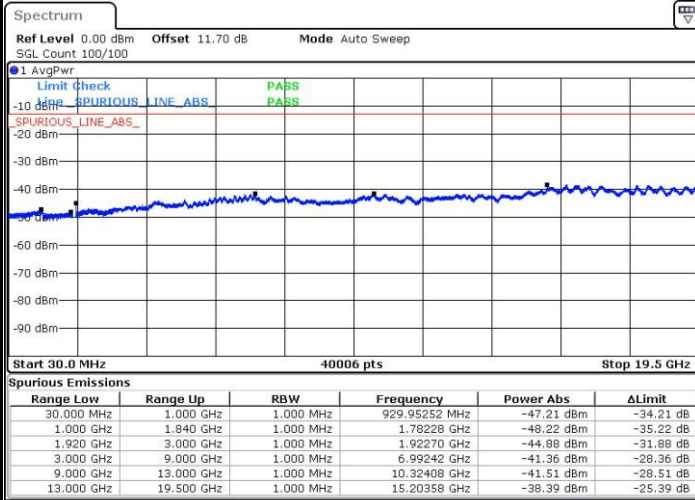




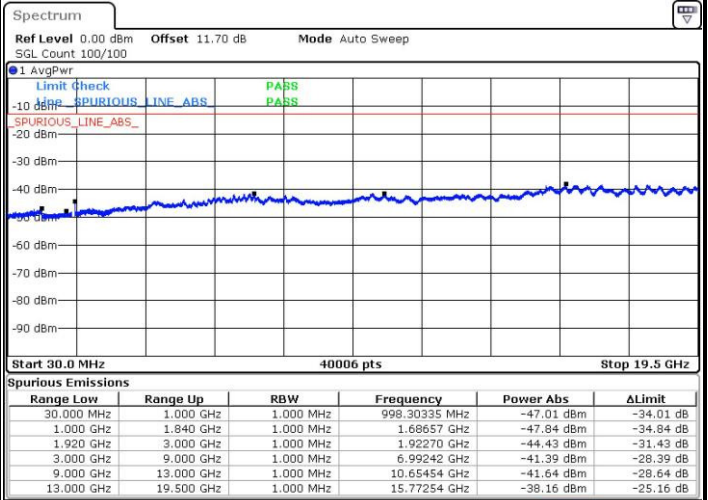
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 13 JAN 2017 14:17:52

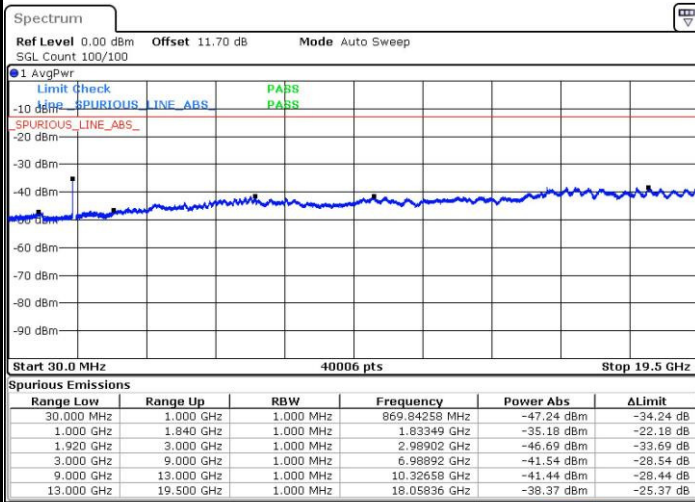
Highest Channel / 16QAM



Date: 13 JAN 2017 14:18:47

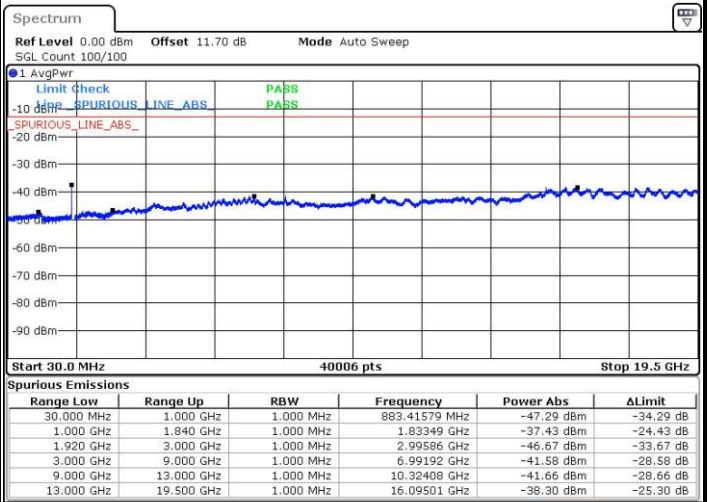
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 13 JAN 2017 14:24:59

Lowest Channel / 16QAM



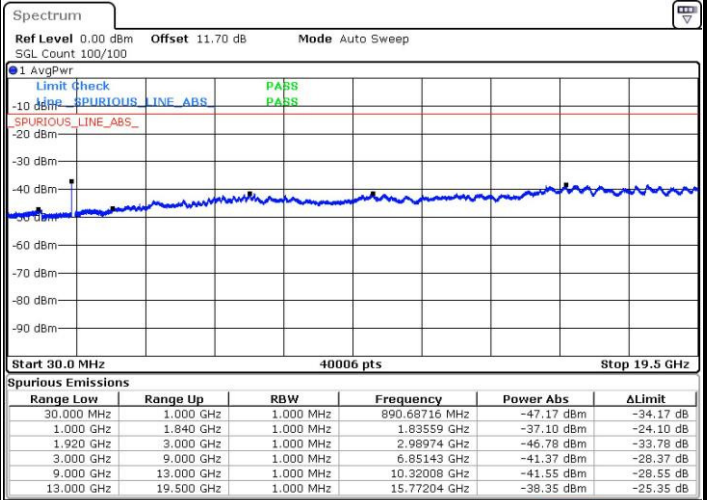
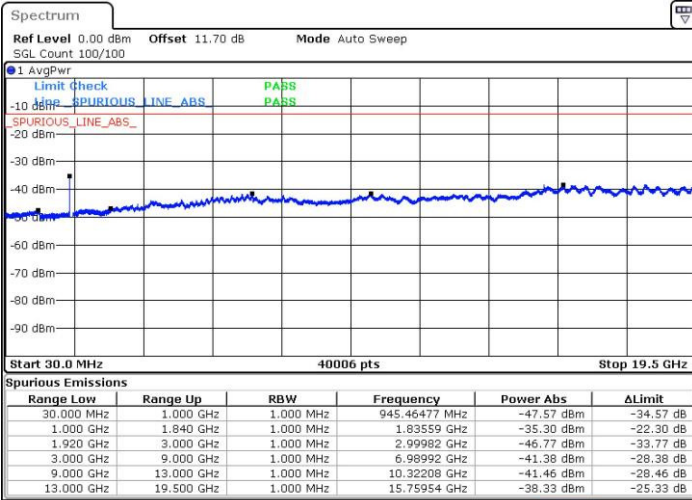
Date: 13 JAN 2017 14:25:54



LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

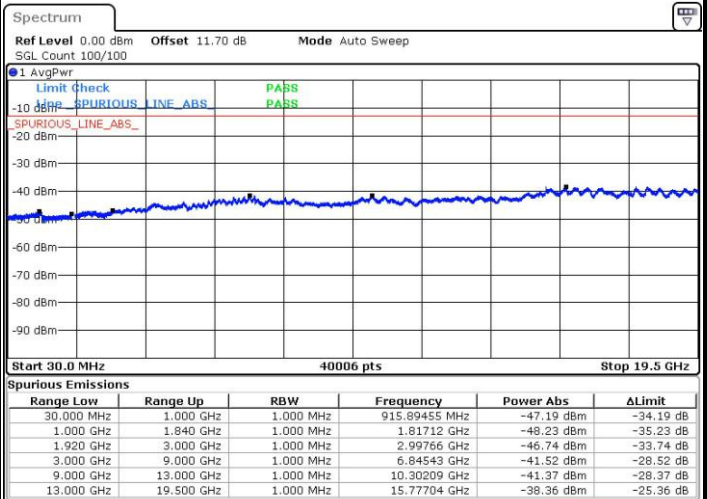
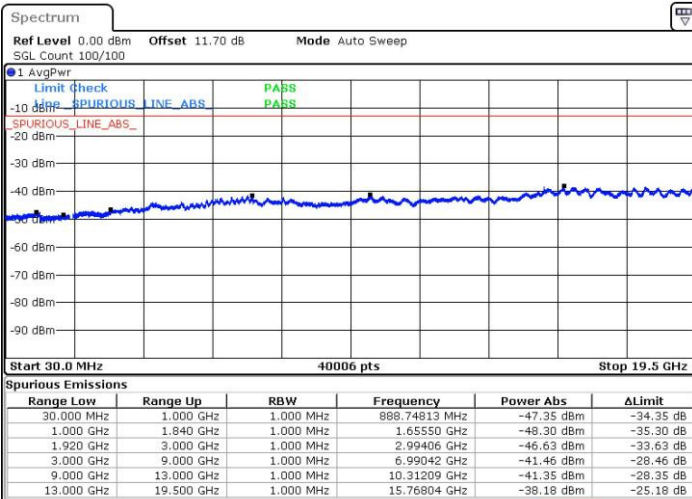


Date: 13 JAN 2017 14:27:30

Date: 13 JAN 2017 14:28:24

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 13 JAN 2017 14:34:37

Date: 13 JAN 2017 14:35:31



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	0.0080	PASS
40	Normal Voltage	0.0077	
30	Normal Voltage	0.0090	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0084	
0	Normal Voltage	0.0088	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0077	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.1 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	3.88	4.99	5.19	6.03	<b>PASS</b>
Middle CH	4.41	4.55	5.36	5.83	
Highest CH	3.39	4.78	4.29	5.68	





LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



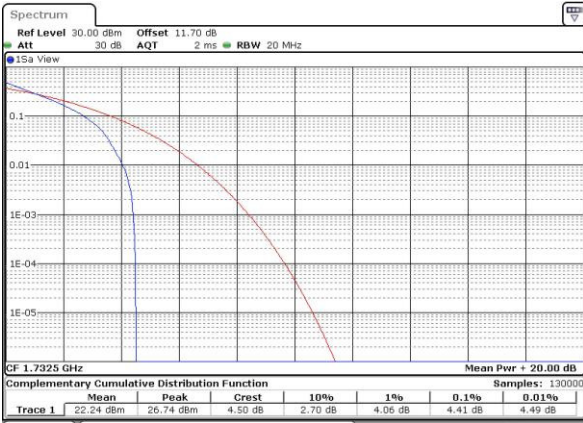
Date: 13 JAN 2017 17:06:27

Lowest Channel / Full RB



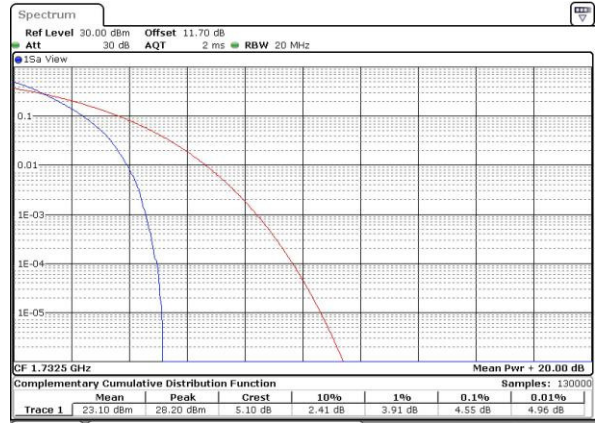
Date: 13 JAN 2017 17:06:37

Middle Channel / 1RB



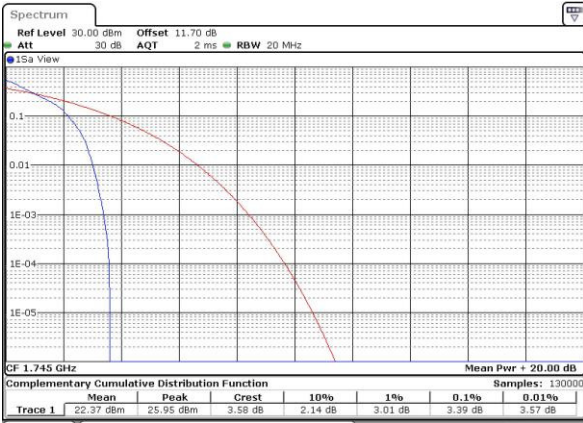
Date: 13 JAN 2017 17:08:00

Middle Channel / Full RB



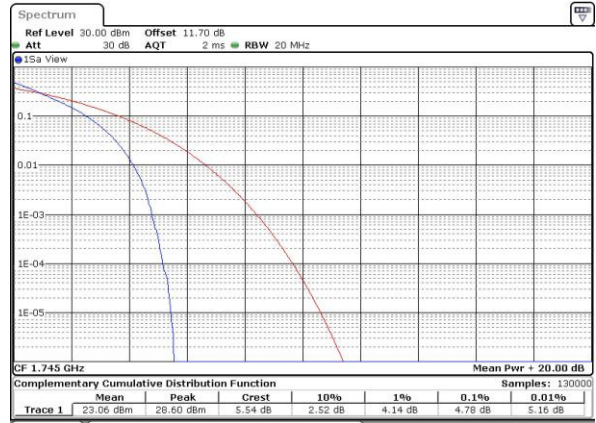
Date: 13 JAN 2017 17:08:11

Highest Channel / 1RB



Date: 13 JAN 2017 17:08:26

Highest Channel / Full RB

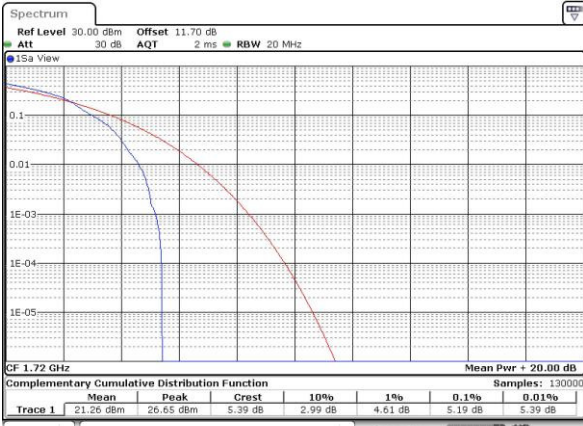


Date: 13 JAN 2017 17:08:49



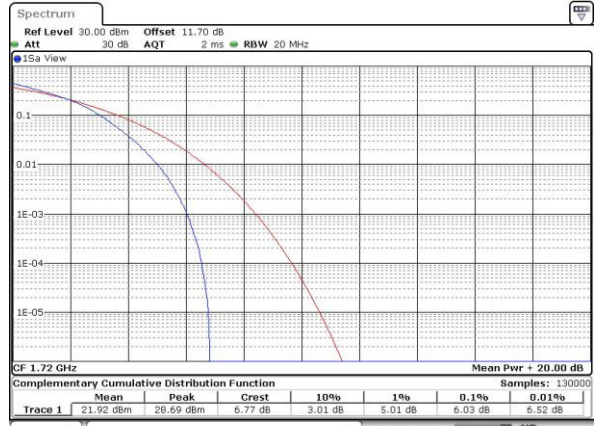
LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



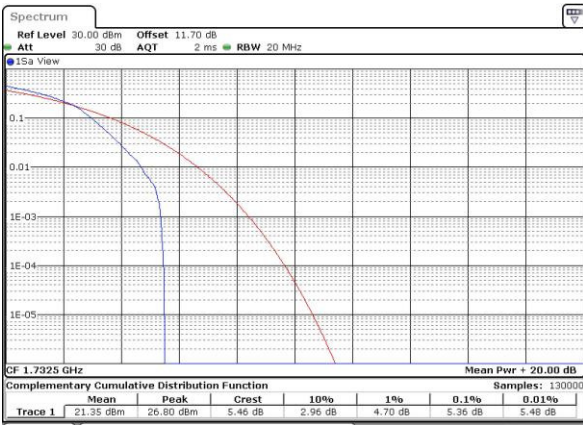
Date: 13 JAN 2017 17:05:13

Lowest Channel / Full RB



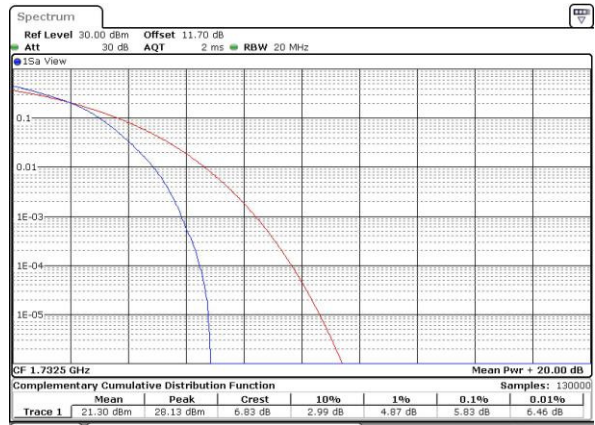
Date: 13 JAN 2017 17:05:25

Middle Channel / 1RB



Date: 13 JAN 2017 17:05:38

Middle Channel / Full RB



Date: 13 JAN 2017 17:05:48

Highest Channel / 1RB



Date: 13 JAN 2017 17:06:04

Highest Channel / Full RB



Date: 13 JAN 2017 17:06:15



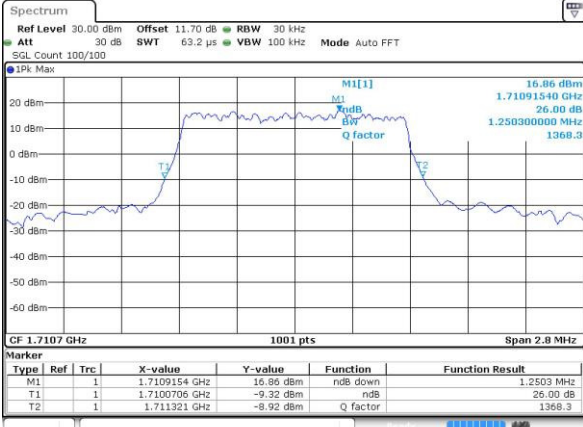
**26dB Bandwidth**

Mode	LTE Band 4 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.25	1.24	3.02	3.02	4.89	4.96	9.77	9.85	14.54	14.15	20.22	20.02
Middle CH	1.25	1.28	2.99	3.00	4.96	4.95	9.75	9.97	14.57	14.39	20.26	20.10
Highest CH	1.25	1.26	2.99	2.99	5.06	5.04	9.73	9.85	14.42	14.33	20.14	20.18



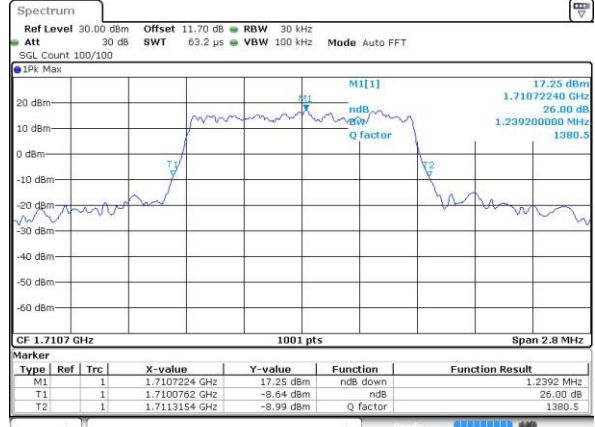
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



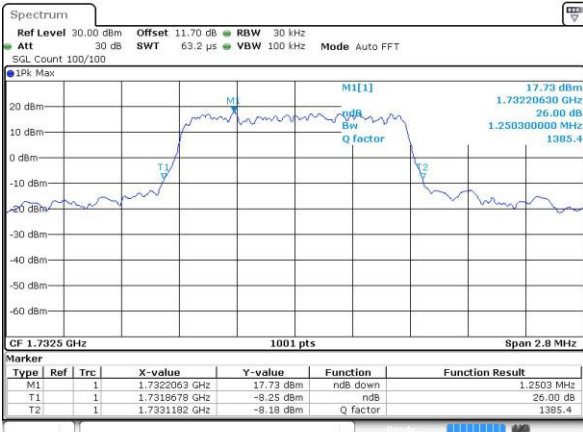
Date: 13 JAN 2017 16:33:05

Lowest Channel / 1.4MHz / 16QAM



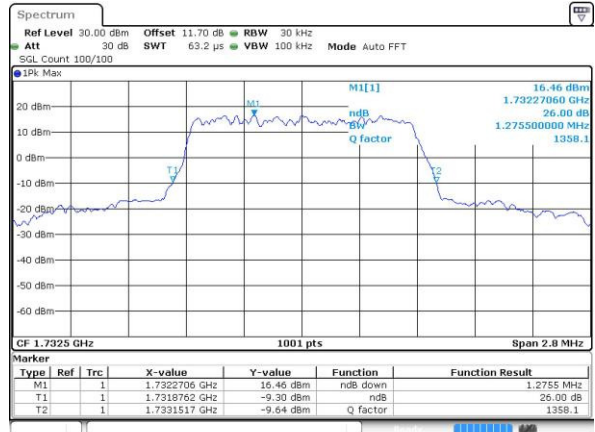
Date: 13 JAN 2017 16:33:16

Middle Channel / 1.4MHz / QPSK



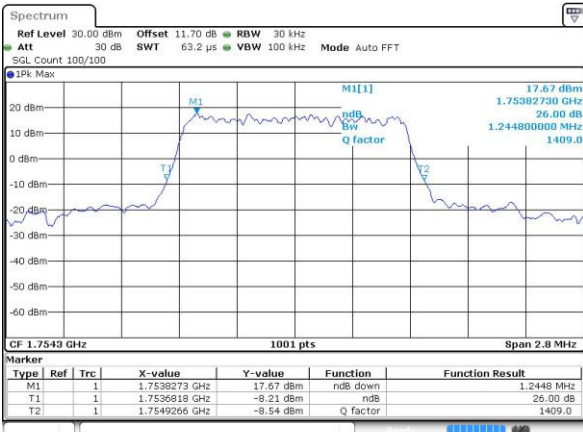
Date: 13 JAN 2017 16:40:12

Middle Channel / 1.4MHz / 16QAM



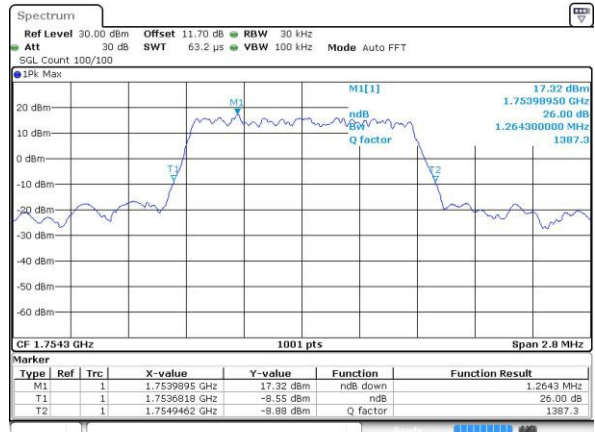
Date: 13 JAN 2017 16:40:22

Highest Channel / 1.4MHz / QPSK



Date: 13 JAN 2017 16:42:42

Highest Channel / 1.4MHz / 16QAM

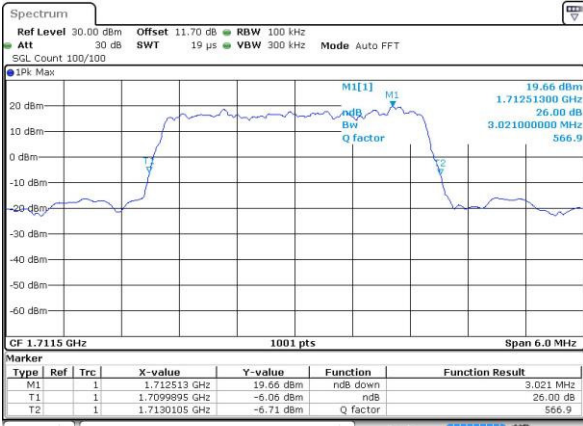


Date: 13 JAN 2017 16:42:52



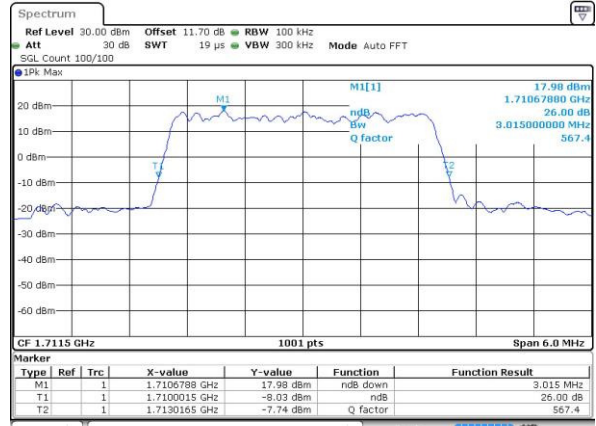
LTE Band 4

Lowest Channel / 3MHz / QPSK



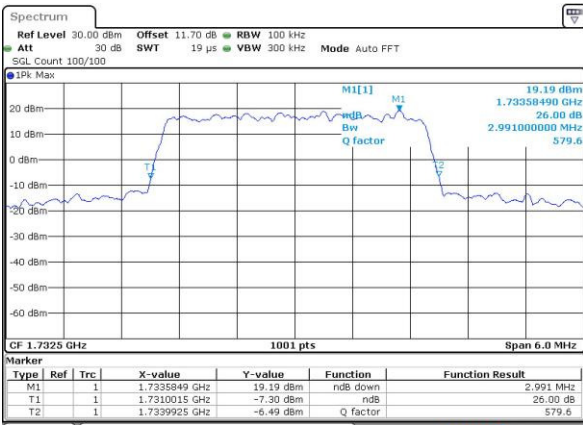
Date: 13 JAN 2017 15:04:58

Lowest Channel / 3MHz / 16QAM



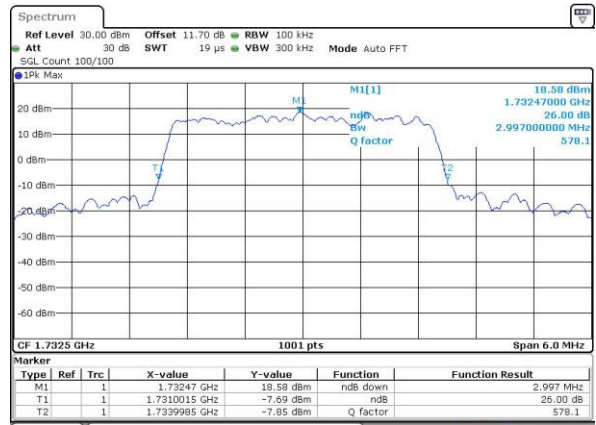
Date: 13 JAN 2017 15:05:08

Middle Channel / 3MHz / QPSK



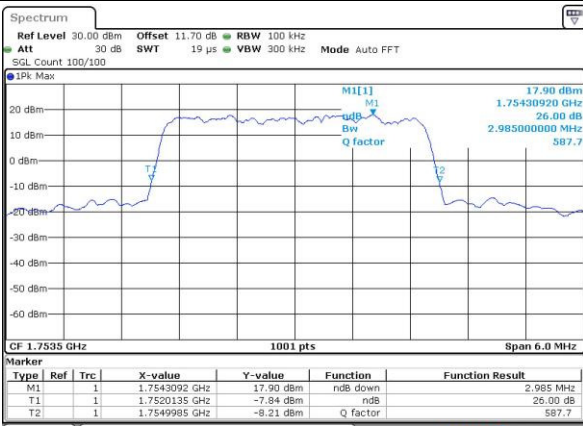
Date: 13 JAN 2017 15:12:05

Middle Channel / 3MHz / 16QAM



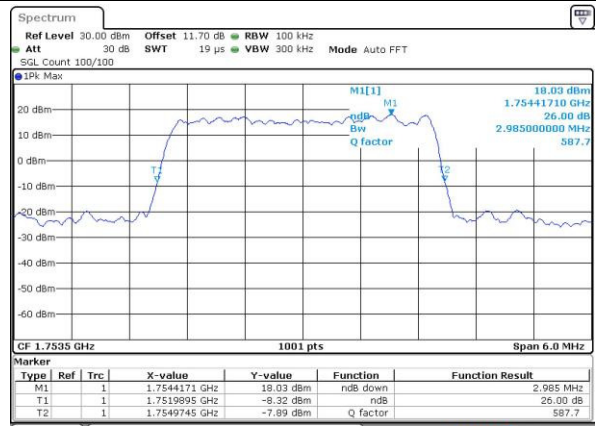
Date: 13 JAN 2017 15:12:15

Highest Channel / 3MHz / QPSK



Date: 13 JAN 2017 15:14:36

Highest Channel / 3MHz / 16QAM



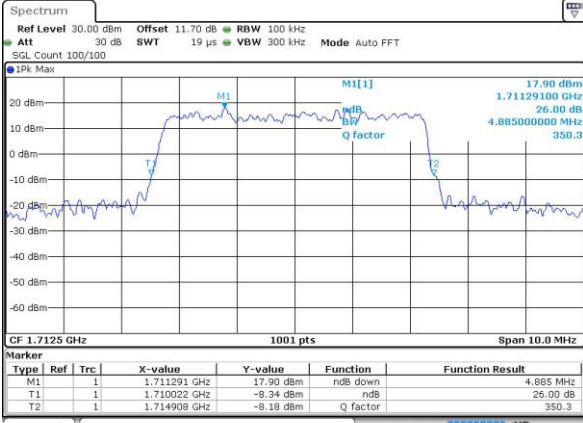
Date: 13 JAN 2017 15:14:46





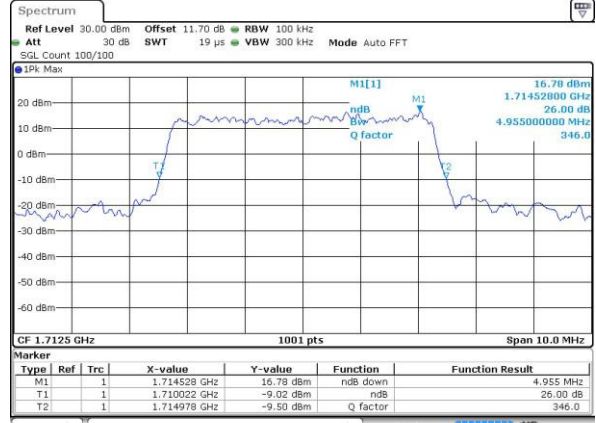
LTE Band 4

Lowest Channel / 5MHz / QPSK



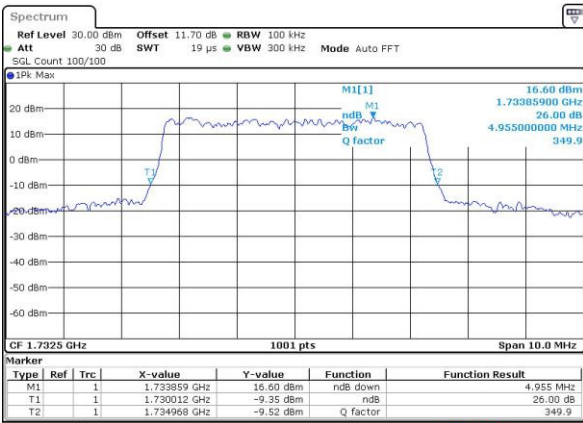
Date: 13 JAN 2017 15:21:44

Lowest Channel / 5MHz / 16QAM



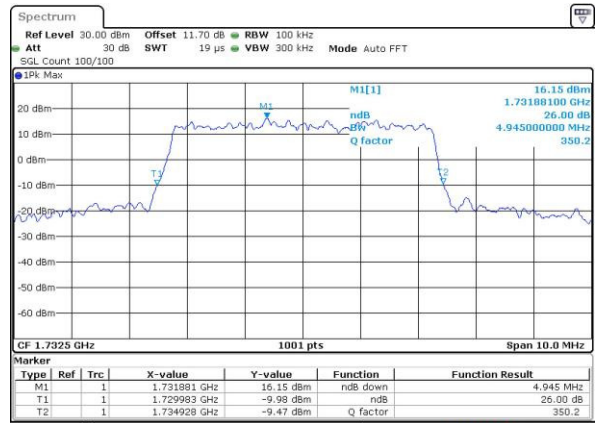
Date: 13 JAN 2017 15:21:54

Middle Channel / 5MHz / QPSK



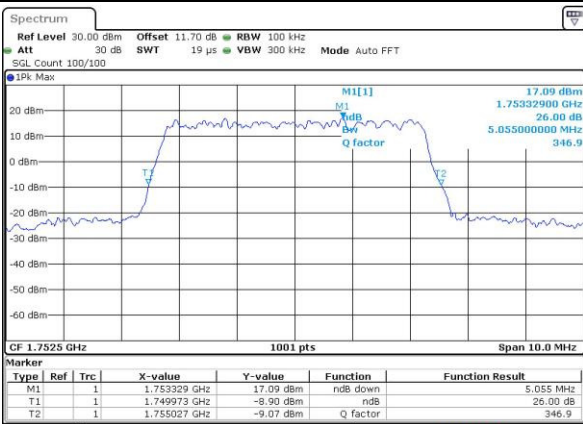
Date: 13 JAN 2017 15:28:51

Middle Channel / 5MHz / 16QAM



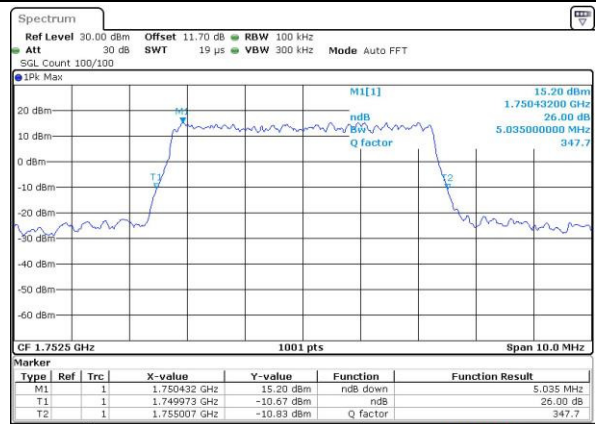
Date: 13 JAN 2017 15:29:01

Highest Channel / 5MHz / QPSK



Date: 13 JAN 2017 15:31:21

Highest Channel / 5MHz / 16QAM

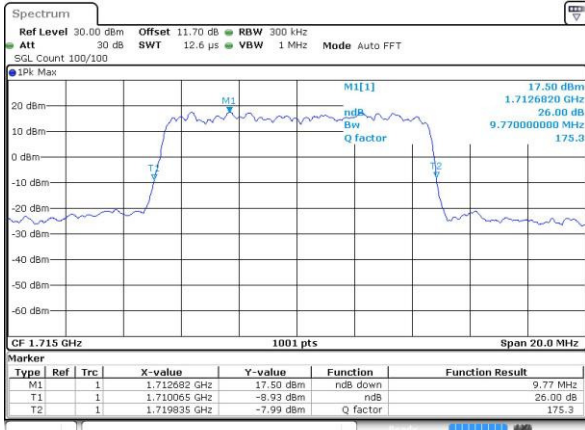


Date: 13 JAN 2017 15:31:31



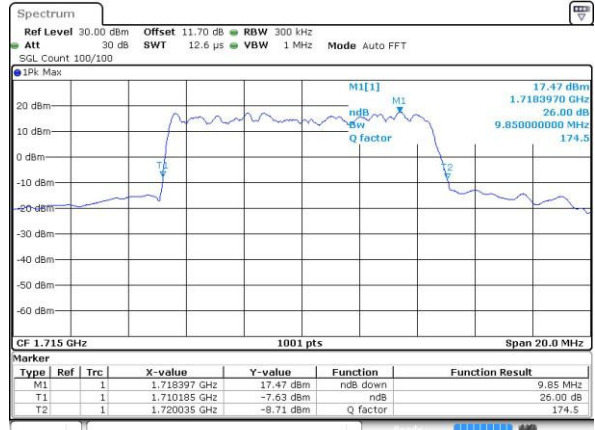
LTE Band 4

Lowest Channel / 10MHz / QPSK



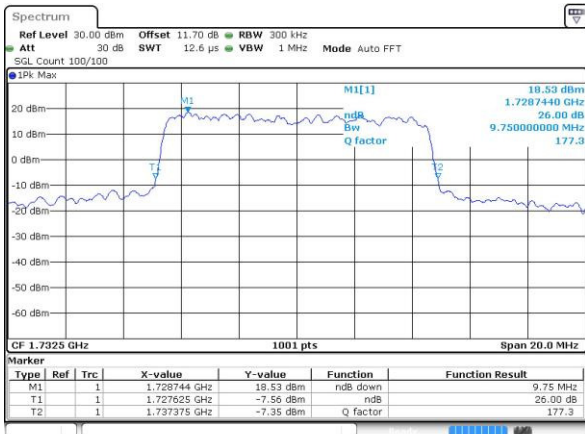
Date: 13 JAN 2017 15:38:29

Lowest Channel / 10MHz / 16QAM



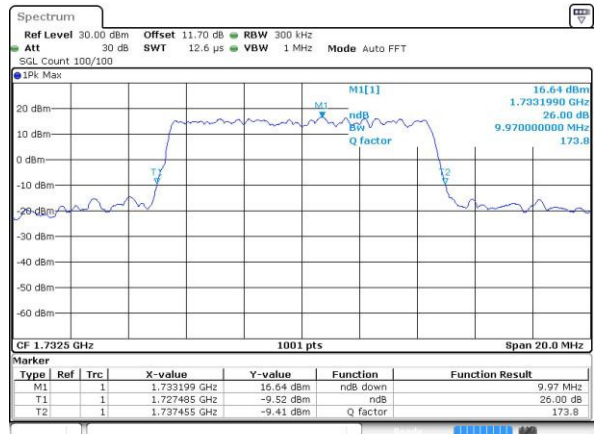
Date: 13 JAN 2017 15:38:39

Middle Channel / 10MHz / QPSK



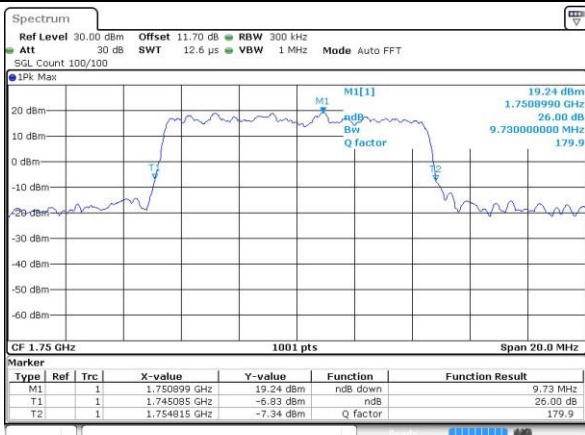
Date: 13 JAN 2017 15:45:35

Middle Channel / 10MHz / 16QAM



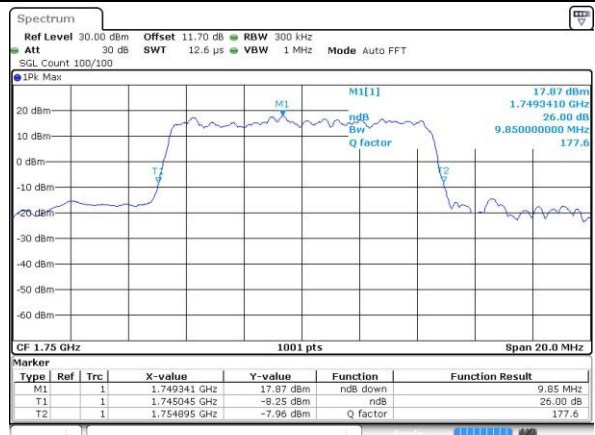
Date: 13 JAN 2017 15:45:45

Highest Channel / 10MHz / QPSK



Date: 13 JAN 2017 15:48:05

Highest Channel / 10MHz / 16QAM

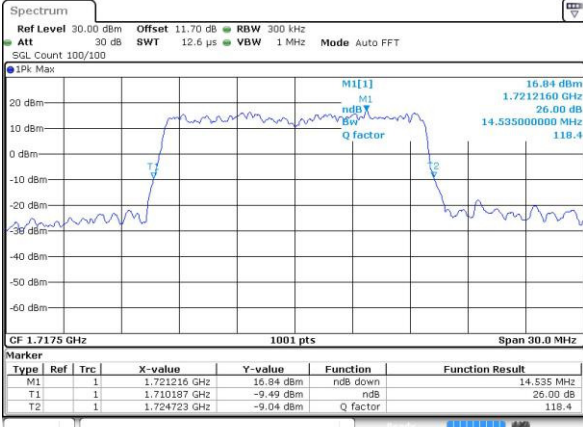


Date: 13 JAN 2017 15:48:16



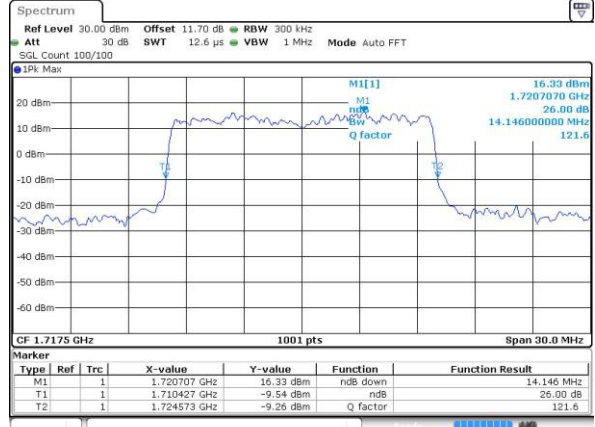
LTE Band 4

Lowest Channel / 15MHz / QPSK



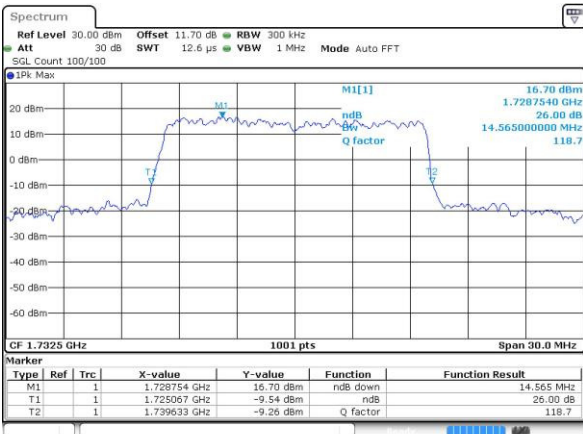
Date: 13 JAN 2017 15:55:12

Lowest Channel / 15MHz / 16QAM



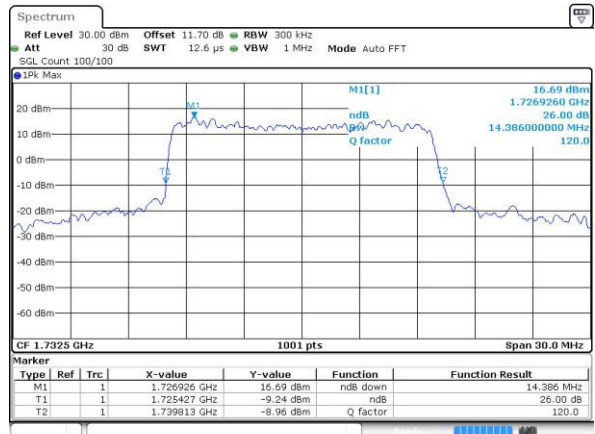
Date: 13 JAN 2017 15:55:22

Middle Channel / 15MHz / QPSK



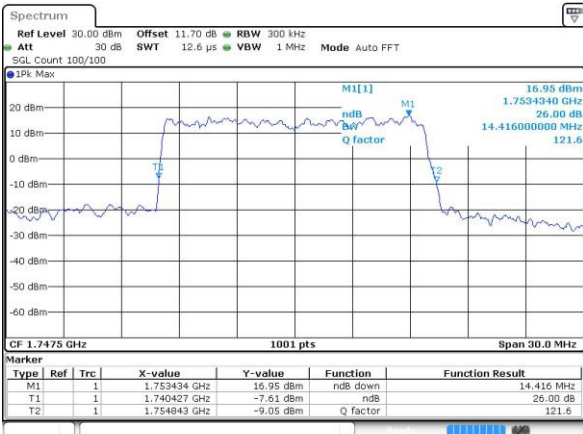
Date: 13 JAN 2017 16:06:44

Middle Channel / 15MHz / 16QAM



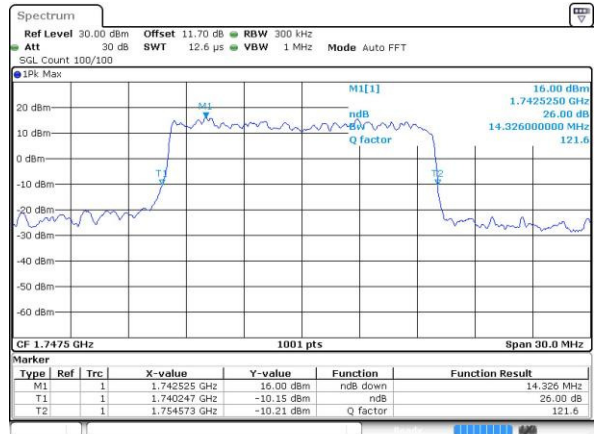
Date: 13 JAN 2017 16:06:54

Highest Channel / 15MHz / QPSK



Date: 13 JAN 2017 16:09:15

Highest Channel / 15MHz / 16QAM



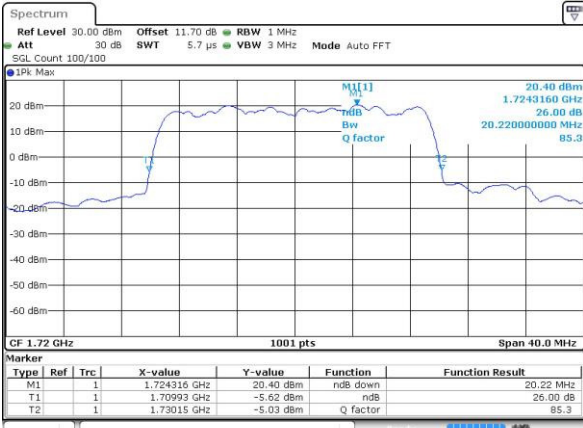
Date: 13 JAN 2017 16:09:25





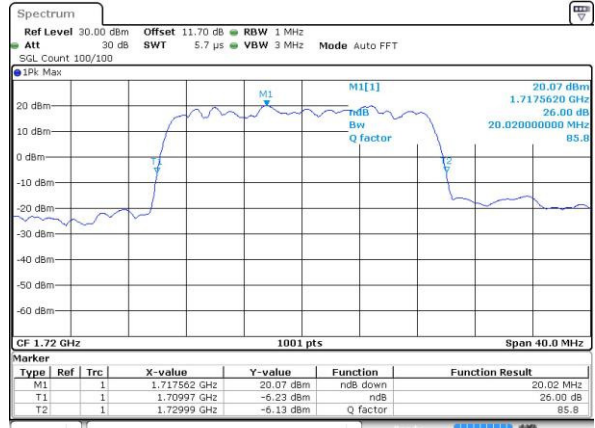
LTE Band 4

Lowest Channel / 20MHz / QPSK



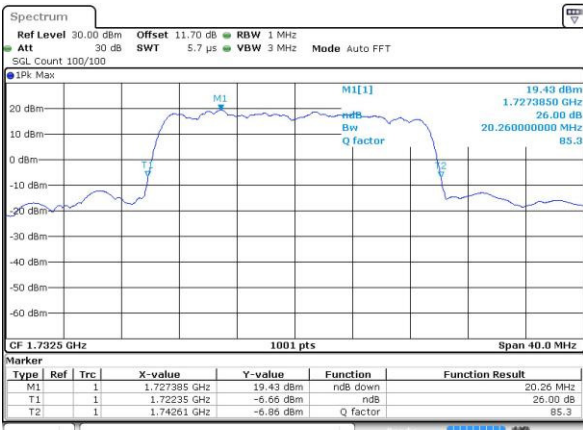
Date: 13 JAN 2017 16:16:21

Lowest Channel / 20MHz / 16QAM



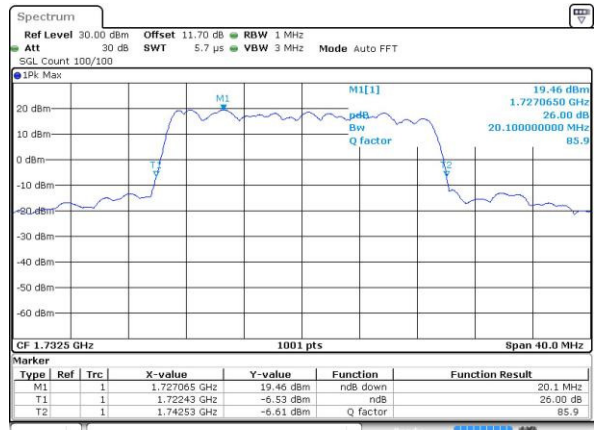
Date: 13 JAN 2017 16:16:32

Middle Channel / 20MHz / QPSK



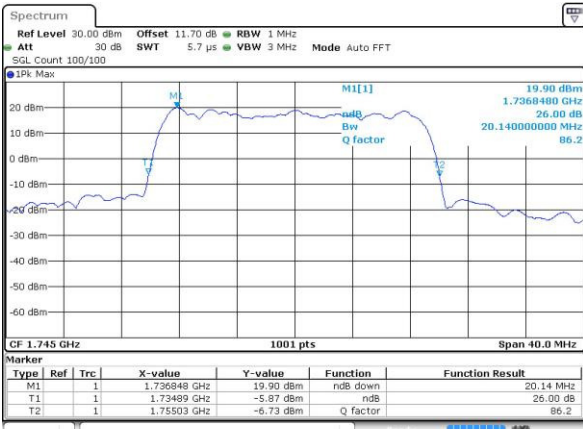
Date: 13 JAN 2017 16:23:28

Middle Channel / 20MHz / 16QAM



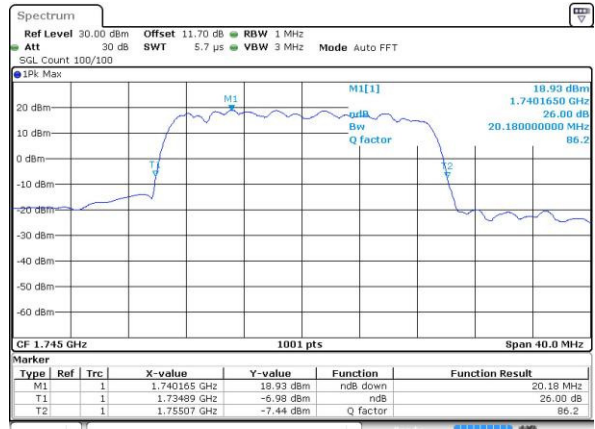
Date: 13 JAN 2017 16:23:38

Highest Channel / 20MHz / QPSK



Date: 13 JAN 2017 16:25:58

Highest Channel / 20MHz / 16QAM



Date: 13 JAN 2017 16:26:09



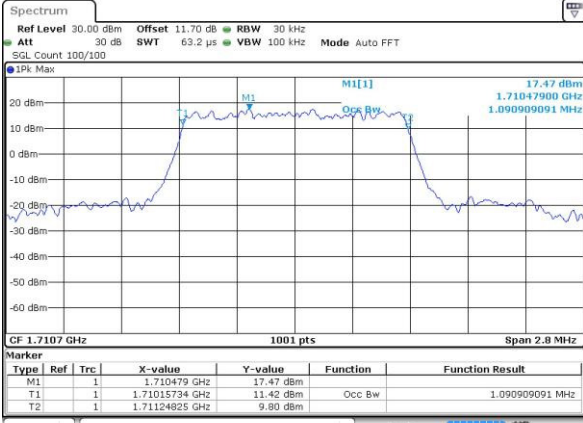
**Occupied Bandwidth**

Mode	LTE Band 4 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.1	2.71	2.72	4.5	4.51	9.03	9.09	13.4	13.46	18.34	18.58
Middle CH	1.1	1.1	2.73	2.7	4.49	4.51	9.03	9.01	13.37	13.46	18.3	18.22
Highest CH	1.09	1.09	2.72	2.72	4.5	4.5	9.07	8.97	13.49	13.49	18.54	18.5



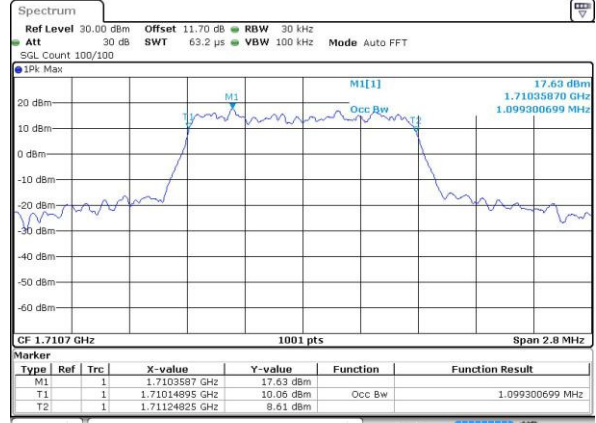
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



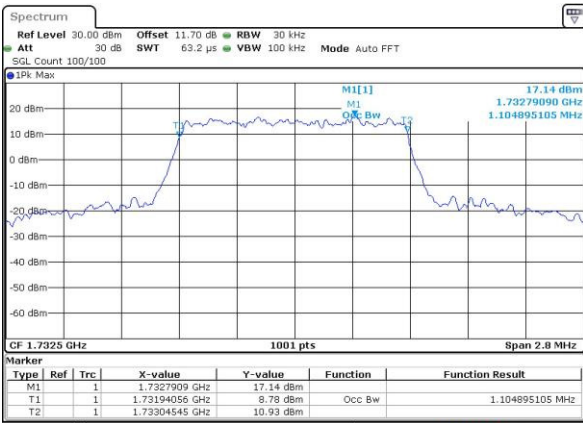
Date: 13 JAN 2017 16:32:45

Lowest Channel / 1.4MHz / 16QAM



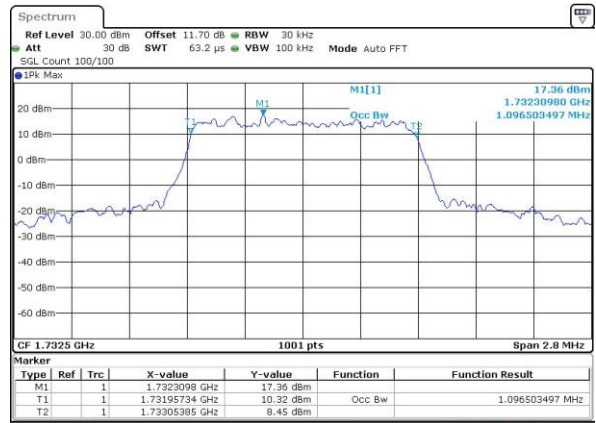
Date: 13 JAN 2017 16:32:55

Middle Channel / 1.4MHz / QPSK



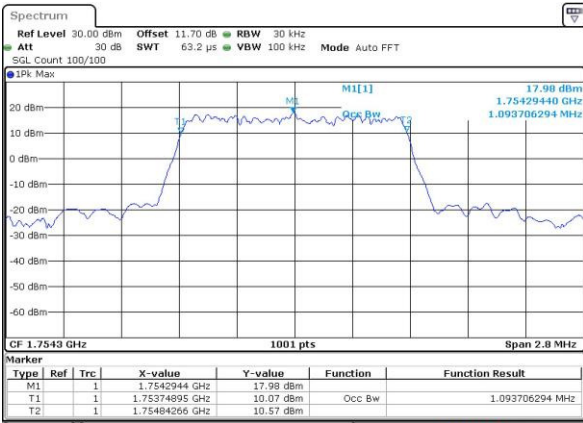
Date: 13 JAN 2017 16:39:51

Middle Channel / 1.4MHz / 16QAM



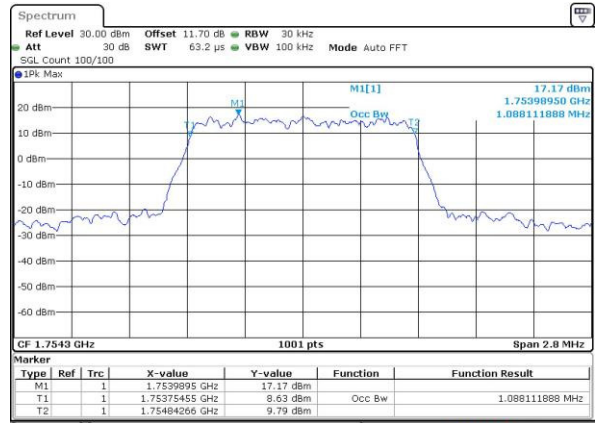
Date: 13 JAN 2017 16:40:01

Highest Channel / 1.4MHz / QPSK



Date: 13 JAN 2017 16:42:21

Highest Channel / 1.4MHz / 16QAM

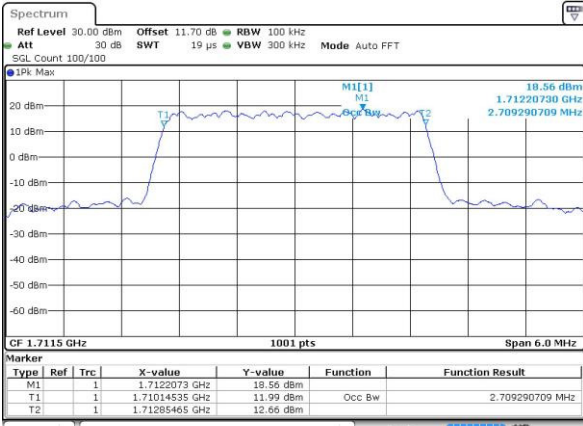


Date: 13 JAN 2017 16:42:31



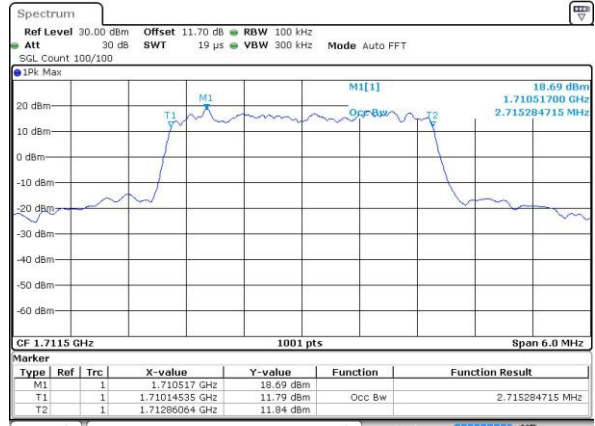
LTE Band 4

Lowest Channel / 3MHz / QPSK



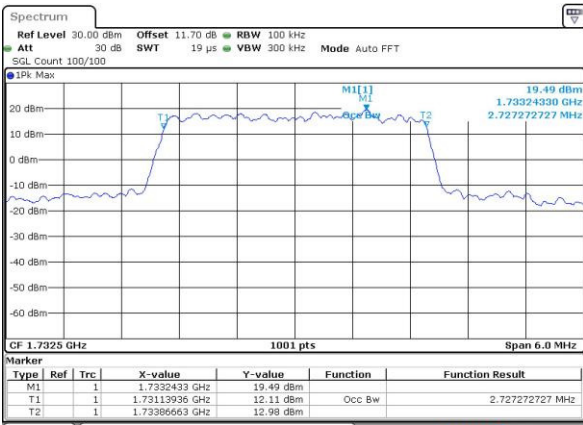
Date: 13 JAN 2017 14:58:53

Lowest Channel / 3MHz / 16QAM



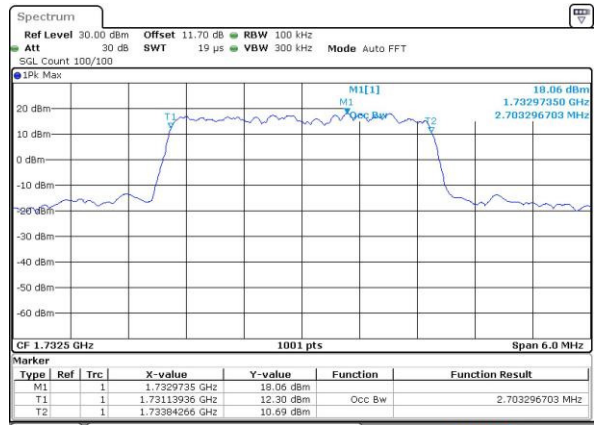
Date: 13 JAN 2017 14:59:03

Middle Channel / 3MHz / QPSK



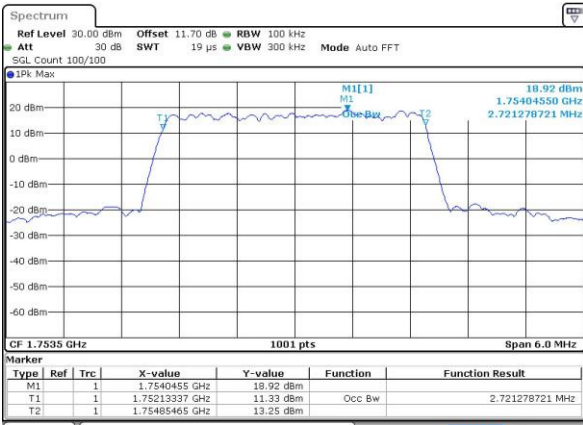
Date: 13 JAN 2017 15:11:44

Middle Channel / 3MHz / 16QAM



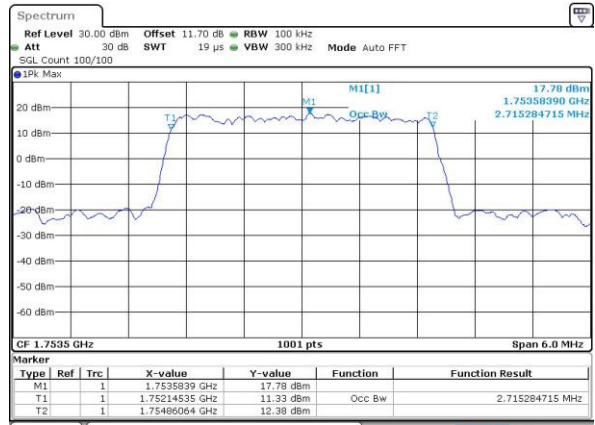
Date: 13 JAN 2017 15:11:55

Highest Channel / 3MHz / QPSK



Date: 13 JAN 2017 15:14:15

Highest Channel / 3MHz / 16QAM

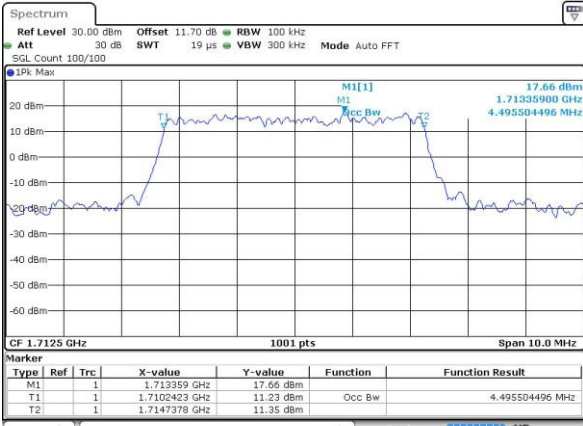


Date: 13 JAN 2017 15:14:26



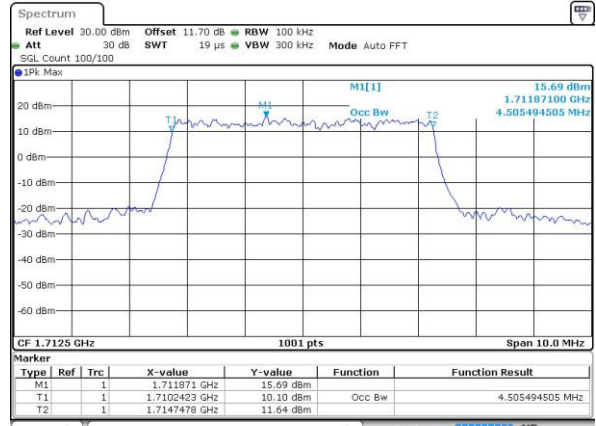
LTE Band 4

Lowest Channel / 5MHz / QPSK



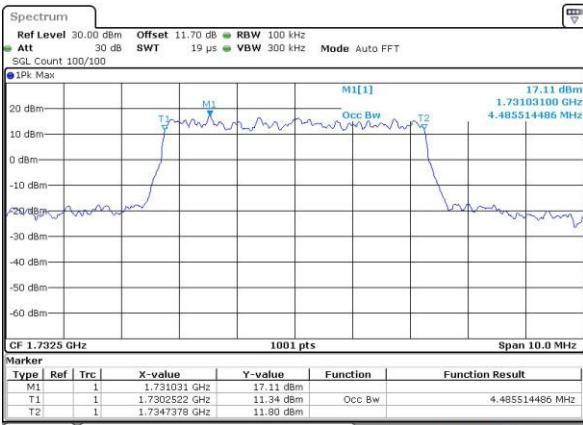
Date: 13 JAN 2017 15:21:23

Lowest Channel / 5MHz / 16QAM



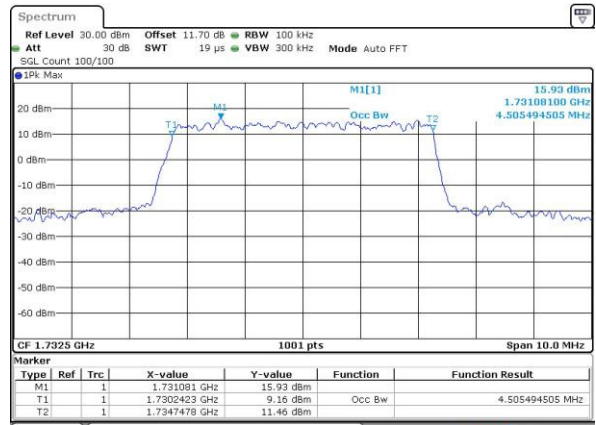
Date: 13 JAN 2017 15:21:33

Middle Channel / 5MHz / QPSK



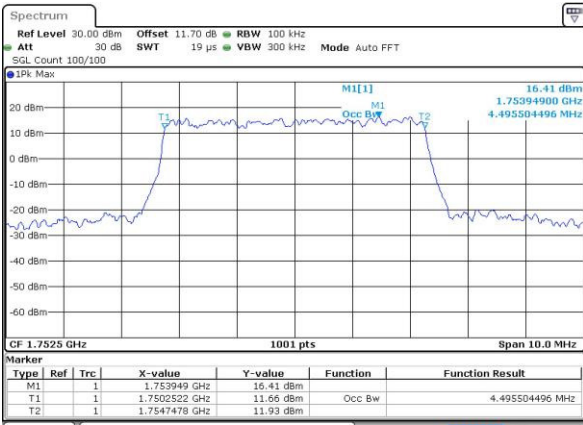
Date: 13 JAN 2017 15:28:30

Middle Channel / 5MHz / 16QAM



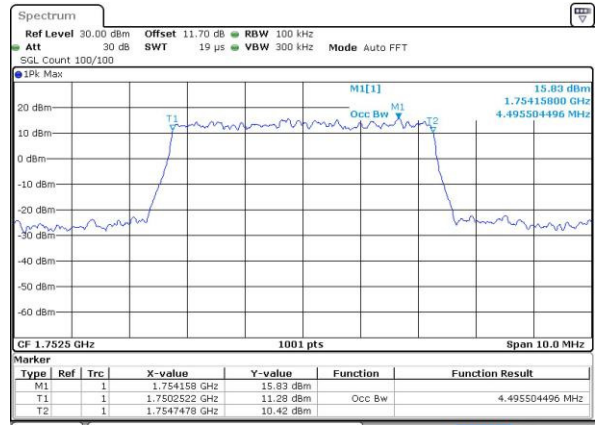
Date: 13 JAN 2017 15:28:40

Highest Channel / 5MHz / QPSK



Date: 13 JAN 2017 15:31:00

Highest Channel / 5MHz / 16QAM

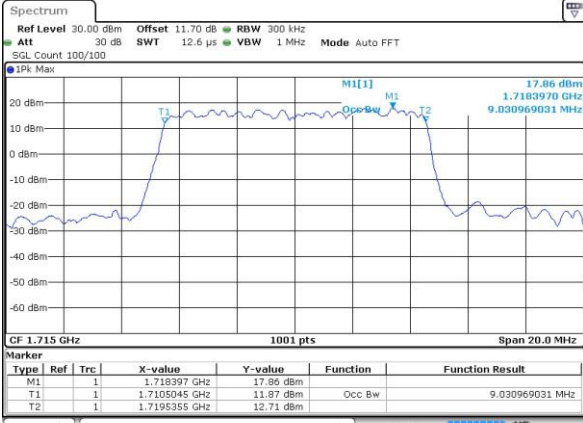


Date: 13 JAN 2017 15:31:11



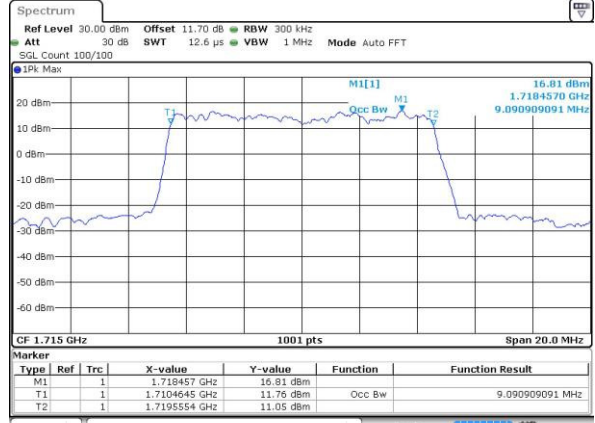
LTE Band 4

Lowest Channel / 10MHz / QPSK



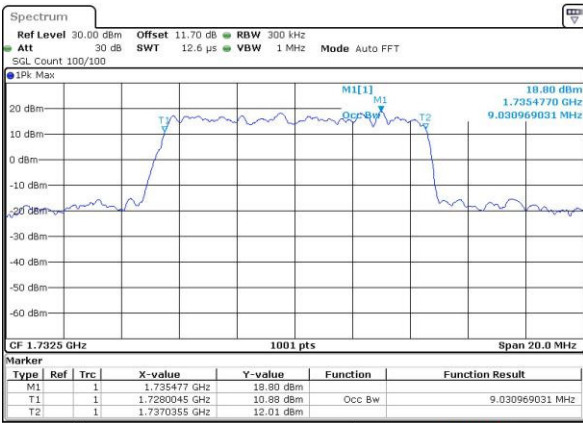
Date: 13 JAN 2017 15:38:08

Lowest Channel / 10MHz / 16QAM



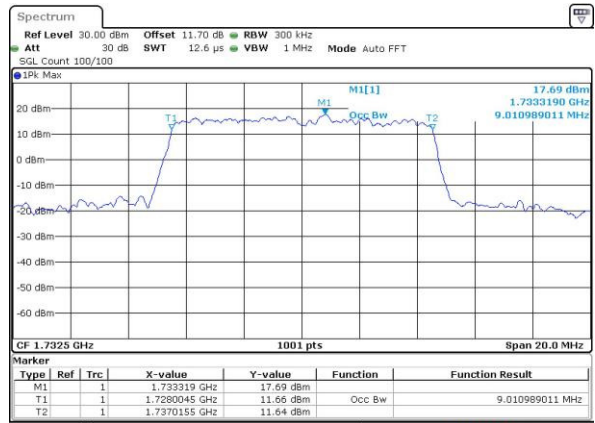
Date: 13 JAN 2017 15:38:19

Middle Channel / 10MHz / QPSK



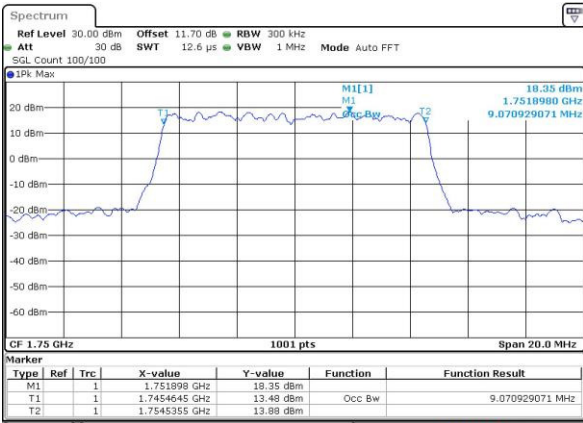
Date: 13 JAN 2017 15:45:15

Middle Channel / 10MHz / 16QAM



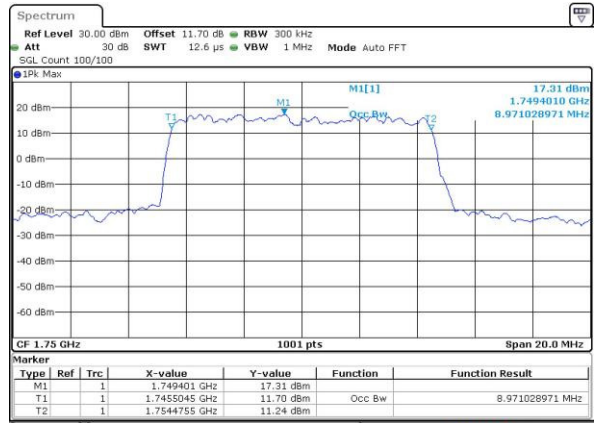
Date: 13 JAN 2017 15:45:25

Highest Channel / 10MHz / QPSK



Date: 13 JAN 2017 15:47:45

Highest Channel / 10MHz / 16QAM



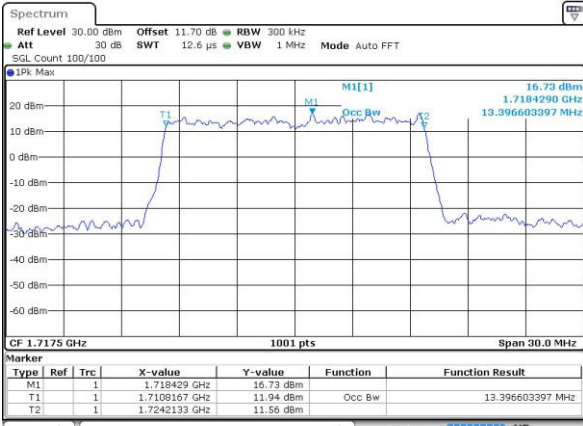
Date: 13 JAN 2017 15:47:55





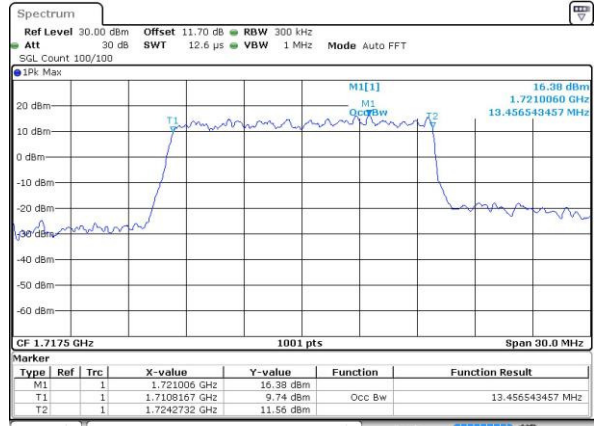
LTE Band 4

Lowest Channel / 15MHz / QPSK



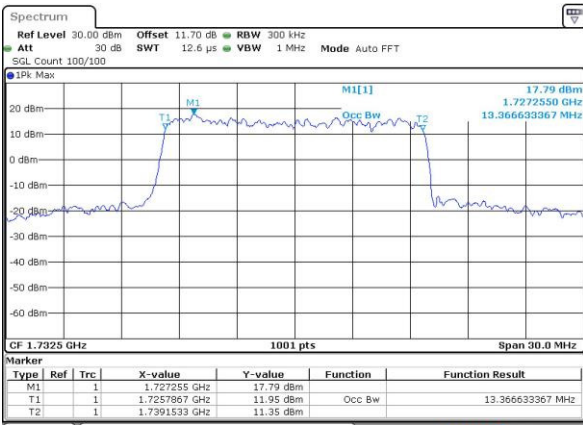
Date: 13 JAN 2017 15:54:51

Lowest Channel / 15MHz / 16QAM



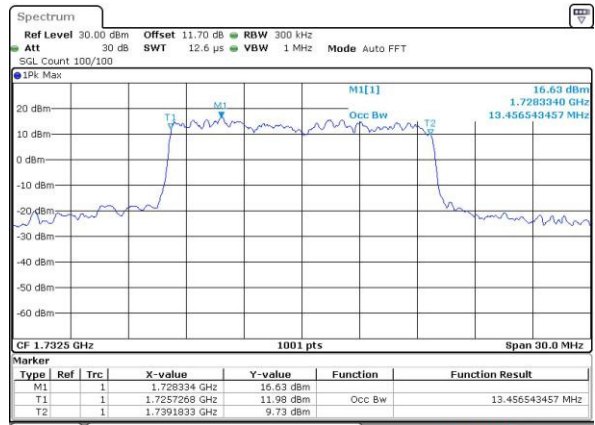
Date: 13 JAN 2017 15:55:02

Middle Channel / 15MHz / QPSK



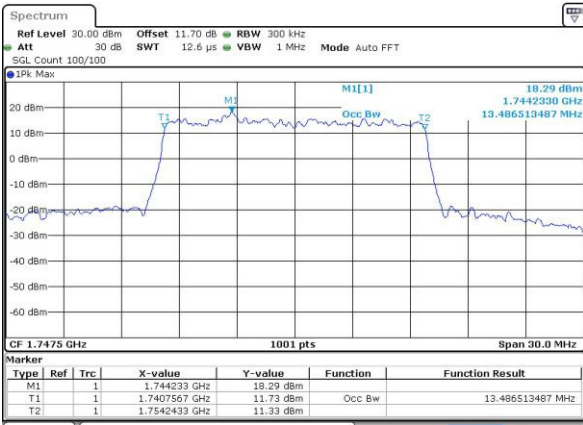
Date: 13 JAN 2017 16:06:23

Middle Channel / 15MHz / 16QAM



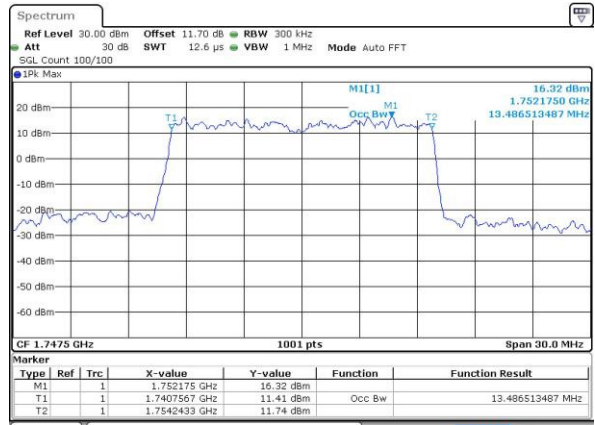
Date: 13 JAN 2017 16:06:33

Highest Channel / 15MHz / QPSK



Date: 13 JAN 2017 16:08:54

Highest Channel / 15MHz / 16QAM

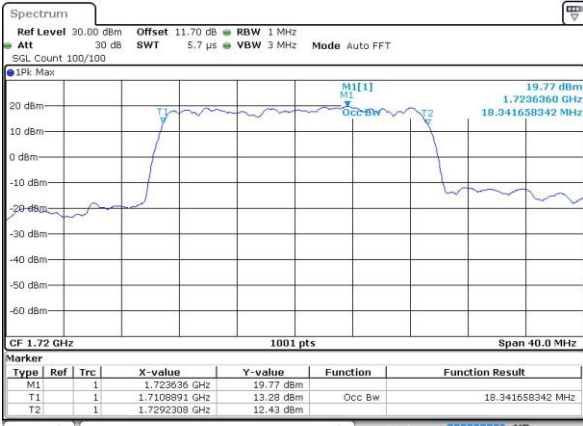


Date: 13 JAN 2017 16:09:04



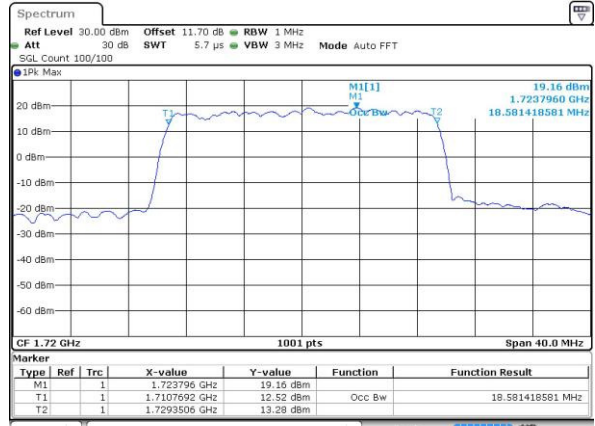
LTE Band 4

Lowest Channel / 20MHz / QPSK



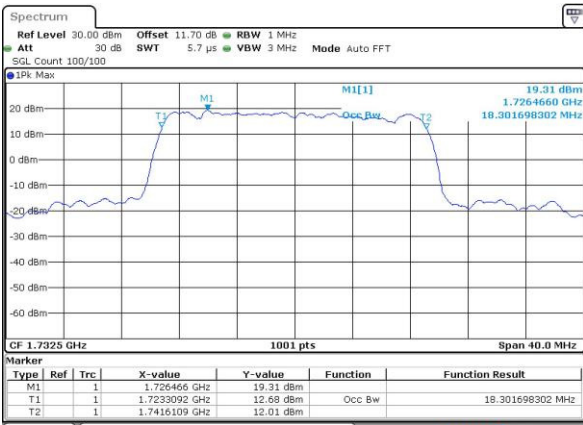
Date: 13 JAN 2017 16:16:01

Lowest Channel / 20MHz / 16QAM



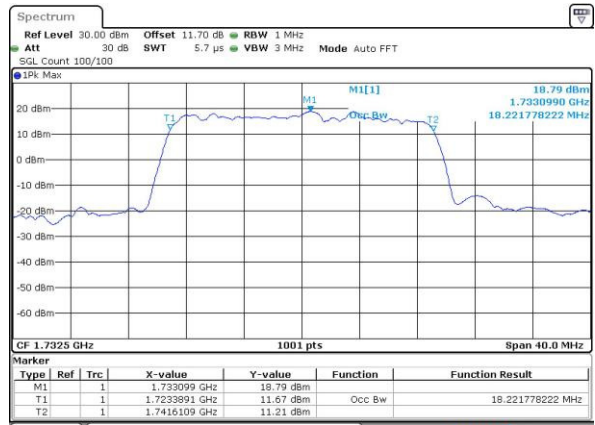
Date: 13 JAN 2017 16:16:11

Middle Channel / 20MHz / QPSK



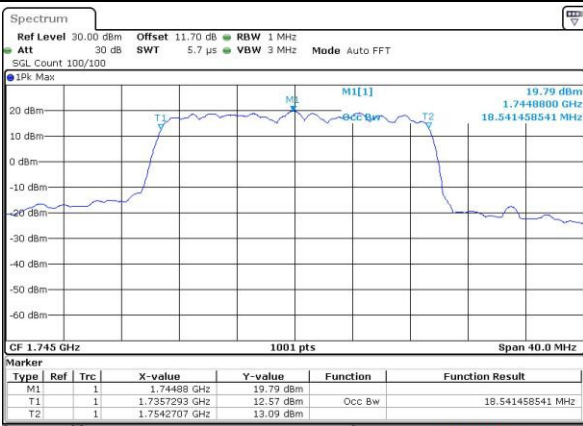
Date: 13 JAN 2017 16:23:07

Middle Channel / 20MHz / 16QAM



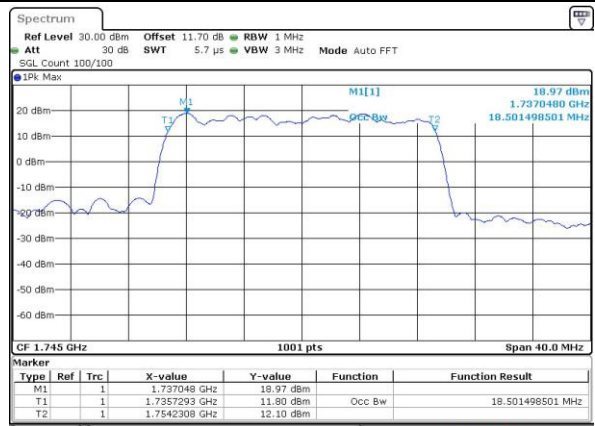
Date: 13 JAN 2017 16:23:18

Highest Channel / 20MHz / QPSK



Date: 13 JAN 2017 16:25:38

Highest Channel / 20MHz / 16QAM



Date: 13 JAN 2017 16:25:48





# Conducted Band Edge

