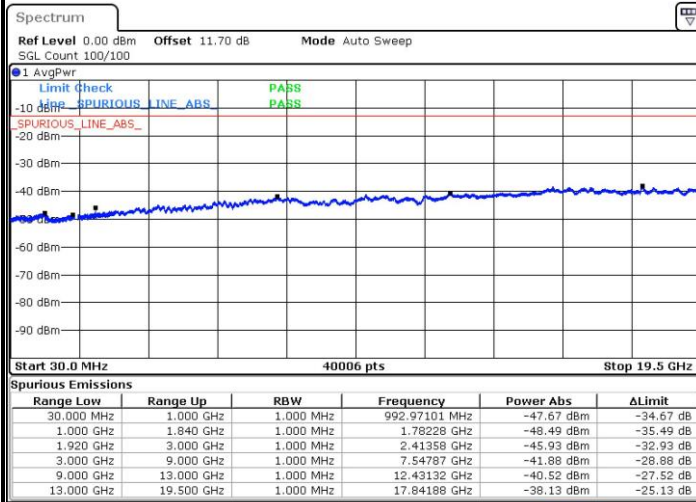




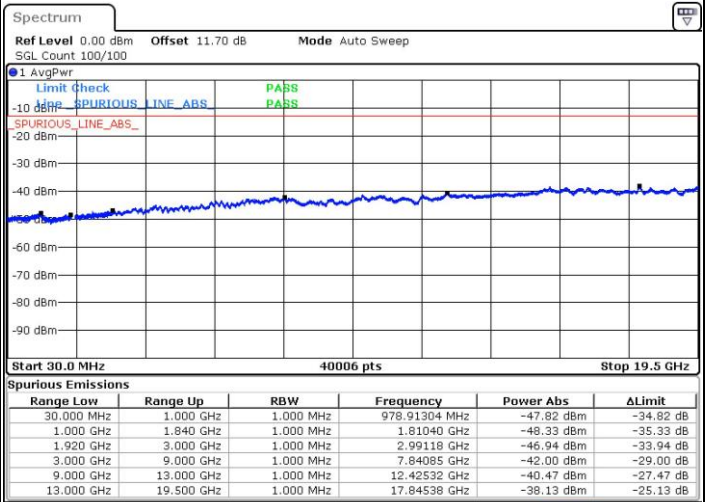
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 21 MAY 2018 16:03:51

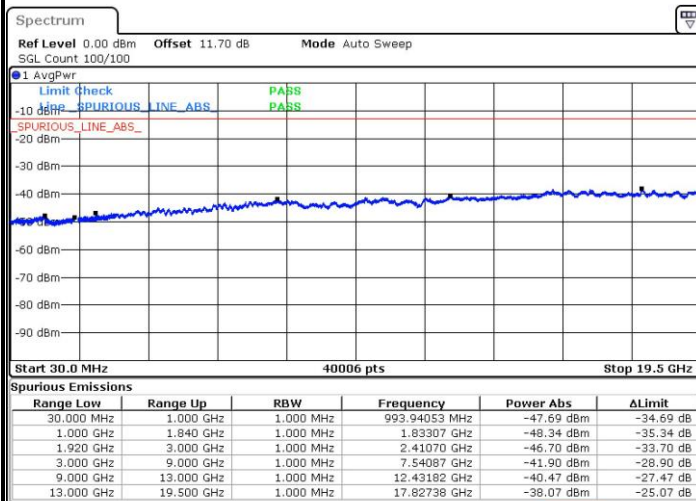
Highest Channel / 16QAM



Date: 21 MAY 2018 16:04:45

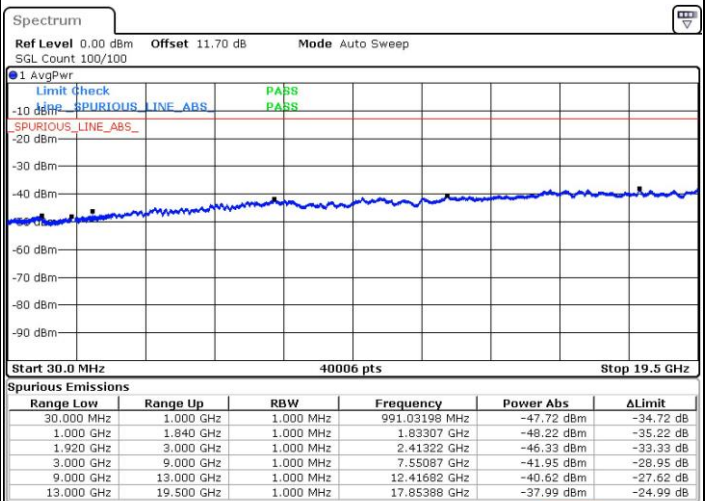
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 21 MAY 2018 16:10:59

Lowest Channel / 16QAM

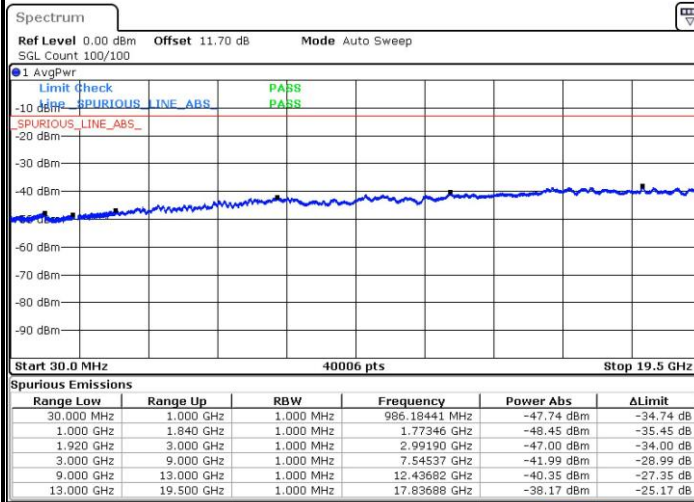


Date: 21 MAY 2018 16:11:54



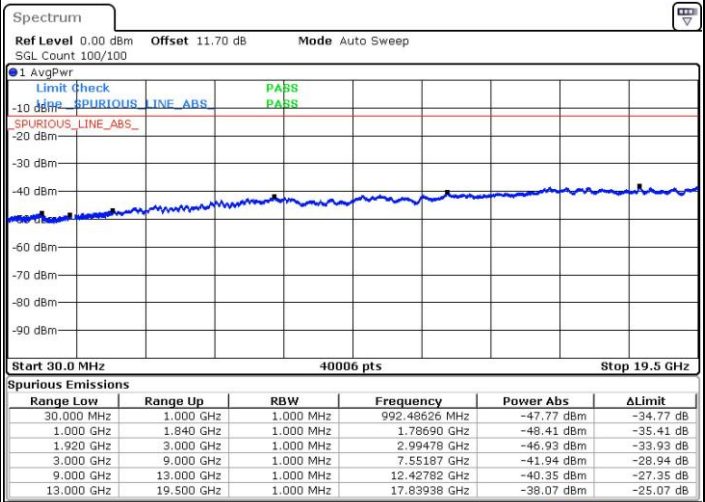
LTE Band 2 / 20MHz

Middle Channel / QPSK



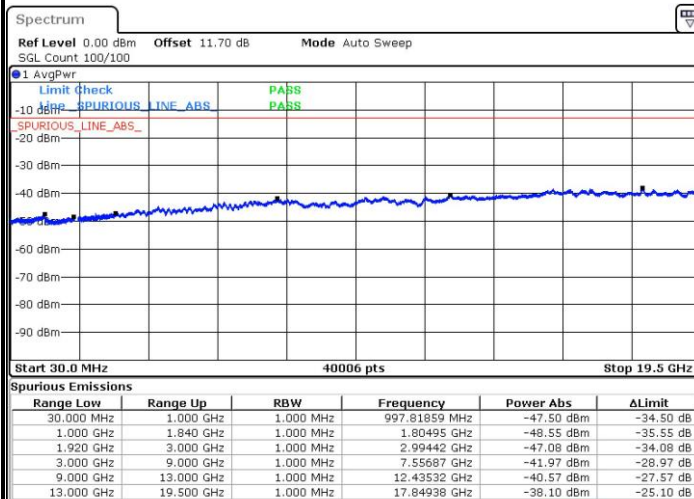
Date: 21 MAY 2018 16:31:45

Middle Channel / 16QAM



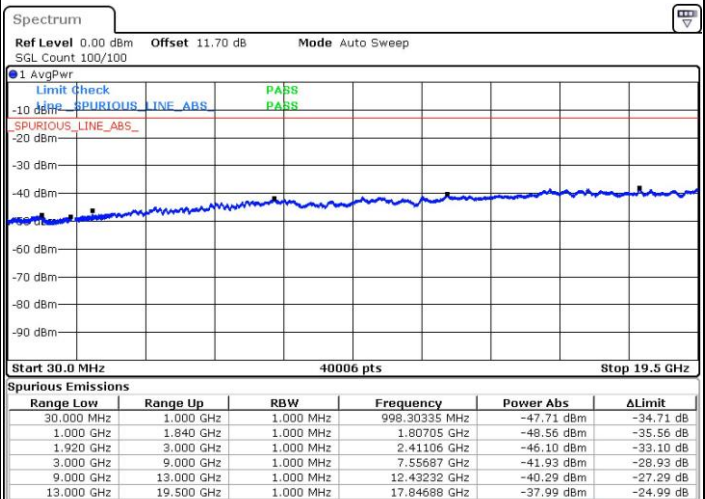
Date: 21 MAY 2018 16:32:39

Highest Channel / QPSK



Date: 21 MAY 2018 16:38:52

Highest Channel / 16QAM



Date: 21 MAY 2018 16:39:47

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0143	
20	Maximum Voltage	0.0114	
20	Normal Voltage	0.0061	
20	Battery End Point	0.0058	

Note:

1. Normal Voltage =230 V. ; Battery End Point (BEP) =207 V. ; Maximum Voltage =253 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

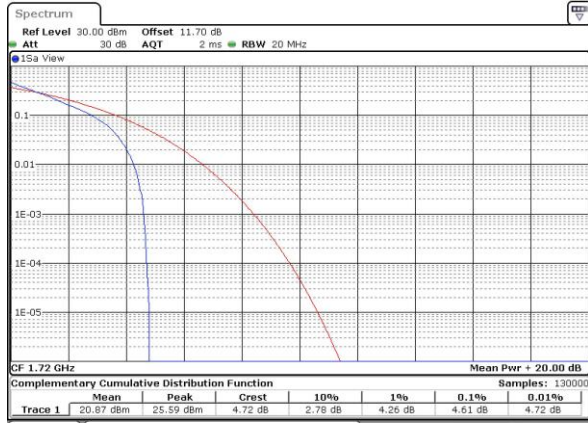
**LTE Band 4****Peak-to-Average Ratio**

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.61	5.13	5.25	6.14	PASS
Middle CH	4.96	4.64	5.88	5.62	
Highest CH	3.62	4.81	4.38	5.8	



LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



Lowest Channel / Full RB



Middle Channel / 1RB



Middle Channel / Full RB

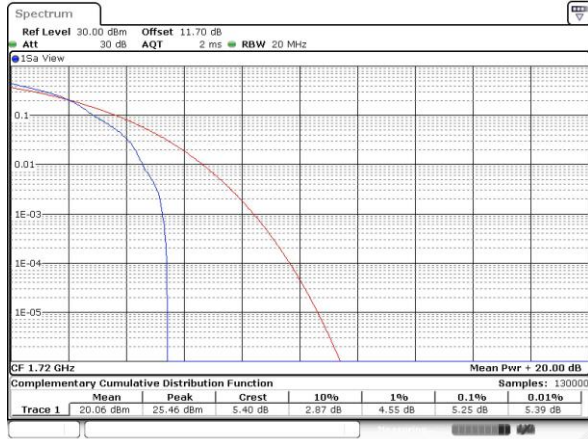


Highest Channel / 1RB

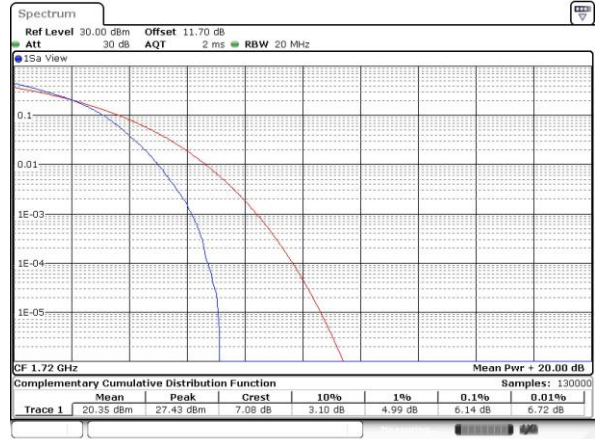


Highest Channel / Full RB

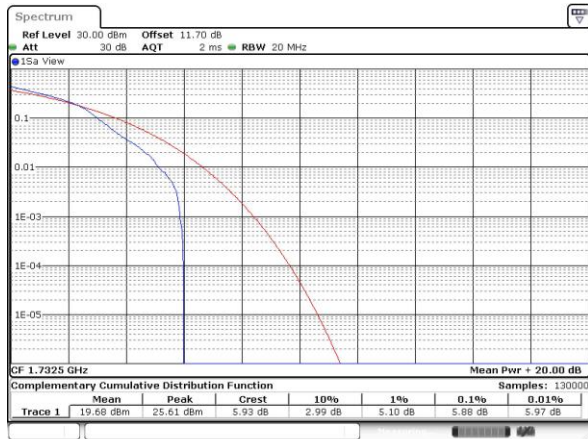


LTE Band 4 / 20MHz / 16QAM
Lowest Channel / 1RB


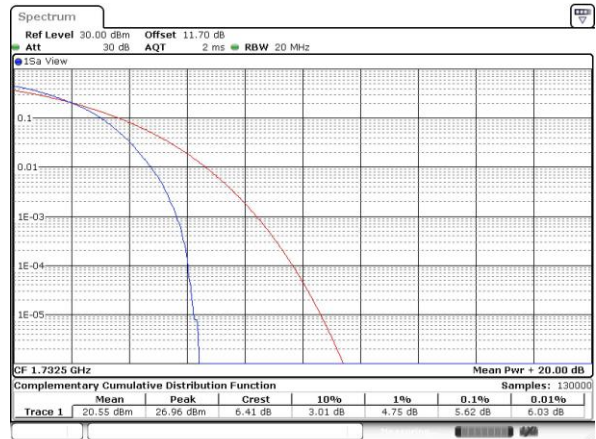
Date: 21 MAY 2018 18:40:12

Lowest Channel / Full RB


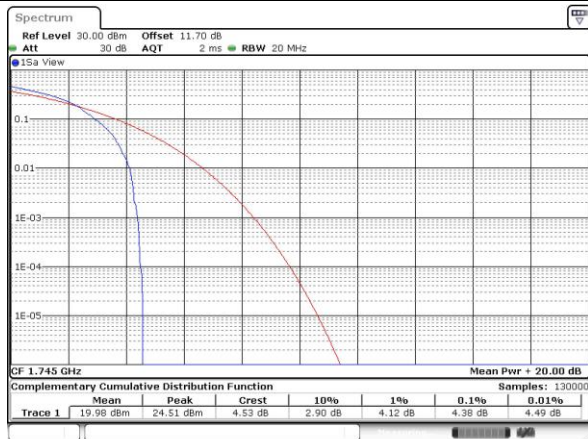
Date: 21 MAY 2018 18:42:18

Middle Channel / 1RB


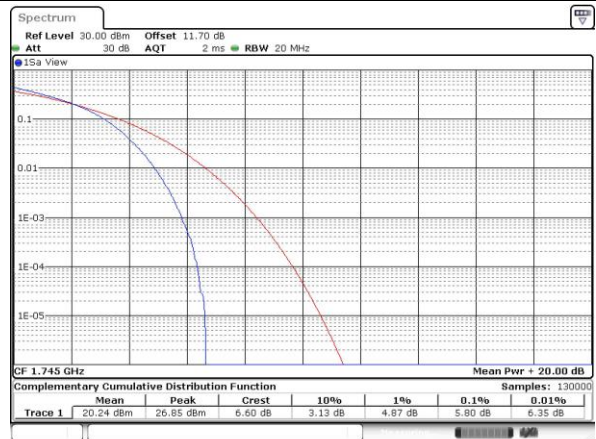
Date: 21 MAY 2018 18:44:04

Middle Channel / Full RB


Date: 21 MAY 2018 18:44:17

Highest Channel / 1RB


Date: 21 MAY 2018 18:44:37

Highest Channel / Full RB


Date: 21 MAY 2018 18:44:48

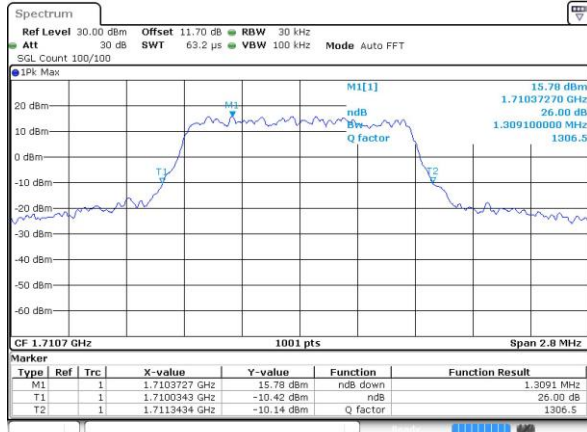
**26dB Bandwidth**

Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.31	1.30	3.12	3.06	5.07	4.94	9.65	9.87	14.15	14.63	20.38	20.14
Middle CH	1.28	1.29	3.02	3.10	5.04	4.98	9.71	9.69	14.45	14.51	20.34	20.34
Highest CH	1.29	1.30	3.03	3.06	5.00	4.95	9.81	10.07	14.36	14.18	20.18	20.42



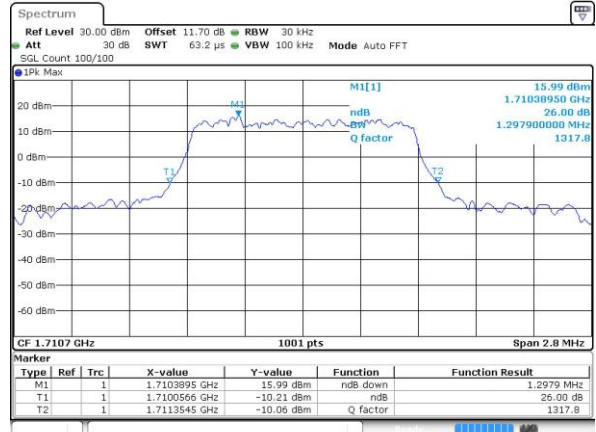
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



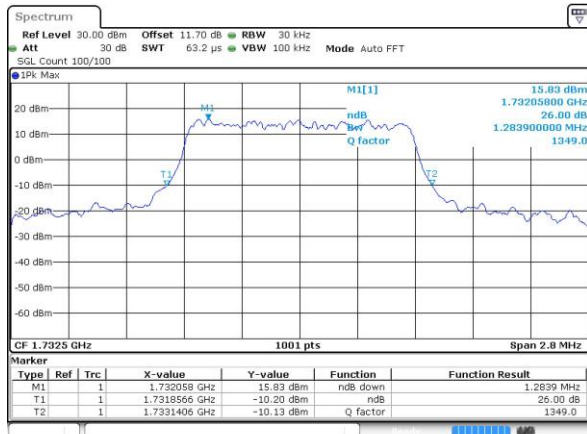
Date: 21 MAY 2018 16:40:18

Lowest Channel / 1.4MHz / 16QAM



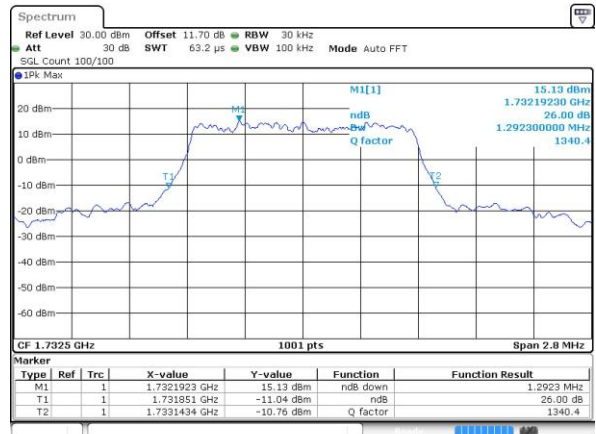
Date: 21 MAY 2018 16:40:29

Middle Channel / 1.4MHz / QPSK



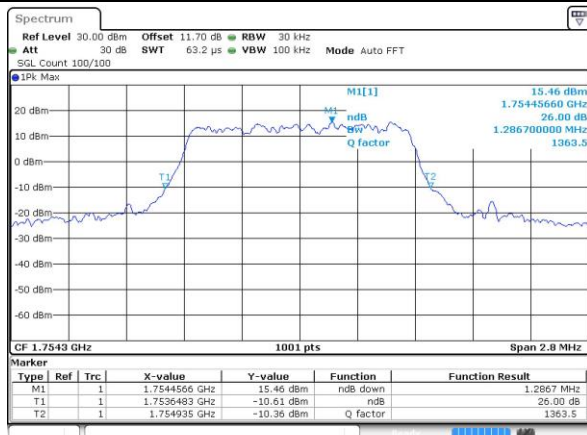
Date: 21 MAY 2018 16:47:26

Middle Channel / 1.4MHz / 16QAM



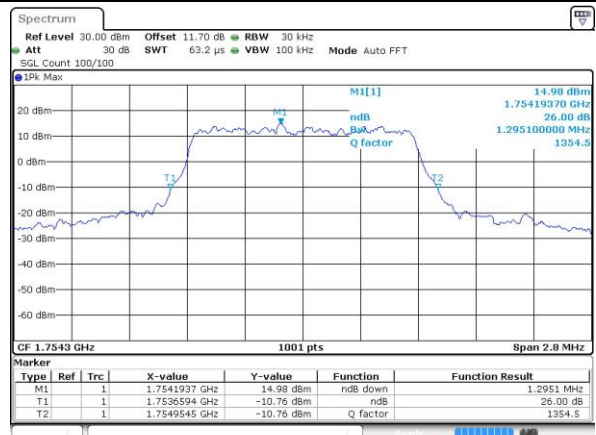
Date: 21 MAY 2018 16:47:37

Highest Channel / 1.4MHz / QPSK



Date: 21 MAY 2018 16:49:57

Highest Channel / 1.4MHz / 16QAM

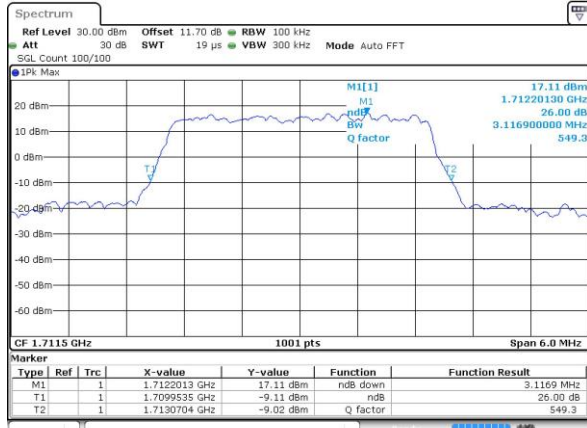


Date: 21 MAY 2018 16:50:07



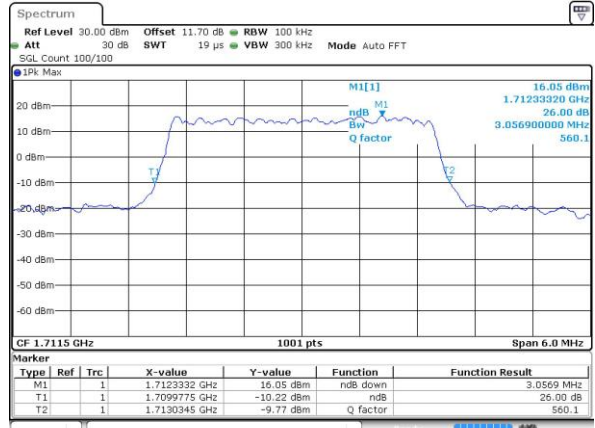
LTE Band 4

Lowest Channel / 3MHz / QPSK



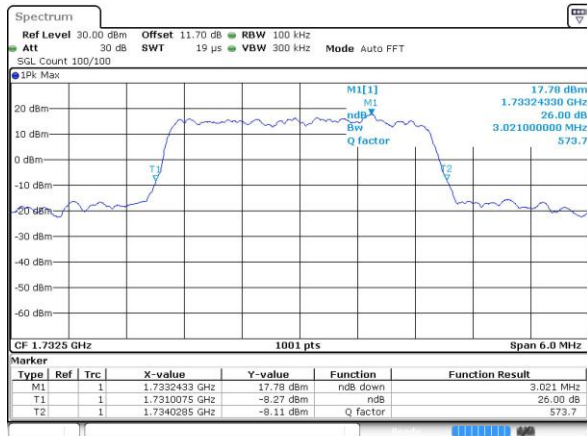
Date: 21 MAY 2018 16:57:05

Lowest Channel / 3MHz / 16QAM



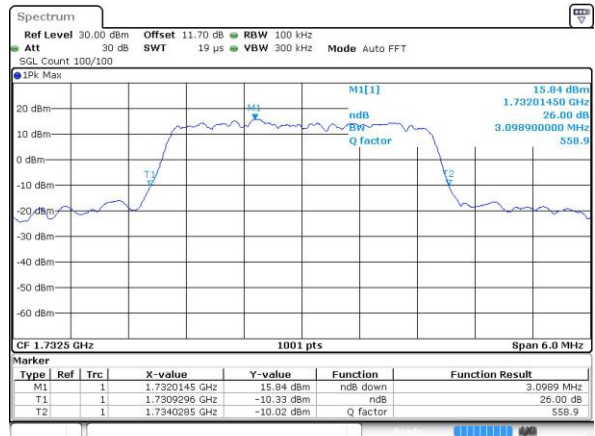
Date: 21 MAY 2018 16:57:15

Middle Channel / 3MHz / QPSK



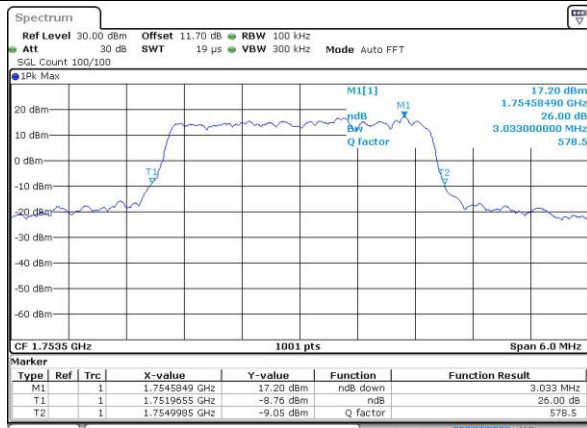
Date: 21 MAY 2018 17:04:13

Middle Channel / 3MHz / 16QAM



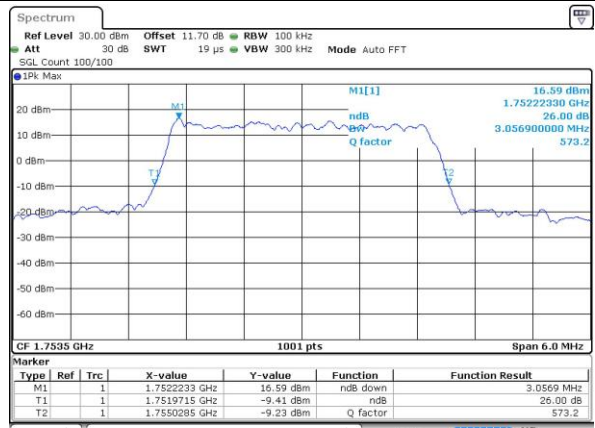
Date: 21 MAY 2018 17:04:23

Highest Channel / 3MHz / QPSK



Date: 21 MAY 2018 17:06:43

Highest Channel / 3MHz / 16QAM

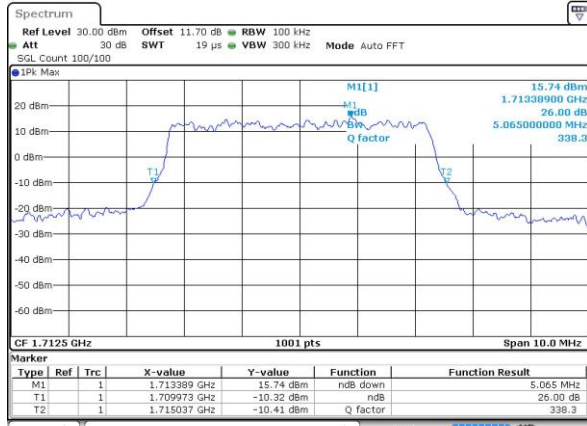


Date: 21 MAY 2018 17:06:54

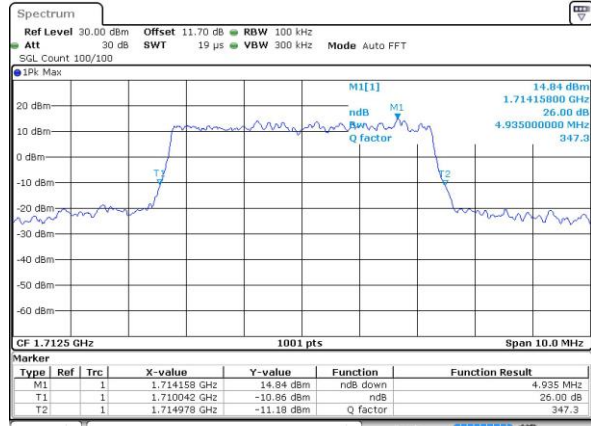


LTE Band 4

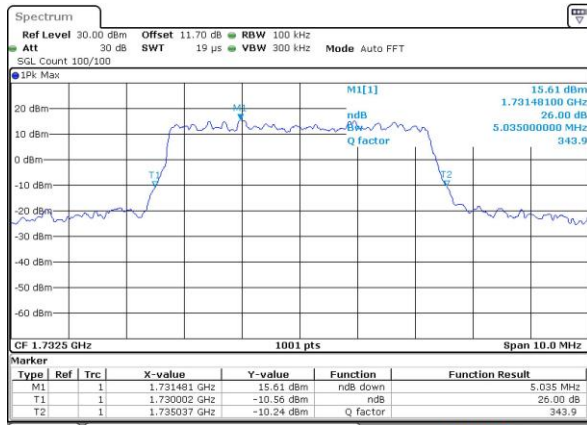
Lowest Channel / 5MHz / QPSK



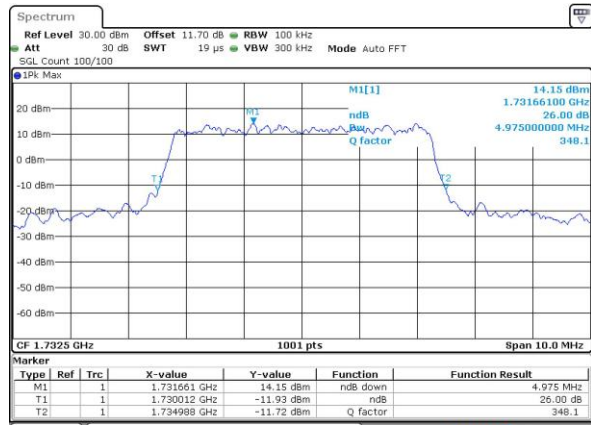
Lowest Channel / 5MHz / 16QAM



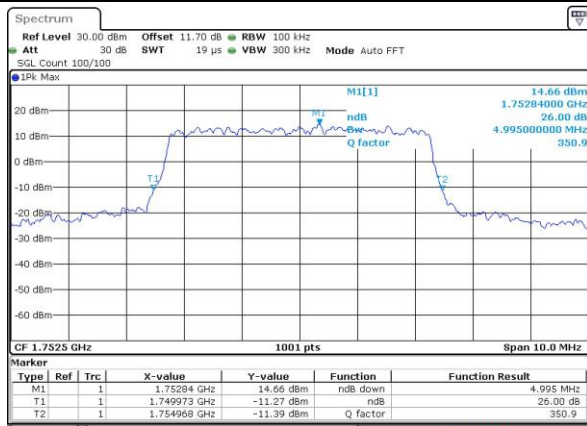
Middle Channel / 5MHz / QPSK



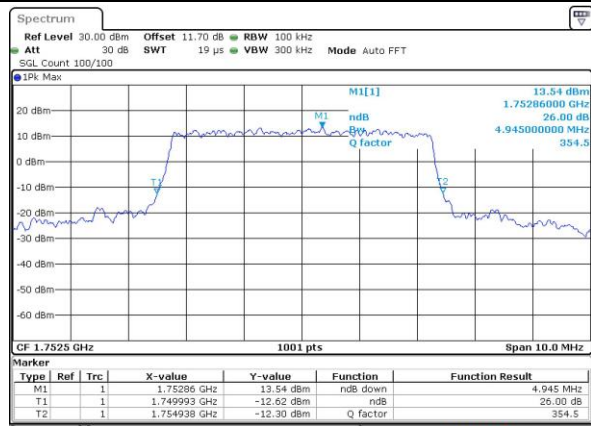
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



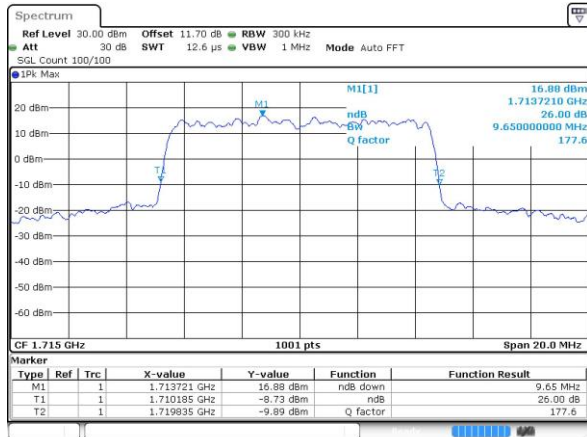
Highest Channel / 5MHz / 16QAM





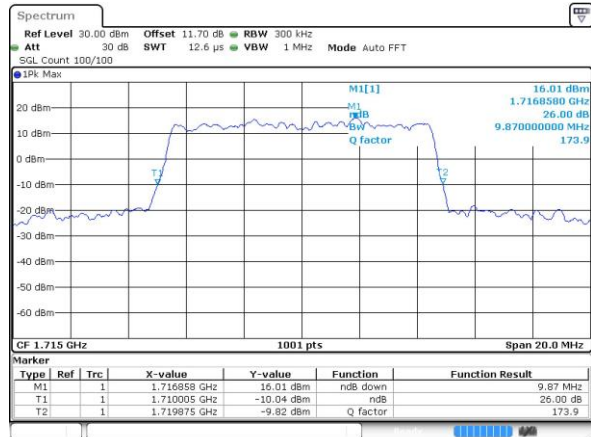
LTE Band 4

Lowest Channel / 10MHz / QPSK



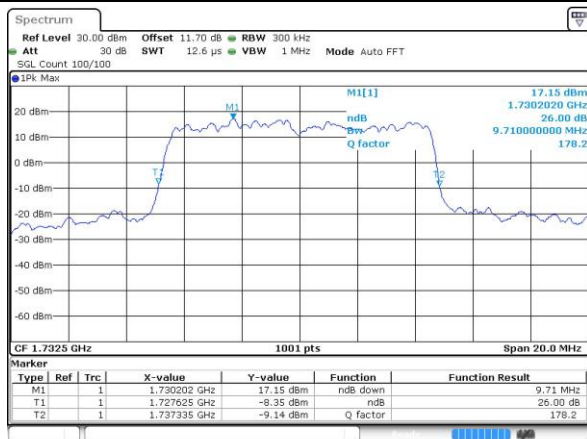
Date: 21 MAY 2018 17:30:37

Lowest Channel / 10MHz / 16QAM



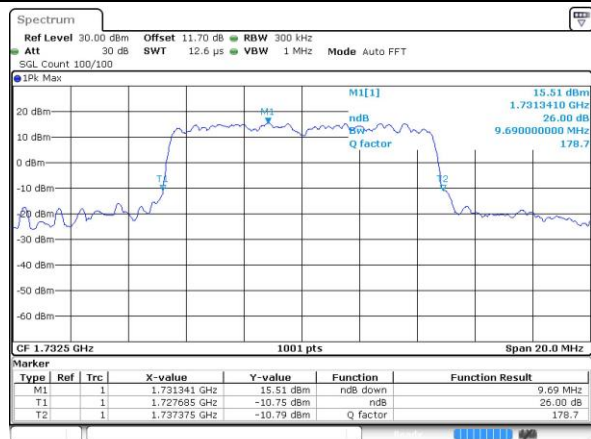
Date: 21 MAY 2018 17:30:47

Middle Channel / 10MHz / QPSK



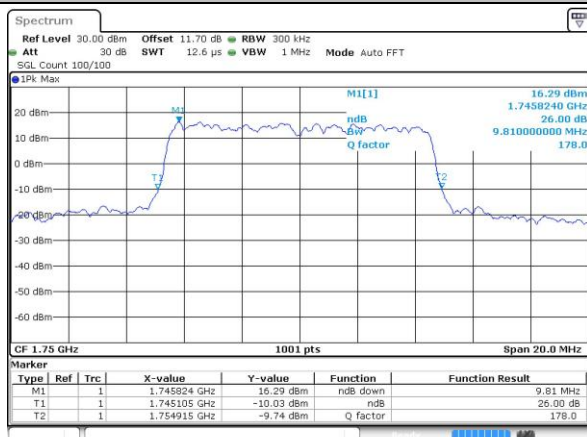
Date: 21 MAY 2018 17:37:45

Middle Channel / 10MHz / 16QAM



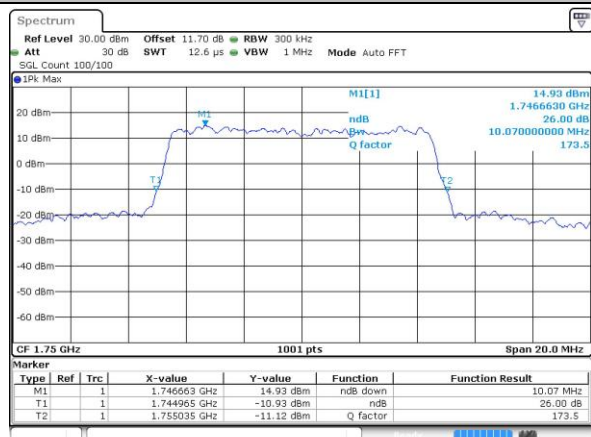
Date: 21 MAY 2018 17:37:55

Highest Channel / 10MHz / QPSK



Date: 21 MAY 2018 17:40:16

Highest Channel / 10MHz / 16QAM

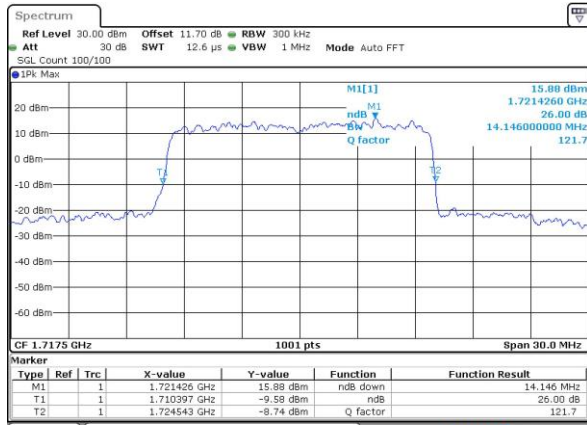


Date: 21 MAY 2018 17:40:26



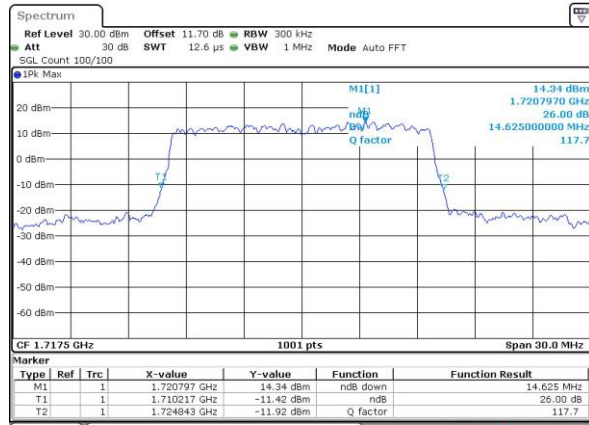
LTE Band 4

Lowest Channel / 15MHz / QPSK



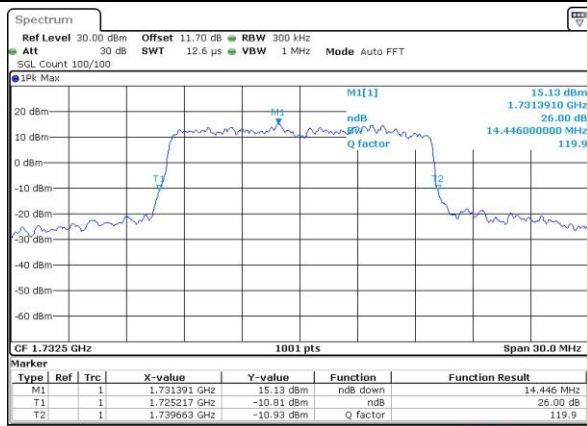
Date: 21 MAY 2018 17:47:24

Lowest Channel / 15MHz / 16QAM



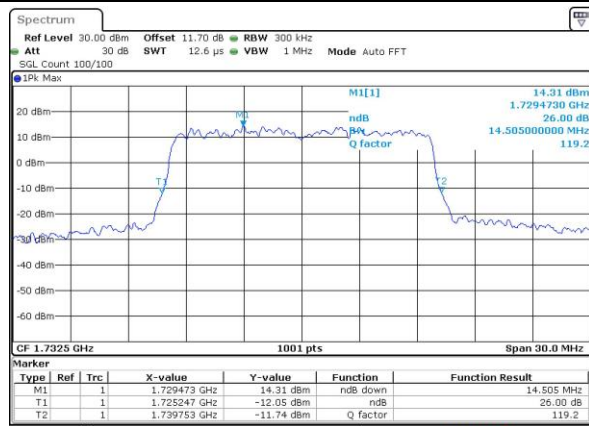
Date: 21 MAY 2018 17:47:34

Middle Channel / 15MHz / QPSK



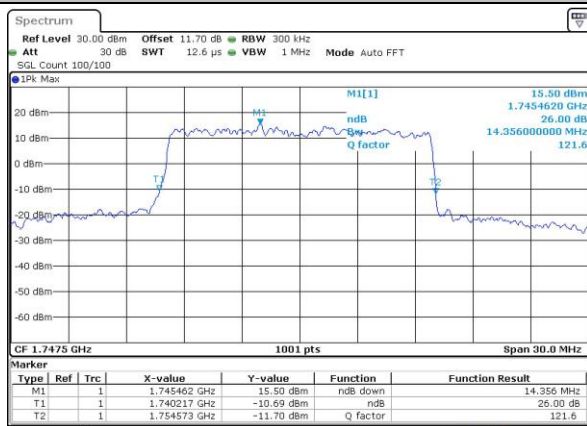
Date: 21 MAY 2018 17:54:31

Middle Channel / 15MHz / 16QAM



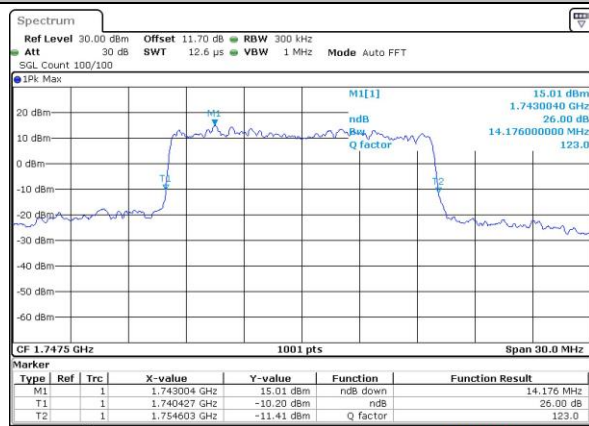
Date: 21 MAY 2018 17:54:42

Highest Channel / 15MHz / QPSK



Date: 21 MAY 2018 17:57:02

Highest Channel / 15MHz / 16QAM

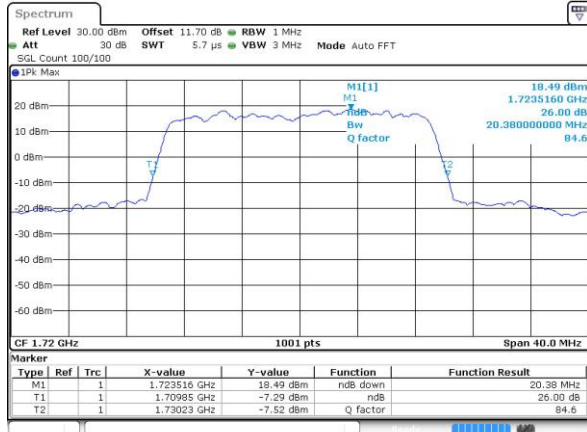


Date: 21 MAY 2018 17:57:13

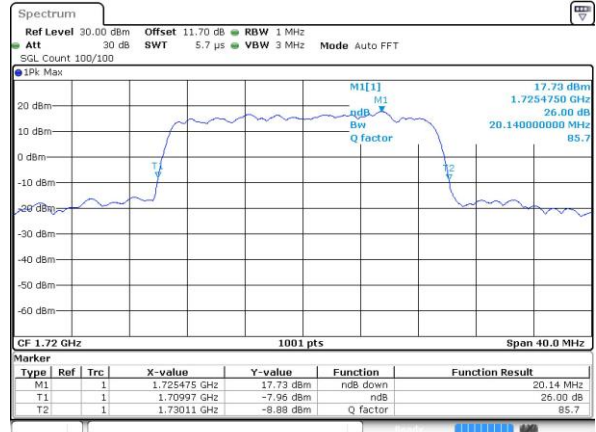


LTE Band 4

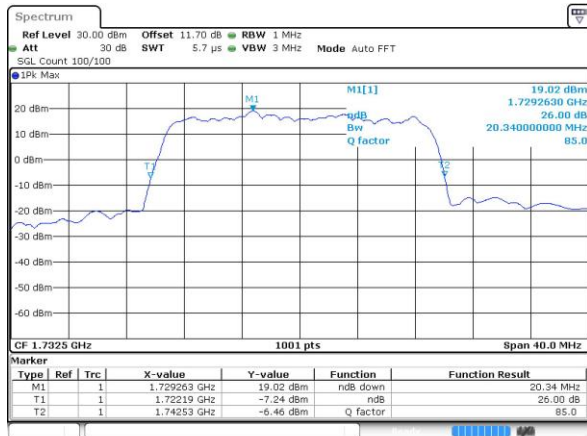
Lowest Channel / 20MHz / QPSK



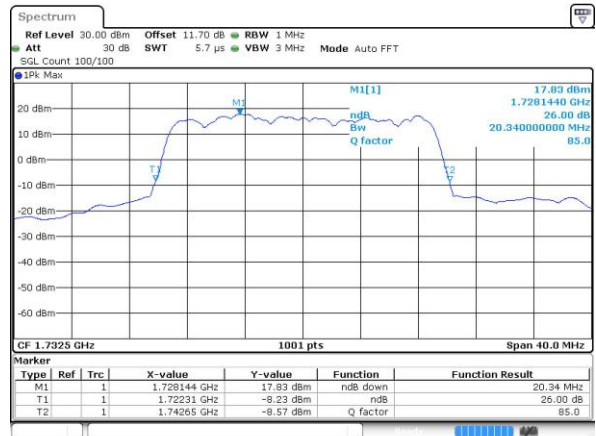
Lowest Channel / 20MHz / 16QAM



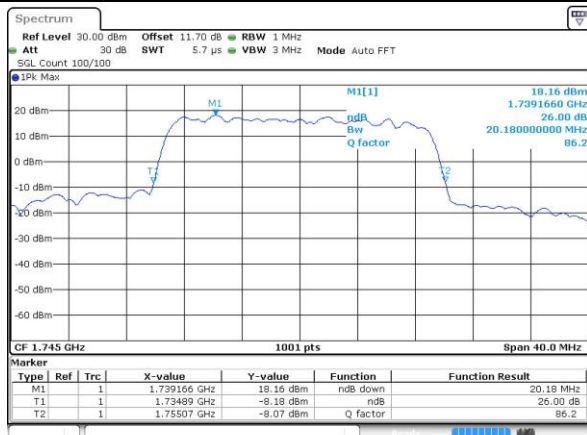
Middle Channel / 20MHz / QPSK



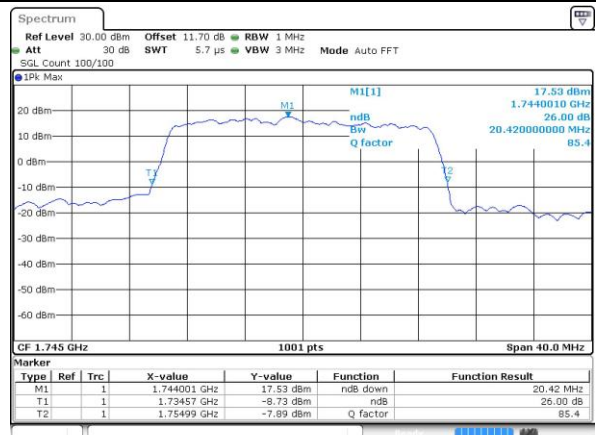
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM





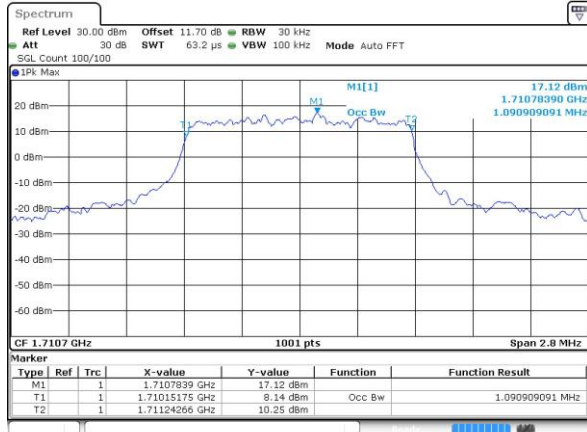
Occupied Bandwidth

Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.1	2.7	2.73	4.52	4.5	9.01	9.03	13.4	13.4	18.3	18.3
Middle CH	1.09	1.1	2.74	2.73	4.52	4.5	9.03	8.99	13.37	13.37	18.34	18.26
Highest CH	1.1	1.1	2.71	2.73	4.49	4.48	8.99	9.01	13.43	13.61	18.34	18.34

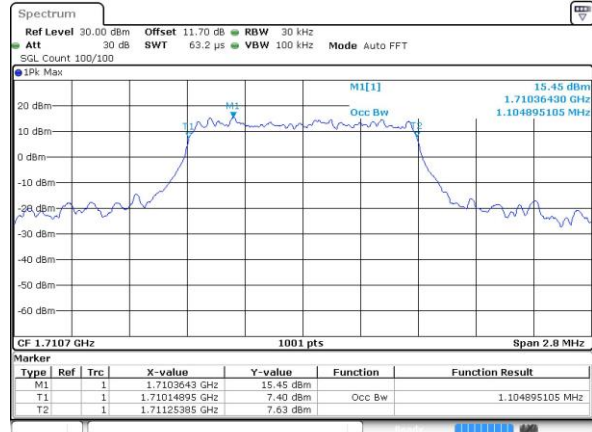


LTE Band 4

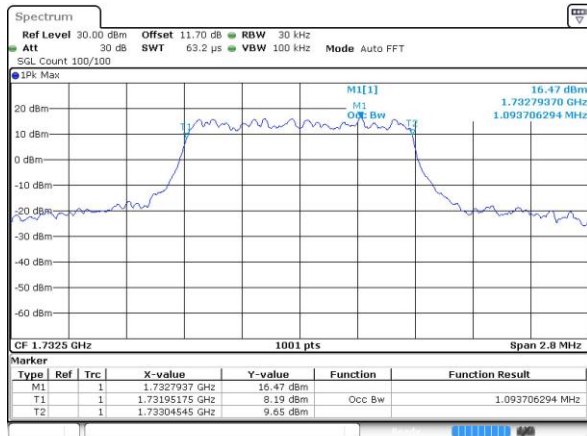
Lowest Channel / 1.4MHz / QPSK



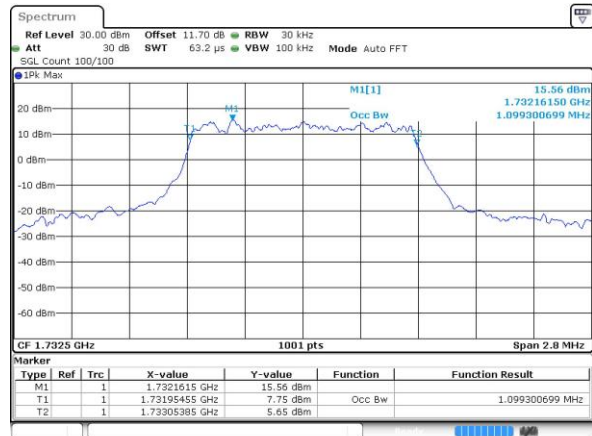
Lowest Channel / 1.4MHz / 16QAM



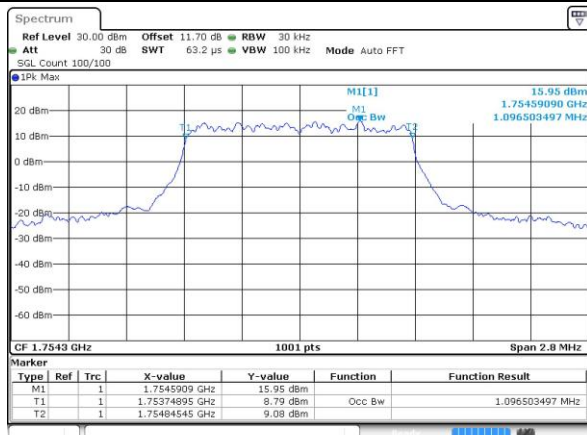
Middle Channel / 1.4MHz / QPSK



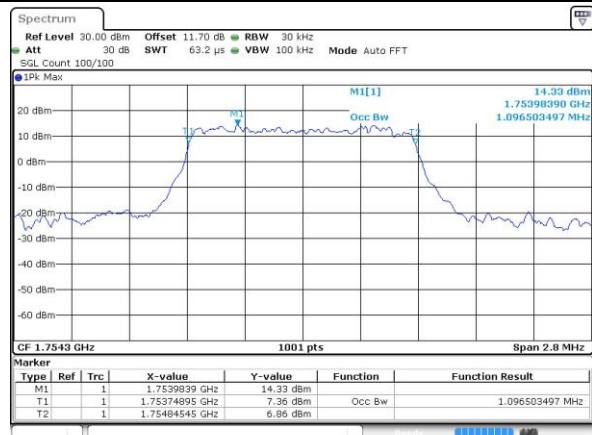
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



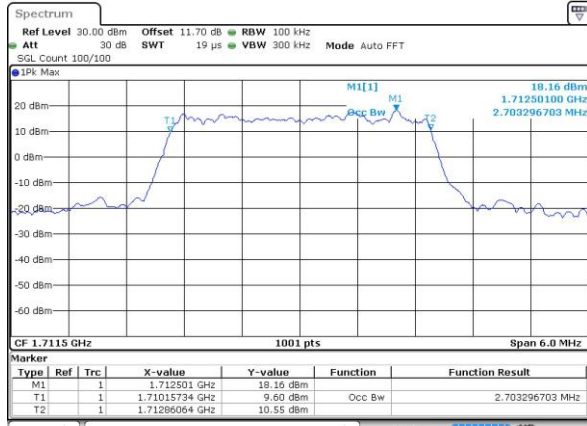
Highest Channel / 1.4MHz / 16QAM





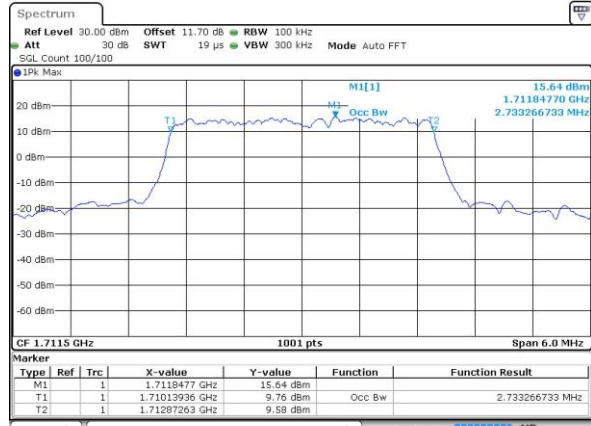
LTE Band 4

Lowest Channel / 3MHz / QPSK



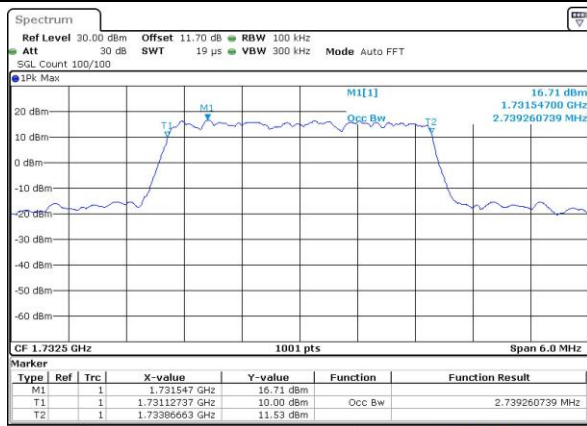
Date: 21 MAY 2018 16:56:44

Lowest Channel / 3MHz / 16QAM



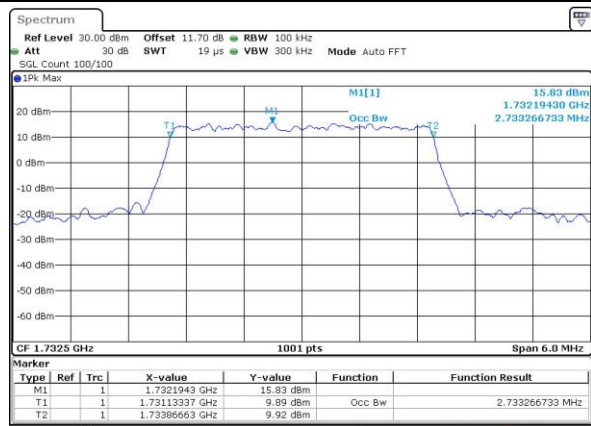
Date: 21 MAY 2018 16:56:54

Middle Channel / 3MHz / QPSK



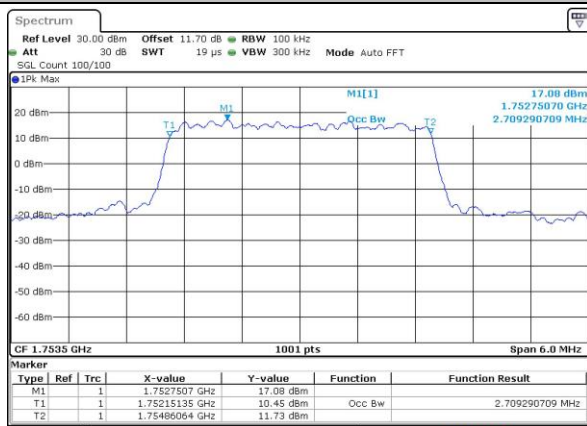
Date: 21 MAY 2018 17:03:52

Middle Channel / 3MHz / 16QAM



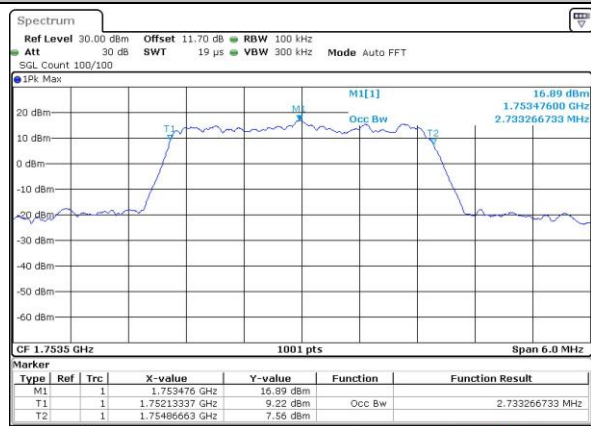
Date: 21 MAY 2018 17:04:02

Highest Channel / 3MHz / QPSK



Date: 21 MAY 2018 17:06:22

Highest Channel / 3MHz / 16QAM

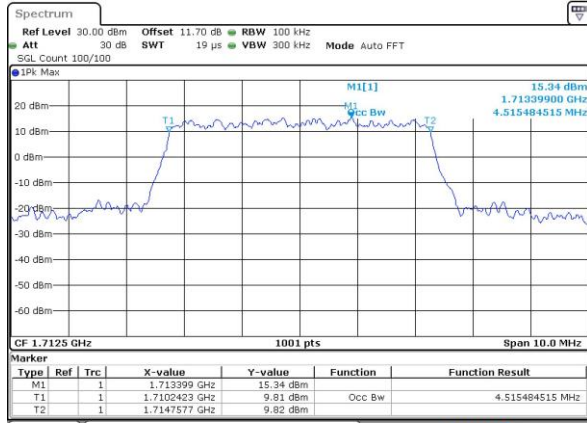


Date: 21 MAY 2018 17:06:33



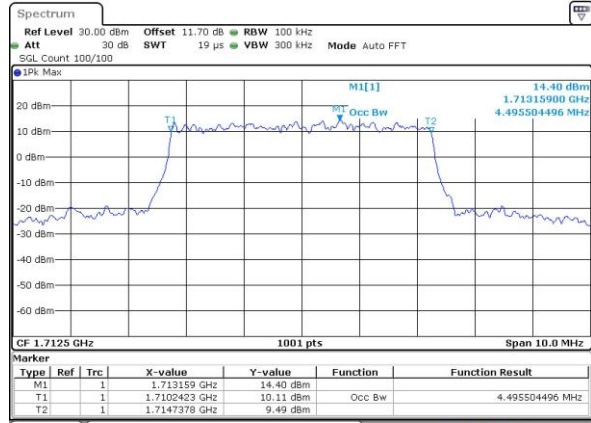
LTE Band 4

Lowest Channel / 5MHz / QPSK



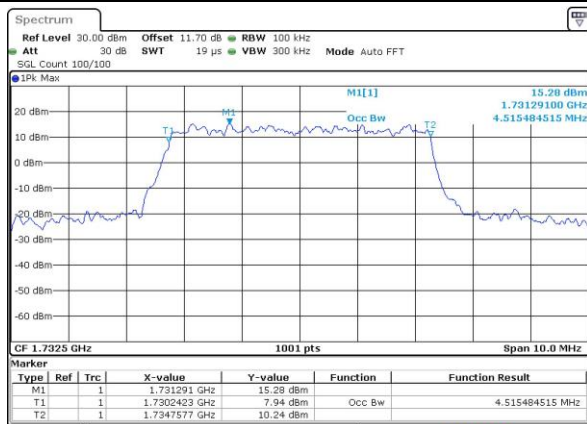
Date: 21 MAY 2018 17:13:30

Lowest Channel / 5MHz / 16QAM



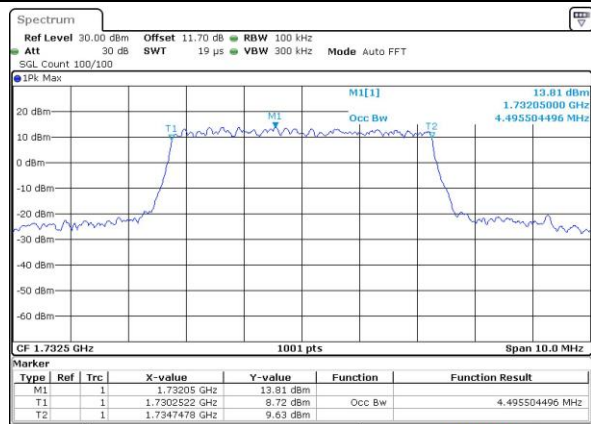
Date: 21 MAY 2018 17:13:41

Middle Channel / 5MHz / QPSK



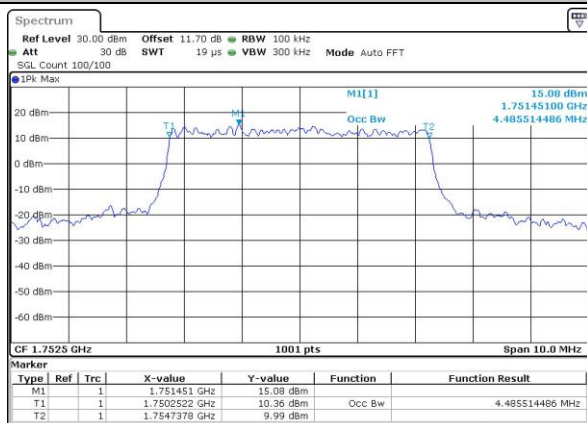
Date: 21 MAY 2018 17:20:38

Middle Channel / 5MHz / 16QAM



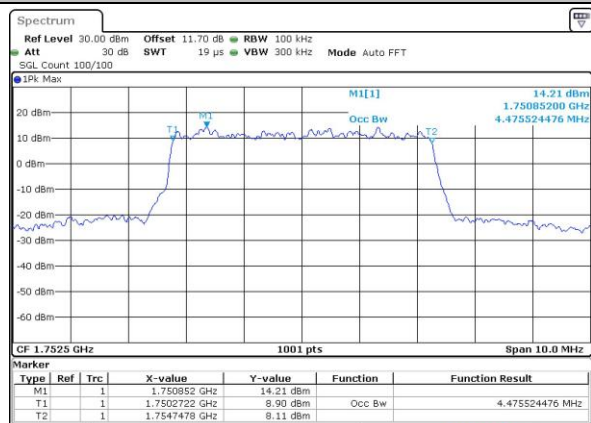
Date: 21 MAY 2018 17:20:48

Highest Channel / 5MHz / QPSK



Date: 21 MAY 2018 17:23:08

Highest Channel / 5MHz / 16QAM

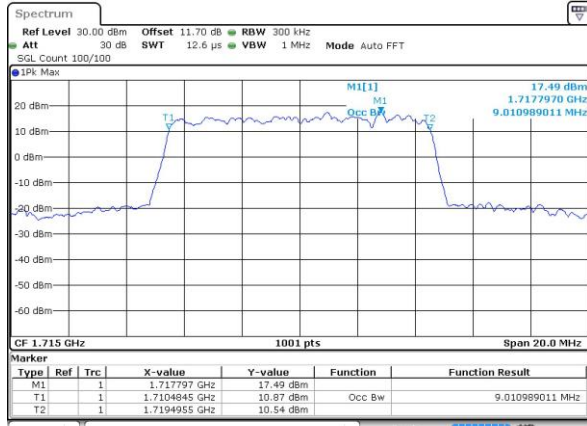


Date: 21 MAY 2018 17:23:19

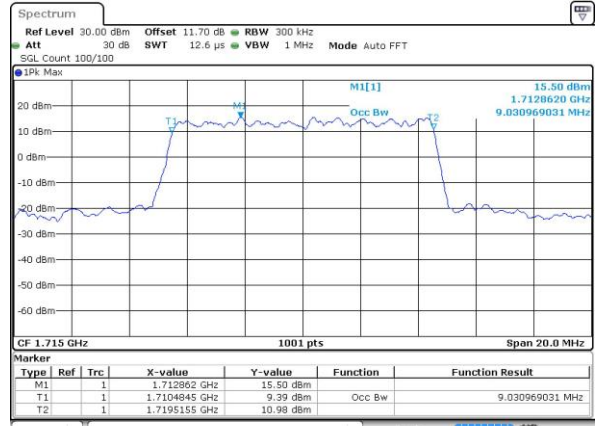


LTE Band 4

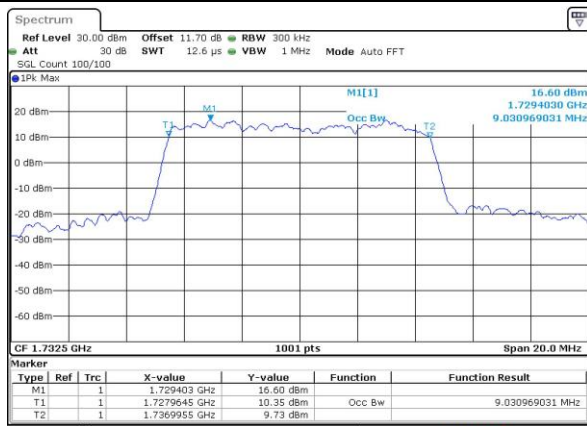
Lowest Channel / 10MHz / QPSK



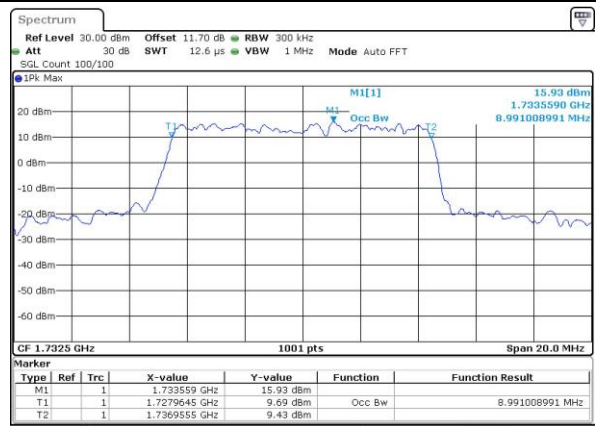
Lowest Channel / 10MHz / 16QAM



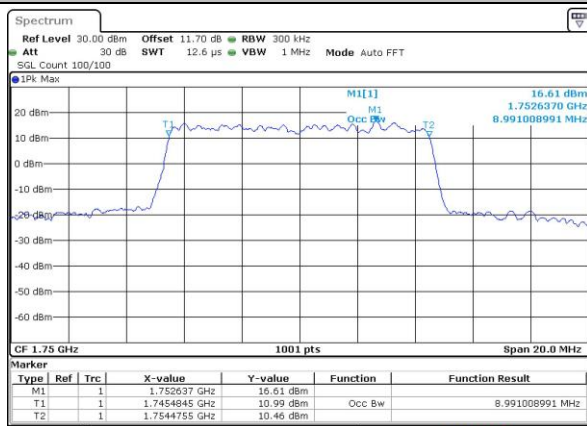
Middle Channel / 10MHz / QPSK



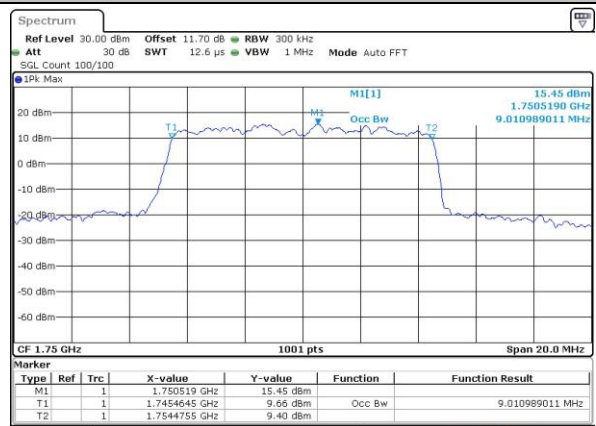
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



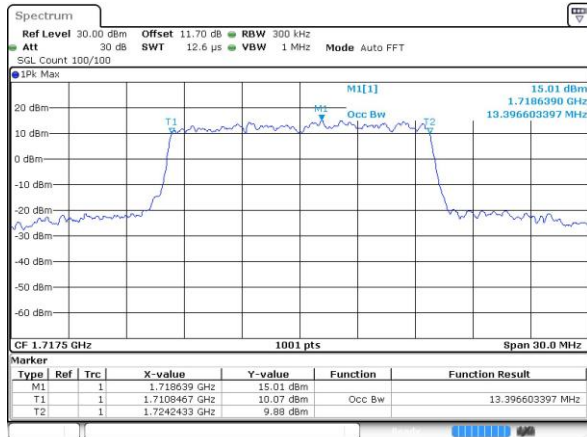
Highest Channel / 10MHz / 16QAM





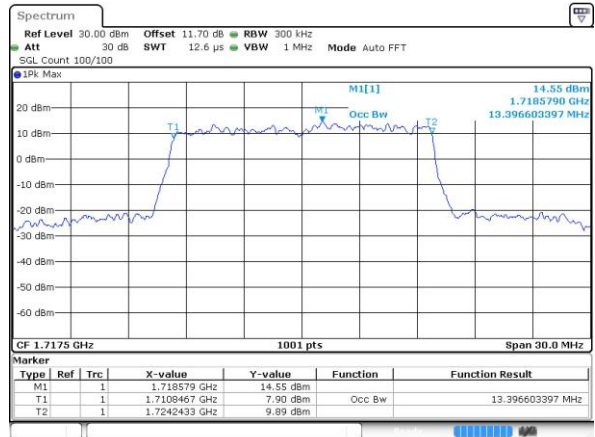
LTE Band 4

Lowest Channel / 15MHz / QPSK



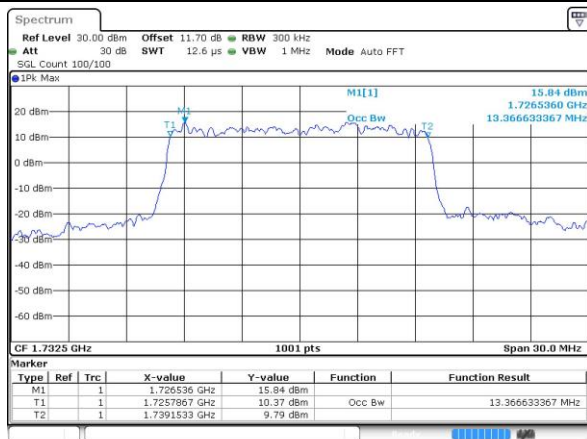
Date: 21 MAY 2018 17:47:03

Lowest Channel / 15MHz / 16QAM



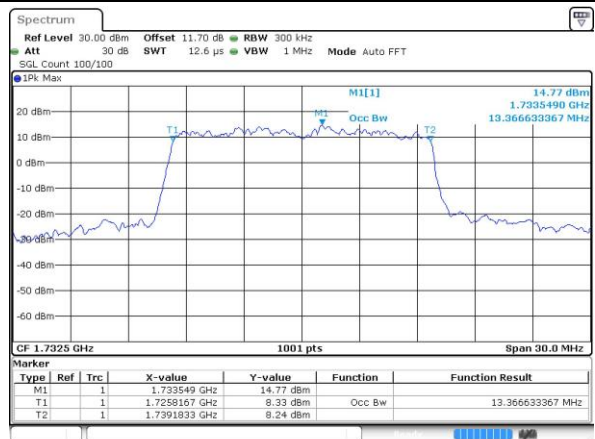
Date: 21 MAY 2018 17:47:13

Middle Channel / 15MHz / QPSK



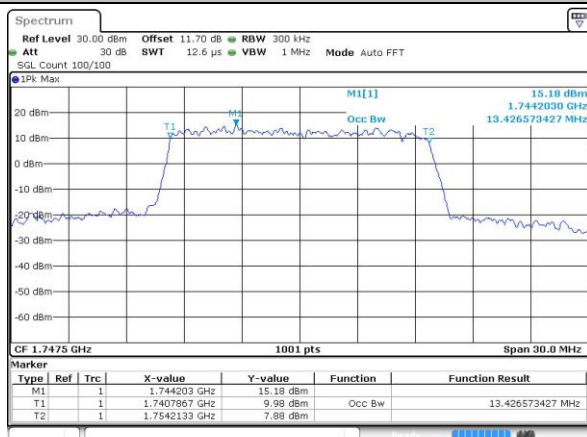
Date: 21 MAY 2018 17:54:10

Middle Channel / 15MHz / 16QAM



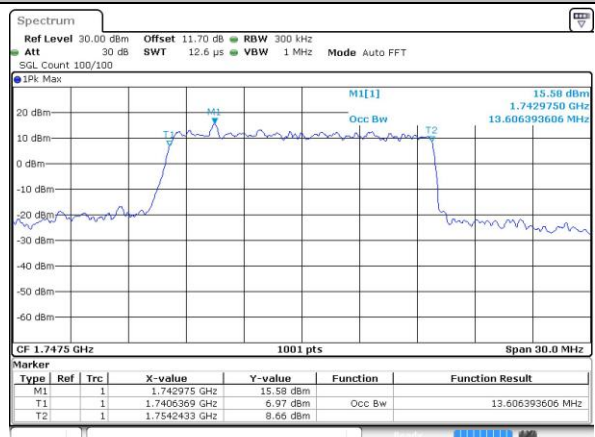
Date: 21 MAY 2018 17:54:21

Highest Channel / 15MHz / QPSK



Date: 21 MAY 2018 17:56:41

Highest Channel / 15MHz / 16QAM

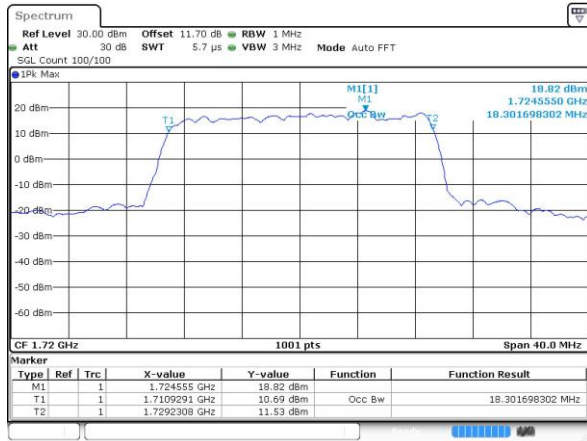


Date: 21 MAY 2018 17:56:52

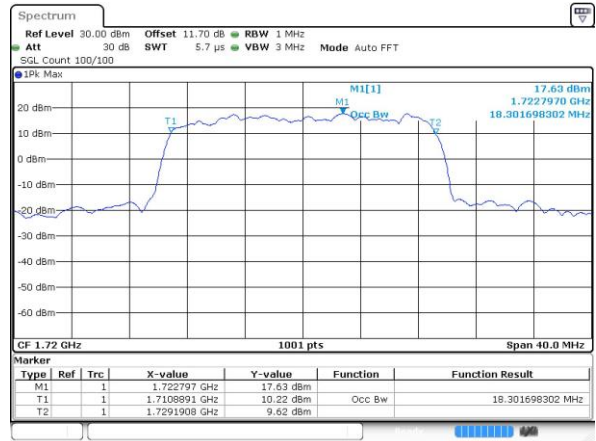


LTE Band 4

Lowest Channel / 20MHz / QPSK



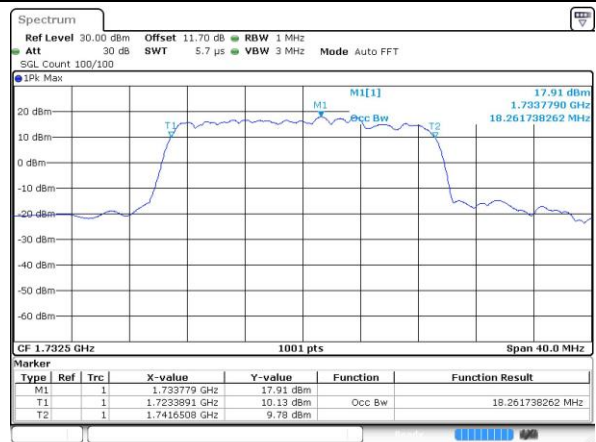
Lowest Channel / 20MHz / 16QAM



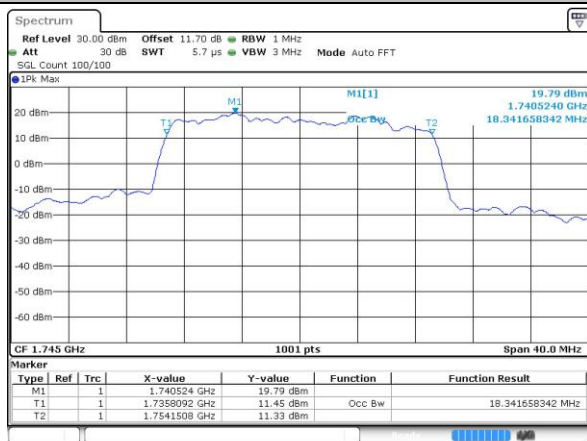
Middle Channel / 20MHz / QPSK



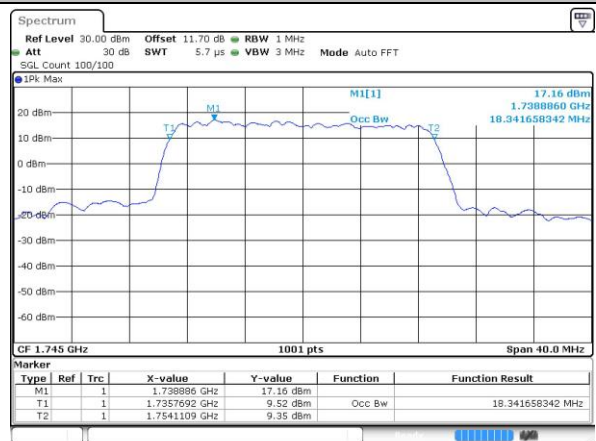
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM



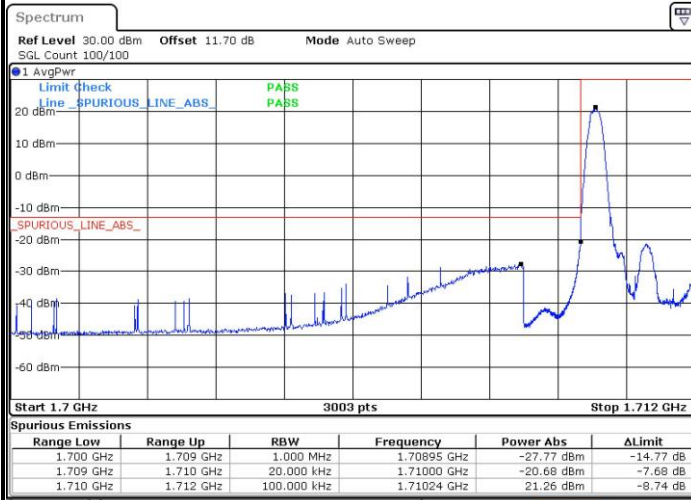


Conducted Band Edge



LTE Band 4 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

