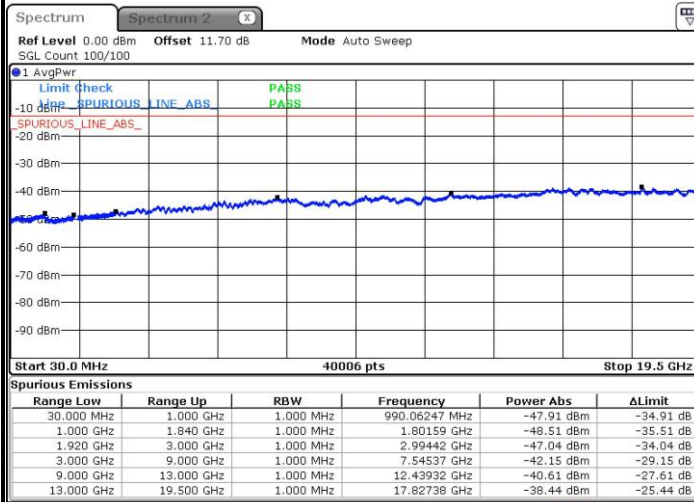




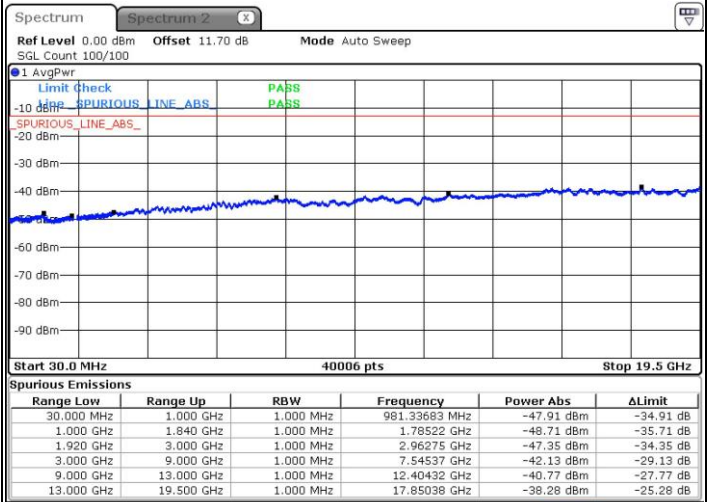
LTE Band 2 / 10MHz

Middle Channel / QPSK



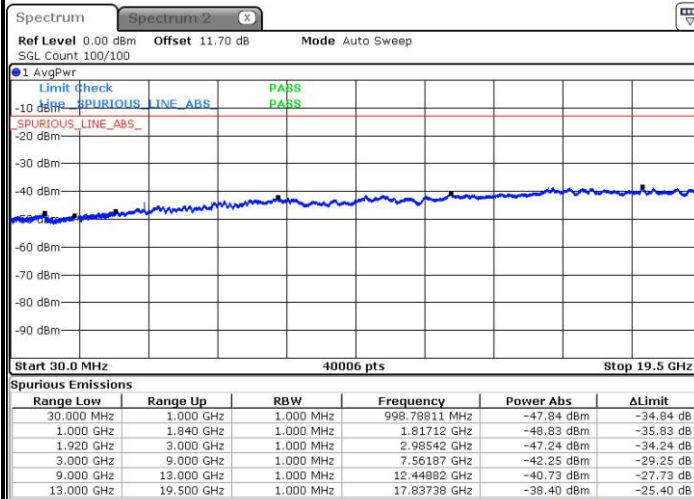
Date: 10 JUL 2018 05:30:02

Middle Channel / 16QAM



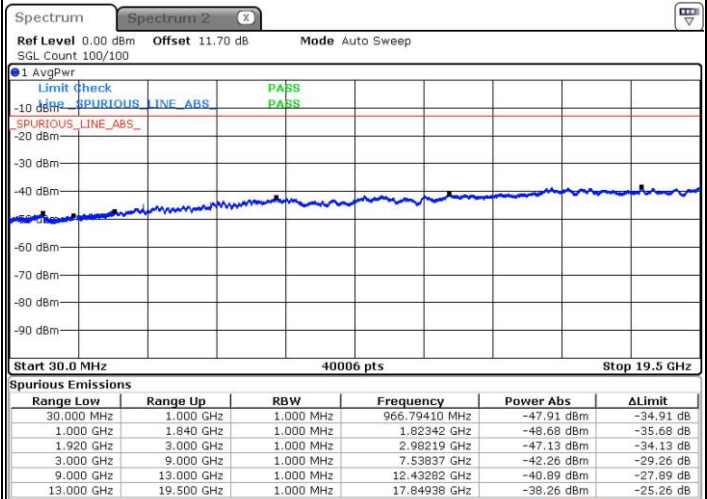
Date: 10 JUL 2018 05:30:57

Highest Channel / QPSK



Date: 10 JUL 2018 05:37:20

Highest Channel / 16QAM

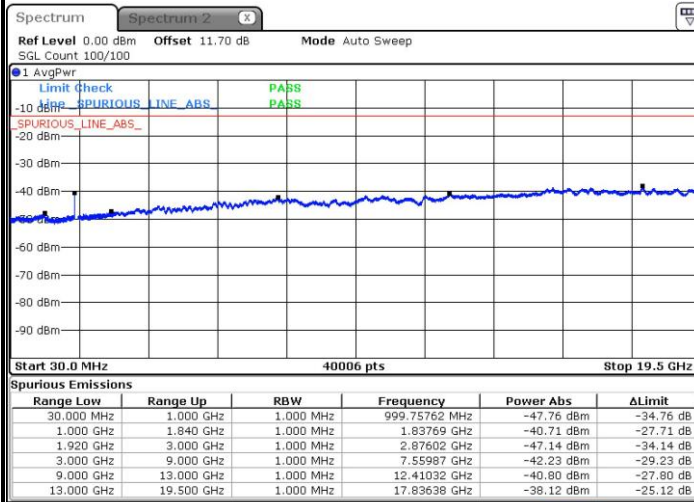


Date: 10 JUL 2018 05:38:16



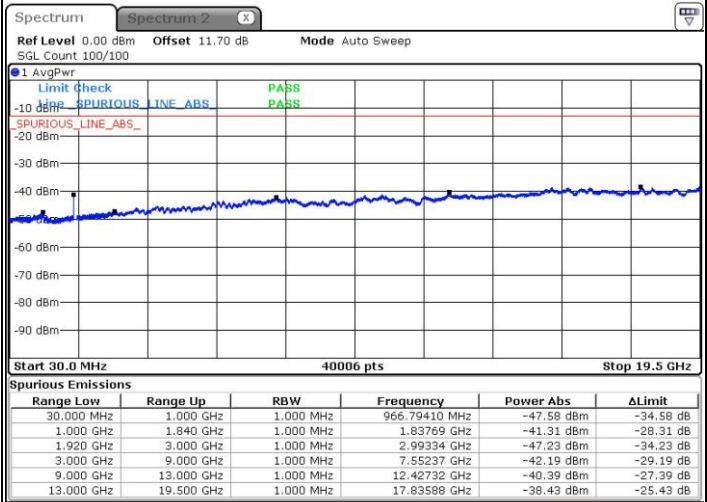
LTE Band 2 / 15MHz

Lowest Channel / QPSK



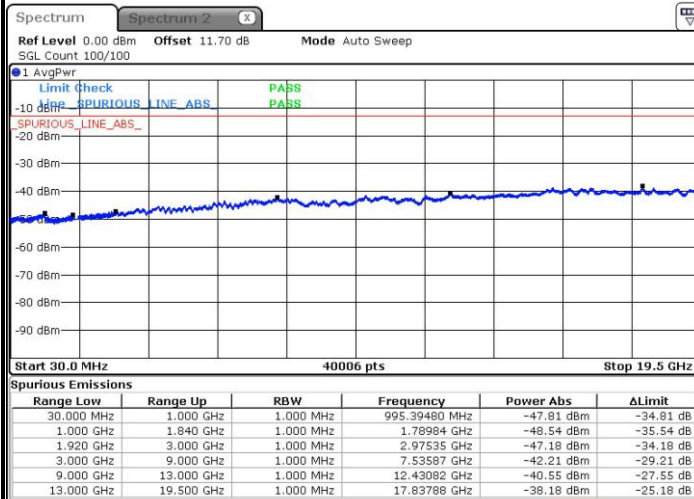
Date: 10 JUL 2018 05:44:39

Lowest Channel / 16QAM



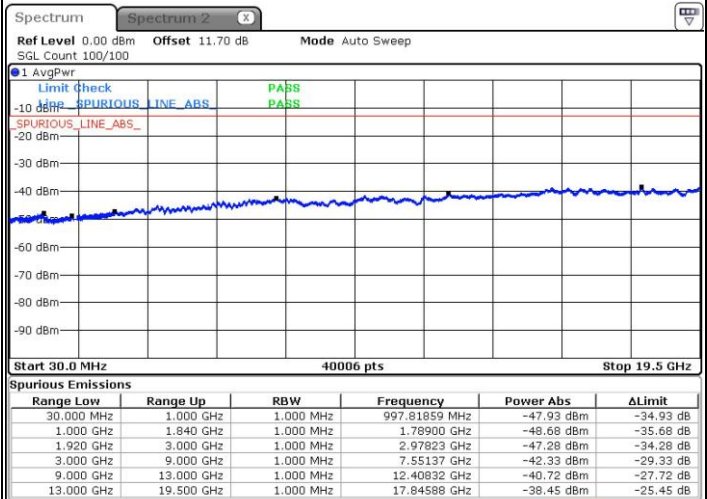
Date: 10 JUL 2018 05:45:34

Middle Channel / QPSK



Date: 10 JUL 2018 05:47:16

Middle Channel / 16QAM

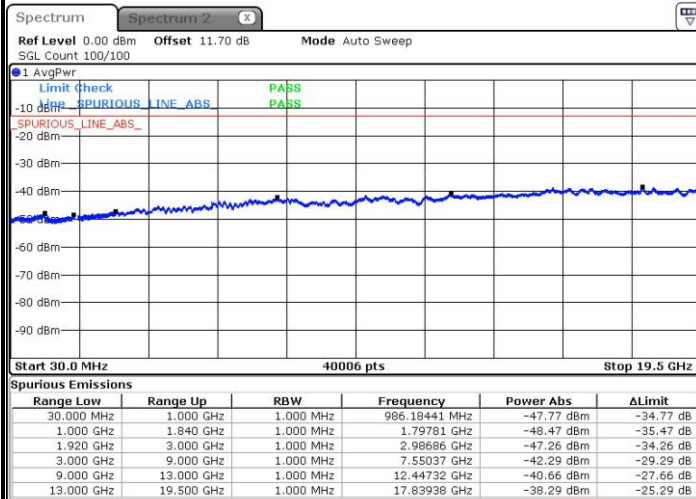


Date: 10 JUL 2018 05:48:12



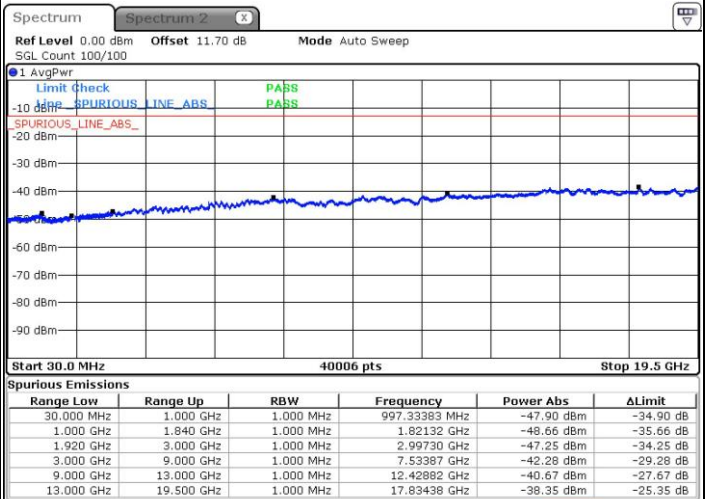
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 10 JUL 2018 05:54:35

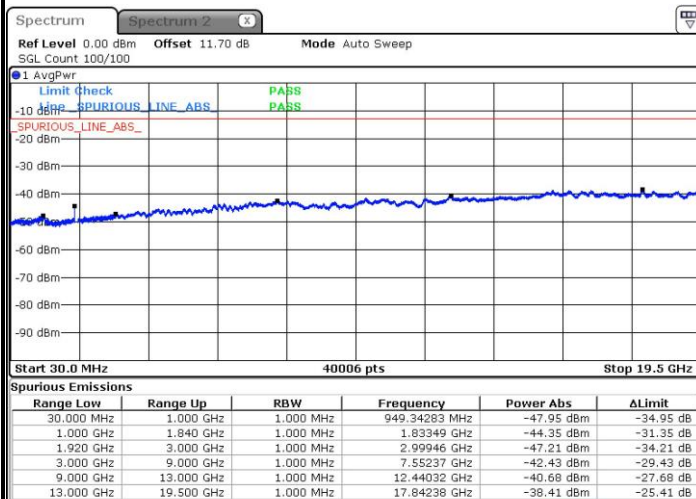
Highest Channel / 16QAM



Date: 10 JUL 2018 05:55:30

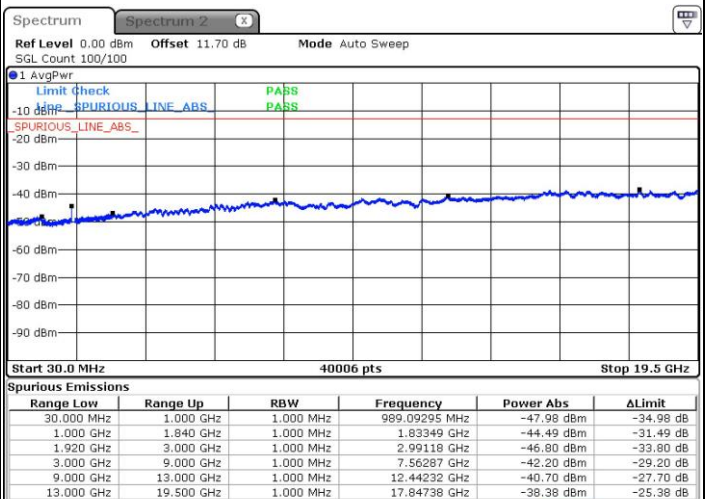
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 10 JUL 2018 06:01:53

Lowest Channel / 16QAM

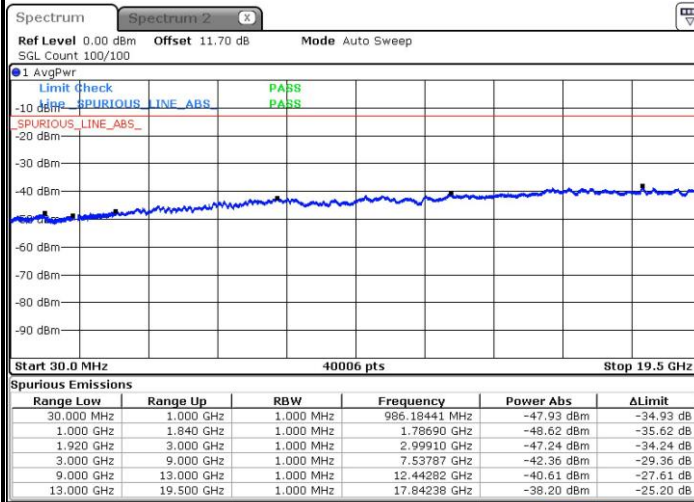


Date: 10 JUL 2018 06:02:49



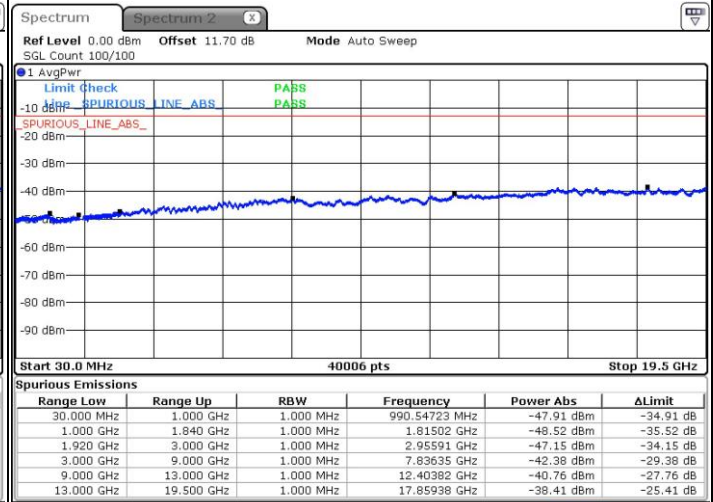
LTE Band 2 / 20MHz

Middle Channel / QPSK



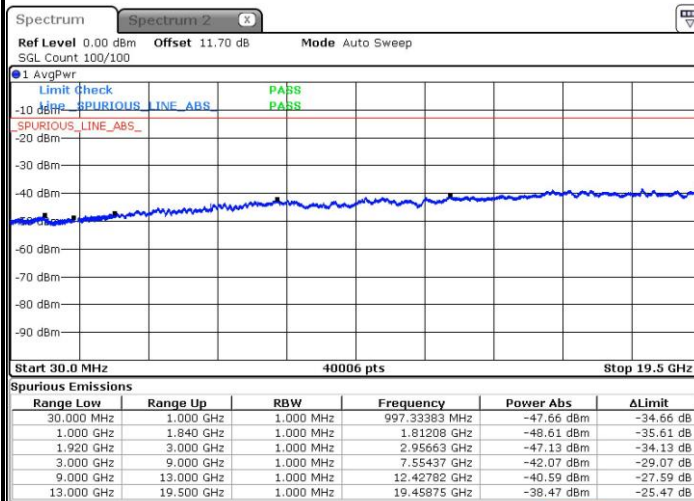
Date: 10 JUL 2018 06:04:31

Middle Channel / 16QAM



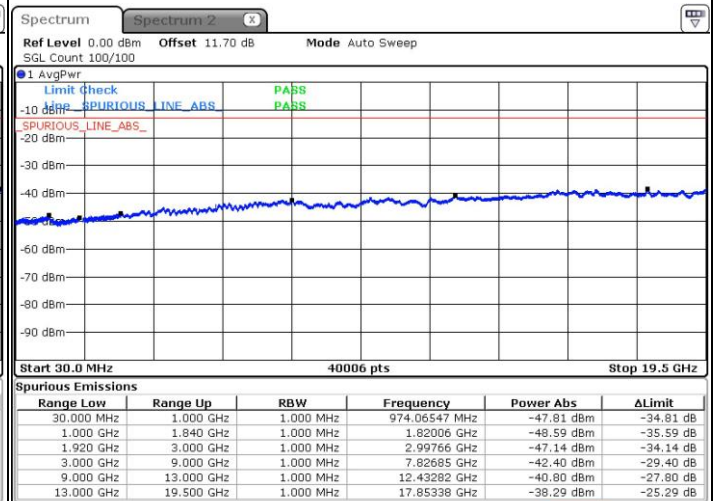
Date: 10 JUL 2018 06:05:27

Highest Channel / QPSK



Date: 10 JUL 2018 06:11:50

Highest Channel / 16QAM



Date: 10 JUL 2018 06:12:45

Frequency Stability

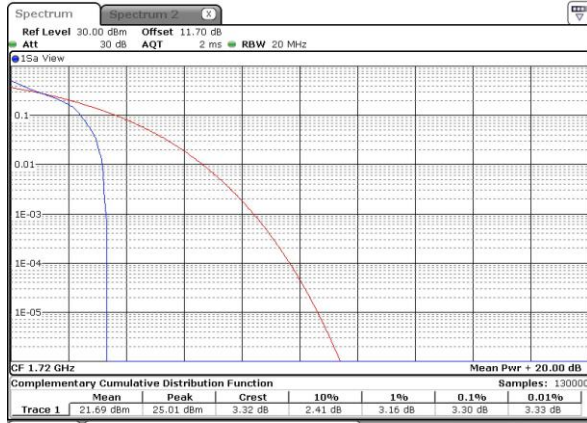
Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0039	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0045	
0	Normal Voltage	0.0028	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0021	

Note:

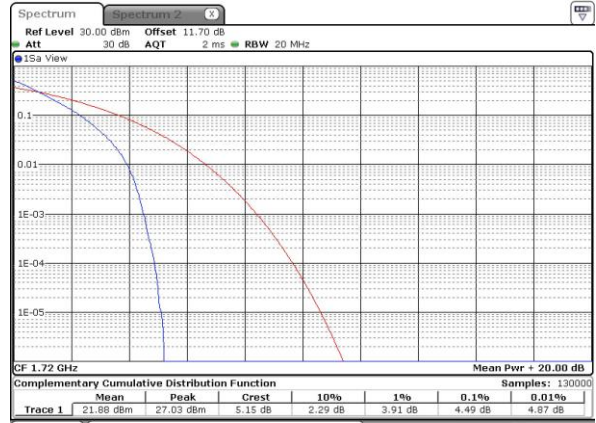
1. Normal Voltage =54 V. ; Battery End Point (BEP) =44 V. ; Maximum Voltage =57 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

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

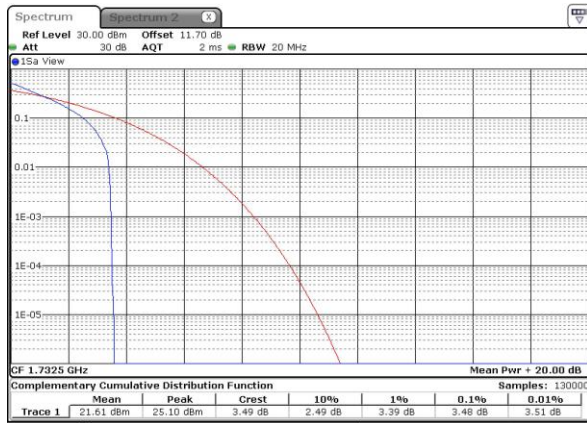
Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.3	4.49	3.54	5.51	PASS
Middle CH	3.48	4.7	4.09	5.68	
Highest CH	3.77	4.75	4.49	5.8	

LTE Band 4 / 20MHz / QPSK
Lowest Channel / 1RB


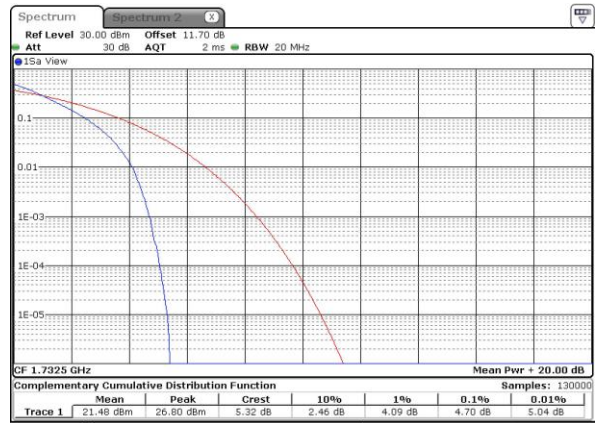
Date: 10 JUL 2018 08:22:53

Lowest Channel / Full RB


Date: 10 JUL 2018 08:23:03

Middle Channel / 1RB


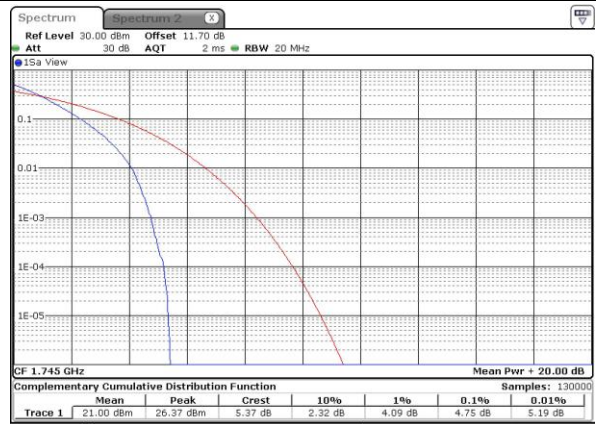
Date: 10 JUL 2018 08:23:14

Middle Channel / Full RB


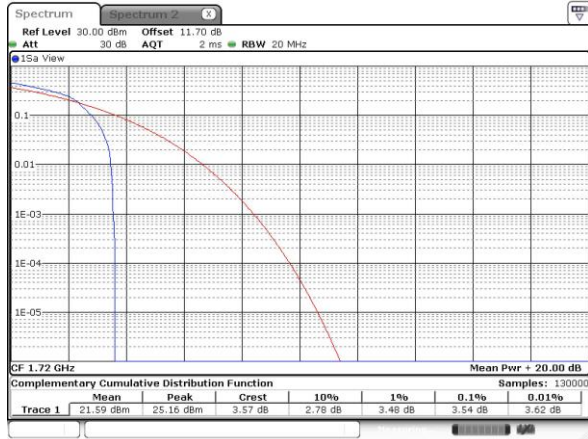
Date: 10 JUL 2018 08:23:24

Highest Channel / 1RB

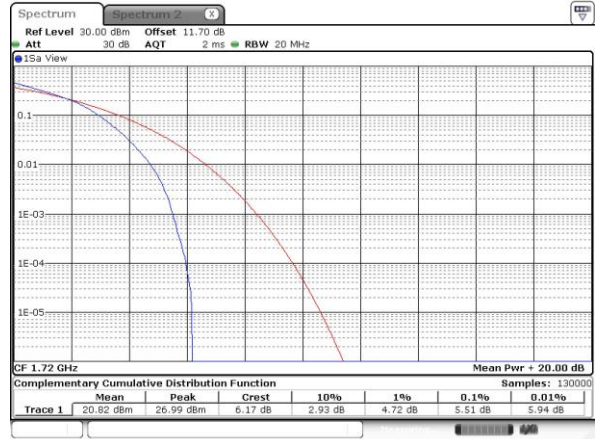

Date: 10 JUL 2018 08:23:35

Highest Channel / Full RB


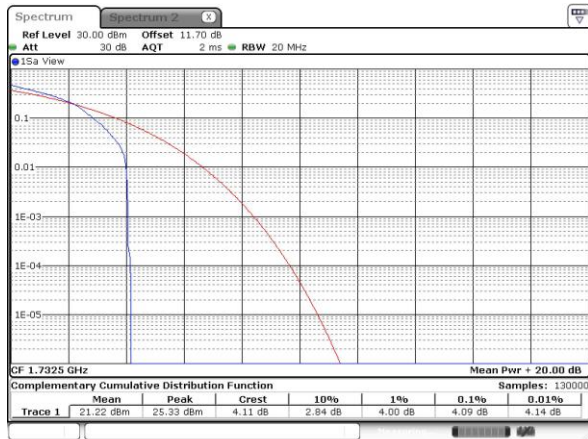
Date: 10 JUL 2018 08:23:46

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


Date: 10 JUL 2018 08:21:49

Lowest Channel / Full RB


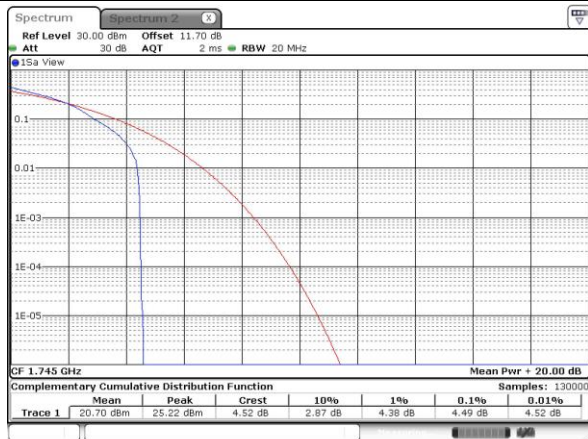
Date: 10 JUL 2018 08:21:59

Middle Channel / 1RB


Date: 10 JUL 2018 08:22:10

Middle Channel / Full RB


Date: 10 JUL 2018 08:22:21

Highest Channel / 1RB


Date: 10 JUL 2018 08:22:32

Highest Channel / Full RB


Date: 10 JUL 2018 08:22:43



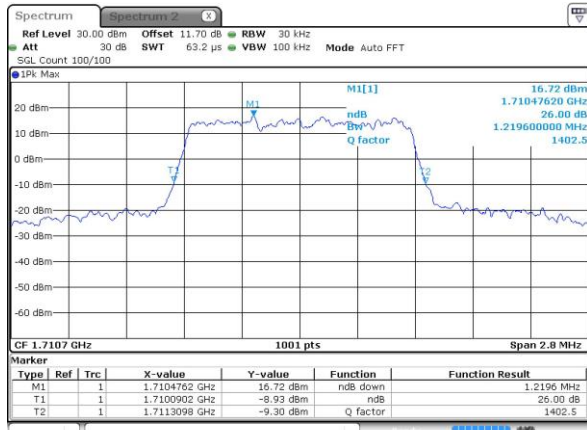
26dB Bandwidth

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	1.22	1.231	3.015	3.033	4.885	4.925	9.73	9.87	14.446	14.356	20.06	20.06
Middle CH	1.222	1.234	3.021	2.961	4.935	4.845	9.73	9.65	14.386	14.446	20.22	20.3
Highest CH	1.234	1.211	3.081	2.979	4.835	4.865	9.79	9.87	14.386	14.296	20.22	20.06



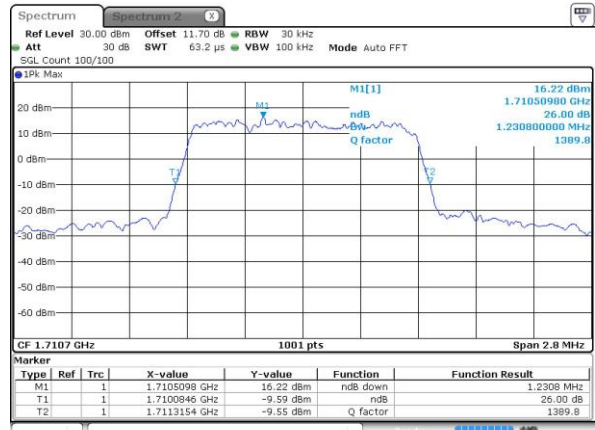
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



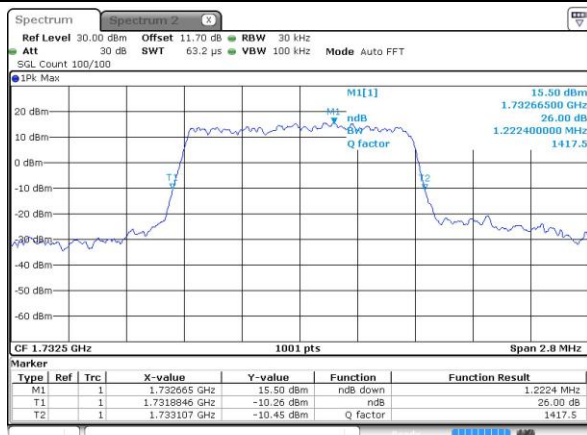
Date: 10 JUL 2018 08:04:52

Lowest Channel / 1.4MHz / 16QAM



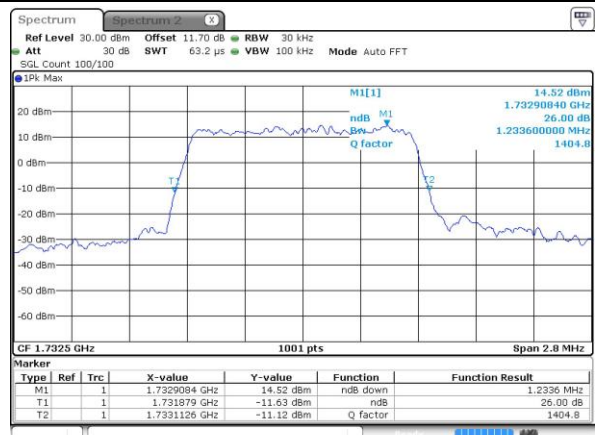
Date: 10 JUL 2018 08:05:03

Middle Channel / 1.4MHz / QPSK



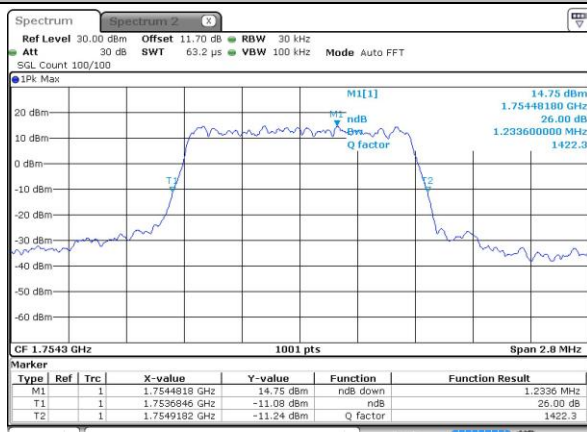
Date: 10 JUL 2018 08:12:10

Middle Channel / 1.4MHz / 16QAM



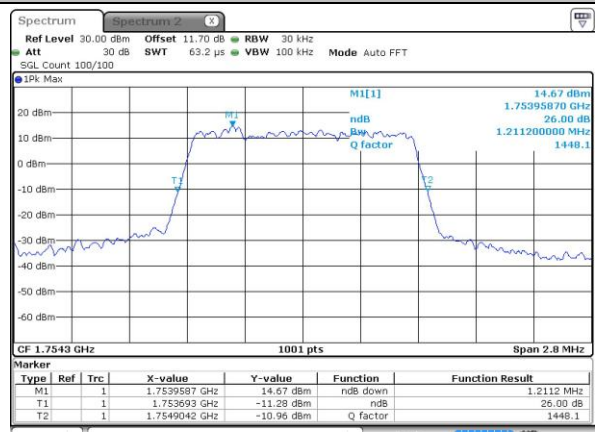
Date: 10 JUL 2018 08:12:21

Highest Channel / 1.4MHz / QPSK



Date: 10 JUL 2018 08:14:47

Highest Channel / 1.4MHz / 16QAM

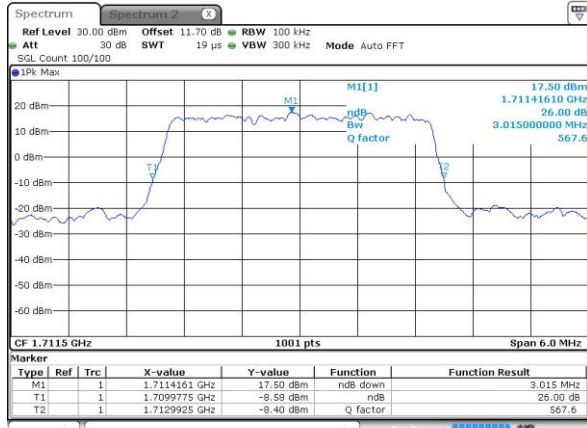


Date: 10 JUL 2018 08:14:59



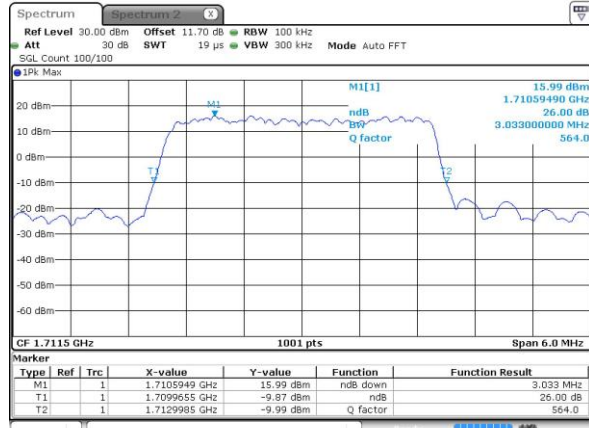
LTE Band 4

Lowest Channel / 3MHz / QPSK



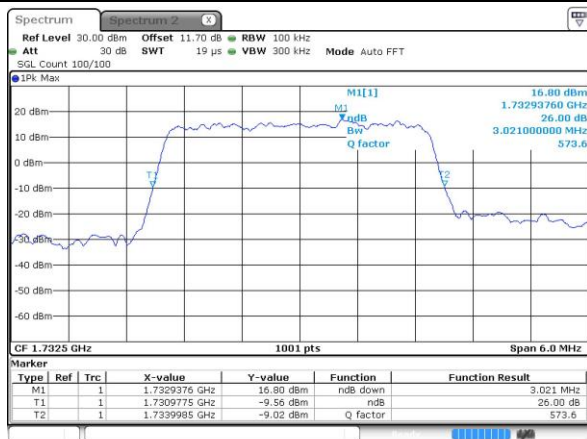
Date: 10 JUL 2018 06:36:09

Lowest Channel / 3MHz / 16QAM



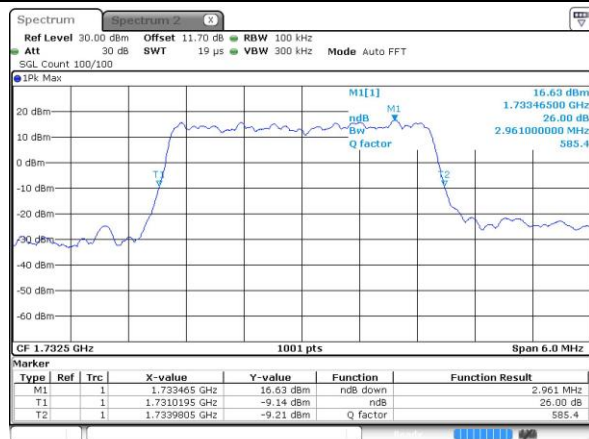
Date: 10 JUL 2018 06:36:21

Middle Channel / 3MHz / QPSK



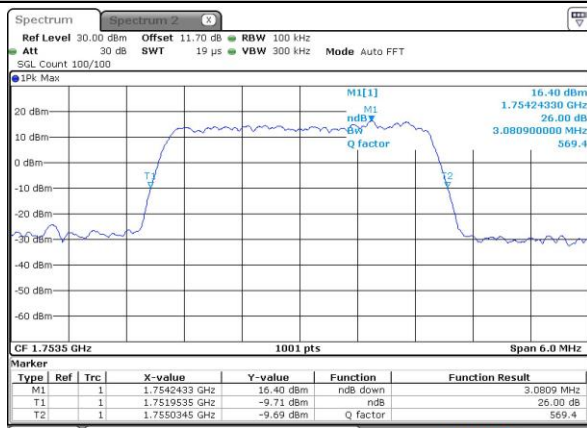
Date: 10 JUL 2018 06:43:27

Middle Channel / 3MHz / 16QAM



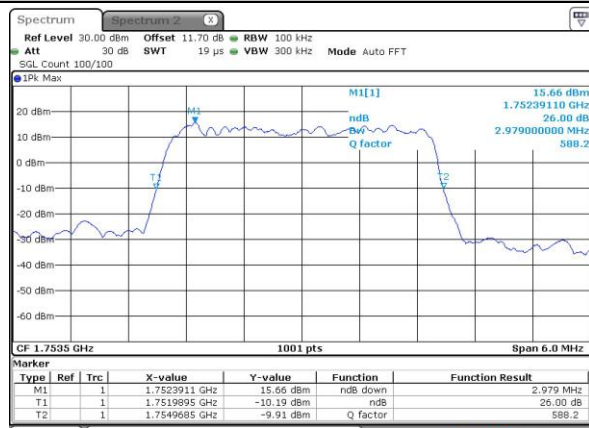
Date: 10 JUL 2018 06:43:39

Highest Channel / 3MHz / QPSK



Date: 10 JUL 2018 06:46:05

Highest Channel / 3MHz / 16QAM

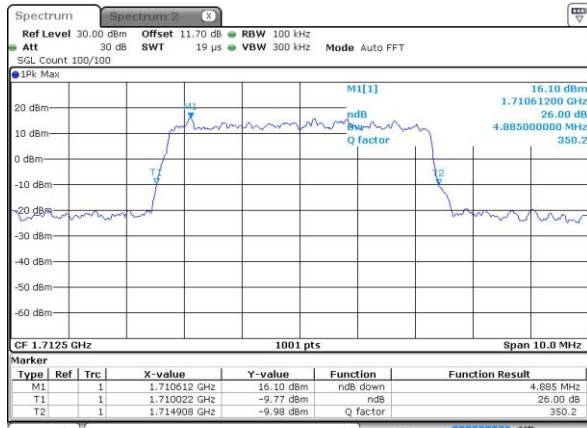


Date: 10 JUL 2018 06:46:16

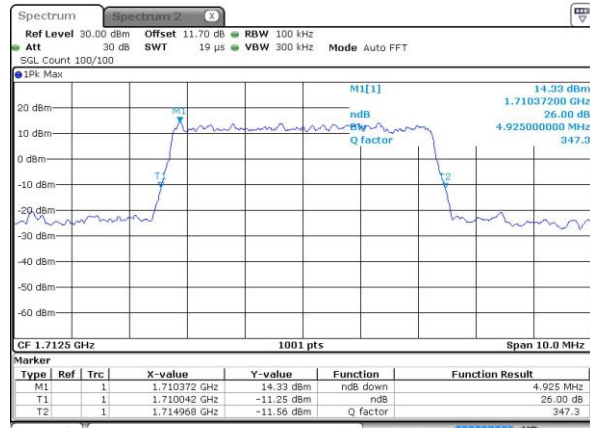


LTE Band 4

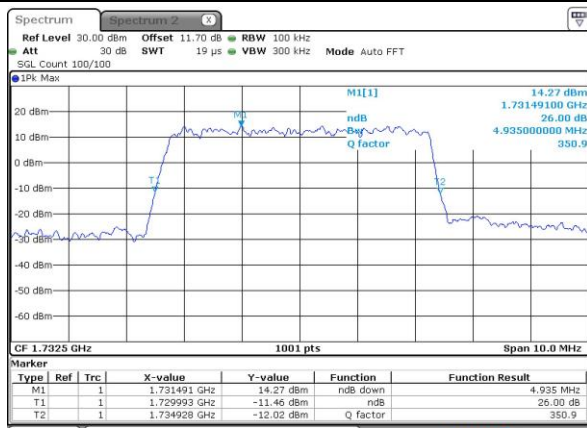
Lowest Channel / 5MHz / QPSK



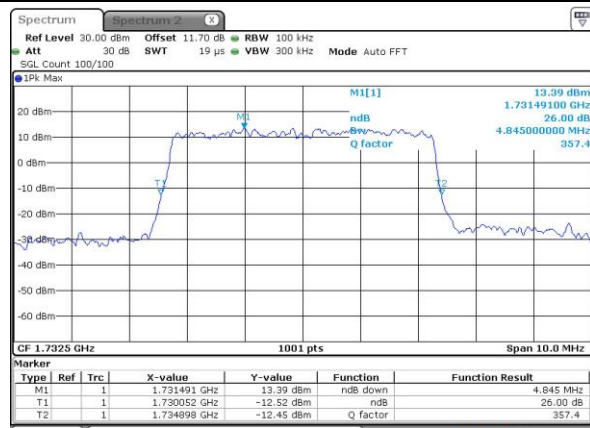
Lowest Channel / 5MHz / 16QAM



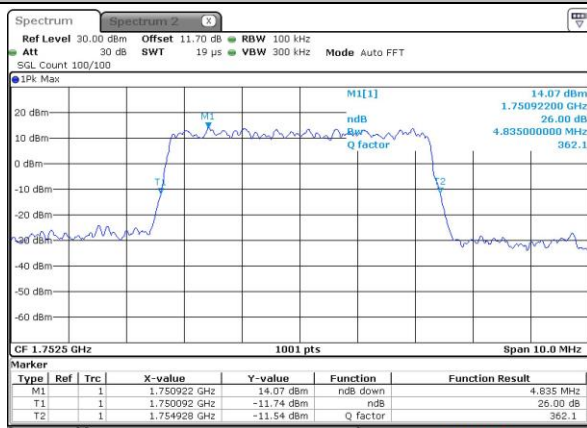
Middle Channel / 5MHz / QPSK



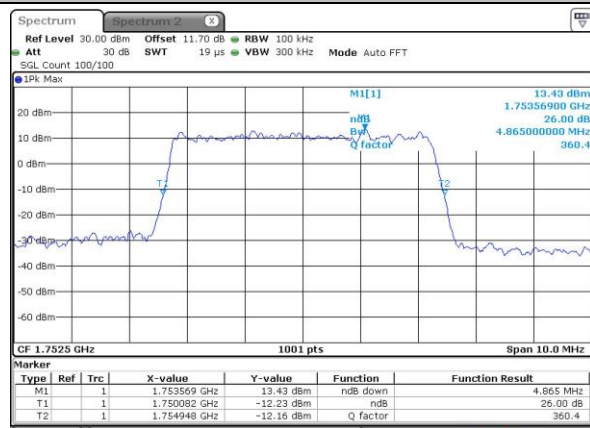
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



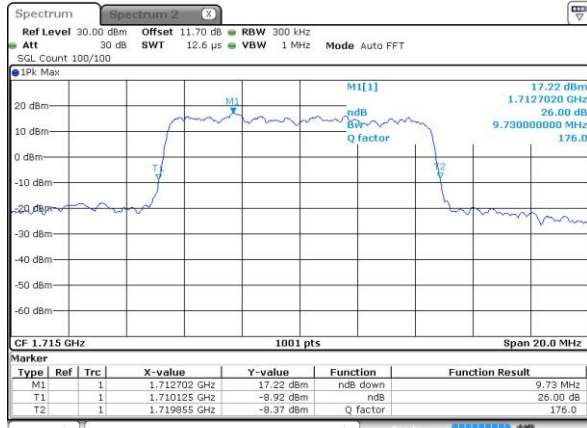
Highest Channel / 5MHz / 16QAM





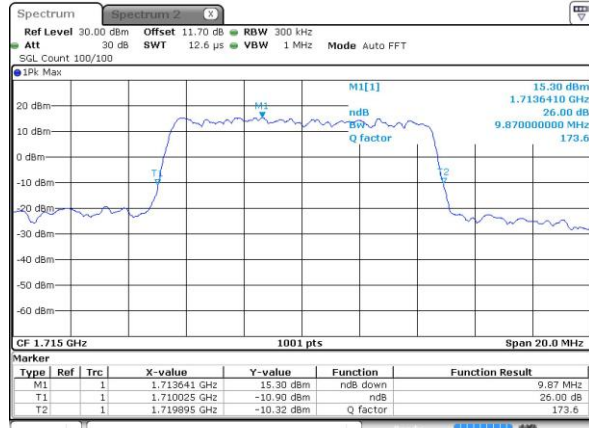
LTE Band 4

Lowest Channel / 10MHz / QPSK



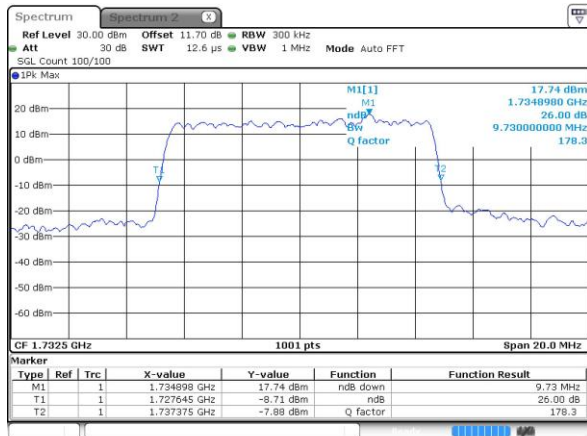
Date: 10 JUL 2018 07:10:38

Lowest Channel / 10MHz / 16QAM



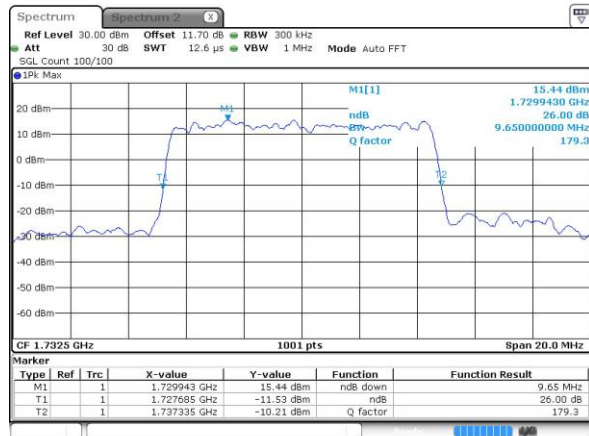
Date: 10 JUL 2018 07:10:49

Middle Channel / 10MHz / QPSK



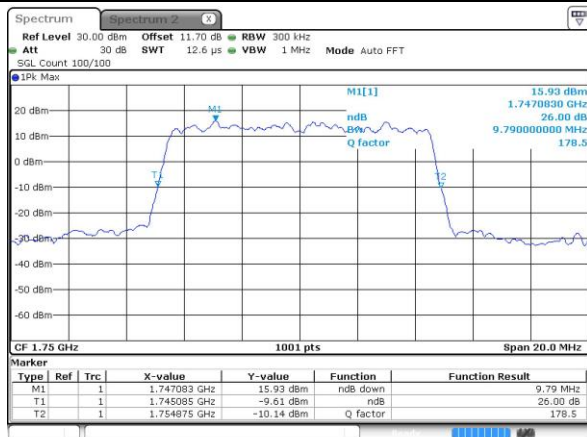
Date: 10 JUL 2018 07:17:56

Middle Channel / 10MHz / 16QAM



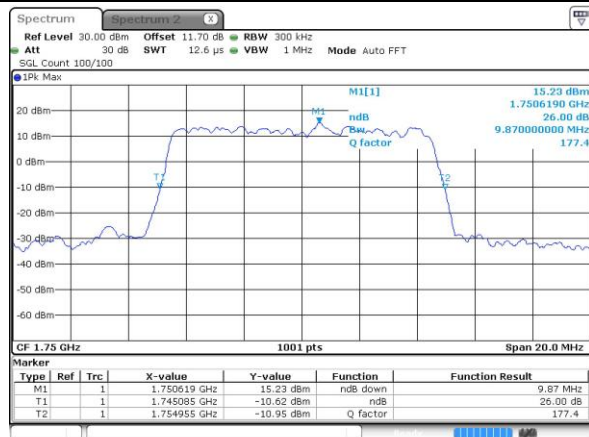
Date: 10 JUL 2018 07:18:06

Highest Channel / 10MHz / QPSK



Date: 10 JUL 2018 07:20:34

Highest Channel / 10MHz / 16QAM

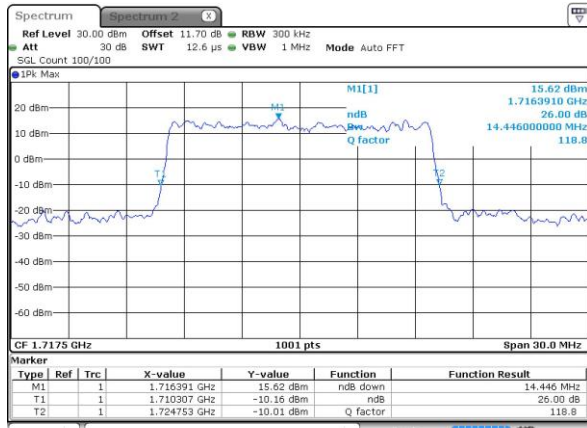


Date: 10 JUL 2018 07:20:45

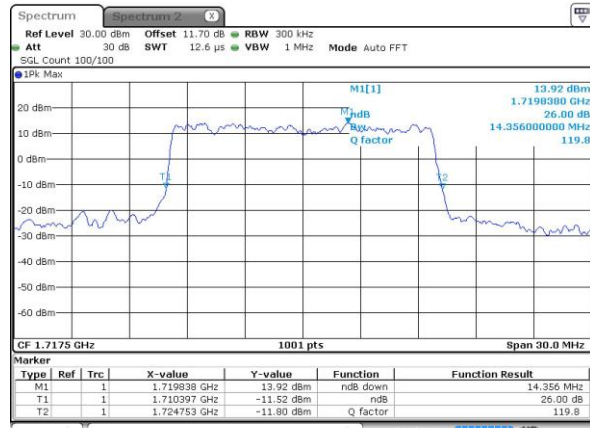


LTE Band 4

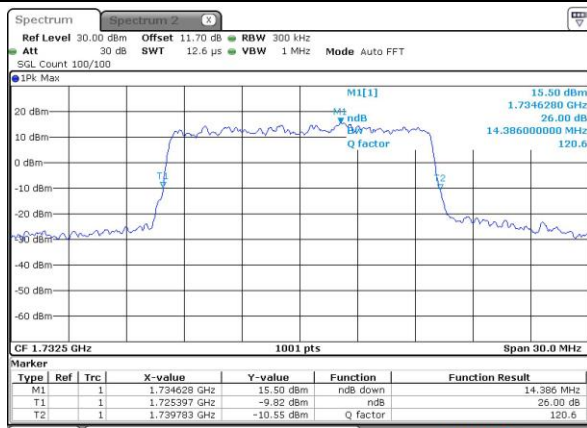
Lowest Channel / 15MHz / QPSK



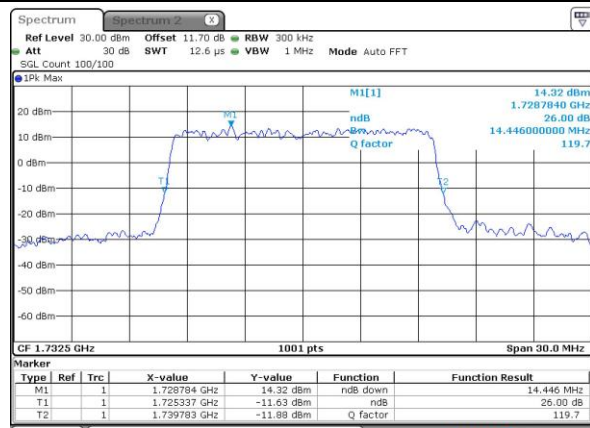
Lowest Channel / 15MHz / 16QAM



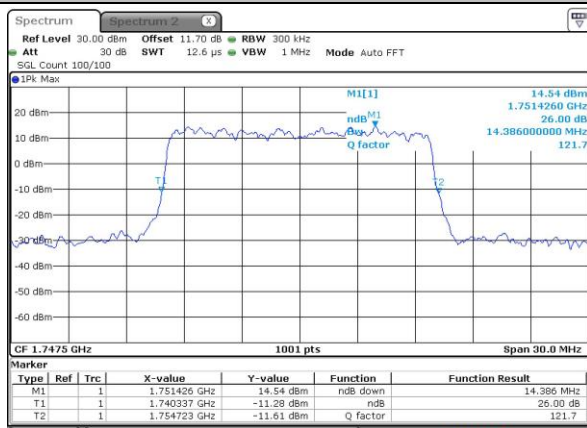
Middle Channel / 15MHz / QPSK



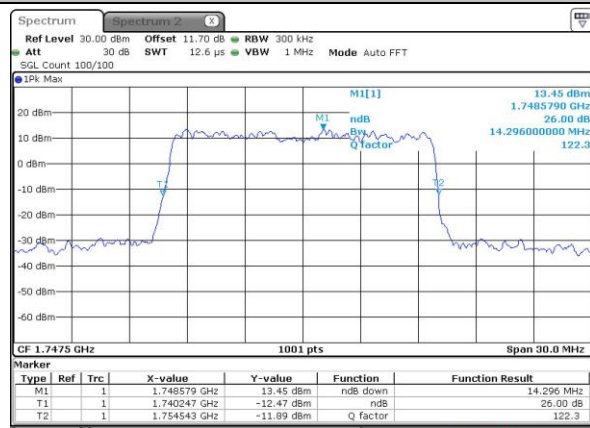
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



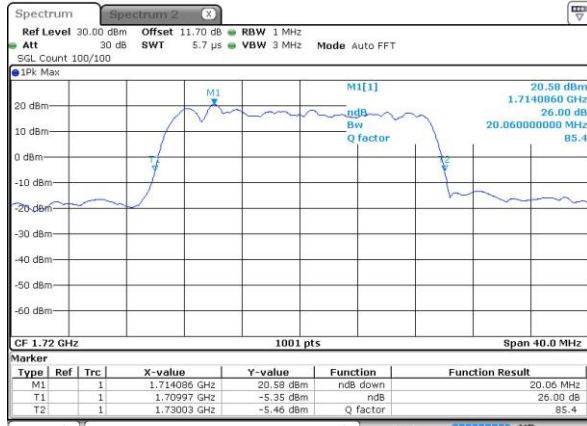
Highest Channel / 15MHz / 16QAM





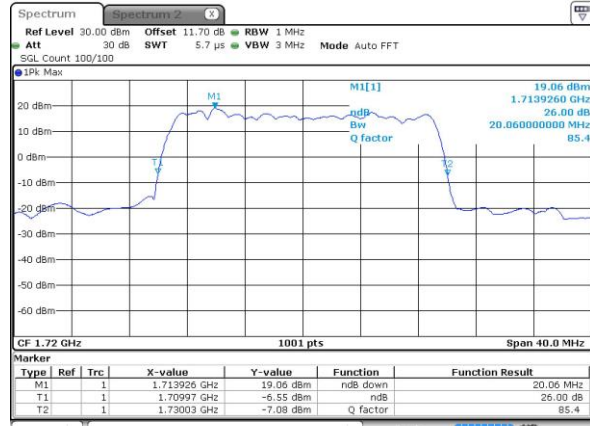
LTE Band 4

Lowest Channel / 20MHz / QPSK



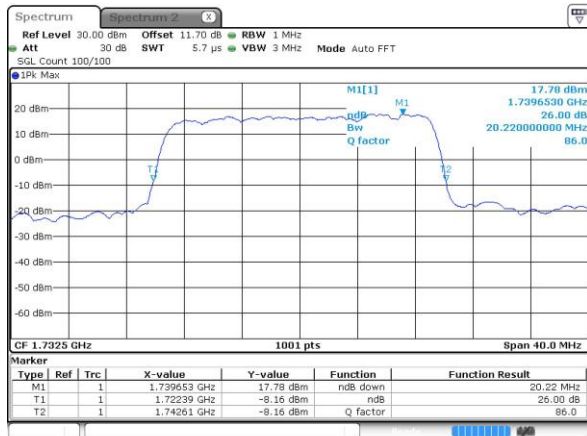
Date: 10 JUL 2018 07:47:37

Lowest Channel / 20MHz / 16QAM



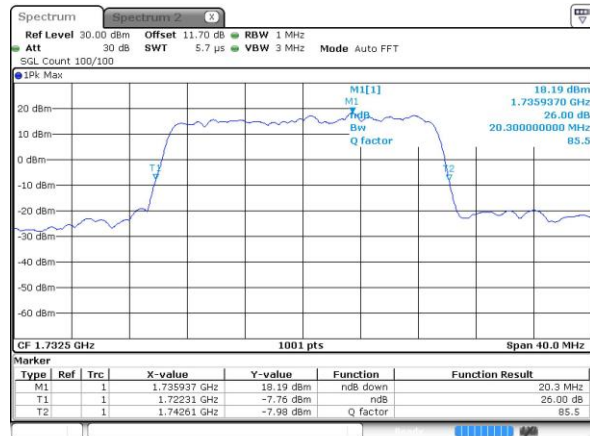
Date: 10 JUL 2018 07:47:49

Middle Channel / 20MHz / QPSK



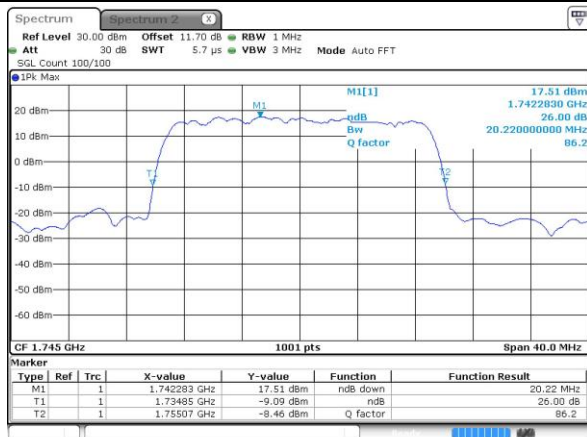
Date: 10 JUL 2018 07:54:56

Middle Channel / 20MHz / 16QAM



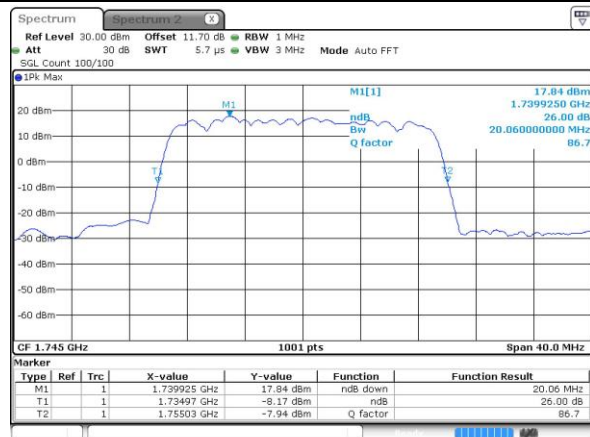
Date: 10 JUL 2018 07:55:07

Highest Channel / 20MHz / QPSK



Date: 10 JUL 2018 07:57:33

Highest Channel / 20MHz / 16QAM



Date: 10 JUL 2018 07:57:45

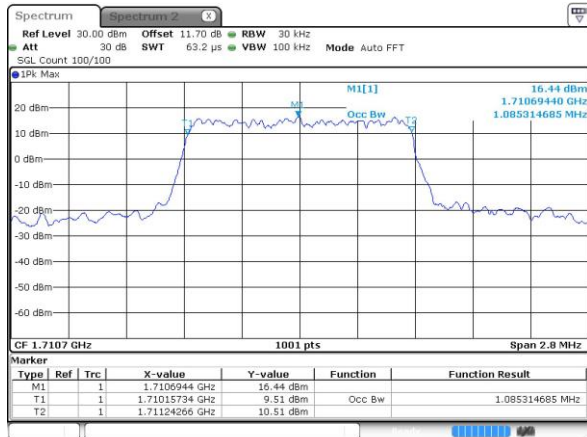
**Occupied Bandwidth**

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	1.09	2.72	2.73	4.49	4.5	8.97	9.03	13.52	13.49	18.46	18.58
Middle CH	1.09	1.09	2.7	2.7	4.51	4.48	9.01	8.97	13.4	13.43	18.34	18.38
Highest CH	1.09	1.09	2.72	2.72	4.5	4.49	9.05	8.99	13.37	13.46	18.34	18.46

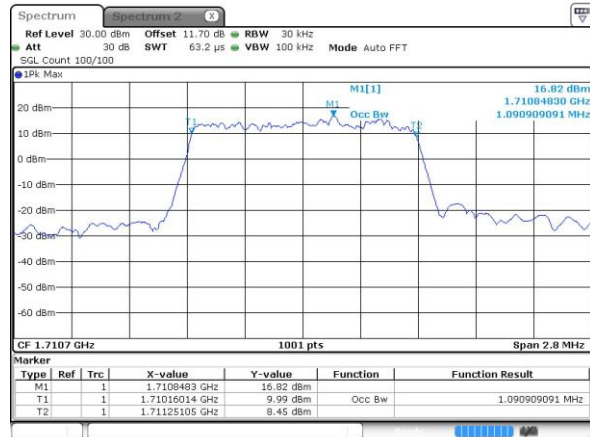


LTE Band 4

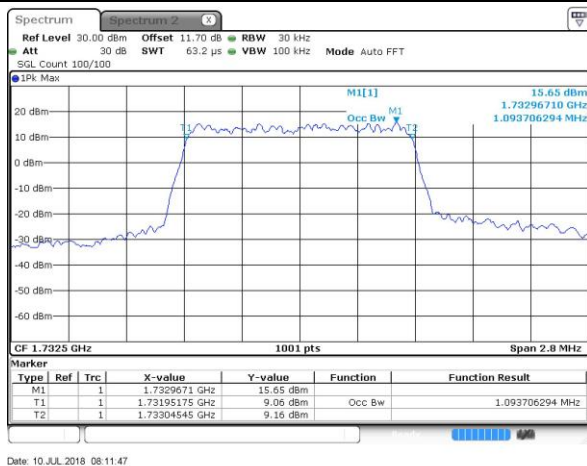
Lowest Channel / 1.4MHz / QPSK



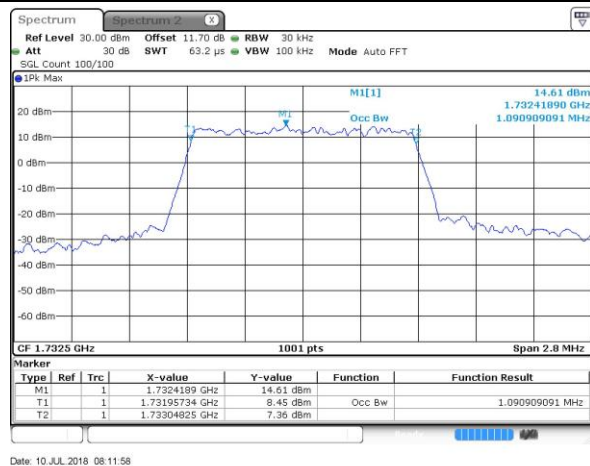
Lowest Channel / 1.4MHz / 16QAM



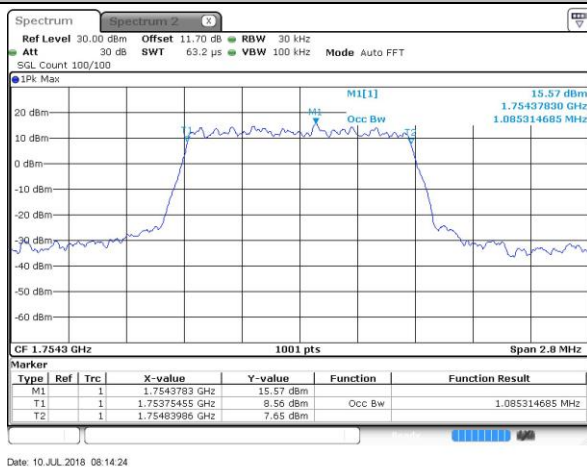
Middle Channel / 1.4MHz / QPSK



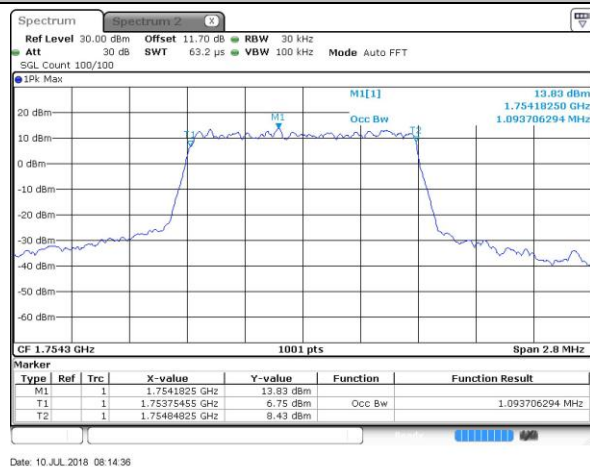
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



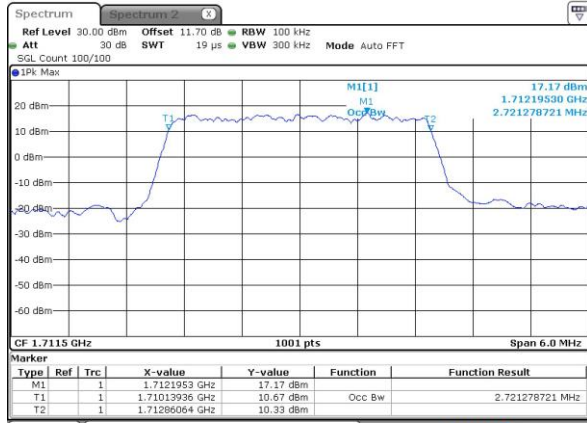
Highest Channel / 1.4MHz / 16QAM





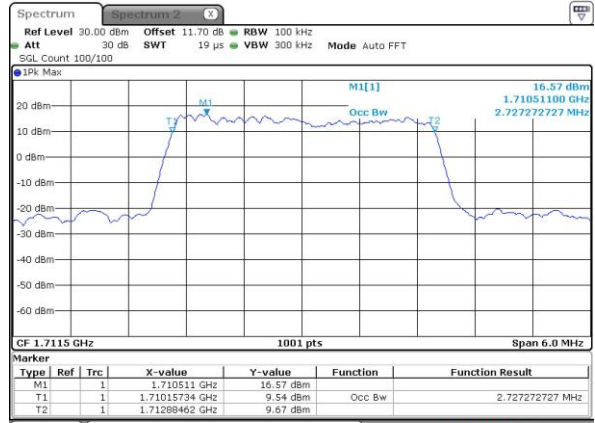
LTE Band 4

Lowest Channel / 3MHz / QPSK



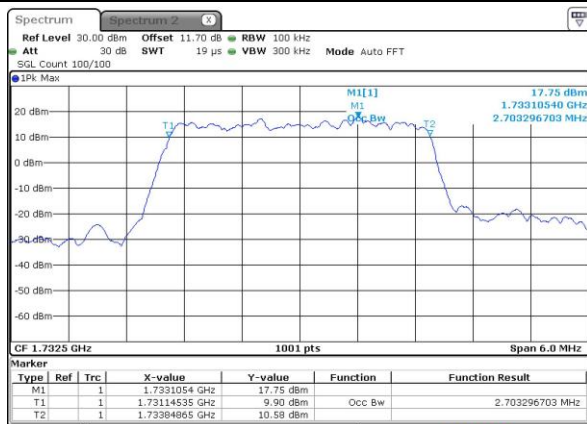
Date: 10 JUL 2018 06:35:46

Lowest Channel / 3MHz / 16QAM



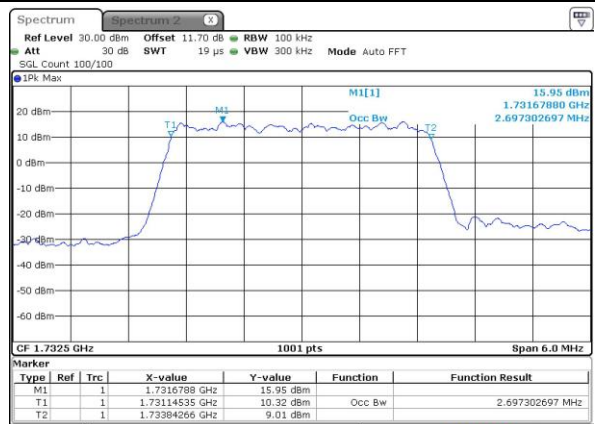
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Middle Channel / 3MHz / QPSK



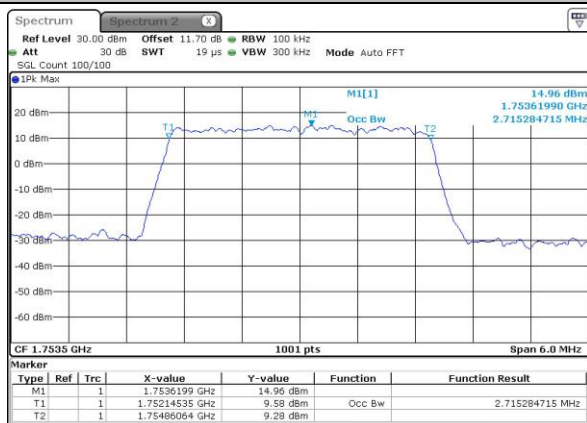
Date: 10 JUL 2018 06:43:04

Middle Channel / 3MHz / 16QAM



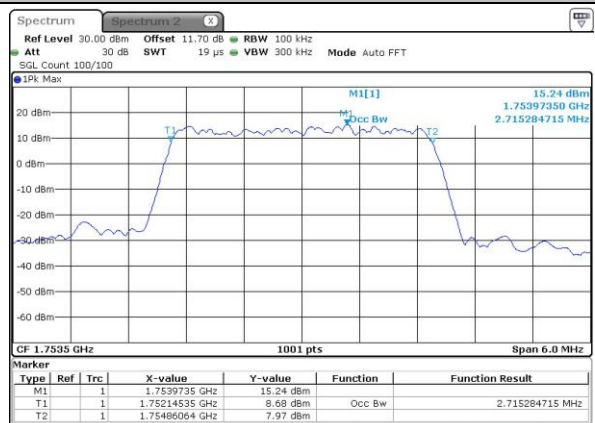
Date: 10 JUL 2018 06:43:16

Highest Channel / 3MHz / QPSK



Date: 10 JUL 2018 06:45:42

Highest Channel / 3MHz / 16QAM

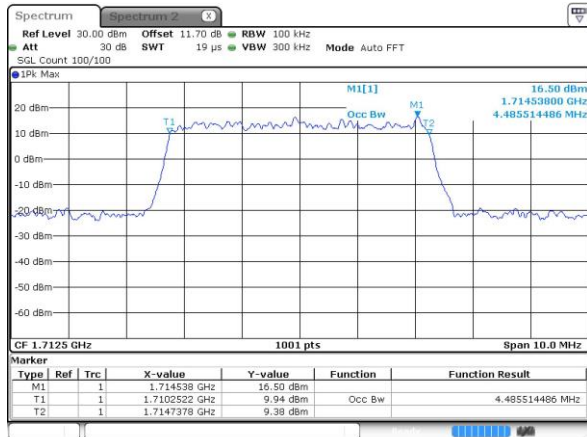


Date: 10 JUL 2018 06:45:53

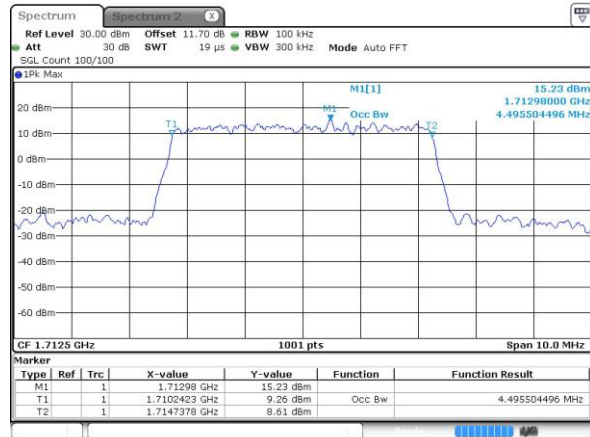


LTE Band 4

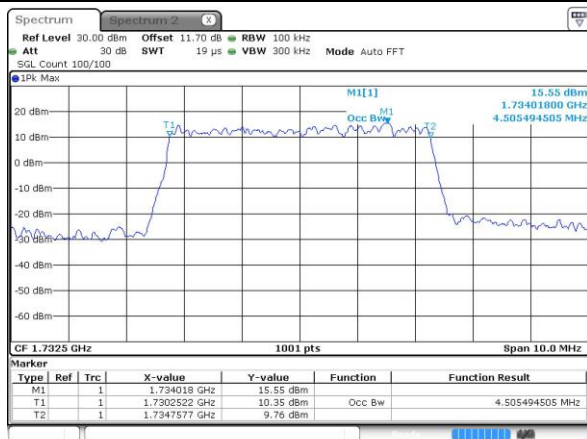
Lowest Channel / 5MHz / QPSK



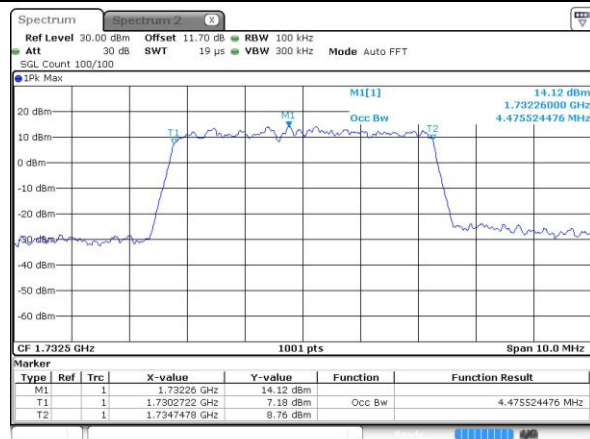
Lowest Channel / 5MHz / 16QAM



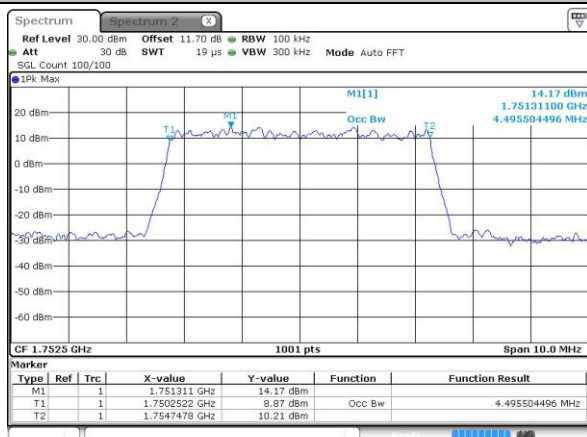
Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM

