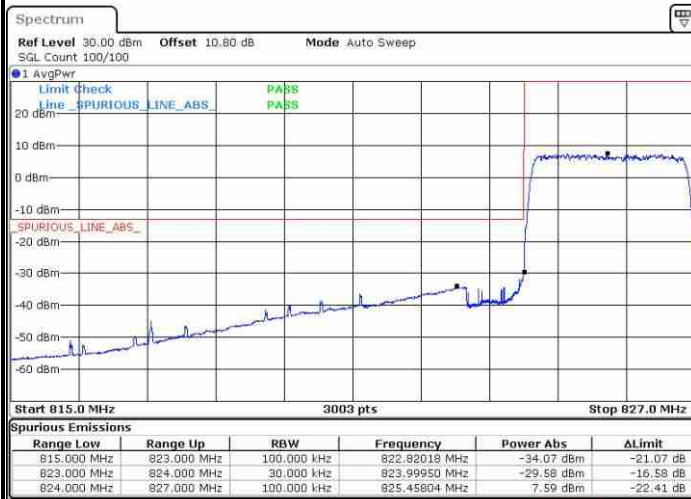
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



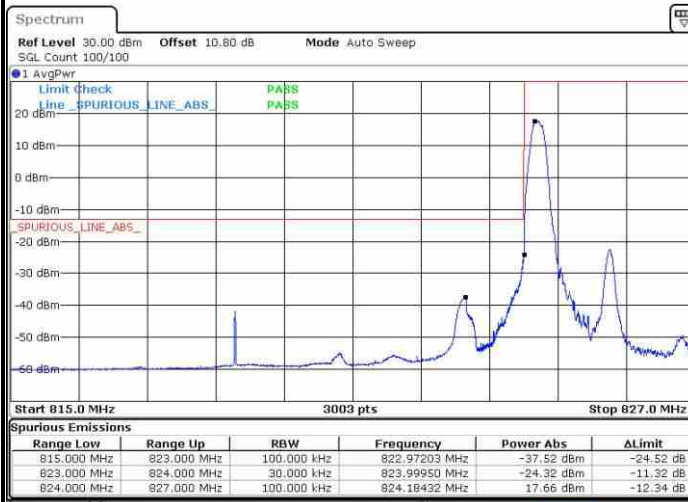
Highest Band Edge / Full RB





LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



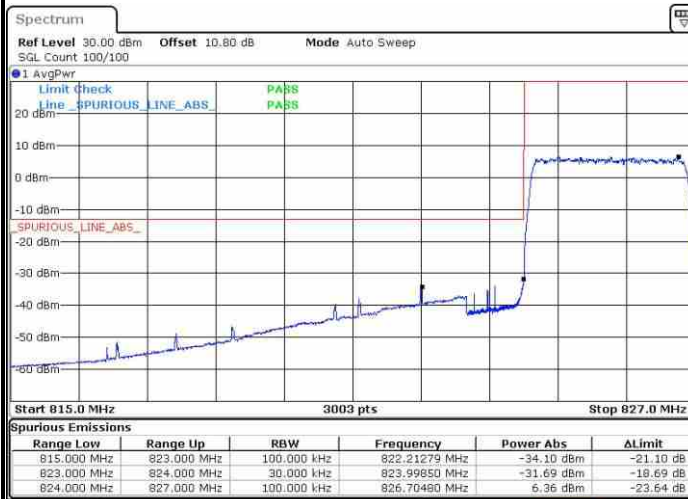
Date: 24 FEB 2019 19:10:48

Highest Band Edge / 1 RB



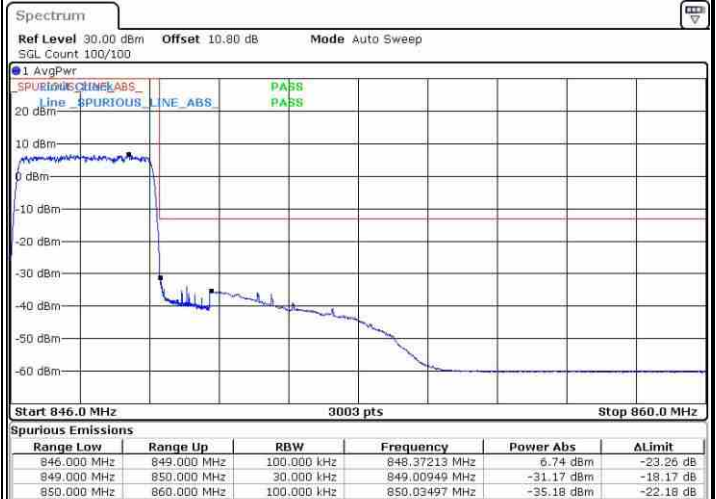
Date: 24 FEB 2019 19:16:35

Lowest Band Edge / Full RB



Date: 24 FEB 2019 19:12:29

Highest Band Edge / Full RB

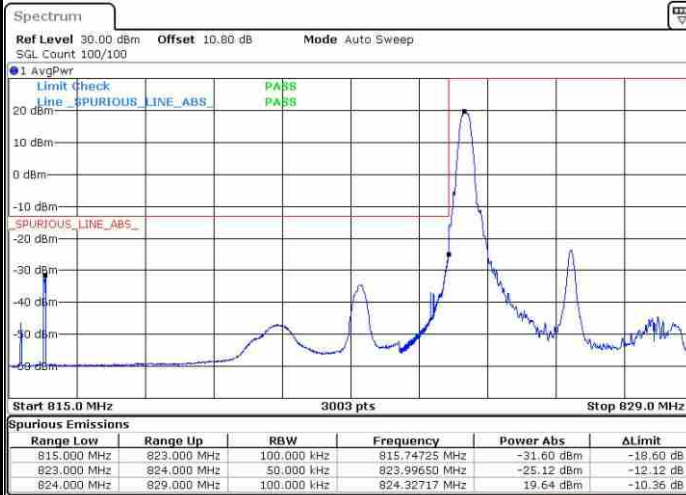


Date: 24 FEB 2019 19:18:15



LTE Band 5 / 5MHz / QPSK

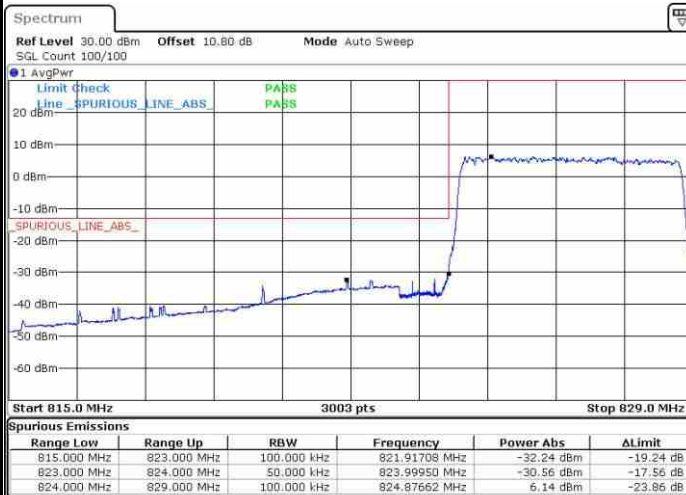
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



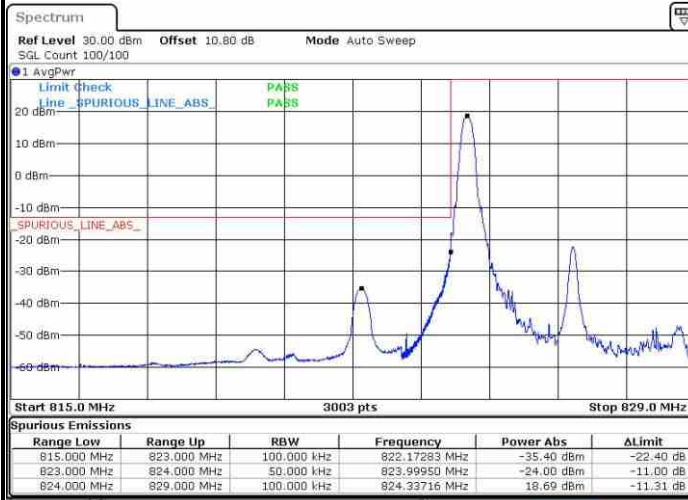
Highest Band Edge / Full RB





LTE Band 5 / 5MHz / 16QAM

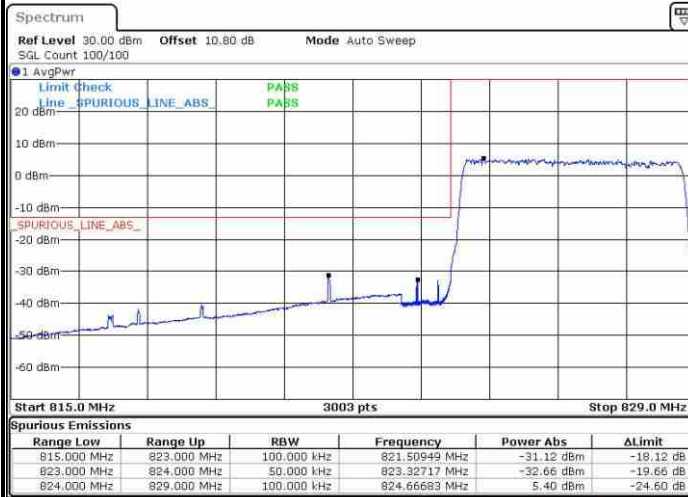
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



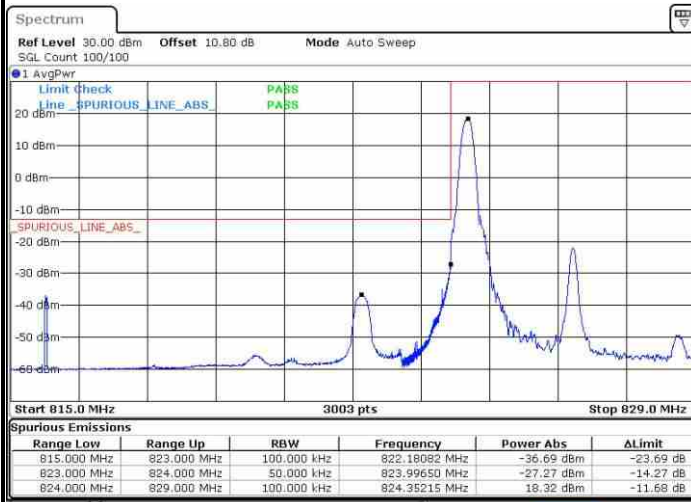
Highest Band Edge / Full RB





LTE Band 5 / 5MHz / 64QAM

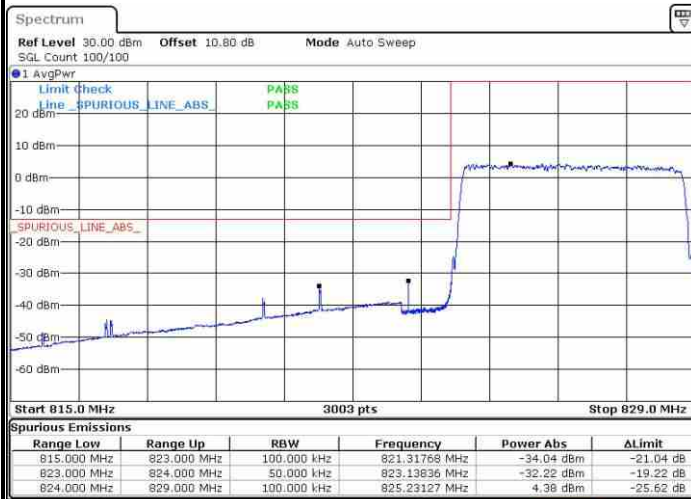
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



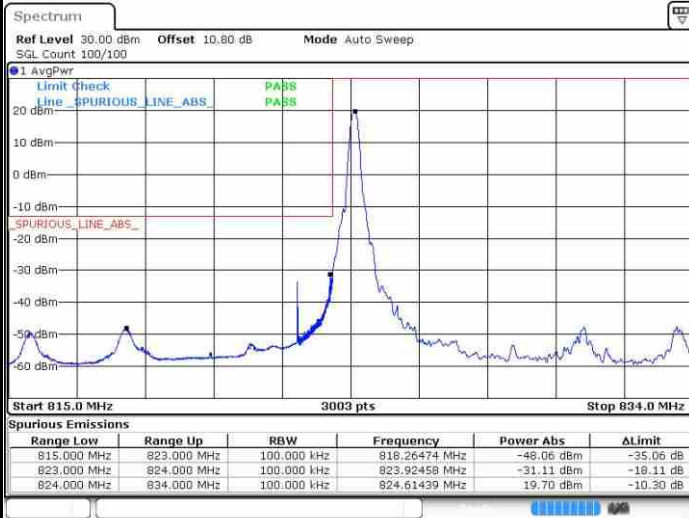
Highest Band Edge / Full RB



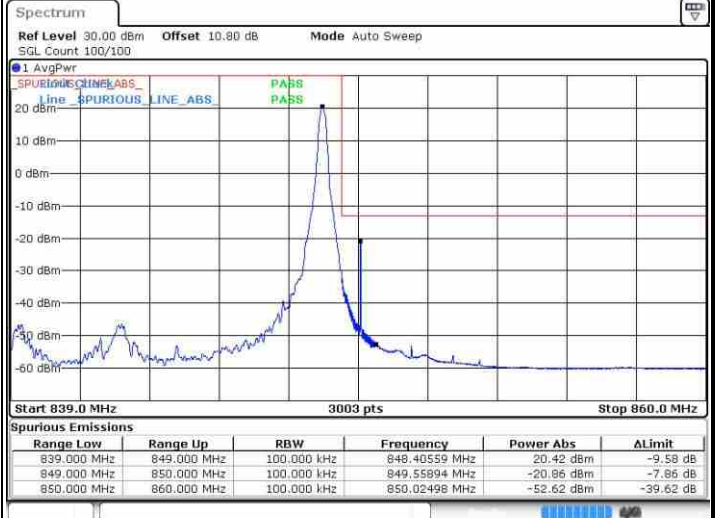


LTE Band 5 / 10MHz / QPSK

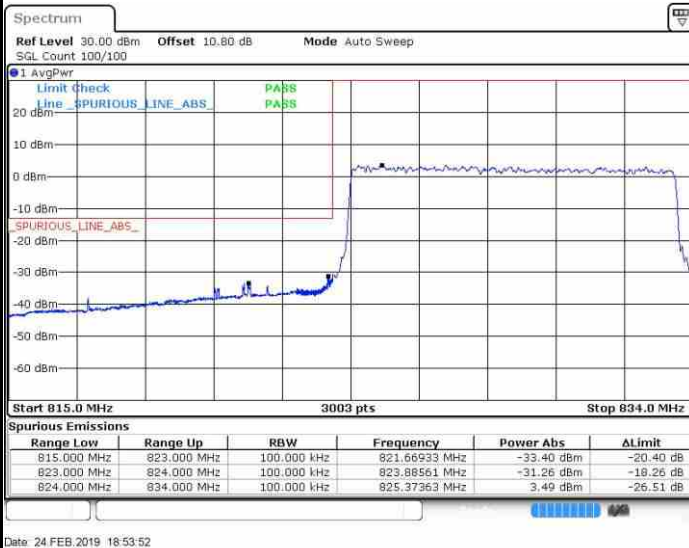
Lowest Band Edge / 1 RB



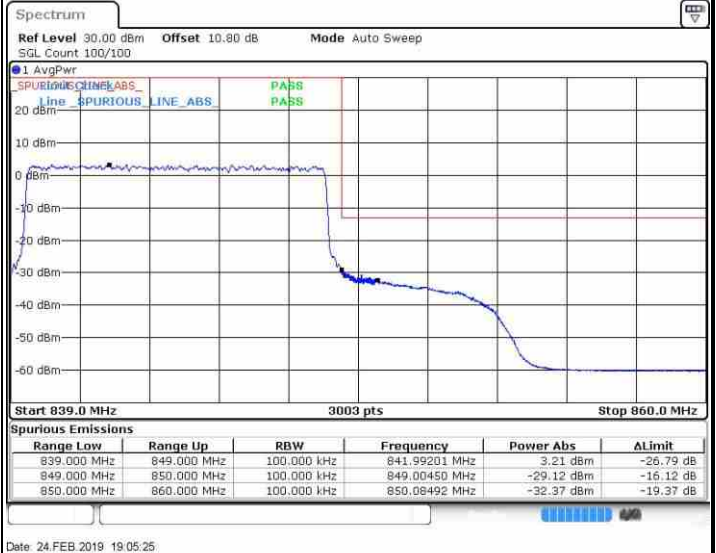
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



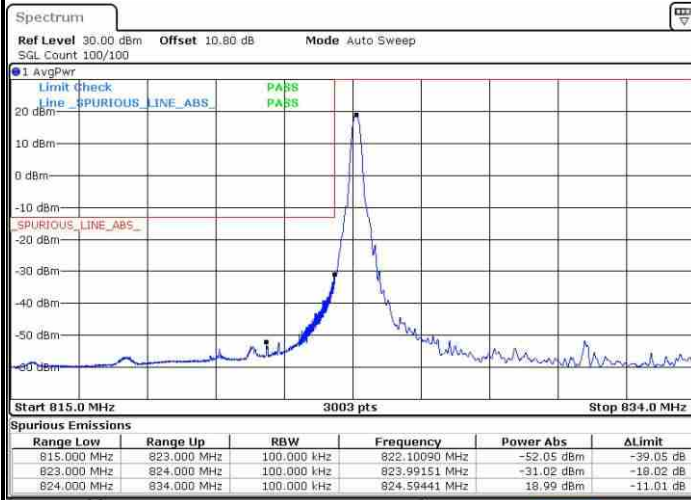
Highest Band Edge / Full RB



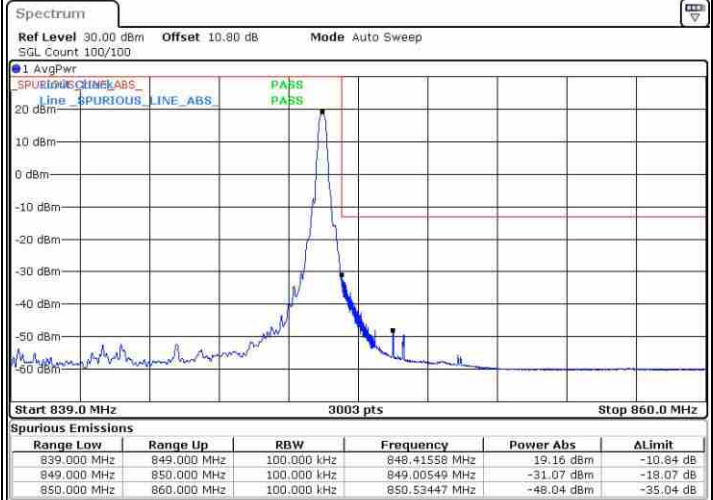


LTE Band 5 / 10MHz / 16QAM

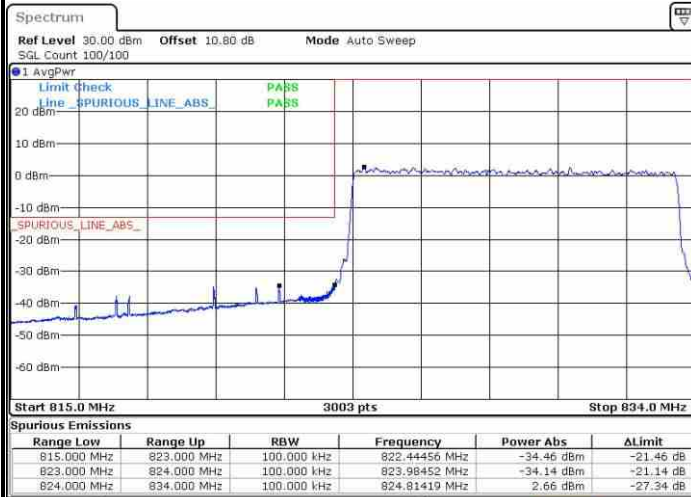
Lowest Band Edge / 1 RB



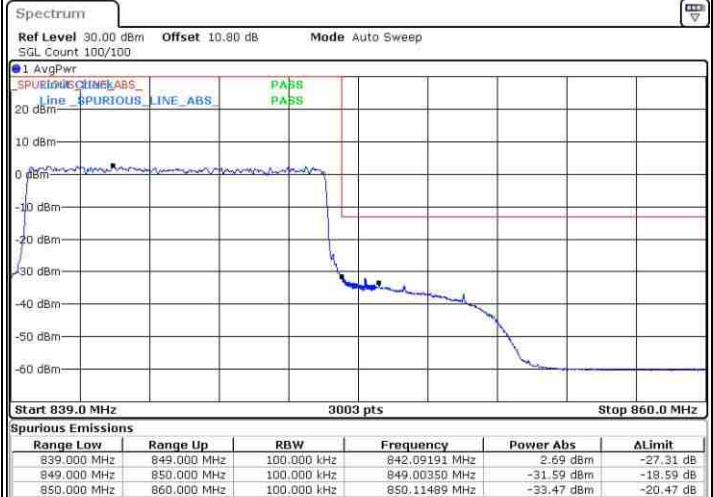
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



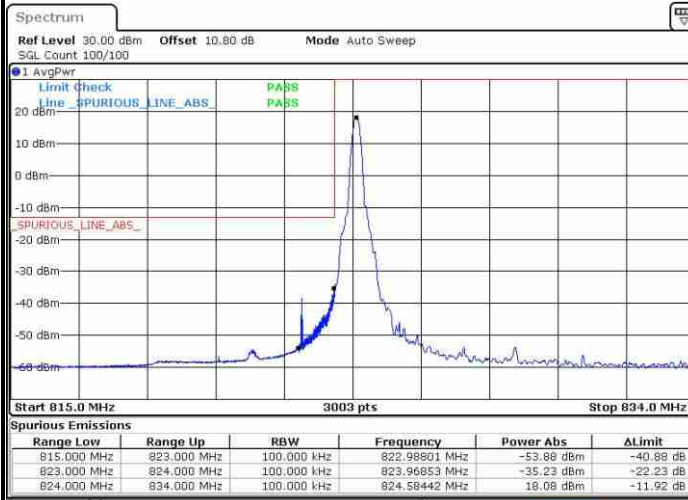
Highest Band Edge / Full RB



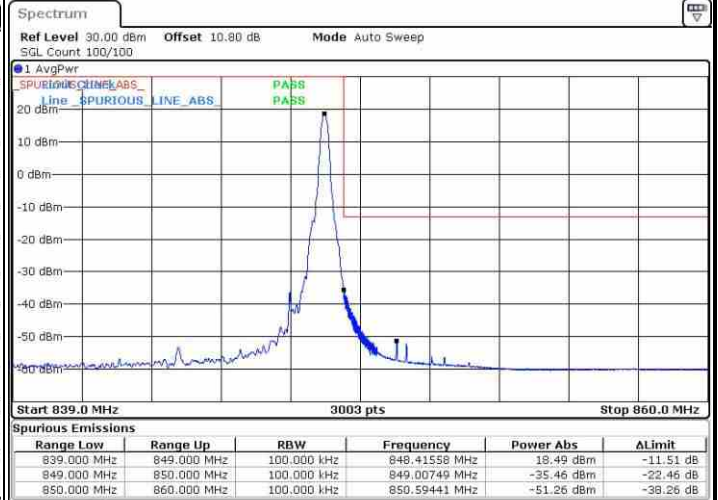


LTE Band 5 / 10MHz / 64QAM

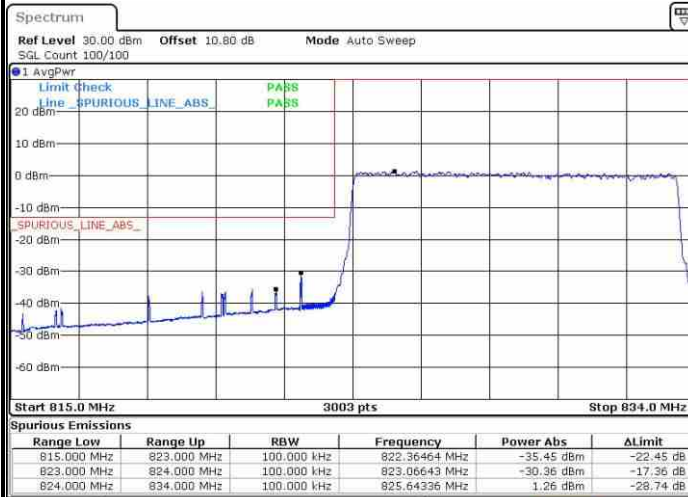
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

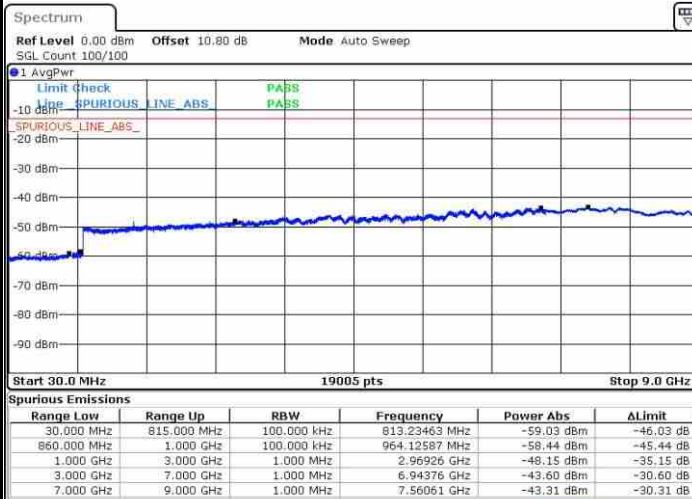




Conducted Spurious Emission

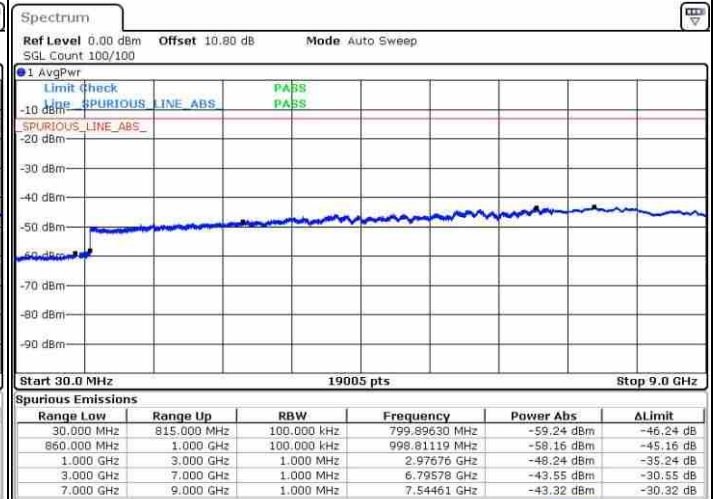
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



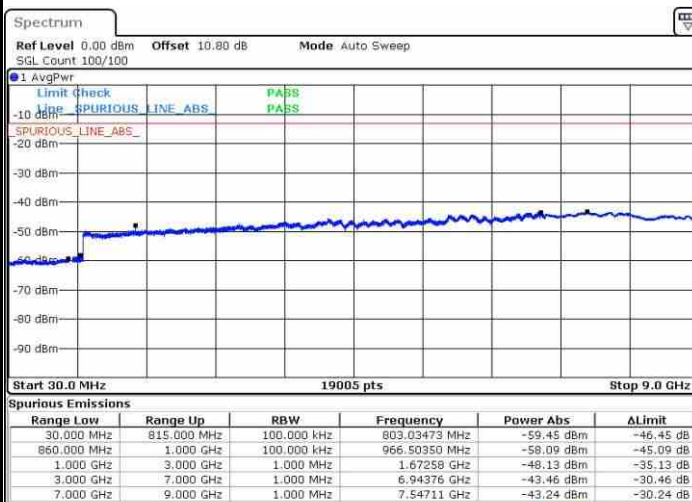
Date: 24 FEB 2019 : 20:03:44

Lowest Channel / 16QAM



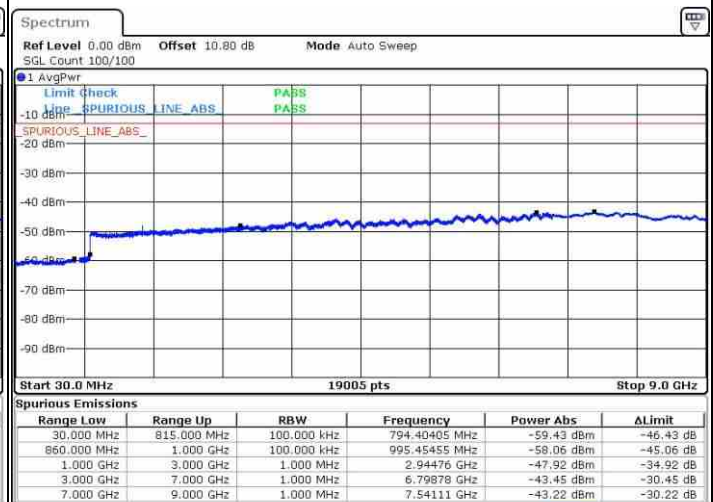
Date: 24 FEB 2019 : 20:04:34

Middle Channel / QPSK



Date: 24 FEB 2019 : 20:06:10

Middle Channel / 16QAM

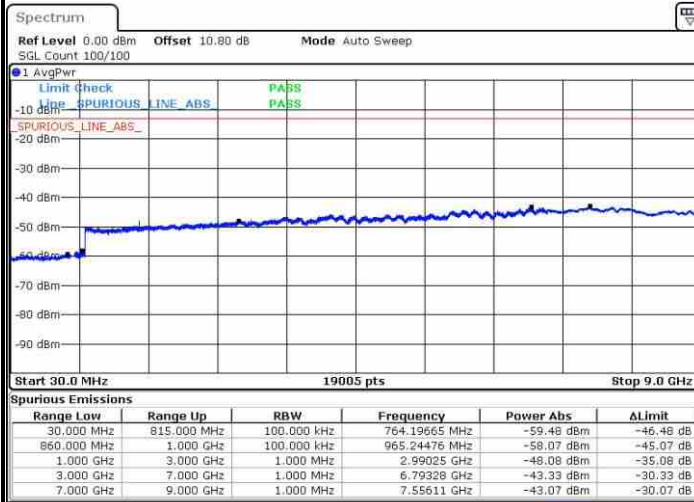


Date: 24 FEB 2019 : 20:07:00



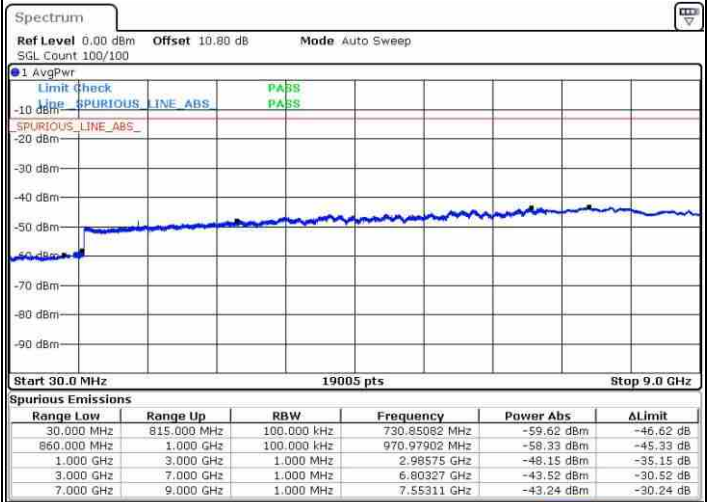
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 24 FEB 2019 20:15:17

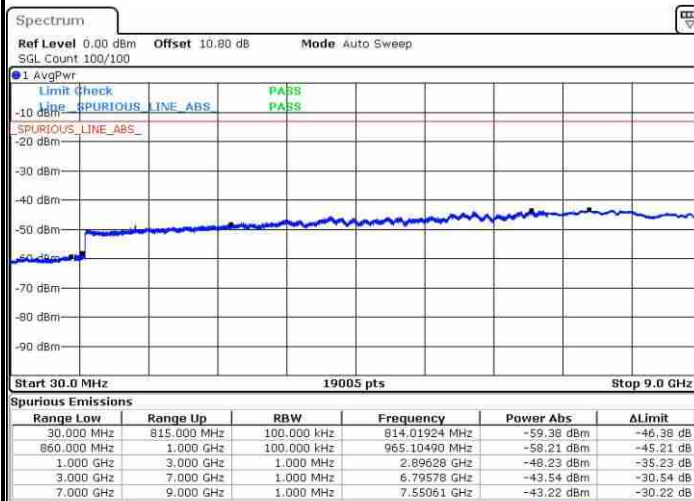
Highest Channel / 16QAM



Date: 24 FEB 2019 20:16:07

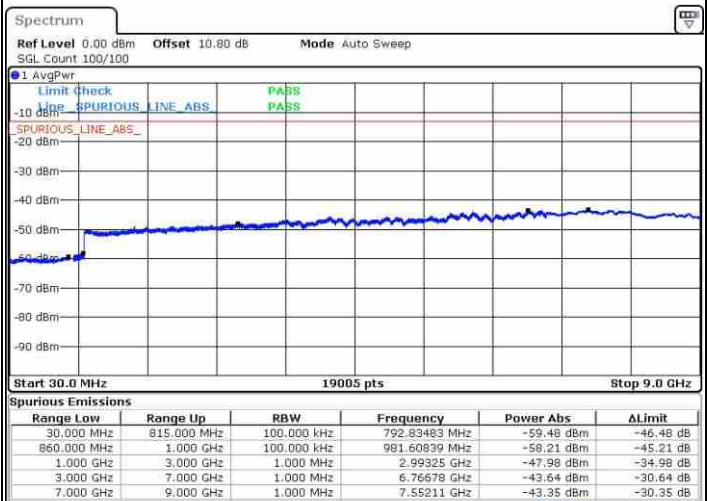
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 24 FEB 2019 18:15:03

Lowest Channel / 16QAM

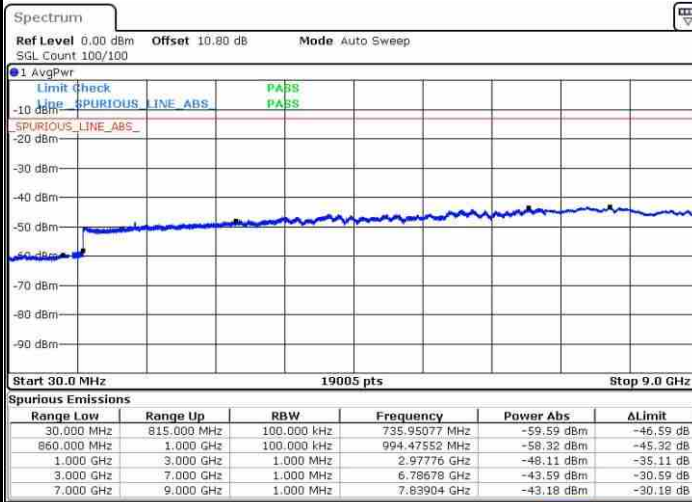


Date: 24 FEB 2019 18:15:53



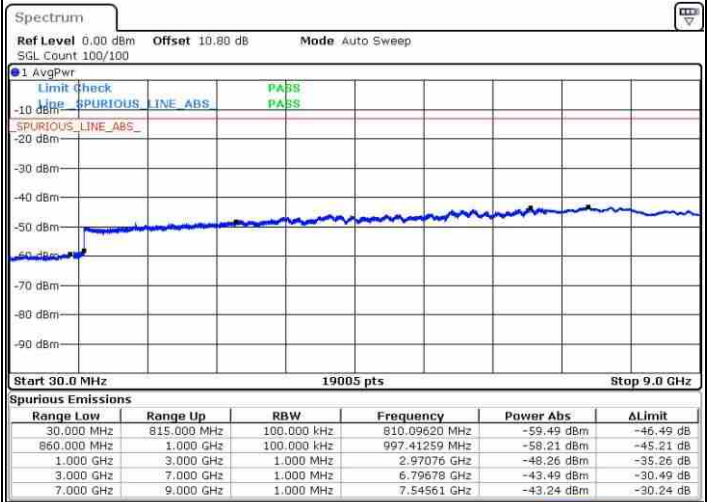
LTE Band 5 / 3MHz

Middle Channel / QPSK



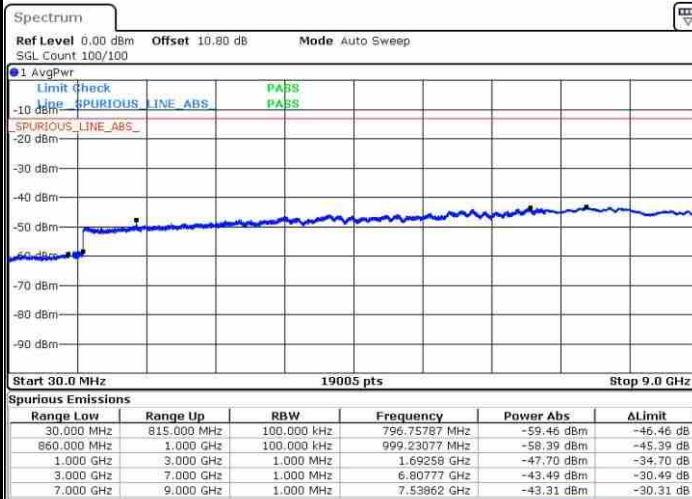
Date: 24 FEB 2019 18:17:29

Middle Channel / 16QAM



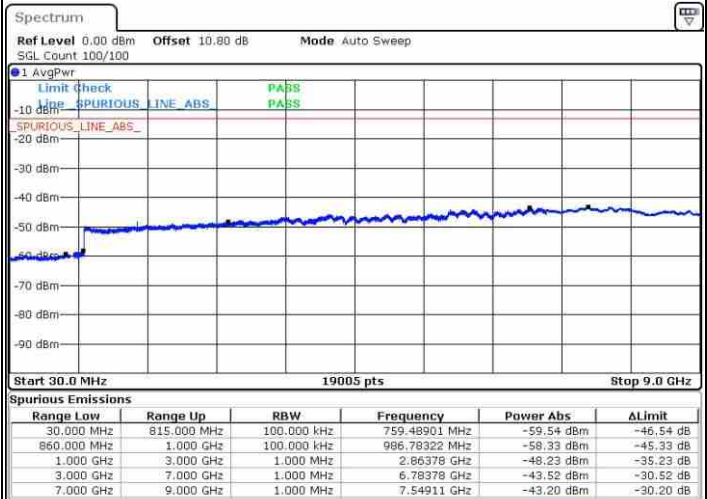
Date: 24 FEB 2019 18:18:20

Highest Channel / QPSK



Date: 24 FEB 2019 18:26:36

Highest Channel / 16QAM

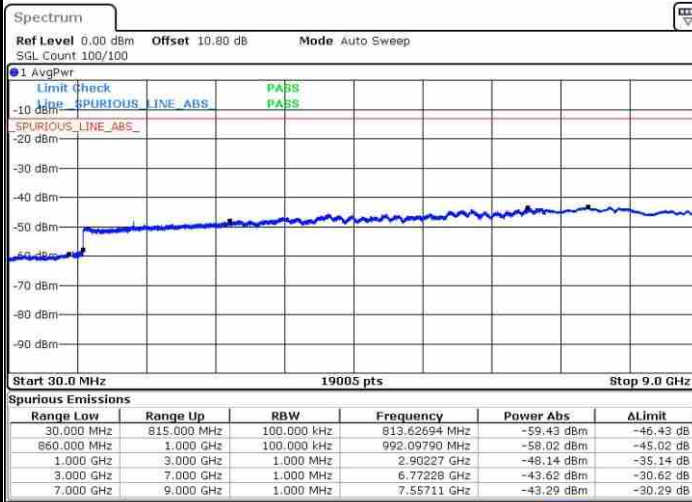


Date: 24 FEB 2019 18:27:26



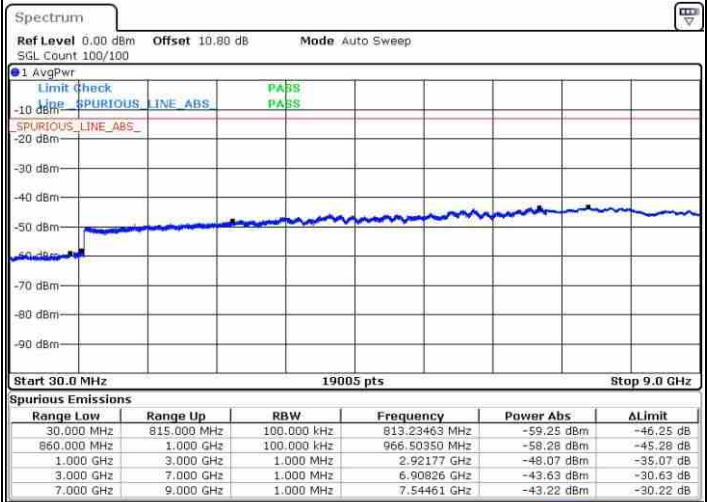
LTE Band 5 / 5MHz

Lowest Channel / QPSK



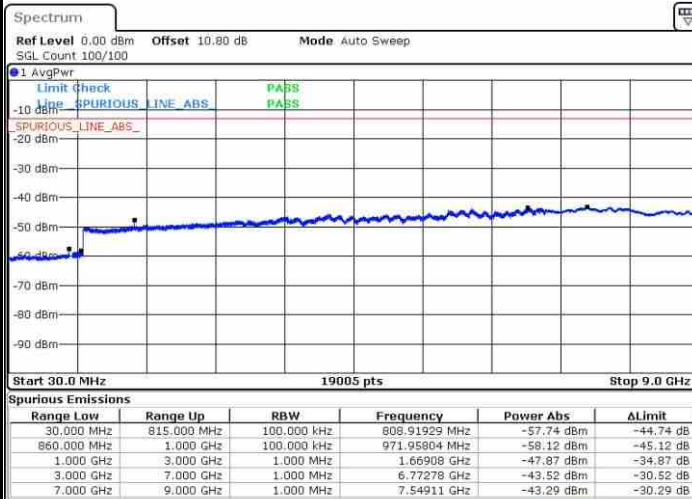
Date: 24 FEB 2019 18:35:43

Lowest Channel / 16QAM



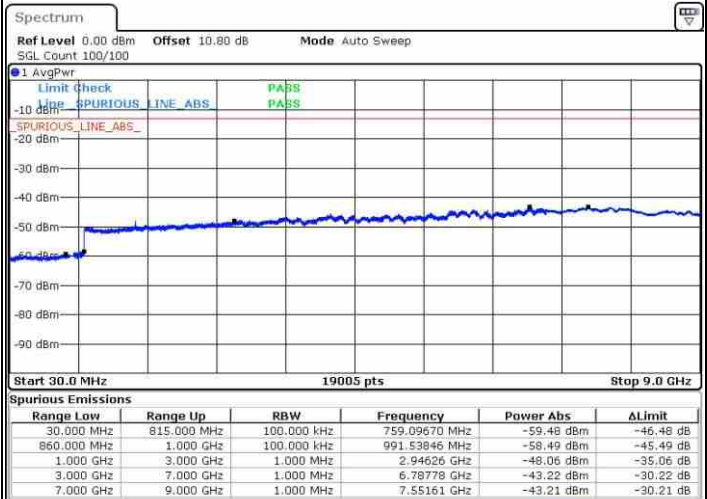
Date: 24 FEB 2019 18:36:33

Middle Channel / QPSK



Date: 24 FEB 2019 18:38:09

Middle Channel / 16QAM

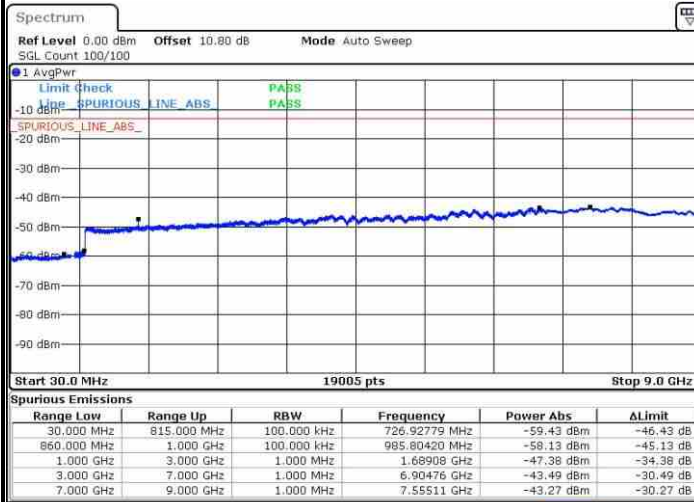


Date: 24 FEB 2019 18:38:59



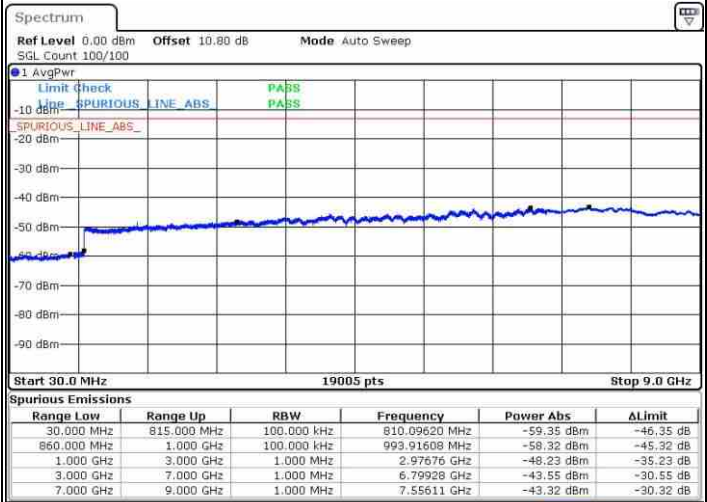
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 24 FEB 2019 18:47:16

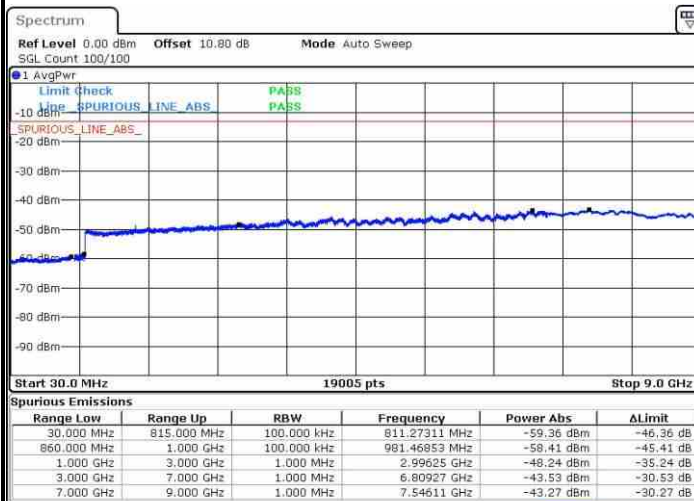
Highest Channel / 16QAM



Date: 24 FEB 2019 18:48:06

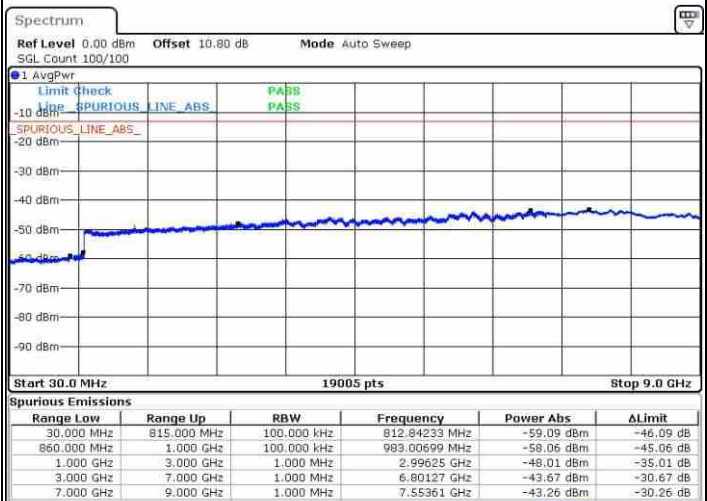
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 24 FEB 2019 18:56:23

Lowest Channel / 16QAM

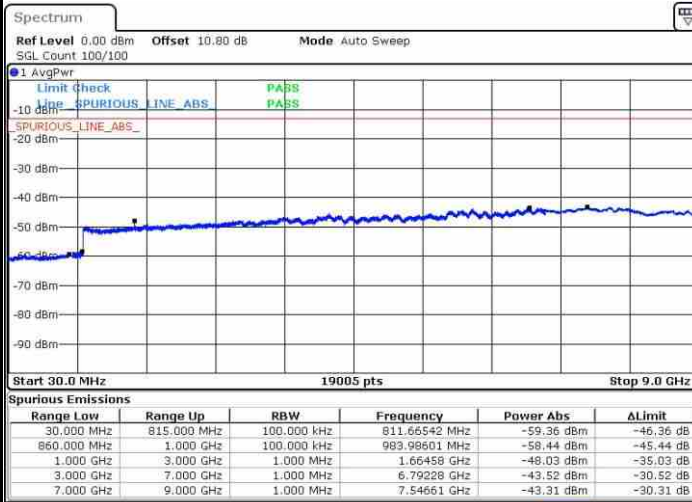


Date: 24 FEB 2019 18:57:13



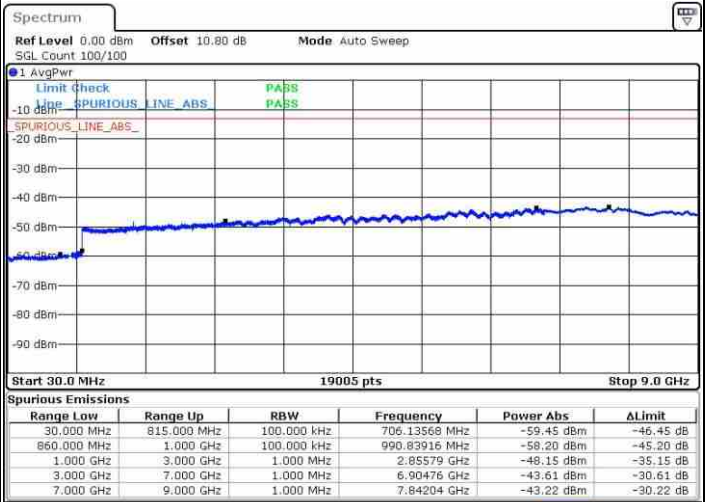
LTE Band 5 / 10MHz

Middle Channel / QPSK



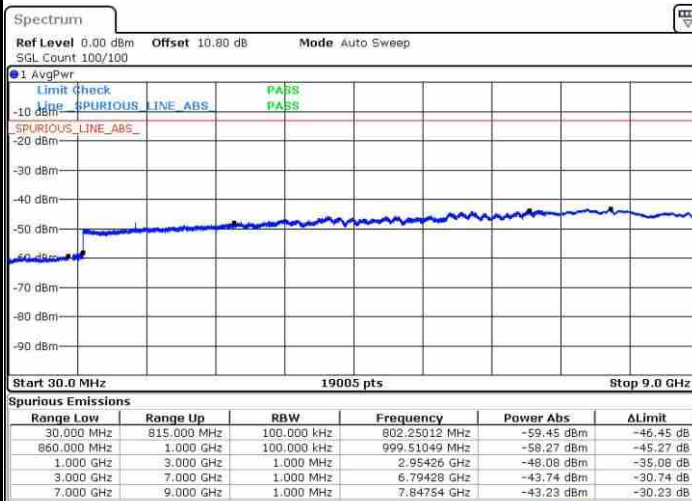
Date: 24 FEB 2019 18:58:49

Middle Channel / 16QAM



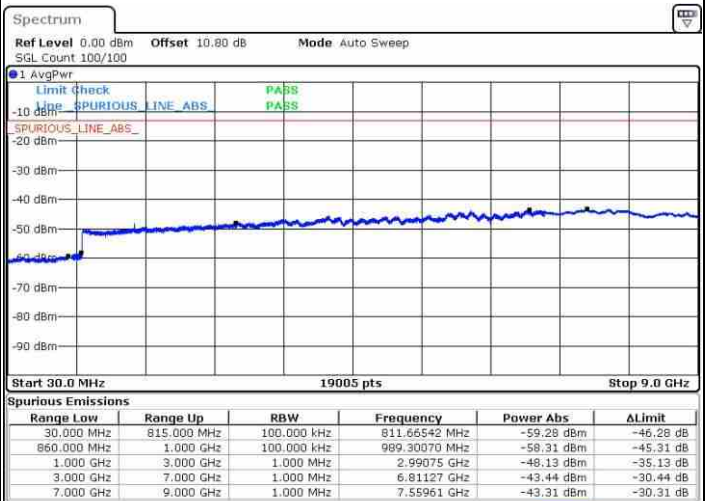
Date: 24 FEB 2019 18:59:39

Highest Channel / QPSK



Date: 24 FEB 2019 19:07:56

Highest Channel / 16QAM

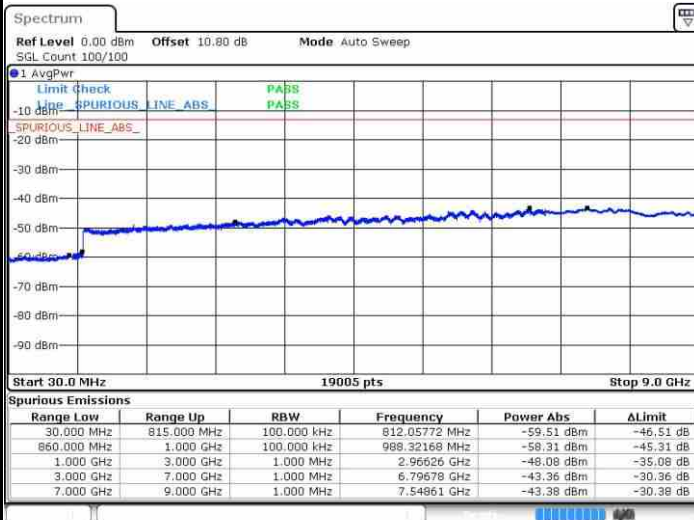


Date: 24 FEB 2019 19:08:46



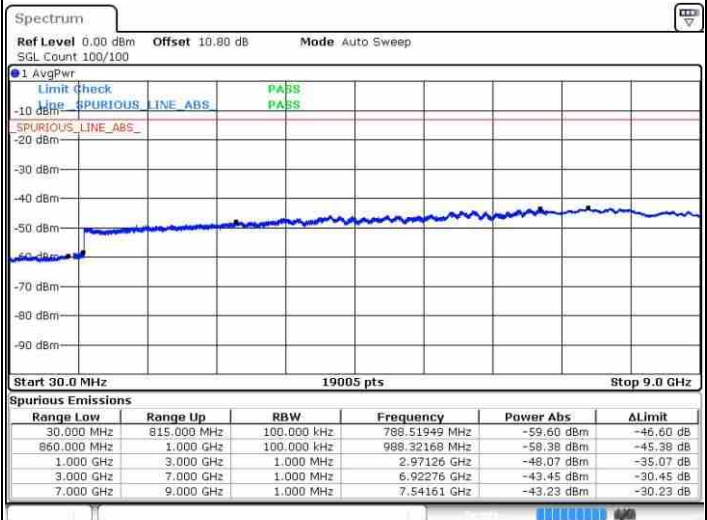
LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM



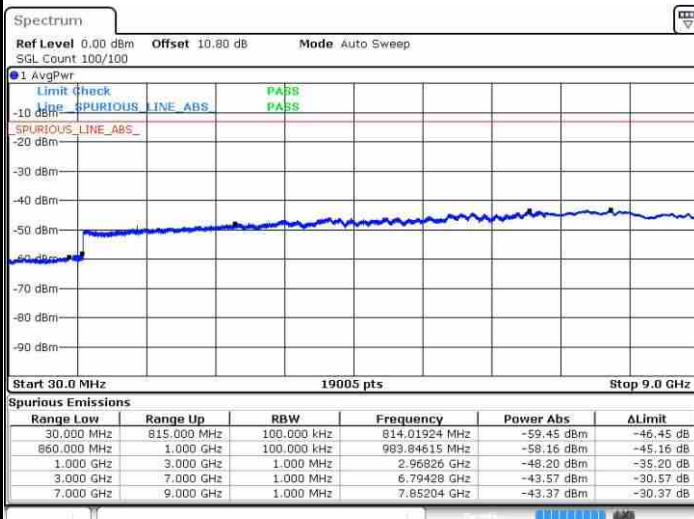
Date: 24 FEB 2019 19:49:41

Middle Channel / 64QAM



Date: 24 FEB 2019 19:50:54

Highest Channel / 64QAM

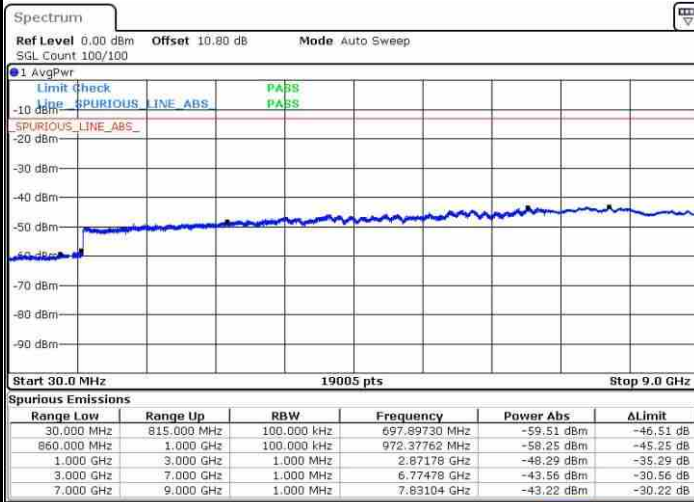


Date: 24 FEB 2019 19:55:28



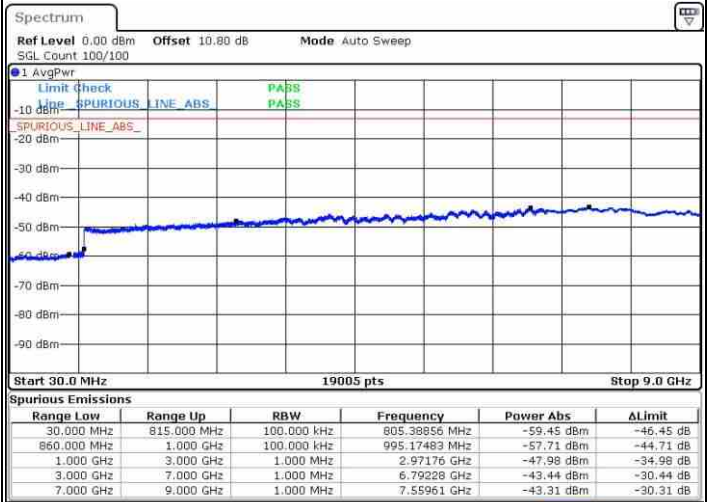
LTE Band 5 / 3MHz

Lowest Channel / 64QAM



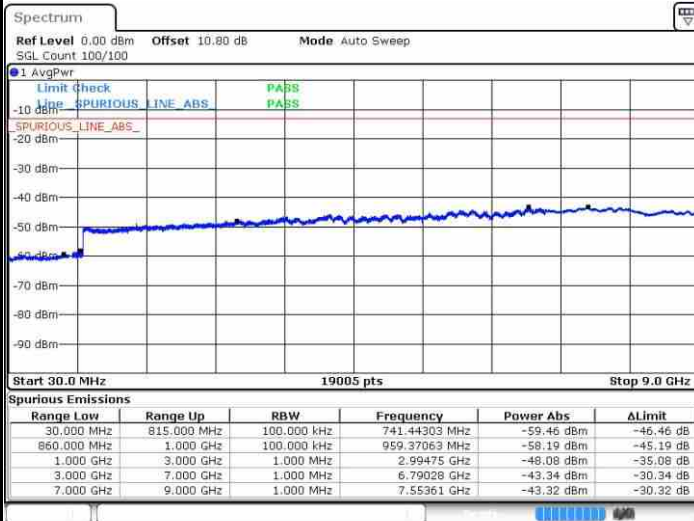
Date: 24 FEB 2019 19:13:19

Middle Channel / 64QAM



Date: 24 FEB 2019 19:14:33

Highest Channel / 64QAM

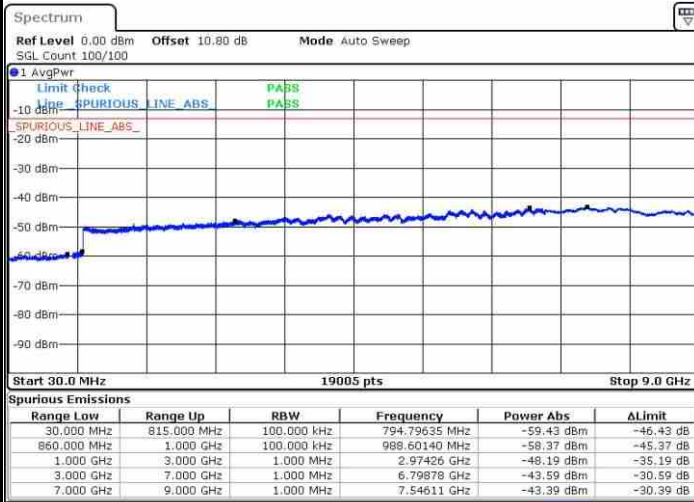


Date: 24 FEB 2019 19:19:05



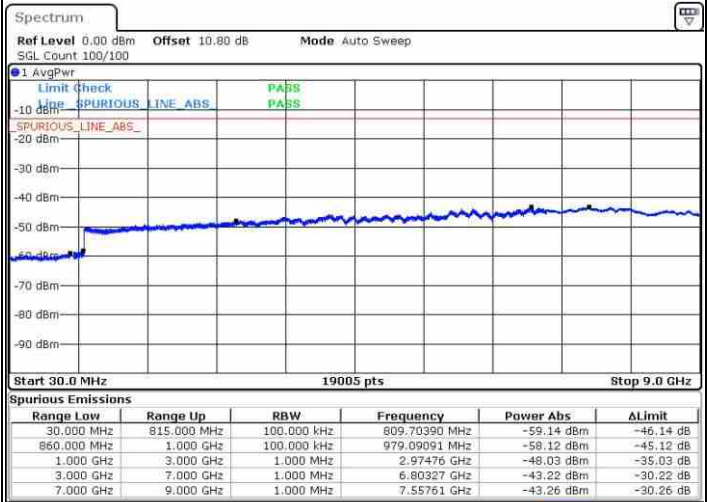
LTE Band 5 / 5MHz

Lowest Channel / 64QAM



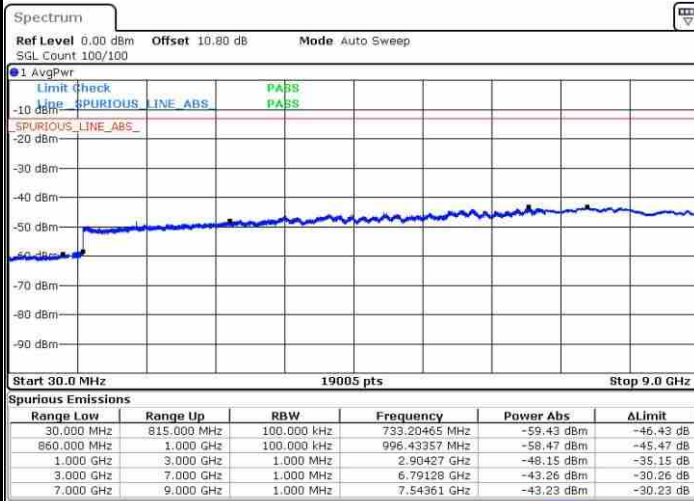
Date: 24 FEB 2019 19:23:40

Middle Channel / 64QAM



Date: 24 FEB 2019 19:24:53

Highest Channel / 64QAM

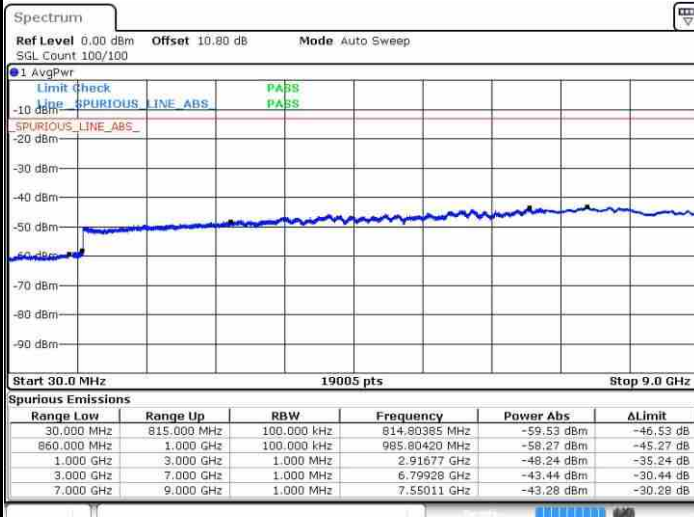


Date: 24 FEB 2019 19:29:25



LTE Band 5 / 10MHz

Lowest Channel / 64QAM



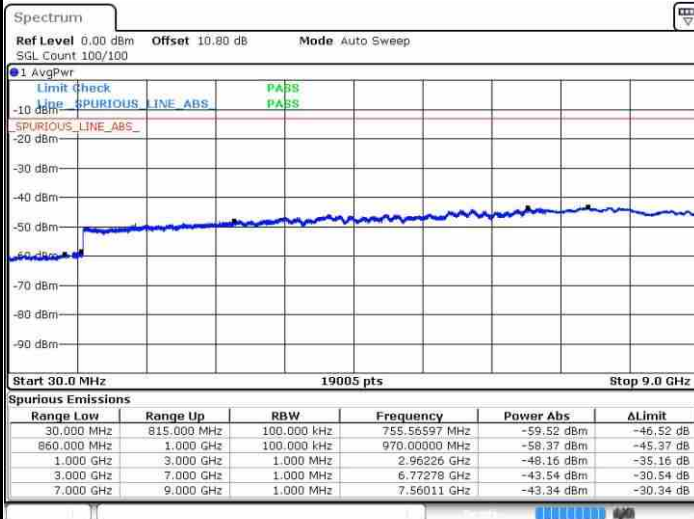
Date: 24 FEB 2019 19:34:00

Middle Channel / 64QAM



Date: 24 FEB 2019 19:35:13

Highest Channel / 64QAM



Date: 24 FEB 2019 19:39:46

Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0085	PASS
40	Normal Voltage	0.0099	
30	Normal Voltage	0.0088	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0097	
-30	Normal Voltage	0.0090	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 5_CA

26dB Bandwidth

Mode	LTE Band 5 : 26dB BW(MHz)		
QPSK			
BW	3MHz+5MHz	5MHz+3MHz	5MHz+10MHz
Lowest CH	8.14	8.18	14.54
Middle CH	8.09	8.2	14.51
Highest CH	8.12	8.17	14.54
BW	10MHz+5MHz	10MHz+10MHz	
Lowest CH	14.69	19.62	
Middle CH	14.69	19.5	
Highest CH	14.72	19.7	

Mode	LTE Band 5 : 26dB BW(MHz)		
16QAM			
BW	3MHz+5MHz	5MHz+3MHz	5MHz+10MHz
Lowest CH	8.09	8.15	14.57
Middle CH	8.15	8.18	14.54
Highest CH	8.14	8.23	14.51
BW	10MHz+5MHz	10MHz+10MHz	
Lowest CH	14.63	19.58	
Middle CH	14.54	19.54	
Highest CH	14.66	19.62	

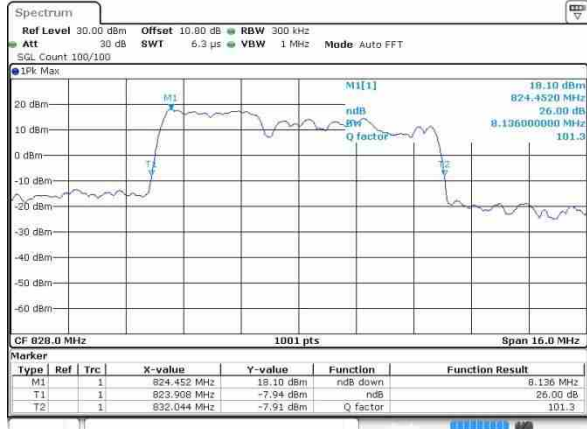
Mode	LTE Band 5 : 26dB BW(MHz)		
64QAM			
BW	3MHz+5MHz	5MHz+3MHz	5MHz+10MHz
Lowest CH	8.10	8.18	14.57
Middle CH	8.07	8.14	14.54
Highest CH	8.09	8.12	14.51
BW	10MHz+5MHz	10MHz+10MHz	
Lowest CH	14.63	19.54	
Middle CH	14.54	19.7	
Highest CH	14.60	19.74	



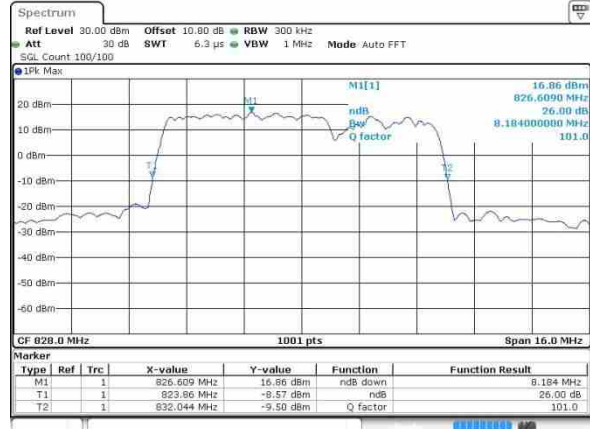
LTE Band 5

QPSK

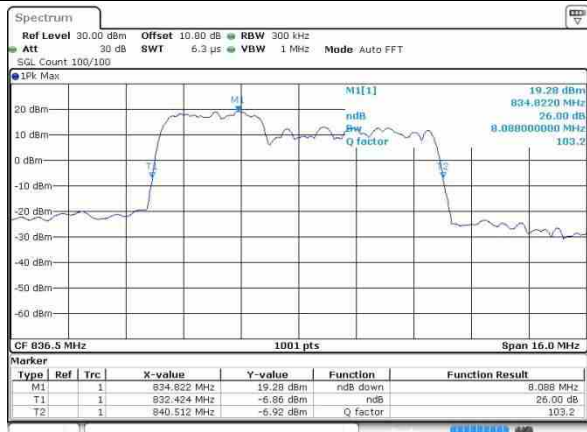
Lowest Channel / 3MHz+5MHz



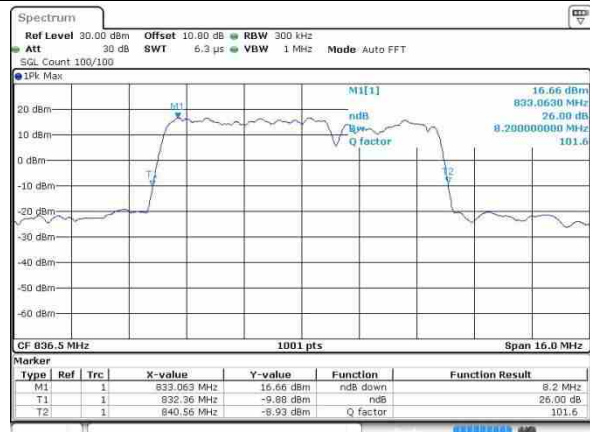
Lowest Channel / 5MHz+3MHz



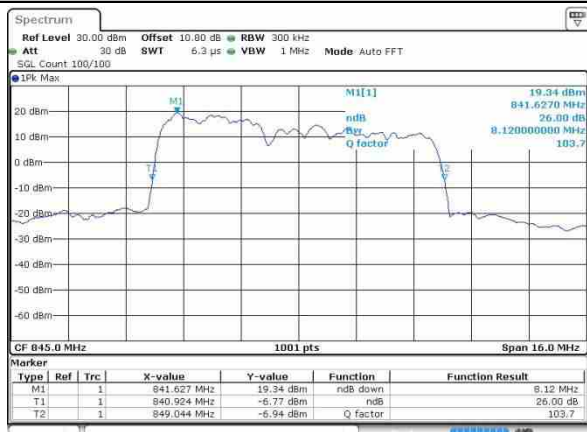
Middle Channel / 3MHz+5MHz



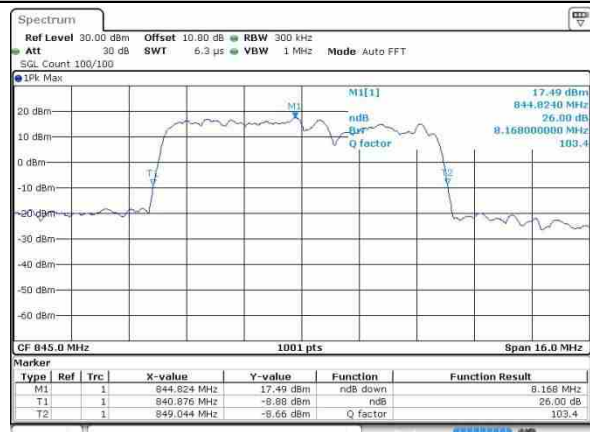
Middle Channel / 5MHz+3MHz



Highest Channel / 3MHz+5MHz



Highest Channel / 5MHz+3MHz

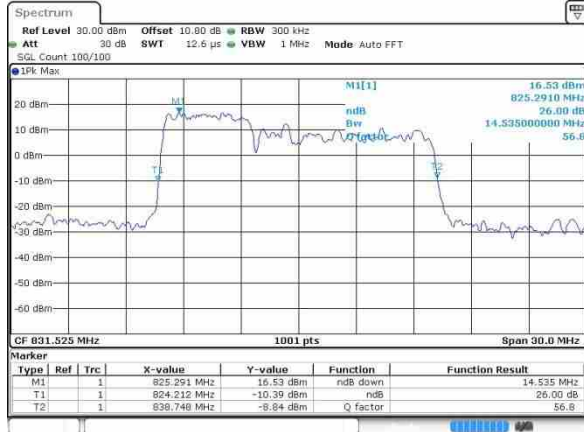




LTE Band 5

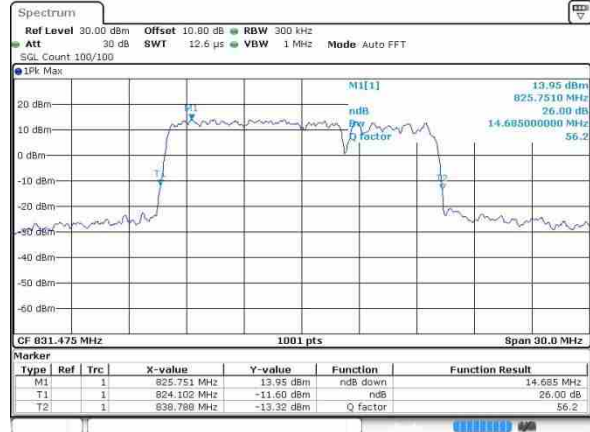
QPSK

Lowest Channel / 5MHz+10MHz



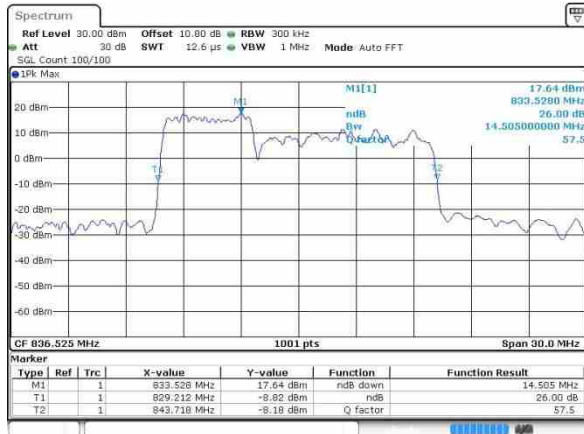
Date: 20 MAY 2019 14:23:34

Lowest Channel / 10MHz+5MHz



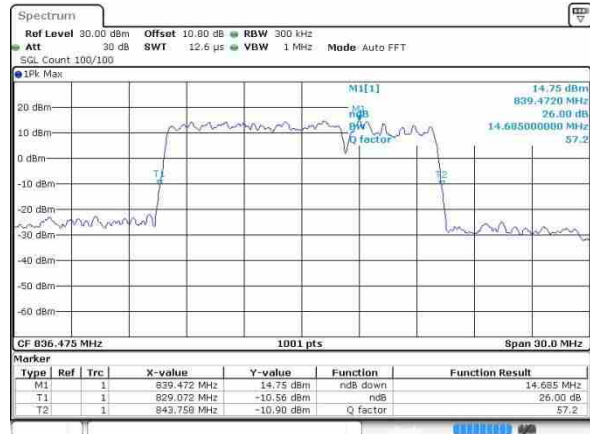
Date: 20 MAY 2019 14:08:31

Middle Channel / 5MHz+10MHz



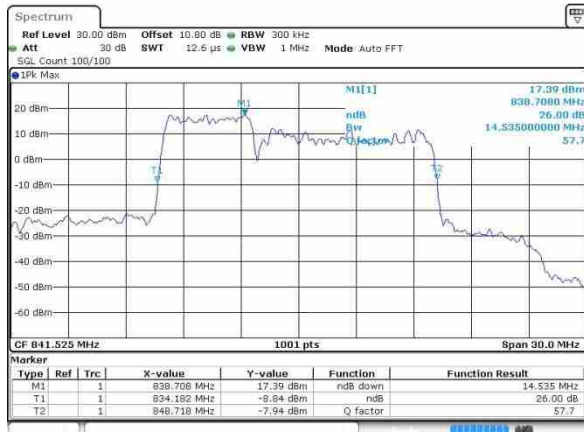
Date: 20 MAY 2019 14:30:06

Middle Channel / 10MHz+5MHz



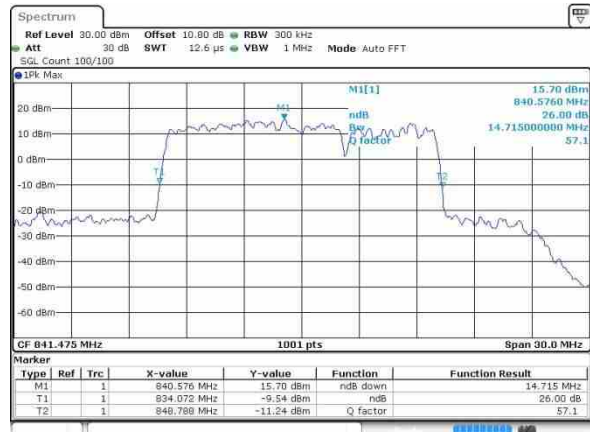
Date: 20 MAY 2019 14:14:31

Highest Channel / 5MHz+10MHz



Date: 20 MAY 2019 14:42:28

Highest Channel / 10MHz+5MHz



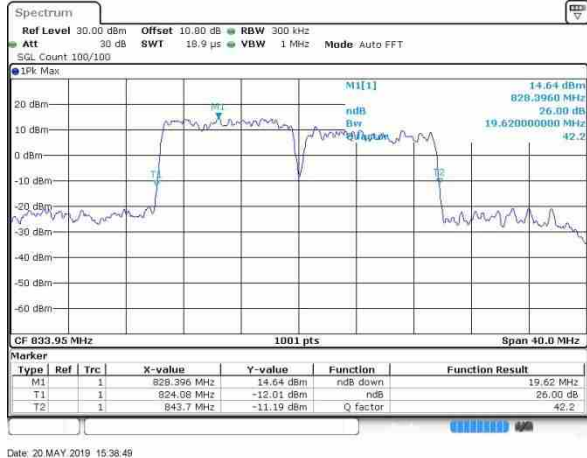
Date: 20 MAY 2019 14:17:27



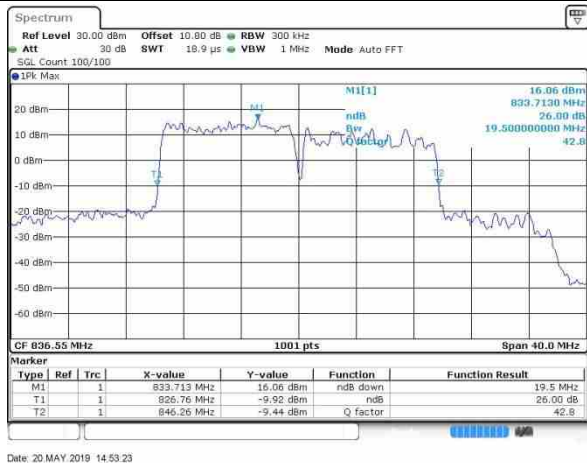
LTE Band 5

QPSK

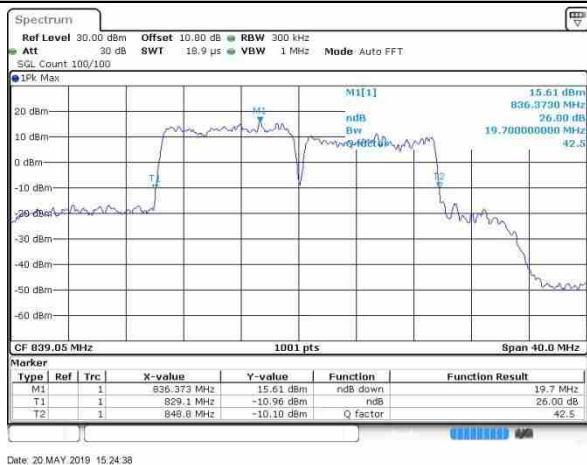
Lowest Channel / 10MHz+10MHz



Middle Channel / 10MHz+10MHz



Highest Channel / 10MHz+10MHz

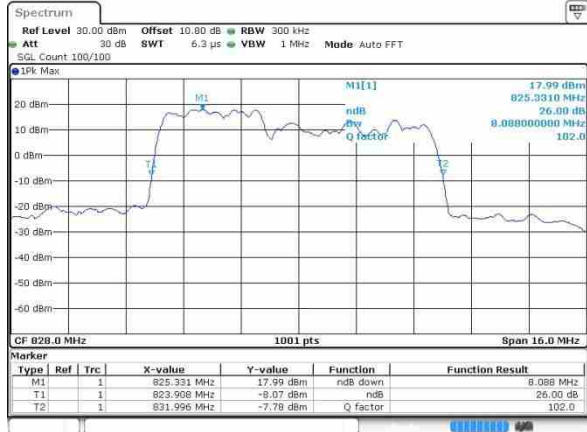




LTE Band 5

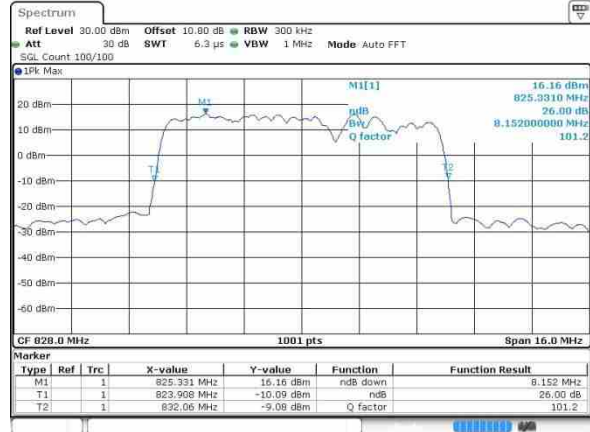
16QAM

Lowest Channel / 3MHz+5MHz



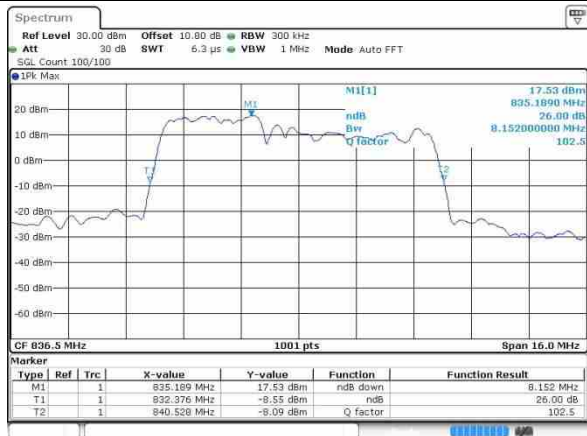
Date: 19 MAR 2019 23:09:28

Lowest Channel / 5MHz+3MHz



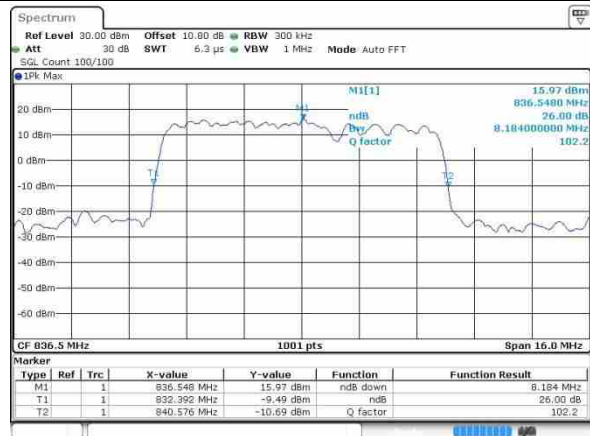
Date: 19 MAR 2019 23:58:16

Middle Channel / 3MHz+5MHz



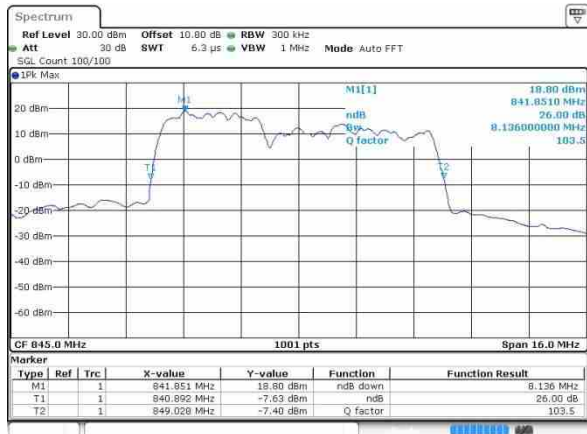
Date: 19 MAR 2019 23:18:37

Middle Channel / 5MHz+3MHz



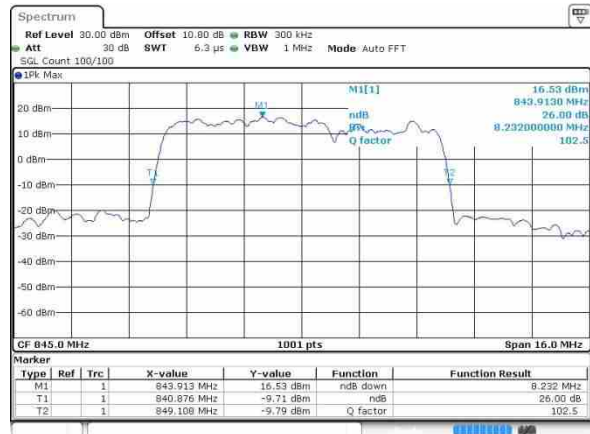
Date: 19 MAR 2019 23:47:34

Highest Channel / 3MHz+5MHz



Date: 19 MAR 2019 23:25:42

Highest Channel / 5MHz+3MHz



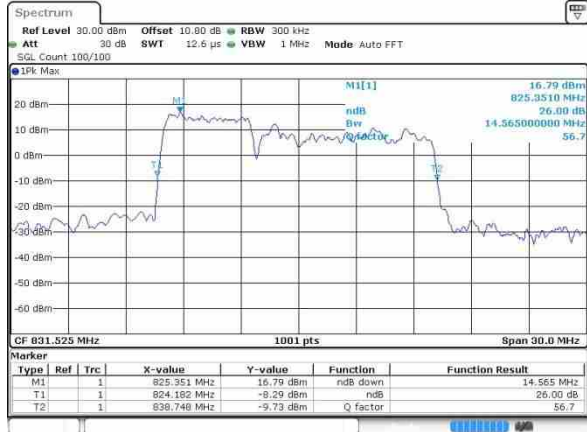
Date: 19 MAR 2019 23:53:34



LTE Band 5

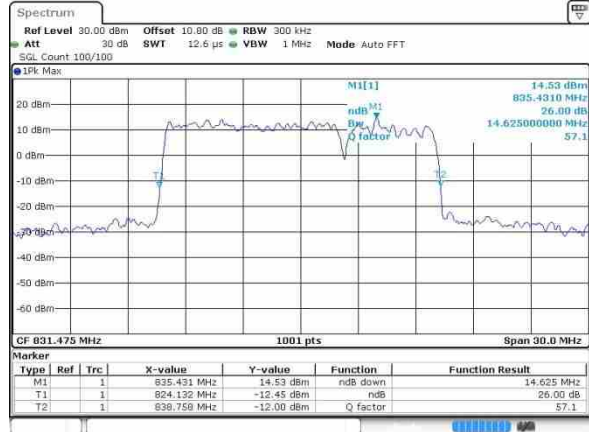
16QAM

Lowest Channel / 5MHz+10MHz



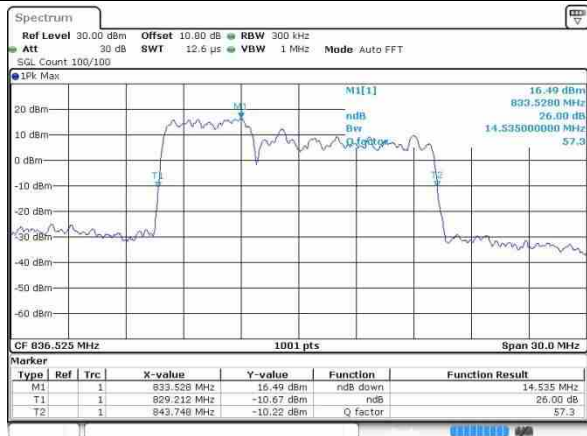
Date: 20 MAY 2019 14:23:10

Lowest Channel / 10MHz+5MHz



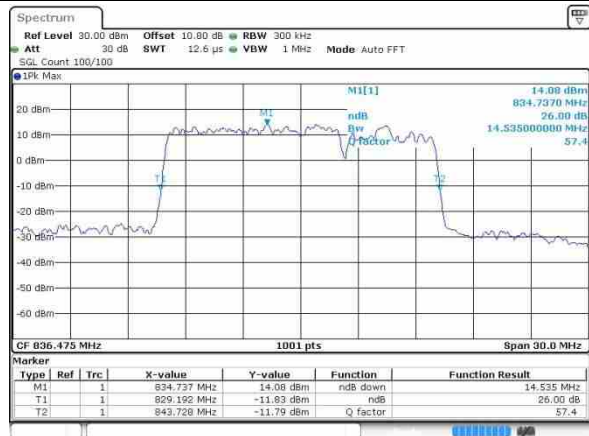
Date: 20 MAY 2019 14:08:08

Middle Channel / 5MHz+10MHz



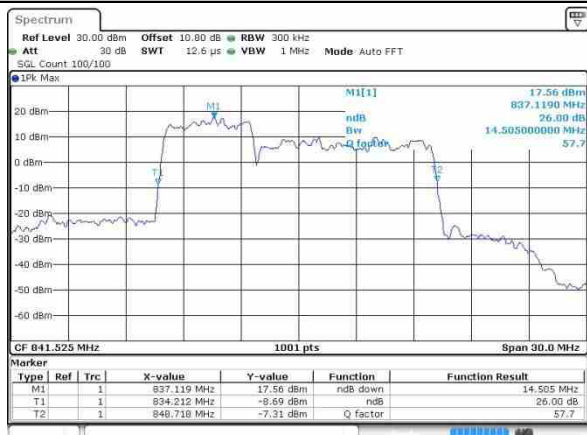
Date: 20 MAY 2019 14:28:43

Middle Channel / 10MHz+5MHz



Date: 20 MAY 2019 14:14:07

Highest Channel / 5MHz+10MHz



Date: 20 MAY 2019 14:42:50

Highest Channel / 10MHz+5MHz

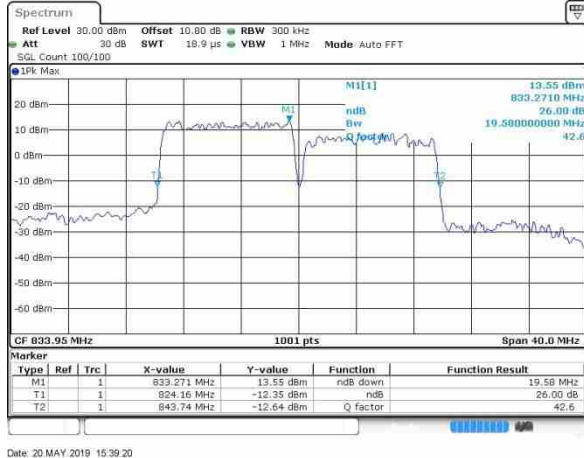


Date: 20 MAY 2019 14:17:50

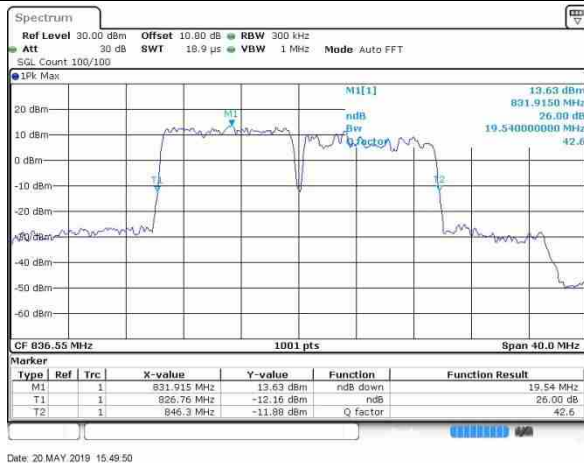
LTE Band 5

16QAM

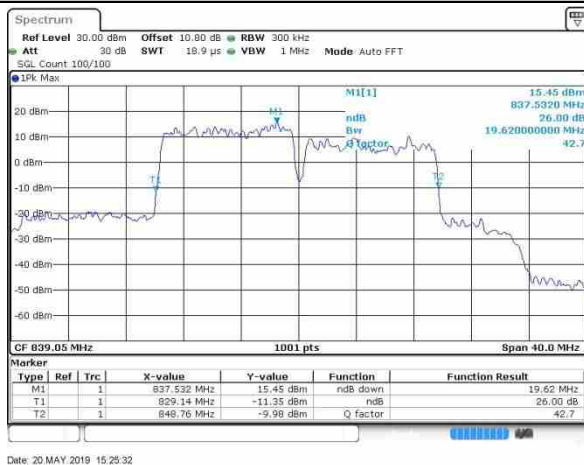
Lowest Channel / 10MHz+10MHz



Middle Channel / 10MHz+10MHz



Highest Channel / 10MHz+10MHz

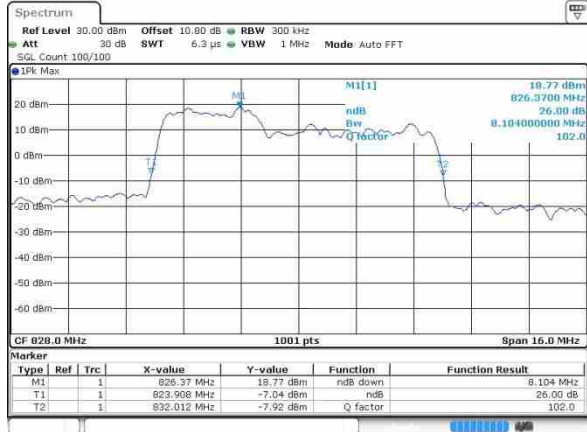




LTE Band 5

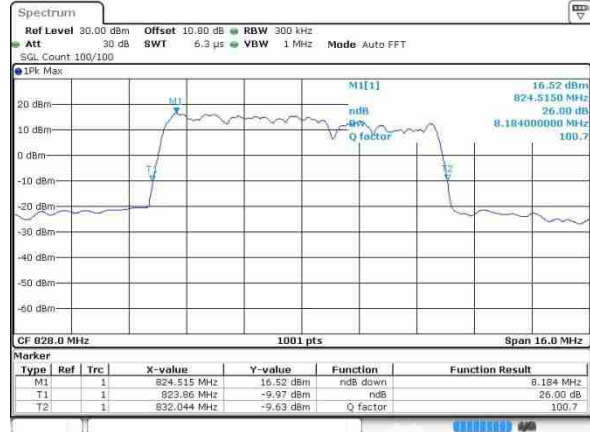
64QAM

Lowest Channel / 3MHz+5MHz



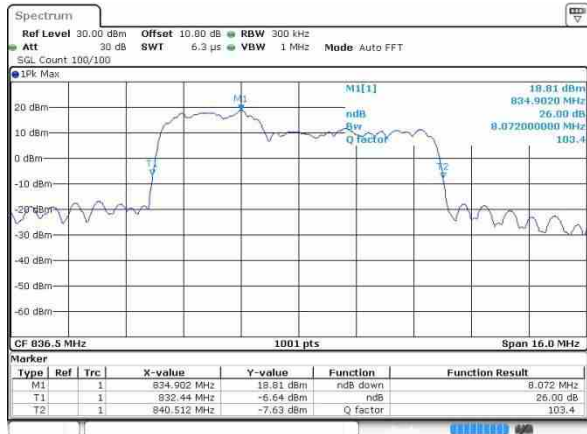
Date: 19 MAR 2019 23:09:04

Lowest Channel / 5MHz+3MHz



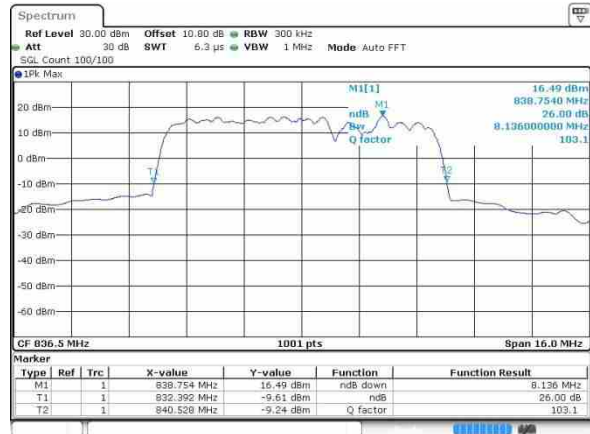
Date: 19 MAR 2019 23:42:40

Middle Channel / 3MHz+5MHz



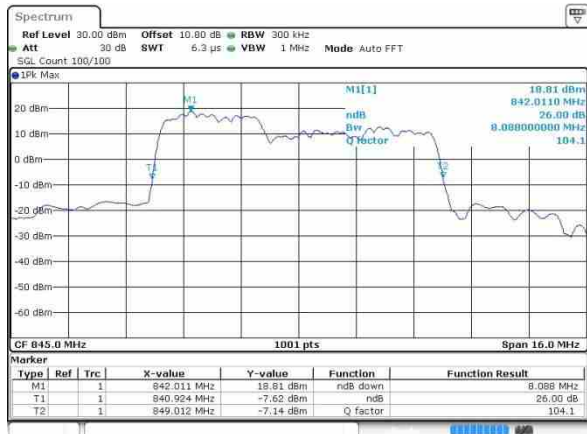
Date: 19 MAR 2019 23:18:14

Middle Channel / 5MHz+3MHz



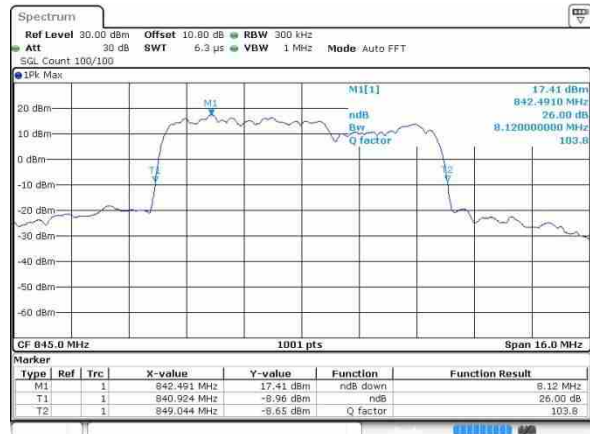
Date: 19 MAR 2019 23:47:10

Highest Channel / 3MHz+5MHz



Date: 19 MAR 2019 23:26:05

Highest Channel / 5MHz+3MHz



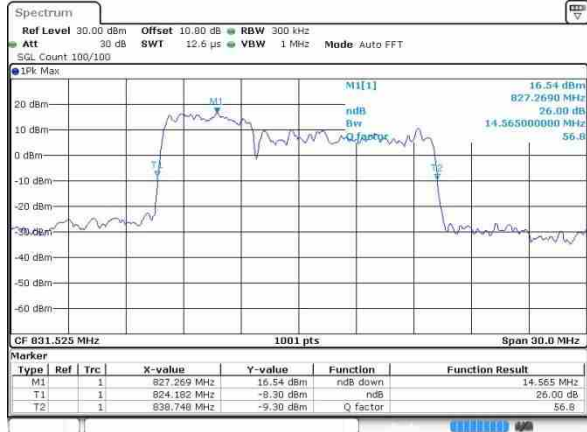
Date: 19 MAR 2019 23:53:57



LTE Band 5

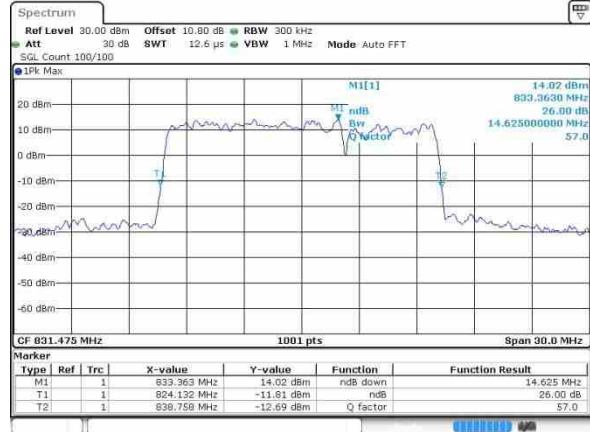
64QAM

Lowest Channel / 5MHz+10MHz



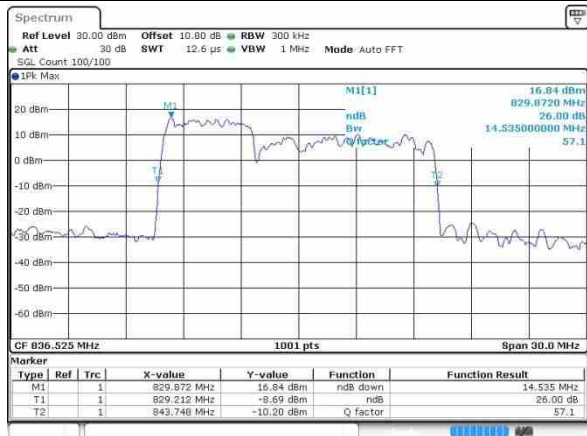
Date: 20 MAY 2019 14:22:47

Lowest Channel / 10MHz+5MHz



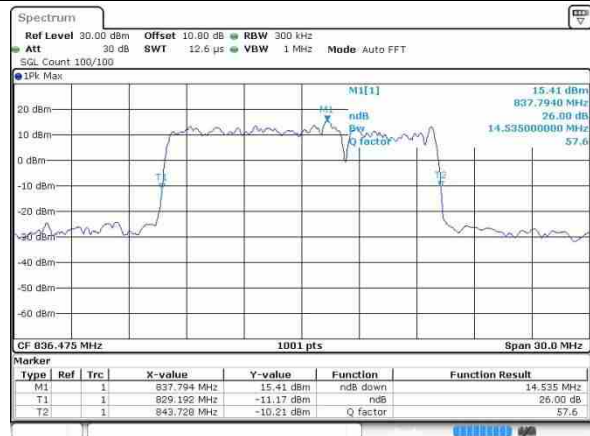
Date: 20 MAY 2019 14:07:43

Middle Channel / 5MHz+10MHz



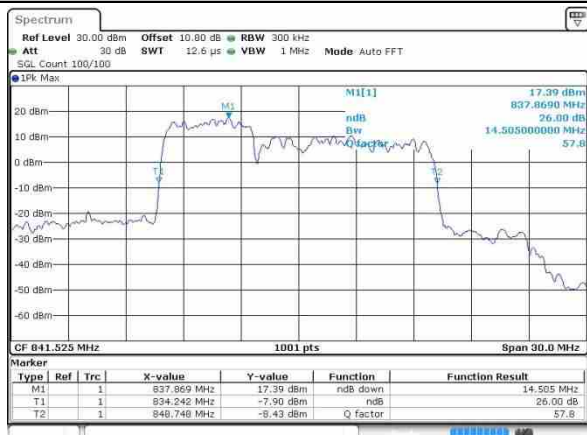
Date: 20 MAY 2019 14:28:19

Middle Channel / 10MHz+5MHz



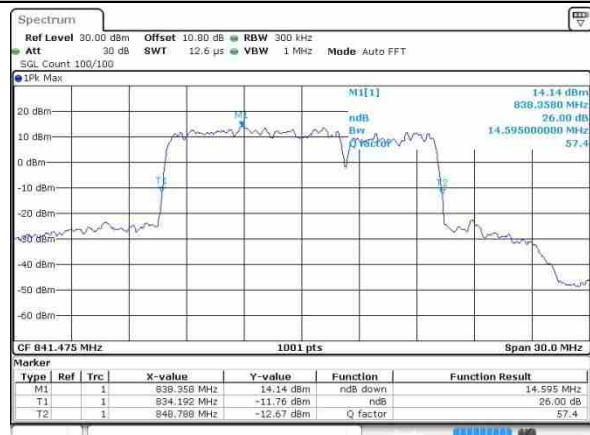
Date: 20 MAY 2019 14:13:44

Highest Channel / 5MHz+10MHz



Date: 20 MAY 2019 14:43:13

Highest Channel / 10MHz+5MHz

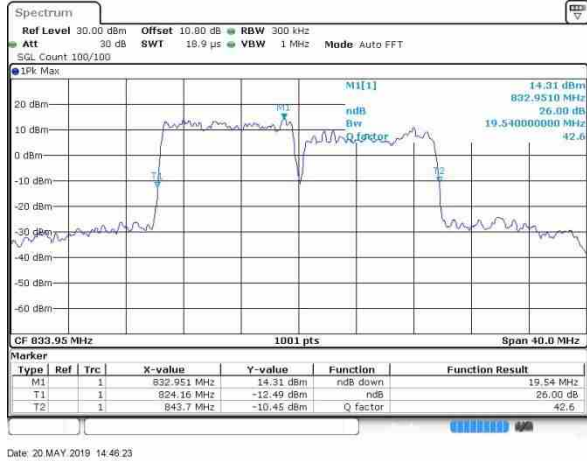


Date: 20 MAY 2019 14:18:14

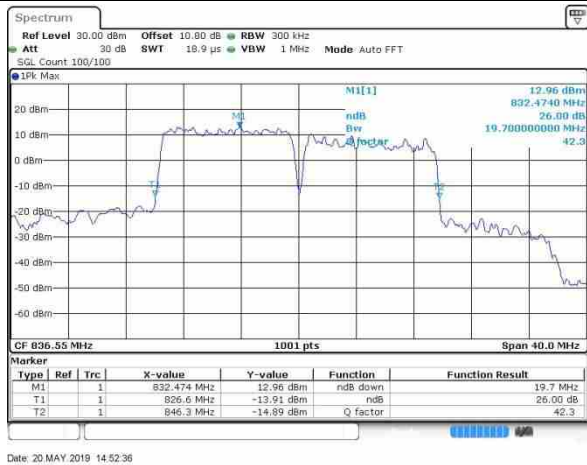
LTE Band 5

64QAM

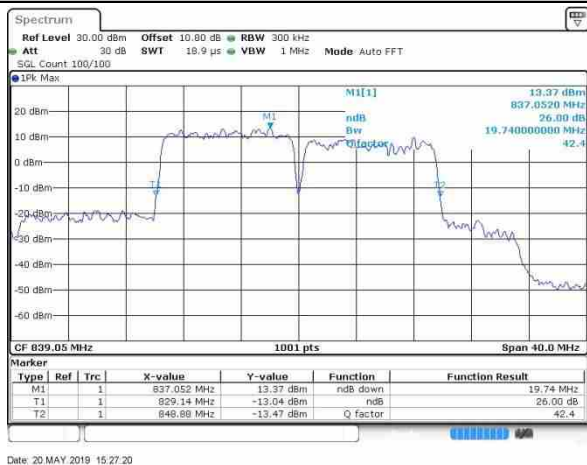
Lowest Channel / 10MHz+10MHz



Middle Channel / 10MHz+10MHz



Highest Channel / 10MHz+10MHz



Occupied Bandwidth

Mode	LTE Band 5 : 99%OBW(MHz)		
QPSK			
BW	3MHz+5MHz	5MHz+3MHz	5MHz+10MHz
Lowest CH	7.59	7.61	13.85
Middle CH	7.53	7.51	13.79
Highest CH	7.51	7.64	13.79
BW	10MHz+5MHz	10MHz+10MHz	
Lowest CH	13.91	18.74	
Middle CH	13.76	18.74	
Highest CH	13.85	18.74	

Mode	LTE Band 5 : 99%OBW(MHz)		
16QAM			
BW	3MHz+5MHz	5MHz+3MHz	5MHz+10MHz
Lowest CH	7.56	7.59	13.94
Middle CH	7.59	7.54	13.76
Highest CH	7.51	7.64	13.70
BW	10MHz+5MHz	10MHz+10MHz	
Lowest CH	13.88	18.66	
Middle CH	13.79	18.62	
Highest CH	13.79	18.70	

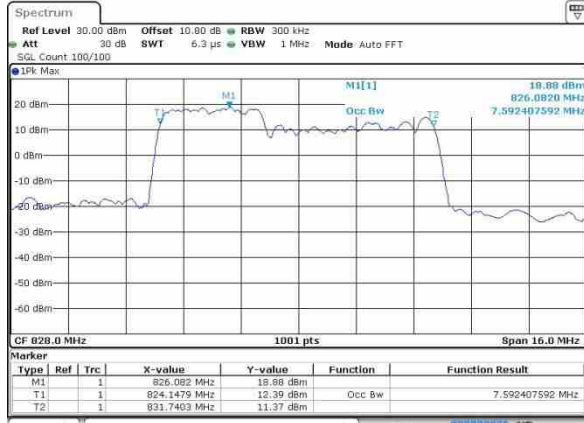
Mode	LTE Band 5 : 99%OBW(MHz)		
64QAM			
BW	3MHz+5MHz	5MHz+3MHz	5MHz+10MHz
Lowest CH	7.53	7.59	13.85
Middle CH	7.54	7.58	13.67
Highest CH	7.53	7.58	13.88
BW	10MHz+5MHz	10MHz+10MHz	
Lowest CH	13.85	18.70	
Middle CH	13.73	18.66	
Highest CH	13.94	18.86	



LTE Band 5

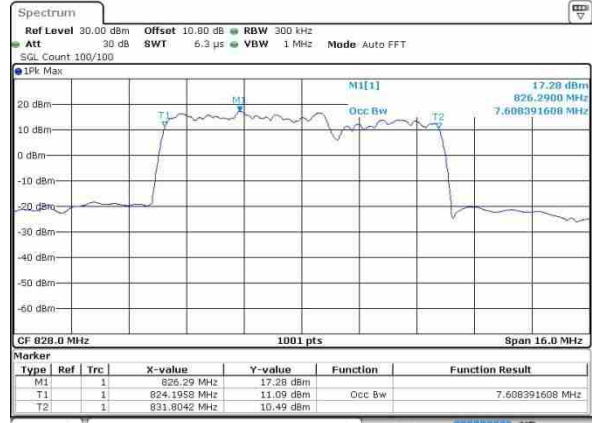
QPSK

Lowest Channel / 3MHz+5MHz



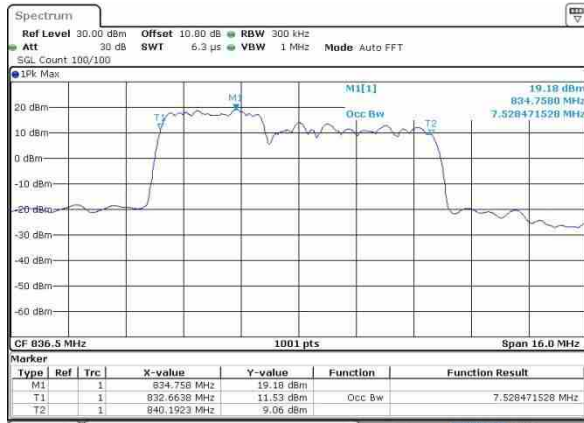
Date: 19 MAR 2019 23:07:55

Lowest Channel / 5MHz+3MHz



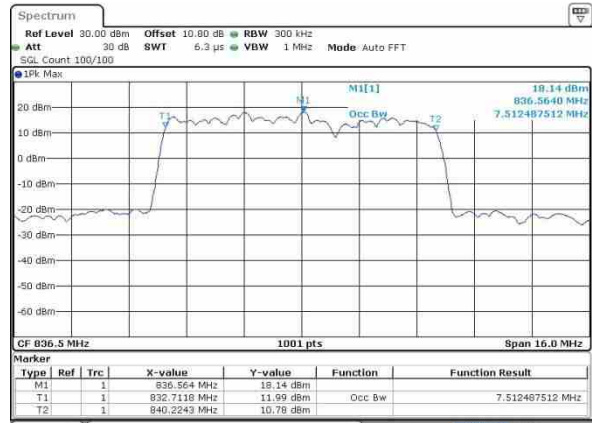
Date: 19 MAR 2019 23:41:31

Middle Channel / 3MHz+5MHz



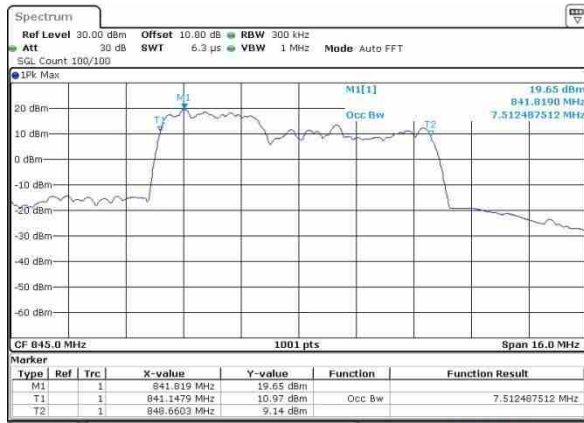
Date: 19 MAR 2019 23:15:04

Middle Channel / 5MHz+3MHz



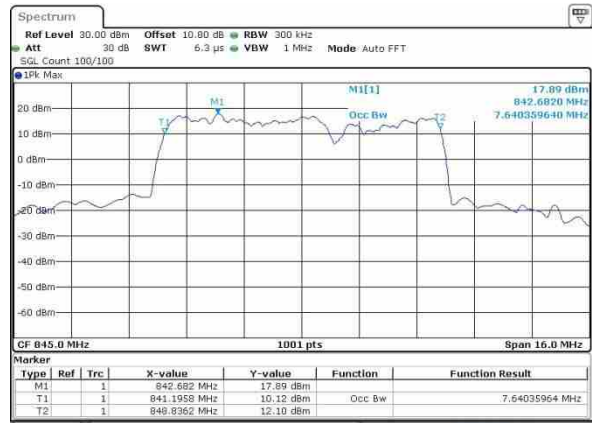
Date: 19 MAR 2019 23:46:01

Highest Channel / 3MHz+5MHz



Date: 19 MAR 2019 23:24:56

Highest Channel / 5MHz+3MHz



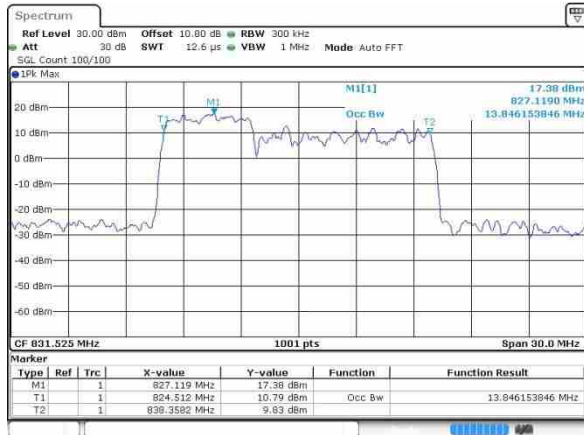
Date: 19 MAR 2019 23:52:48



LTE Band 5

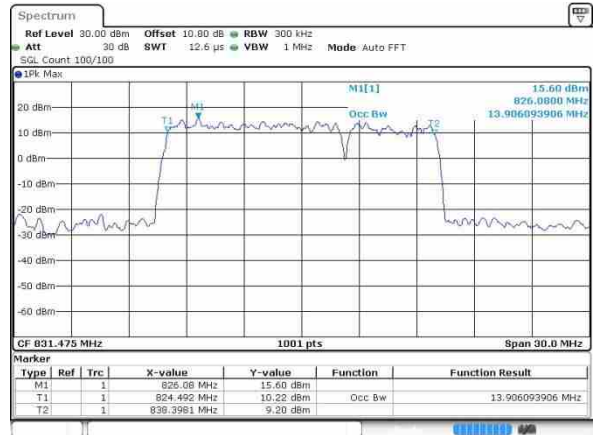
QPSK

Lowest Channel / 5MHz+10MHz



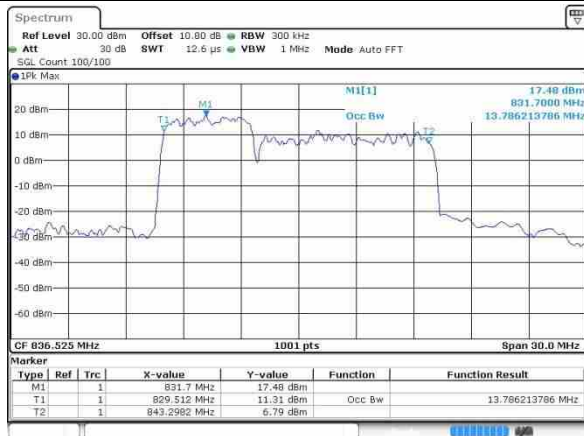
Date: 20 MAY 2019 14:21:38

Lowest Channel / 10MHz+5MHz



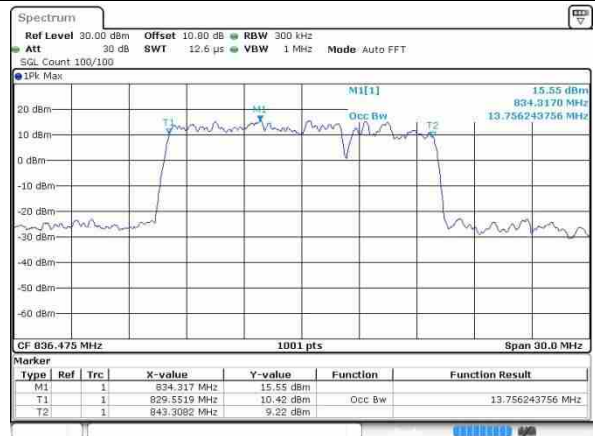
Date: 20 MAY 2019 14:06:34

Middle Channel / 5MHz+10MHz



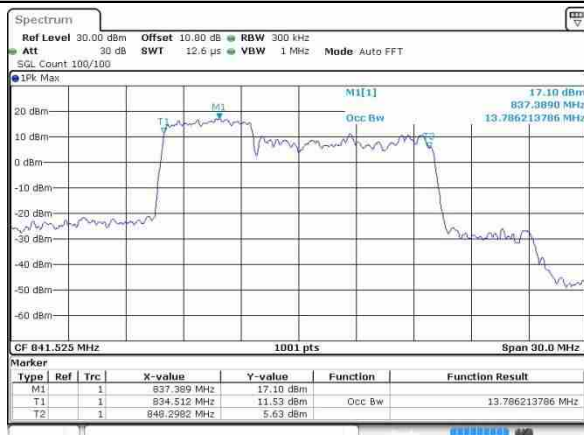
Date: 20 MAY 2019 14:28:10

Middle Channel / 10MHz+5MHz



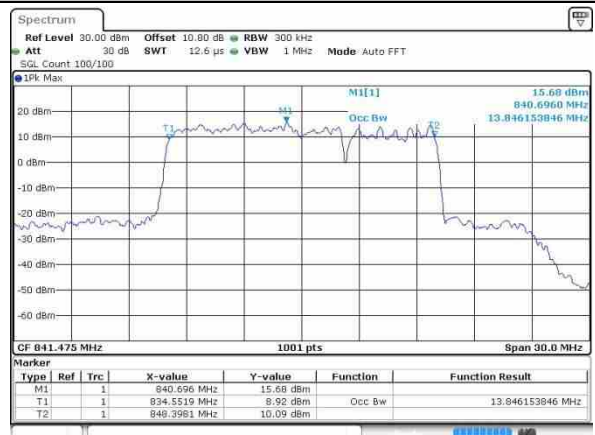
Date: 20 MAY 2019 14:12:35

Highest Channel / 5MHz+10MHz



Date: 20 MAY 2019 14:42:04

Highest Channel / 10MHz+5MHz



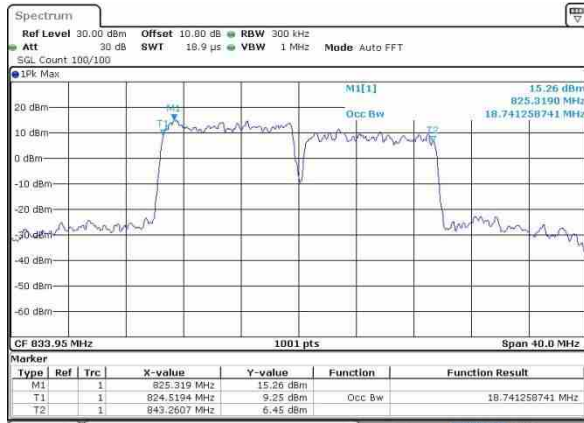
Date: 20 MAY 2019 14:17:04



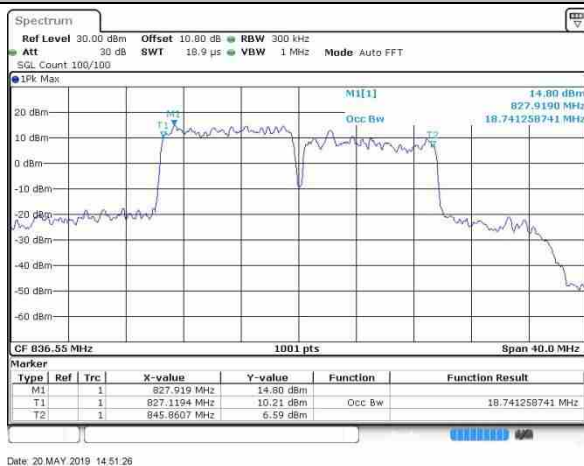
LTE Band 5

QPSK

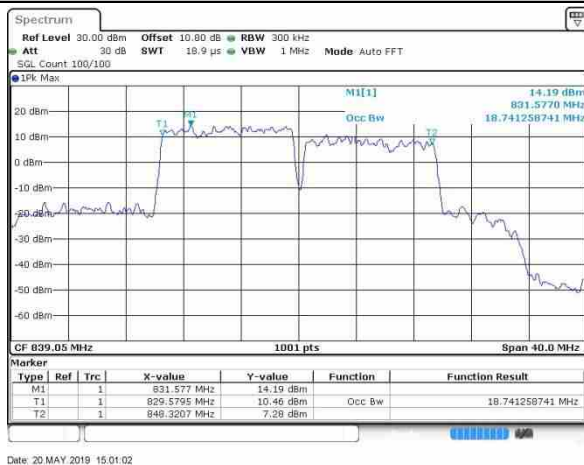
Lowest Channel / 10MHz+10MHz



Middle Channel / 10MHz+10MHz



Highest Channel / 10MHz+10MHz

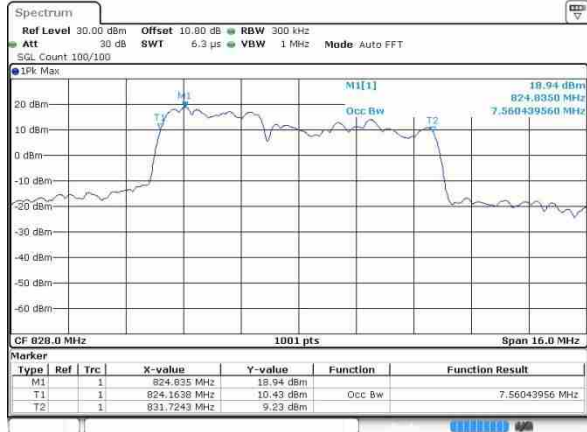




LTE Band 5

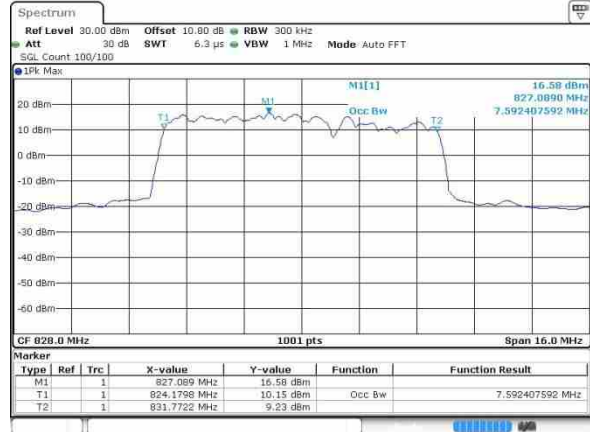
16QAM

Lowest Channel / 3MHz+5MHz



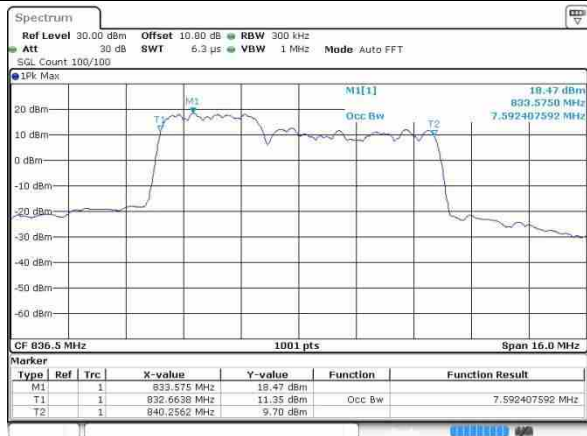
Date: 19 MAR 2019 23:08:18

Lowest Channel / 5MHz+3MHz



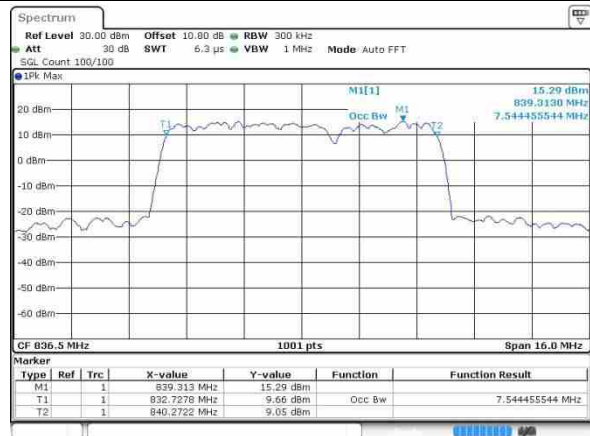
Date: 19 MAR 2019 23:41:54

Middle Channel / 3MHz+5MHz



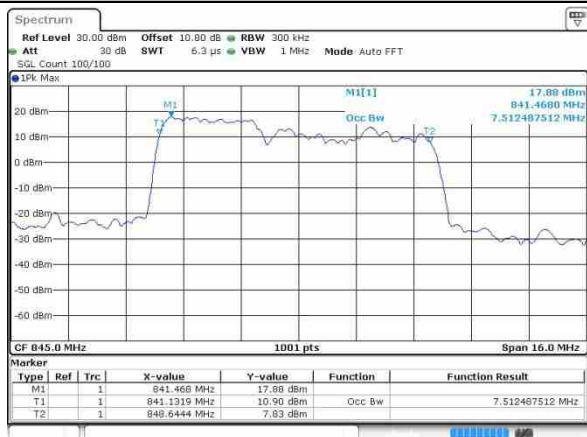
Date: 19 MAR 2019 23:15:28

Middle Channel / 5MHz+3MHz



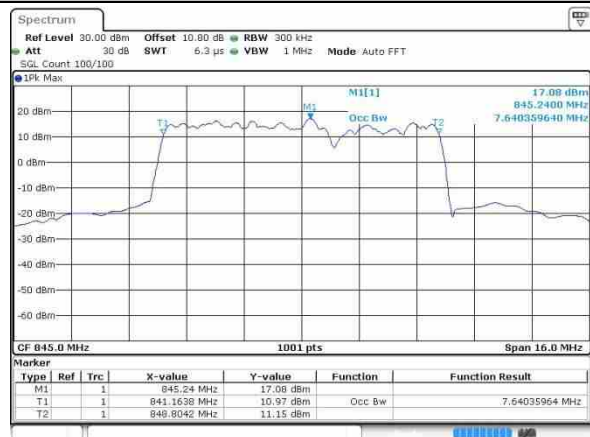
Date: 19 MAR 2019 23:46:24

Highest Channel / 3MHz+5MHz



Date: 19 MAR 2019 23:24:33

Highest Channel / 5MHz+3MHz



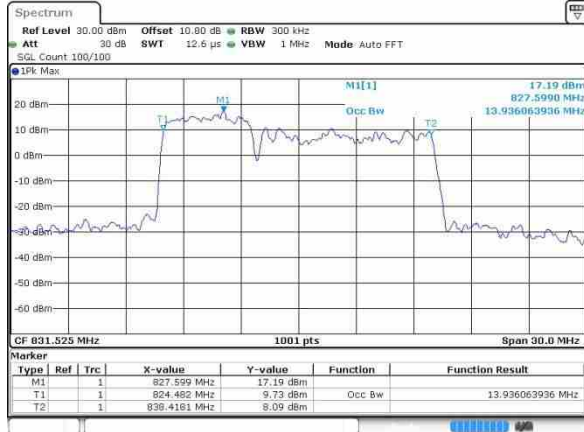
Date: 19 MAR 2019 23:52:25



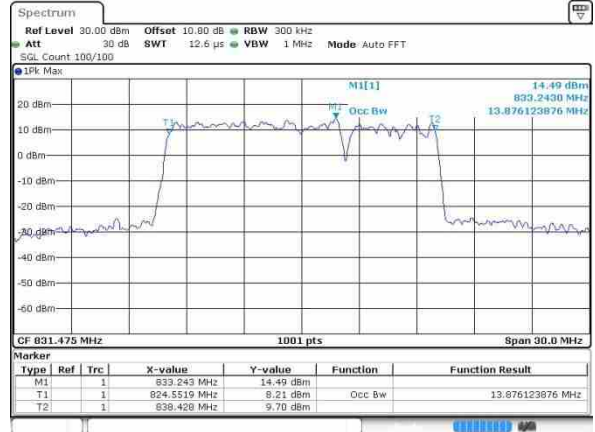
LTE Band 5

16QAM

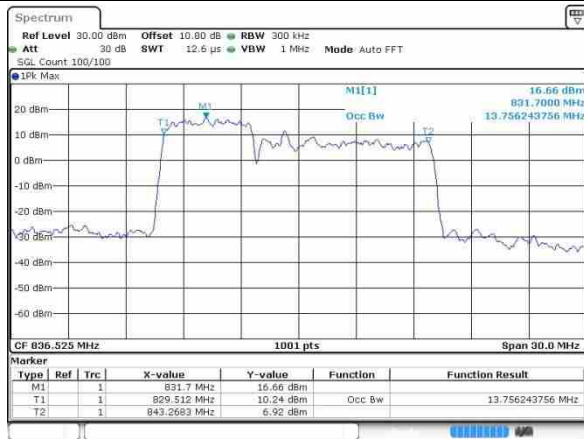
Lowest Channel / 5MHz+10MHz



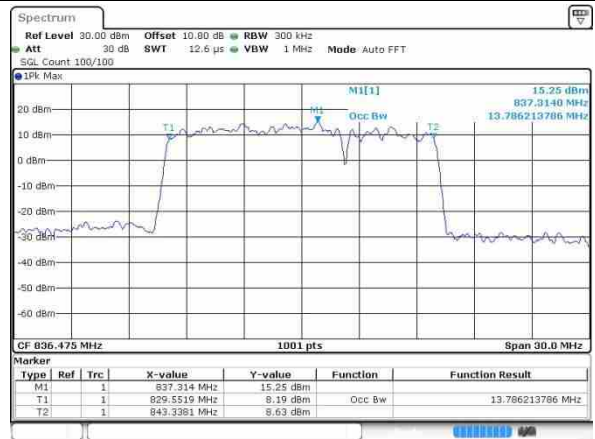
Lowest Channel / 10MHz+5MHz



Middle Channel / 5MHz+10MHz



Middle Channel / 10MHz+5MHz

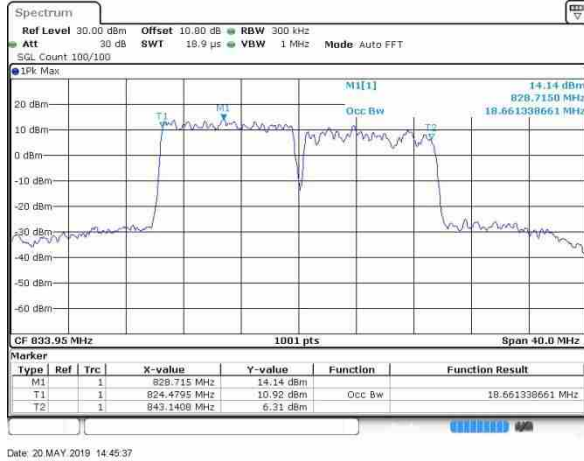
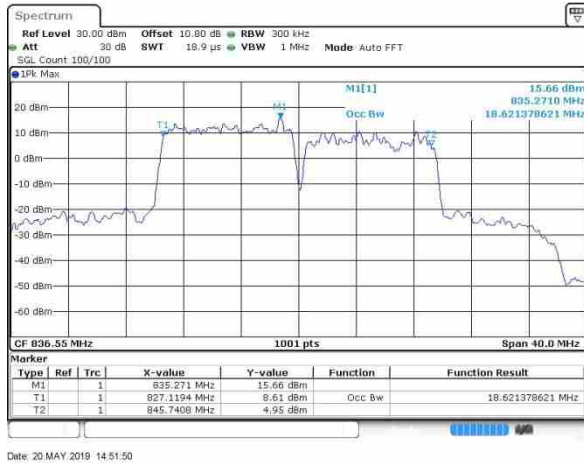
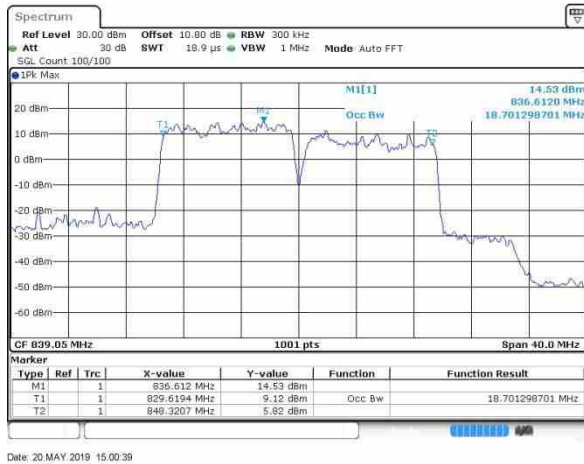


Highest Channel / 5MHz+10MHz



Highest Channel / 10MHz+5MHz



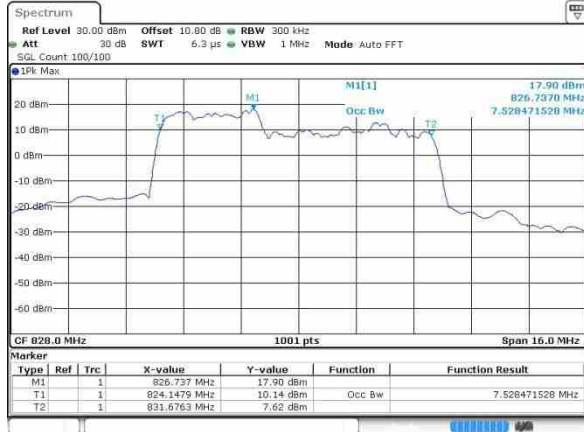
**LTE Band 5****16QAM****Lowest Channel / 10MHz+10MHz****Middle Channel / 10MHz+10MHz****Highest Channel / 10MHz+10MHz**



LTE Band 5

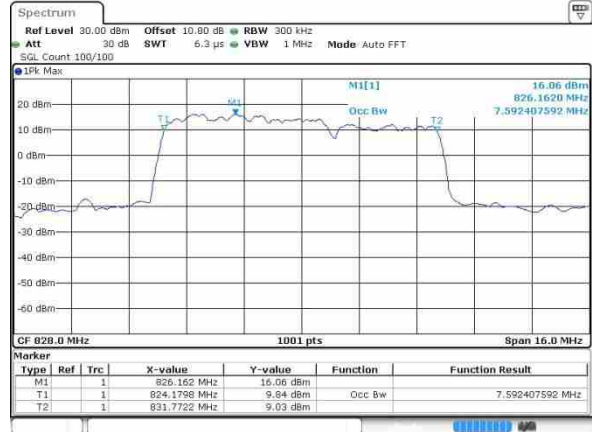
64QAM

Lowest Channel / 3MHz+5MHz



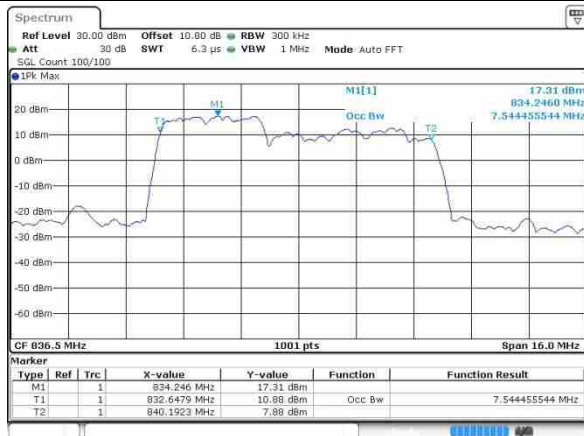
Date: 19 MAR 2019 23:08:42

Lowest Channel / 5MHz+3MHz



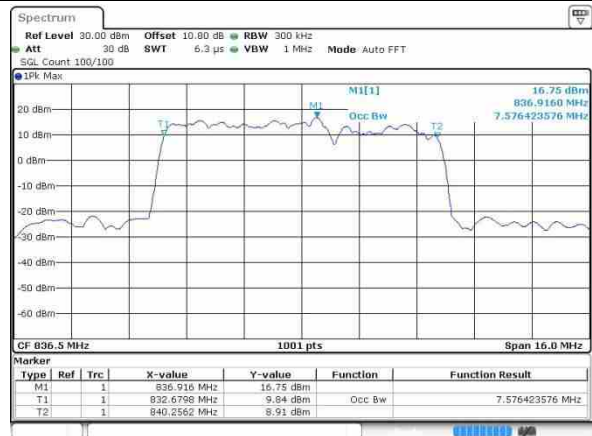
Date: 19 MAR 2019 23:42:18

Middle Channel / 3MHz+5MHz



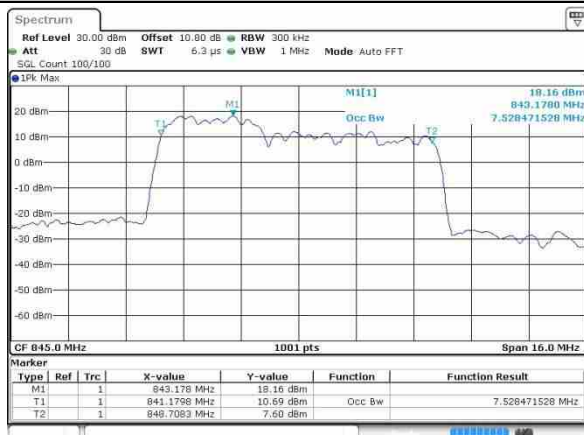
Date: 19 MAR 2019 23:15:51

Middle Channel / 5MHz+3MHz



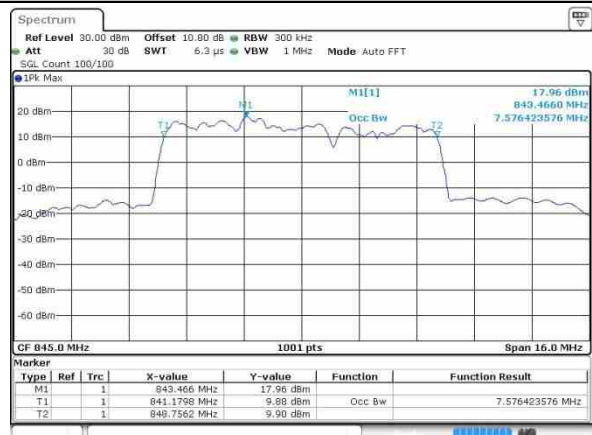
Date: 19 MAR 2019 23:46:48

Highest Channel / 3MHz+5MHz



Date: 19 MAR 2019 23:24:09

Highest Channel / 5MHz+3MHz



Date: 19 MAR 2019 23:52:01