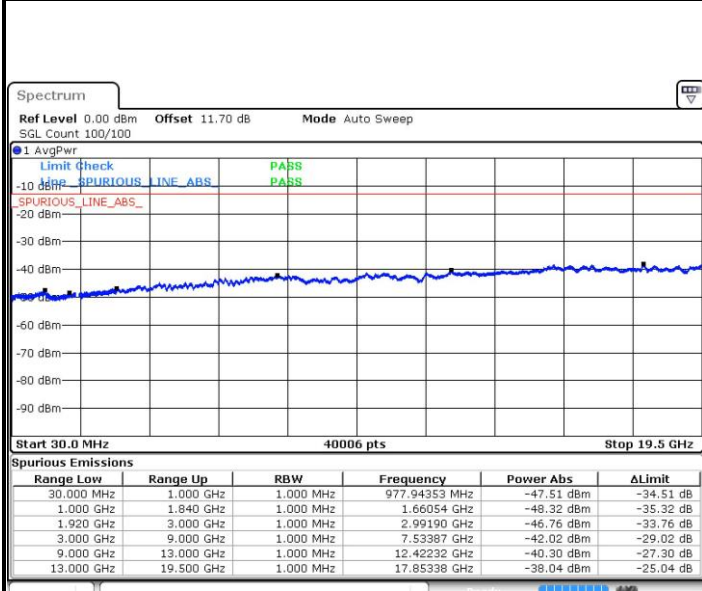




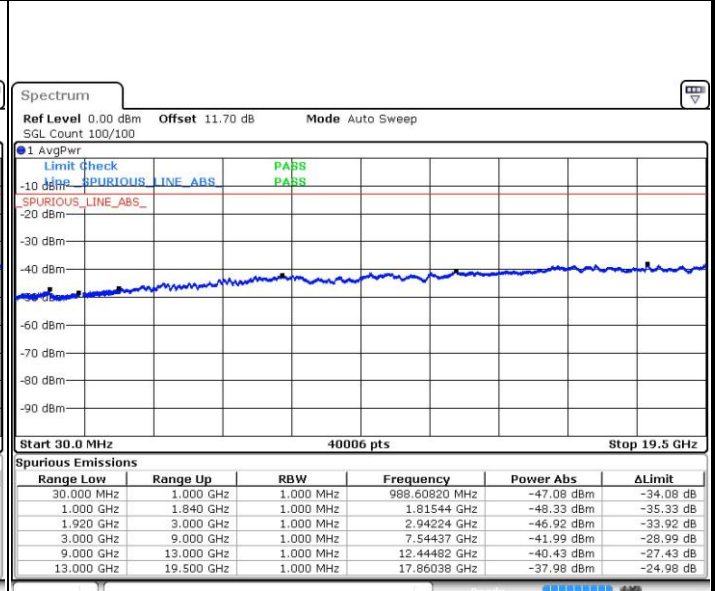
**LTE Band 2 / 10MHz**

**Middle Channel / QPSK**



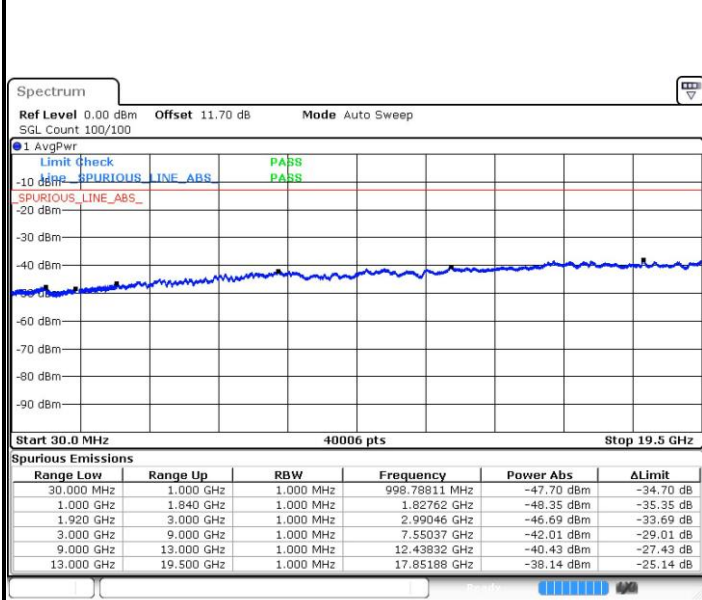
Date: 7.OCT.2018 01:36:26

**Middle Channel / 16QAM**



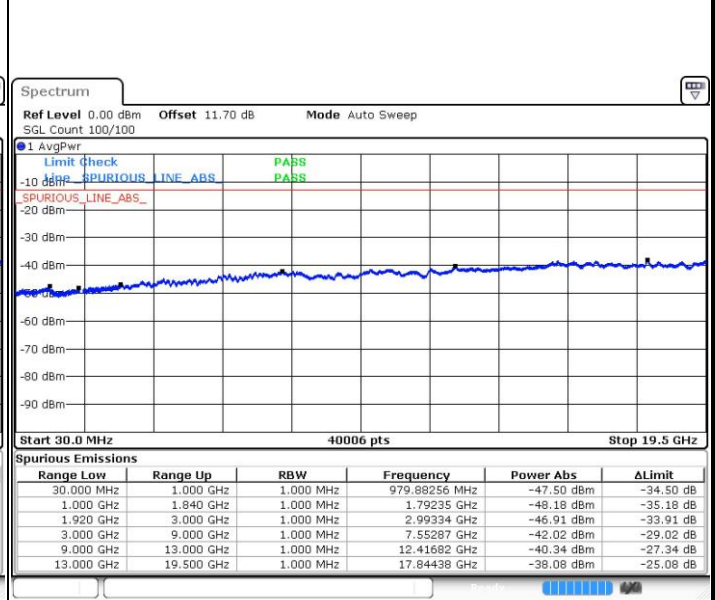
Date: 7.OCT.2018 01:37:16

**Highest Channel / QPSK**



Date: 7.OCT.2018 01:44:53

**Highest Channel / 16QAM**



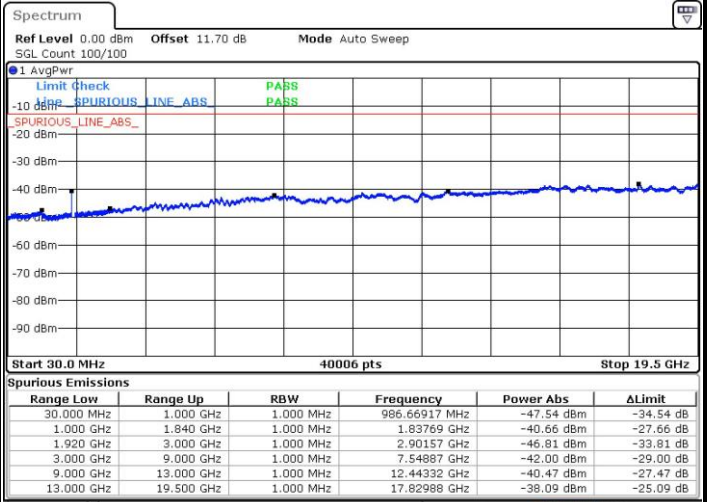
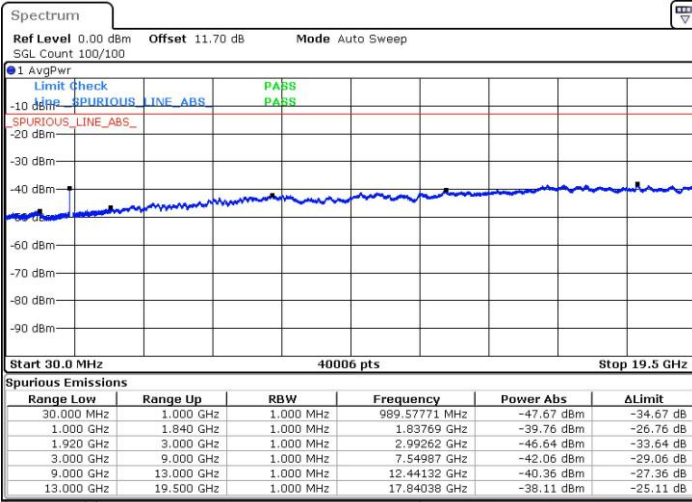
Date: 7.OCT.2018 01:45:43



LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

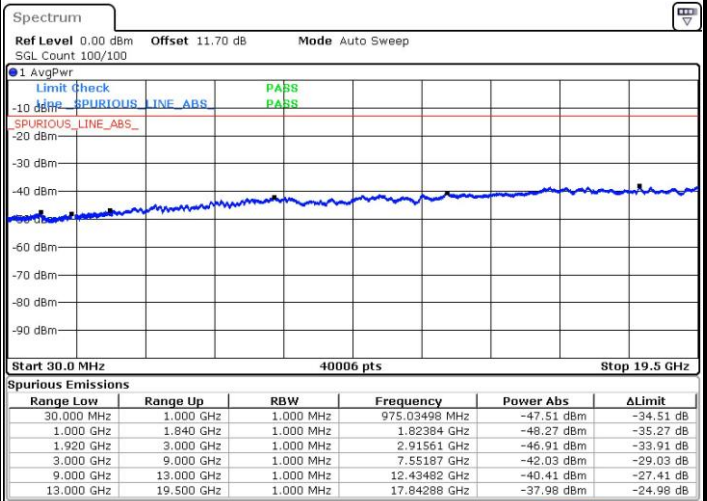
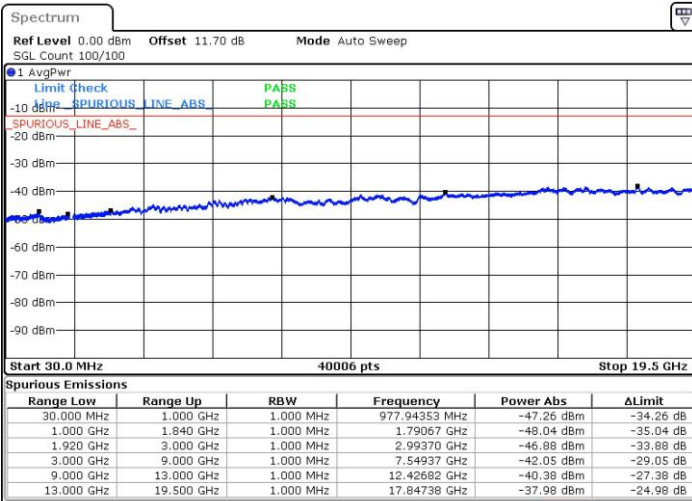


Date: 7.OCT.2018 01:53:19

Date: 7.OCT.2018 01:54:10

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 7.OCT.2018 01:55:46

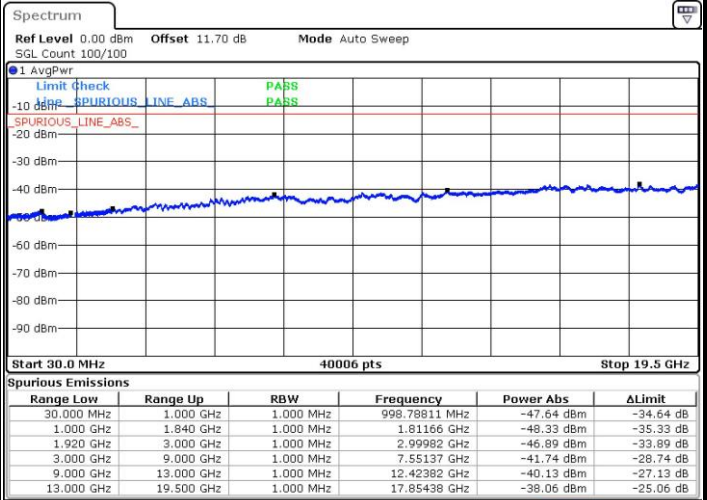
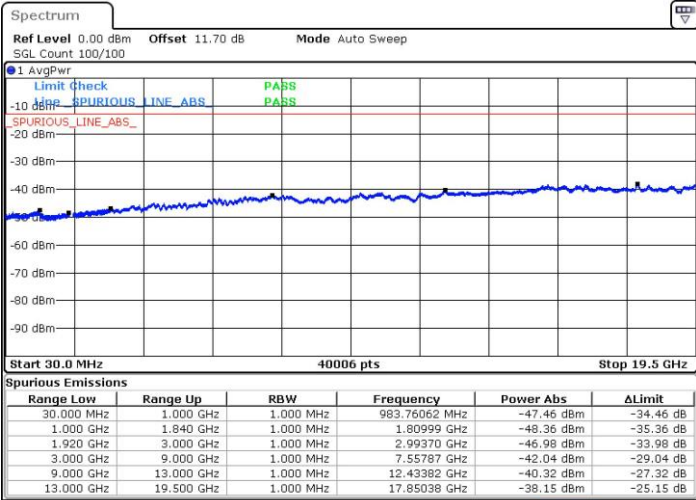
Date: 7.OCT.2018 01:56:37



LTE Band 2 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



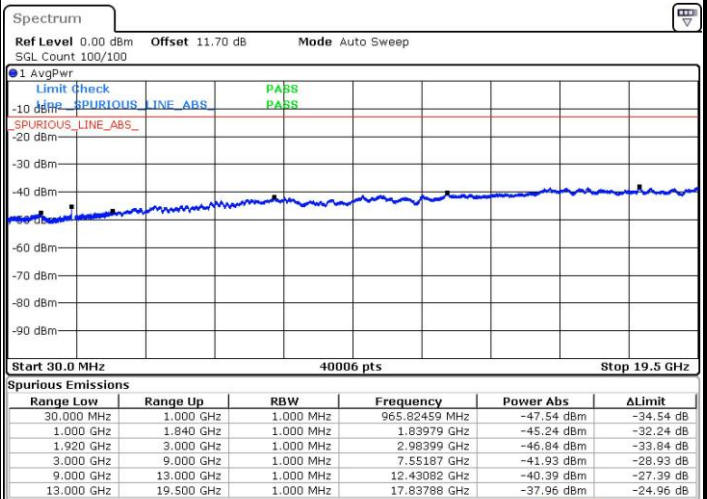
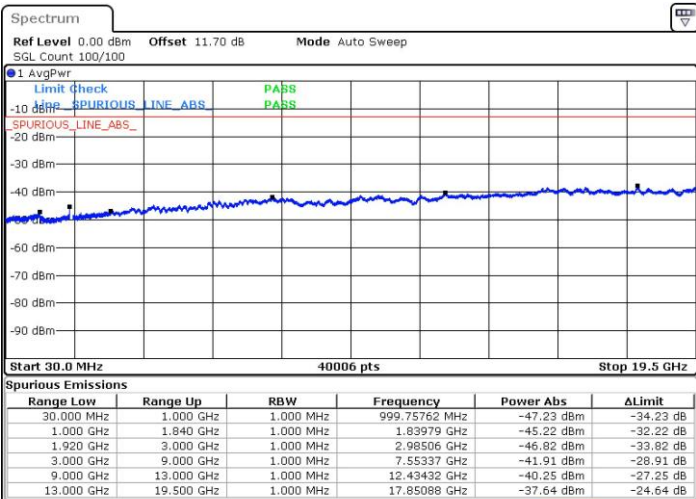
Date: 7.OCT.2018 02:04:13

Date: 7.OCT.2018 02:05:04

LTE Band 2 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 7.OCT.2018 02:12:40

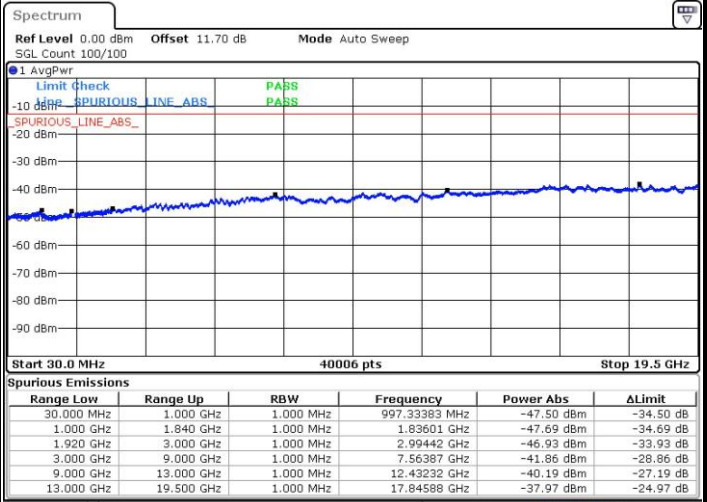
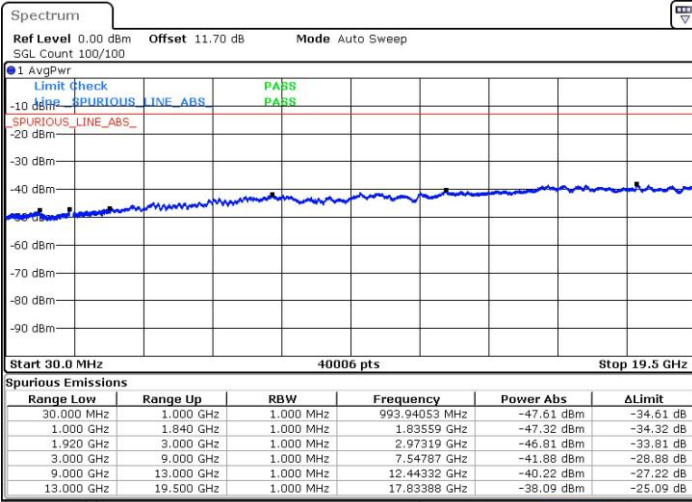
Date: 7.OCT.2018 02:13:31



LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

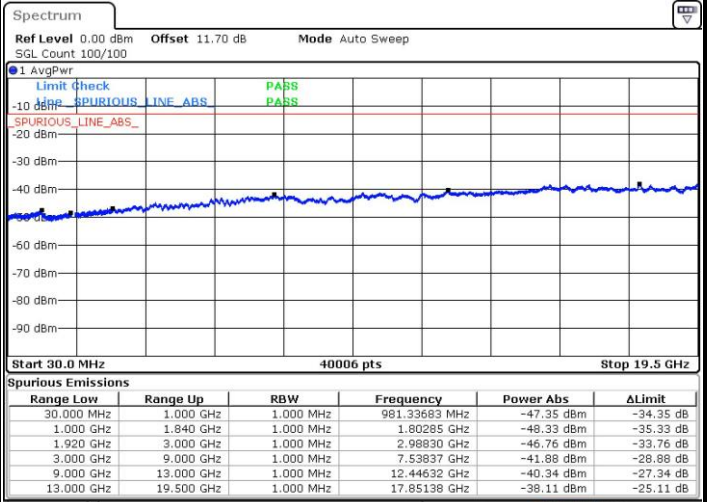
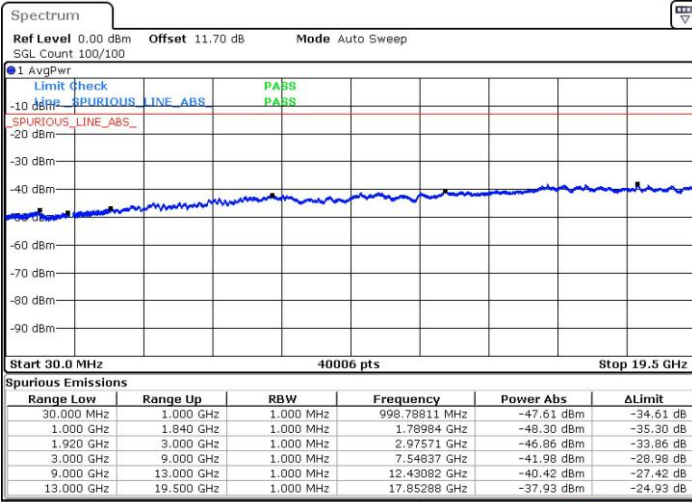


Date: 7.OCT.2018 02:15:07

Date: 7.OCT.2018 02:15:57

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 7.OCT.2018 02:23:34

Date: 7.OCT.2018 02:24:24



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	0.0007	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0025	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0017	

Note:

1. Normal Voltage =7.6 V. ; Battery End Point (BEP) =6.8 V. ; Maximum Voltage =8.7 V.
2. 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	3.91	4.81	5.19	5.88	<b>PASS</b>
Middle CH	4.14	4.78	4.29	5.80	
Highest CH	4.78	4.96	5.39	6.09	



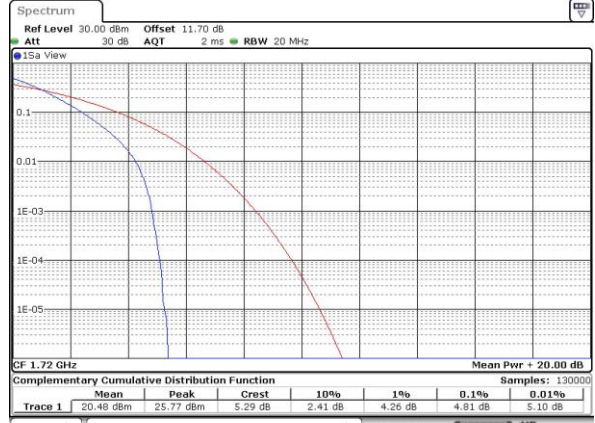
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



Date: 7.OCT.2018 05:49:47

Lowest Channel / Full RB



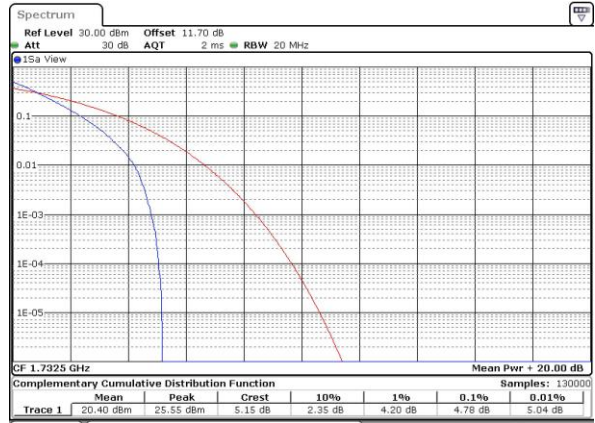
Date: 7.OCT.2018 05:49:57

Middle Channel / 1RB



Date: 7.OCT.2018 05:50:08

Middle Channel / Full RB



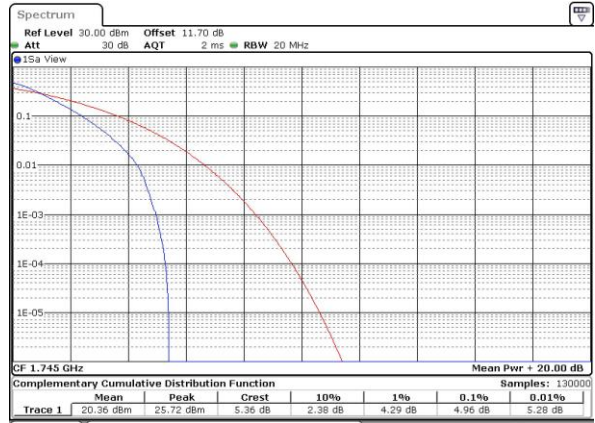
Date: 7.OCT.2018 05:50:19

Highest Channel / 1RB



Date: 7.OCT.2018 05:50:31

Highest Channel / Full RB



Date: 7.OCT.2018 05:50:42





LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



Date: 7.OCT.2018 05:48:43

Lowest Channel / Full RB



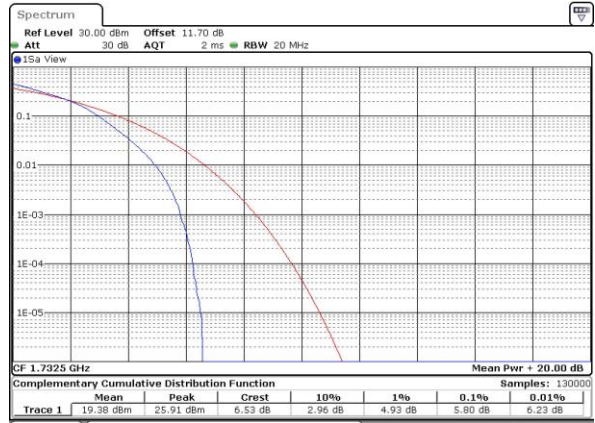
Date: 7.OCT.2018 05:48:54

Middle Channel / 1RB



Date: 7.OCT.2018 05:49:04

Middle Channel / Full RB



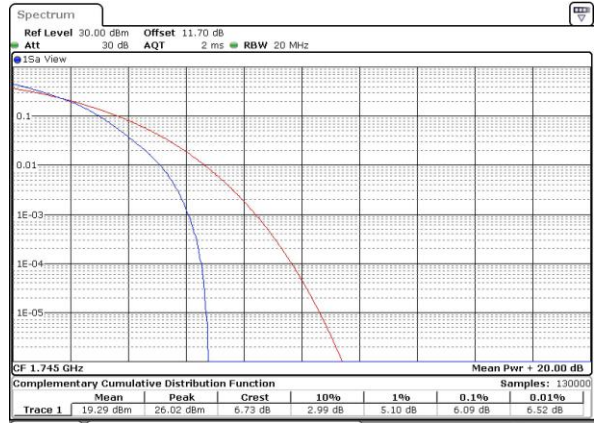
Date: 7.OCT.2018 05:49:14

Highest Channel / 1RB



Date: 7.OCT.2018 05:49:25

Highest Channel / Full RB



Date: 7.OCT.2018 05:49:35





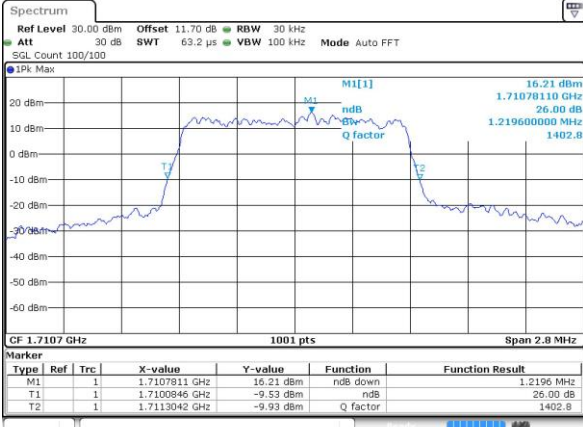
**26dB Bandwidth**

Mode	LTE Band 4 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.22	1.23	3.07	3.05	4.97	4.96	9.81	9.93	14.21	14.54	20.10	20.22
Middle CH	1.23	1.23	3.00	2.99	4.95	4.93	9.81	9.77	14.30	14.51	20.30	20.26
Highest CH	1.22	1.23	3.03	3.04	4.94	4.92	9.79	9.65	14.48	14.24	20.22	20.10



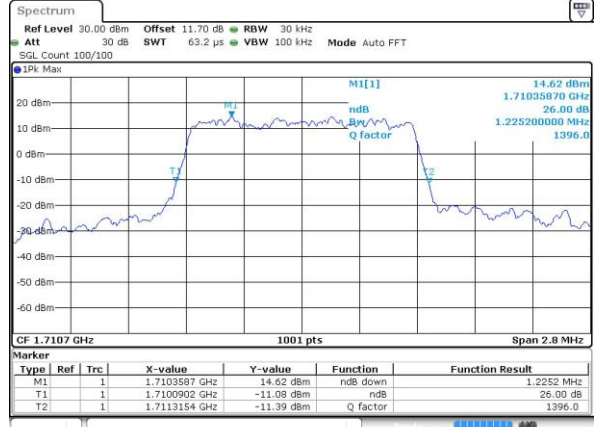
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



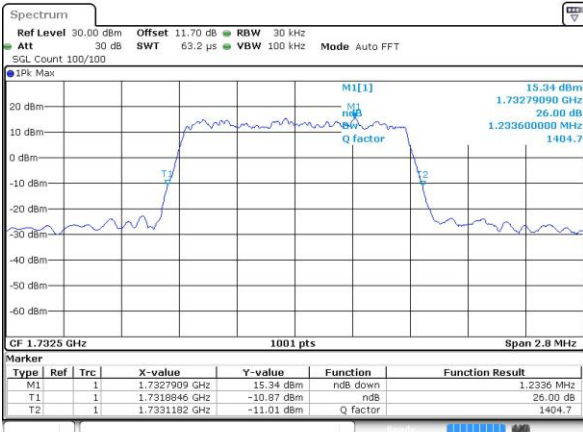
Date: 7.OCT.2018 05:28:45

Lowest Channel / 1.4MHz / 16QAM



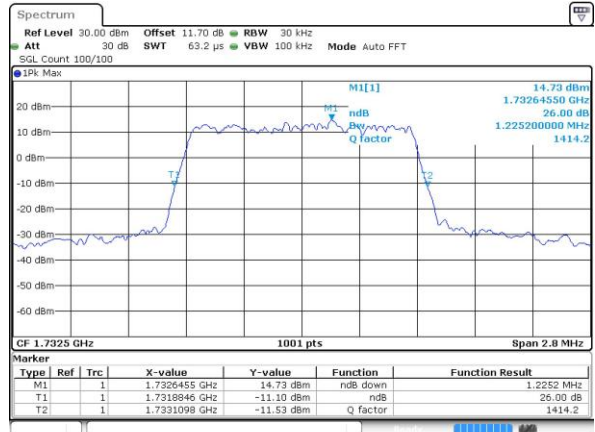
Date: 7.OCT.2018 05:28:56

Middle Channel / 1.4MHz / QPSK



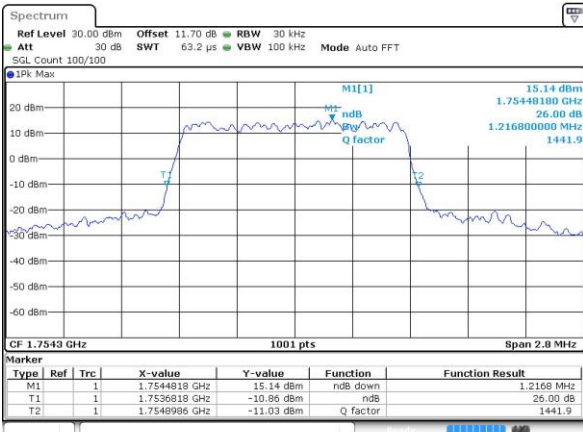
Date: 7.OCT.2018 05:37:12

Middle Channel / 1.4MHz / 16QAM



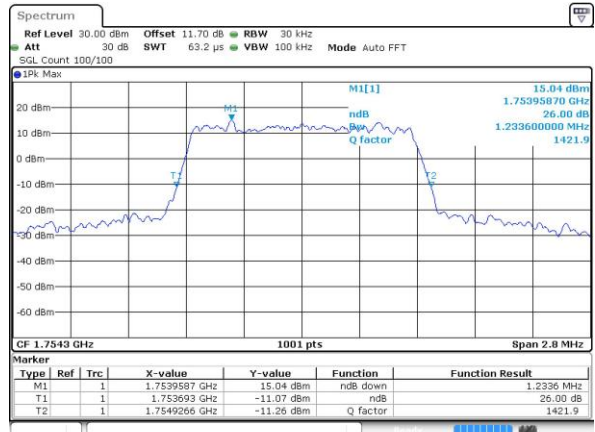
Date: 7.OCT.2018 05:37:23

Highest Channel / 1.4MHz / QPSK



Date: 7.OCT.2018 05:39:38

Highest Channel / 1.4MHz / 16QAM

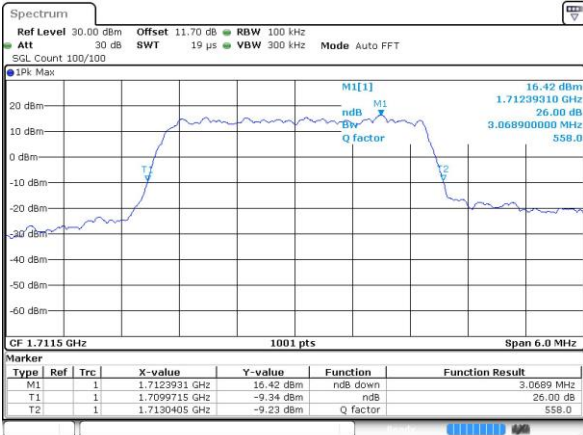


Date: 7.OCT.2018 05:39:50



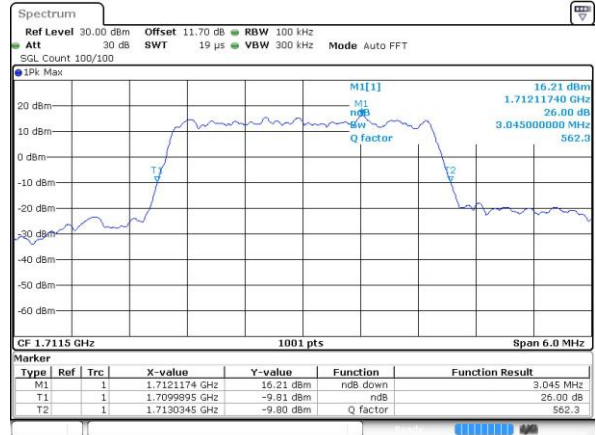
LTE Band 4

Lowest Channel / 3MHz / QPSK



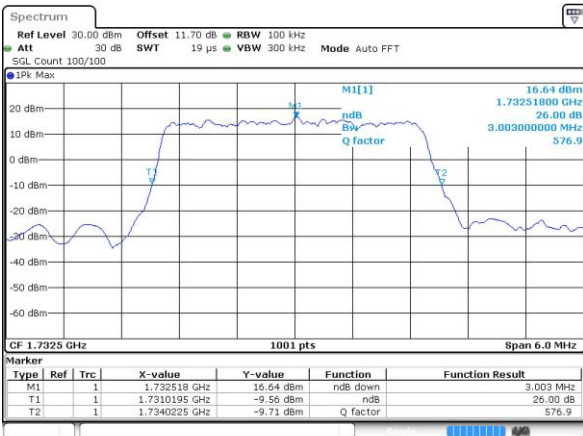
Date: 7.OCT.2018 02:24:58

Lowest Channel / 3MHz / 16QAM



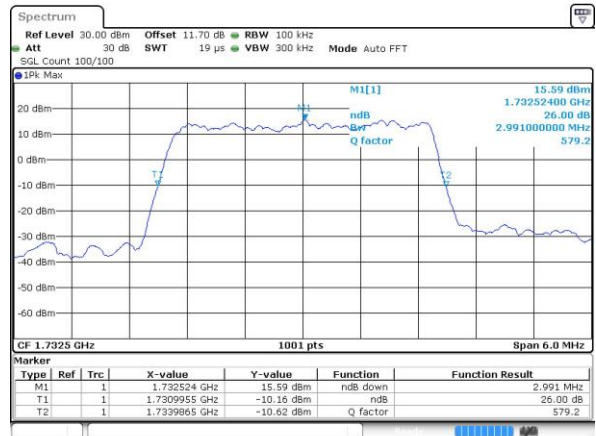
Date: 7.OCT.2018 02:25:09

Middle Channel / 3MHz / QPSK



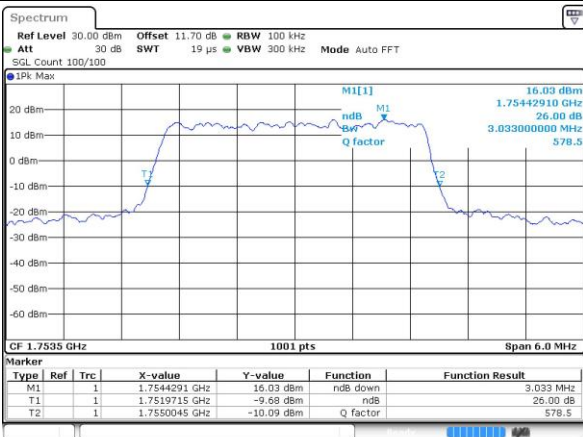
Date: 7.OCT.2018 02:36:11

Middle Channel / 3MHz / 16QAM



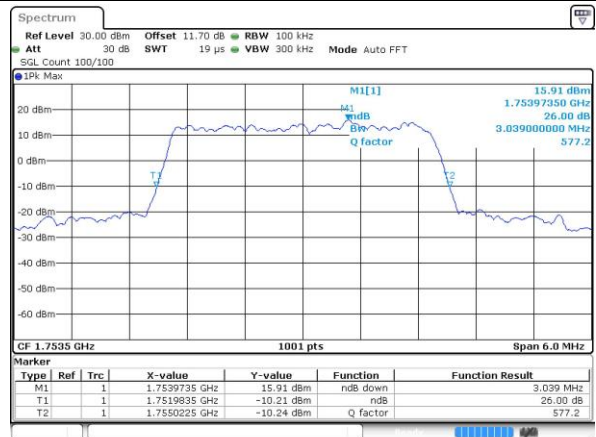
Date: 7.OCT.2018 02:36:22

Highest Channel / 3MHz / QPSK



Date: 7.OCT.2018 02:38:38

Highest Channel / 3MHz / 16QAM

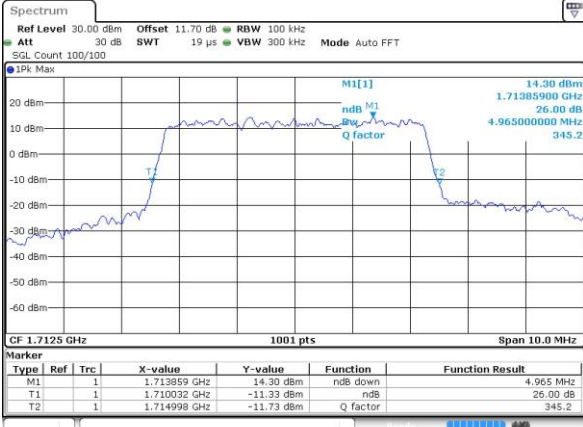


Date: 7.OCT.2018 02:38:49



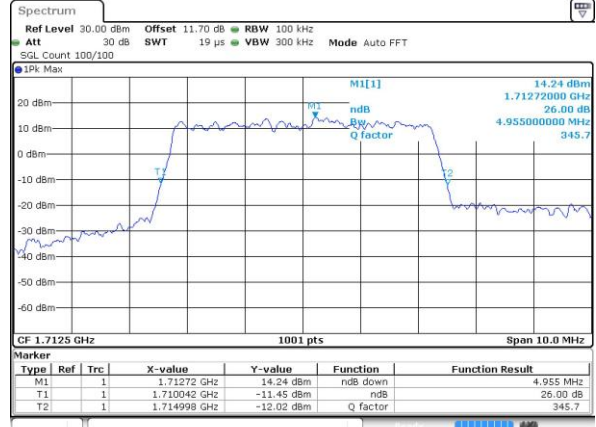
LTE Band 4

Lowest Channel / 5MHz / QPSK



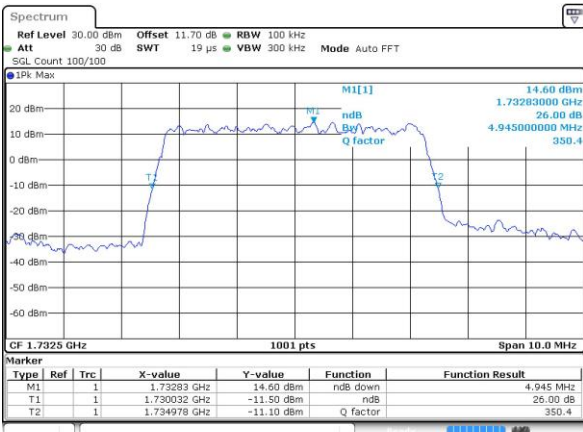
Date: 7.OCT.2018 02:47:04

Lowest Channel / 5MHz / 16QAM



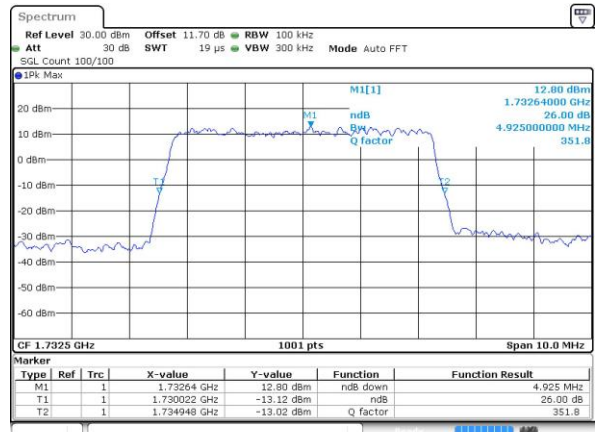
Date: 7.OCT.2018 02:47:16

Middle Channel / 5MHz / QPSK



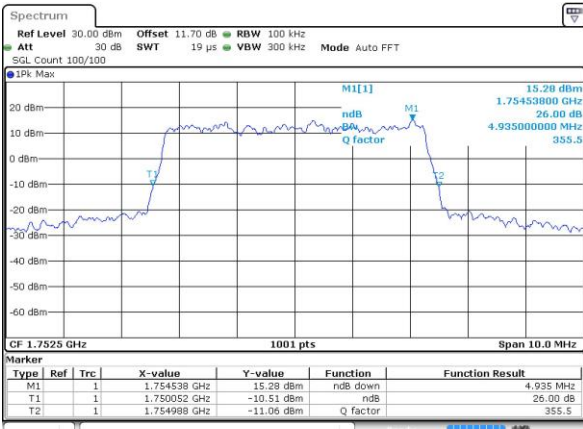
Date: 7.OCT.2018 02:55:31

Middle Channel / 5MHz / 16QAM



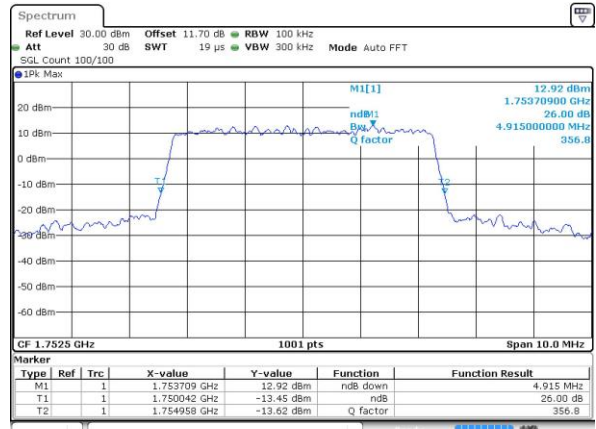
Date: 7.OCT.2018 02:55:42

Highest Channel / 5MHz / QPSK



Date: 7.OCT.2018 02:57:58

Highest Channel / 5MHz / 16QAM

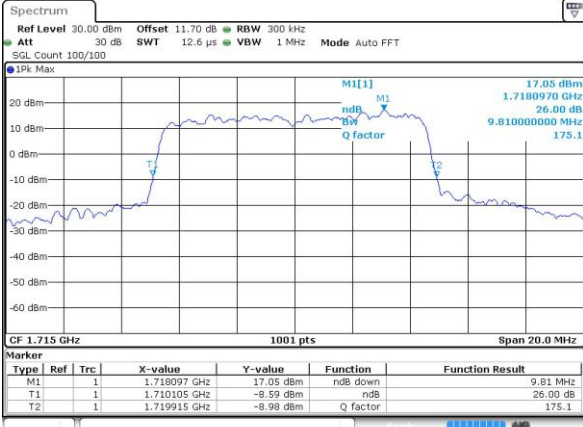


Date: 7.OCT.2018 02:58:09



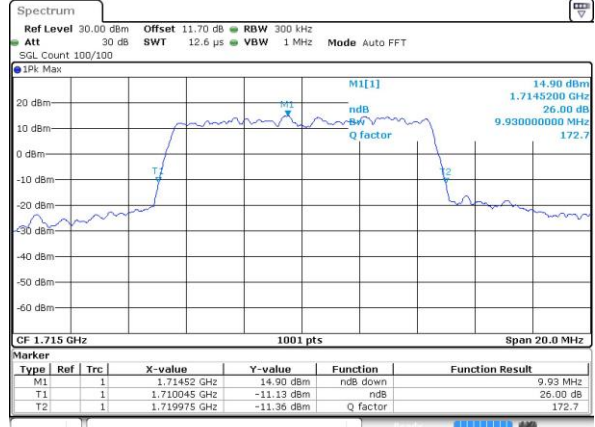
LTE Band 4

Lowest Channel / 10MHz / QPSK



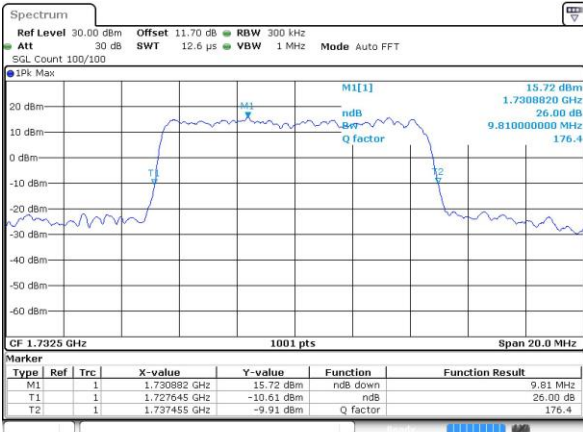
Date: 7.OCT.2018 03:06:24

Lowest Channel / 10MHz / 16QAM



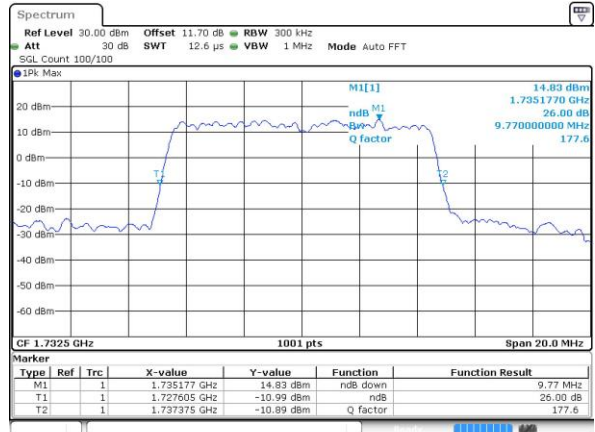
Date: 7.OCT.2018 03:06:36

Middle Channel / 10MHz / QPSK



Date: 7.OCT.2018 03:14:51

Middle Channel / 10MHz / 16QAM



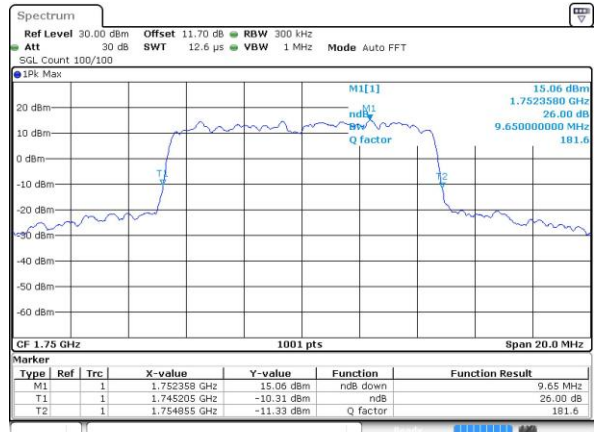
Date: 7.OCT.2018 03:15:03

Highest Channel / 10MHz / QPSK



Date: 7.OCT.2018 03:17:18

Highest Channel / 10MHz / 16QAM

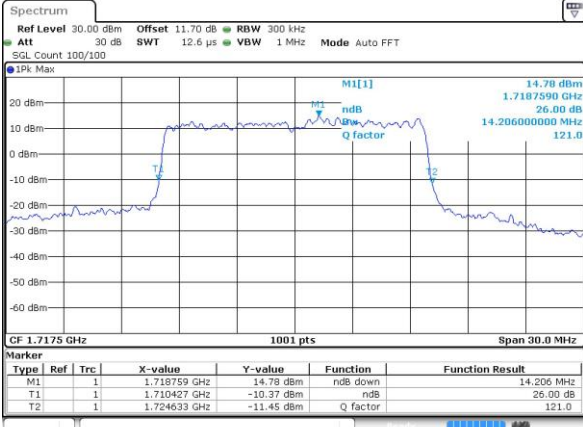


Date: 7.OCT.2018 03:17:29



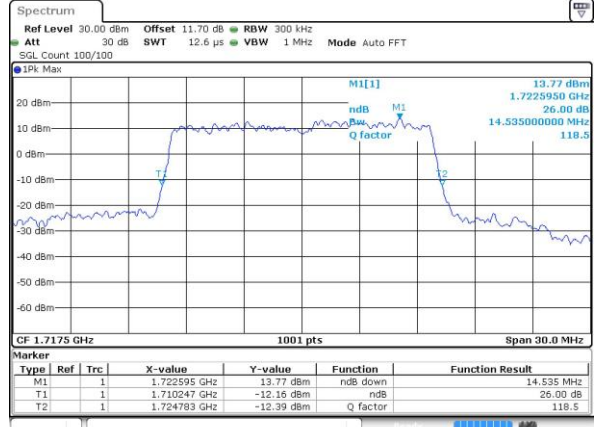
LTE Band 4

Lowest Channel / 15MHz / QPSK



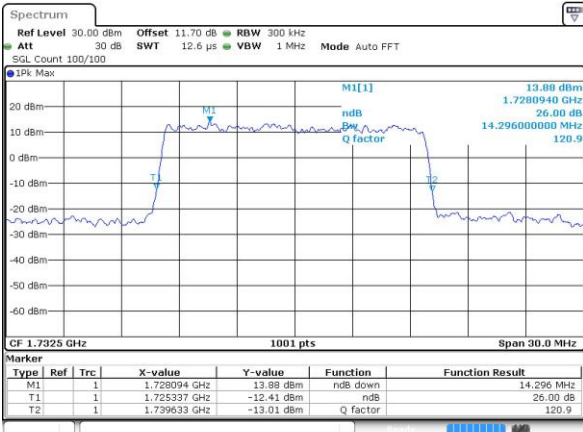
Date: 7.OCT.2018 03:25:45

Lowest Channel / 15MHz / 16QAM



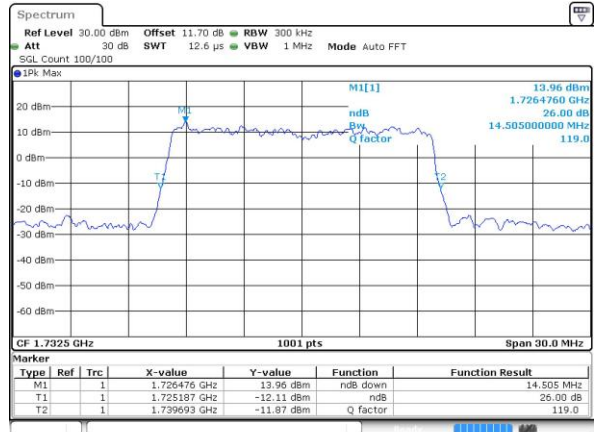
Date: 7.OCT.2018 03:25:56

Middle Channel / 15MHz / QPSK



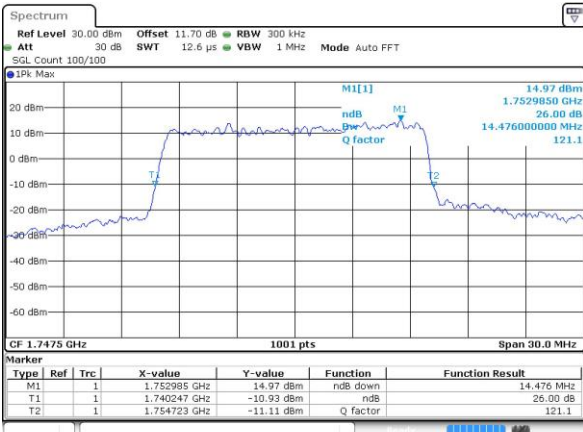
Date: 7.OCT.2018 03:34:11

Middle Channel / 15MHz / 16QAM



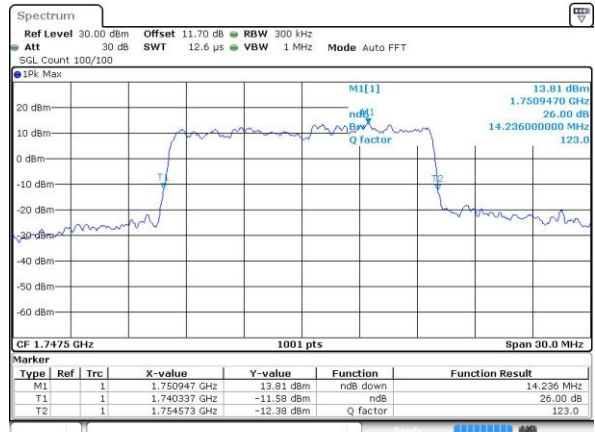
Date: 7.OCT.2018 03:34:23

Highest Channel / 15MHz / QPSK



Date: 7.OCT.2018 03:36:38

Highest Channel / 15MHz / 16QAM



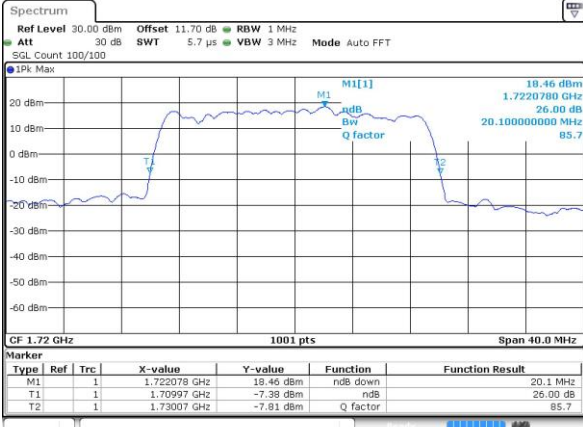
Date: 7.OCT.2018 03:36:49





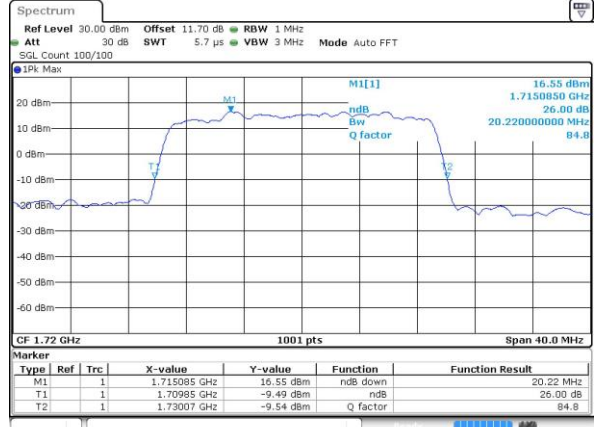
LTE Band 4

Lowest Channel / 20MHz / QPSK



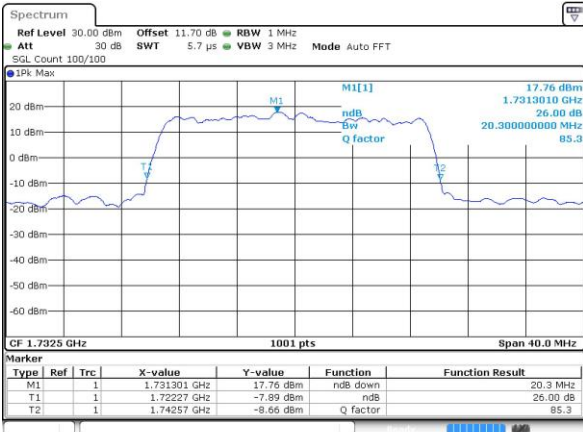
Date: 7.OCT.2018 03:45:05

Lowest Channel / 20MHz / 16QAM



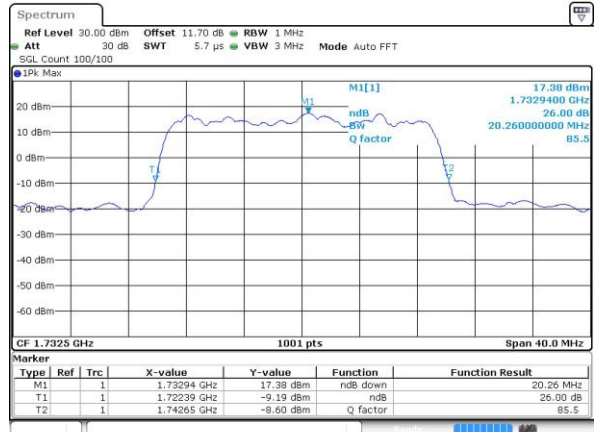
Date: 7.OCT.2018 03:45:16

Middle Channel / 20MHz / QPSK



Date: 7.OCT.2018 03:53:31

Middle Channel / 20MHz / 16QAM



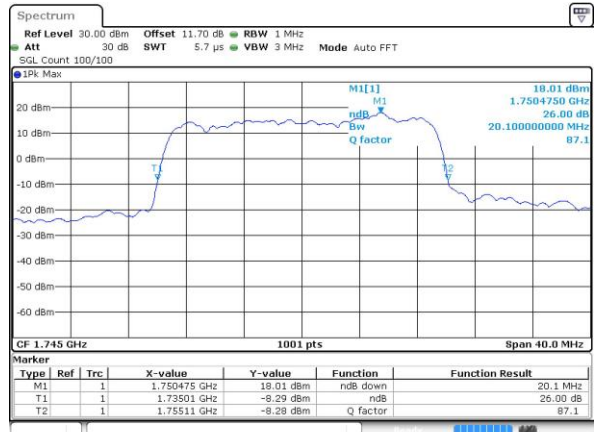
Date: 7.OCT.2018 03:53:43

Highest Channel / 20MHz / QPSK



Date: 7.OCT.2018 03:57:53

Highest Channel / 20MHz / 16QAM



Date: 7.OCT.2018 03:58:05



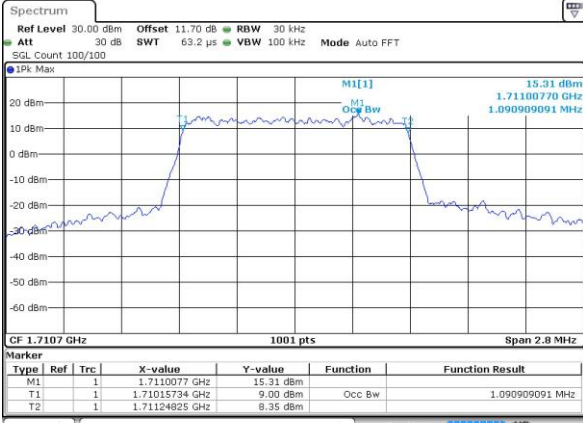
**Occupied Bandwidth**

Mode	LTE Band 4 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.10	2.72	2.74	4.48	4.49	9.07	9.03	13.40	13.40	18.18	18.34
Middle CH	1.09	1.10	2.72	2.71	4.50	4.49	9.03	9.01	13.55	13.52	18.42	18.46
Highest CH	1.09	1.09	2.72	2.70	4.51	4.51	9.03	9.03	13.49	13.43	18.30	18.42



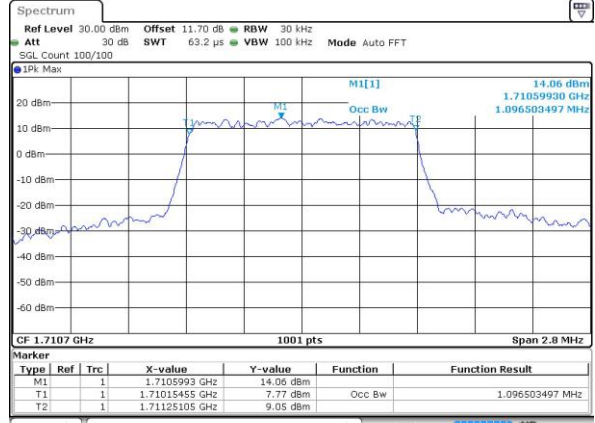
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



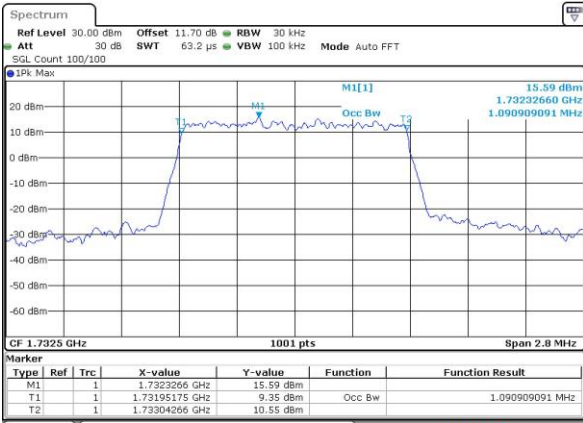
Date: 7.OCT.2018 05:28:22

Lowest Channel / 1.4MHz / 16QAM



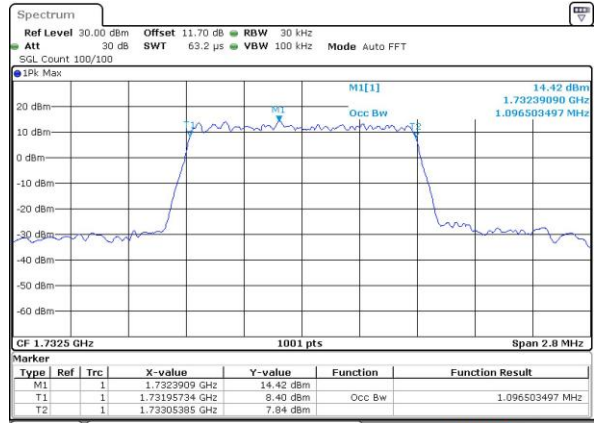
Date: 7.OCT.2018 05:28:34

Middle Channel / 1.4MHz / QPSK



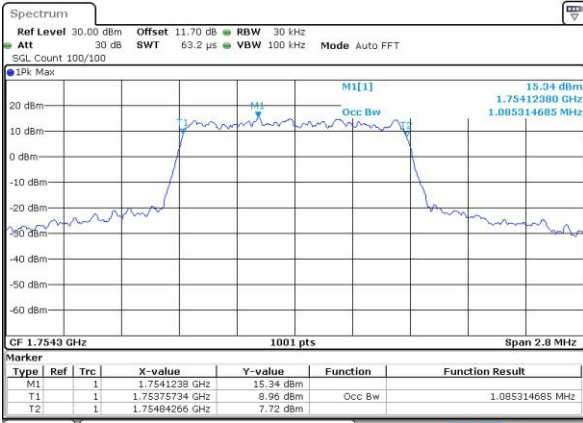
Date: 7.OCT.2018 05:36:49

Middle Channel / 1.4MHz / 16QAM



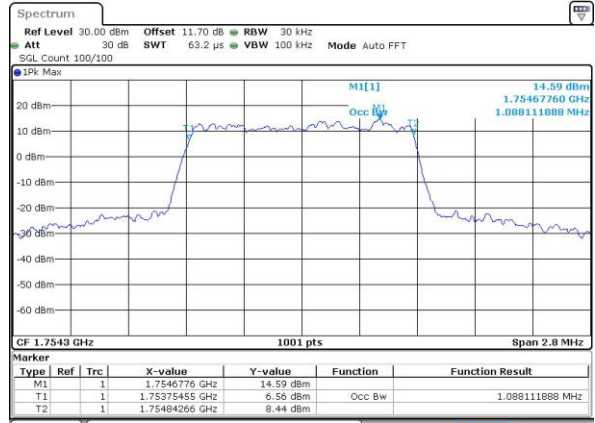
Date: 7.OCT.2018 05:37:00

Highest Channel / 1.4MHz / QPSK



Date: 7.OCT.2018 05:39:16

Highest Channel / 1.4MHz / 16QAM

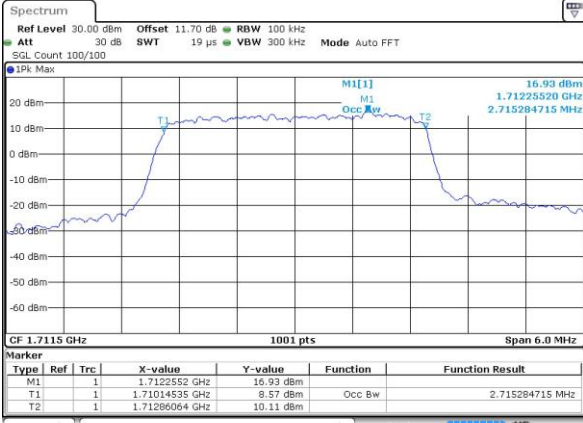


Date: 7.OCT.2018 05:39:27



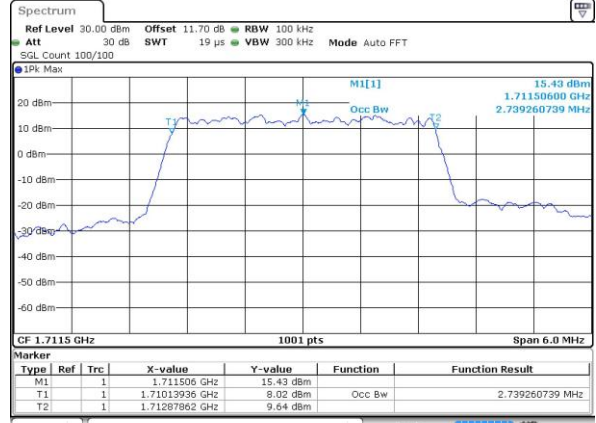
LTE Band 4

Lowest Channel / 3MHz / QPSK



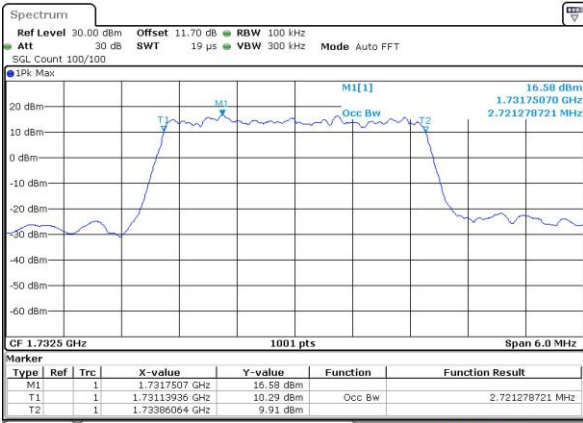
Date: 7.OCT.2018 02:24:35

Lowest Channel / 3MHz / 16QAM



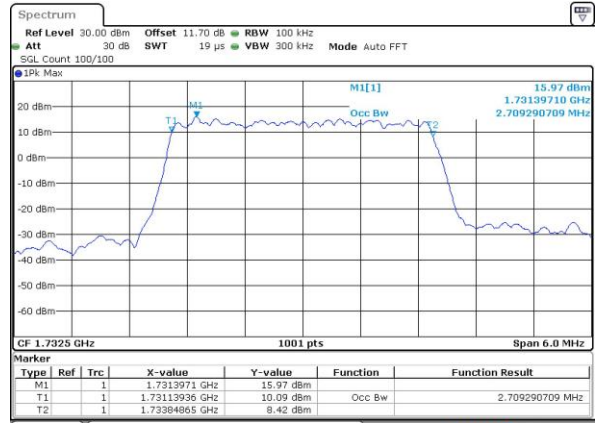
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Middle Channel / 3MHz / QPSK



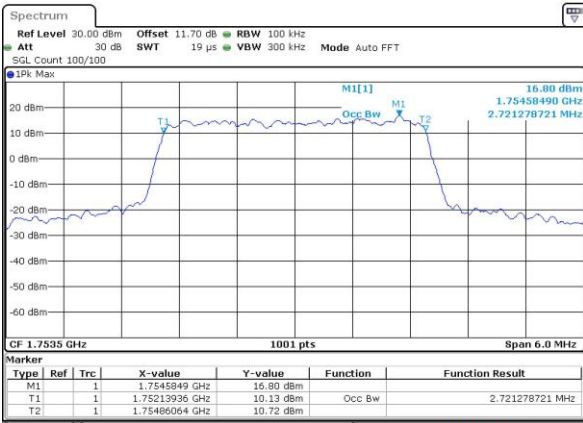
Date: 7.OCT.2018 02:35:48

Middle Channel / 3MHz / 16QAM



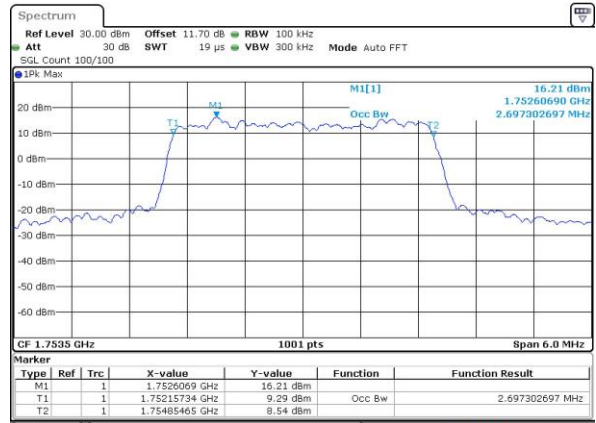
Date: 7.OCT.2018 02:35:59

Highest Channel / 3MHz / QPSK



Date: 7.OCT.2018 02:38:15

Highest Channel / 3MHz / 16QAM

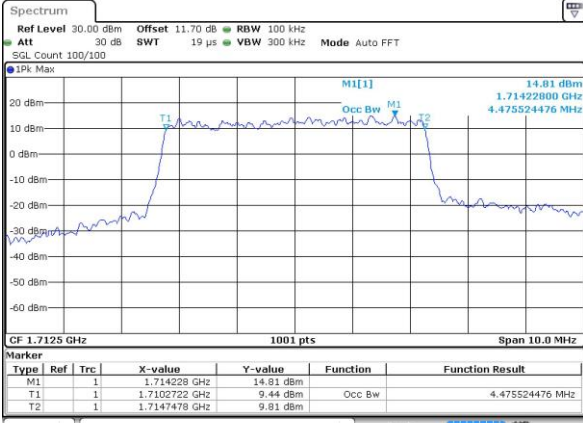


Date: 7.OCT.2018 02:38:26



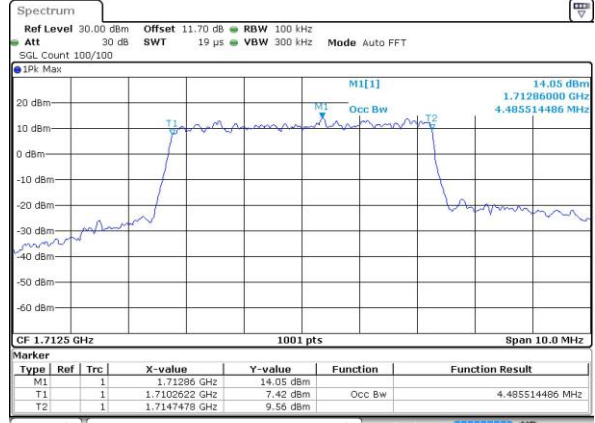
LTE Band 4

Lowest Channel / 5MHz / QPSK



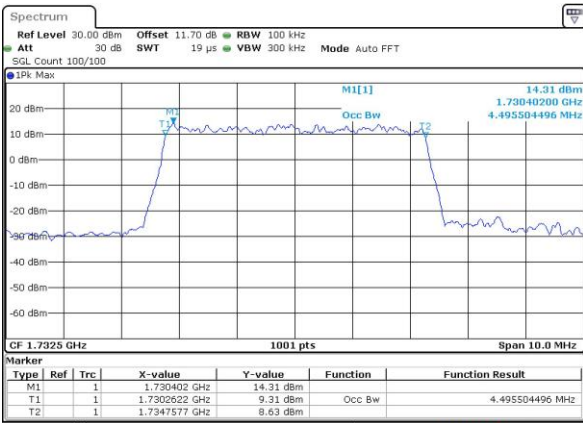
Date: 7.OCT.2018 02:46:42

Lowest Channel / 5MHz / 16QAM



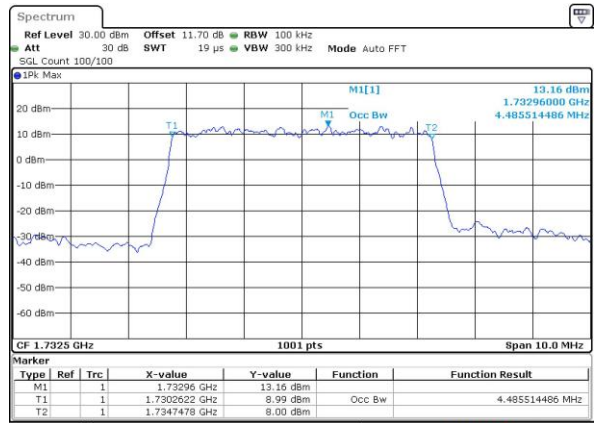
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Middle Channel / 5MHz / QPSK



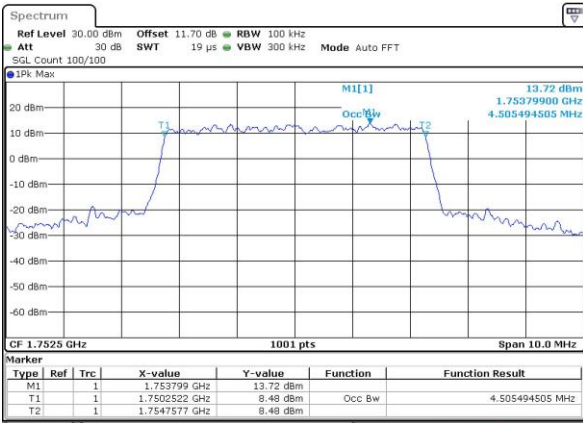
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Middle Channel / 5MHz / 16QAM



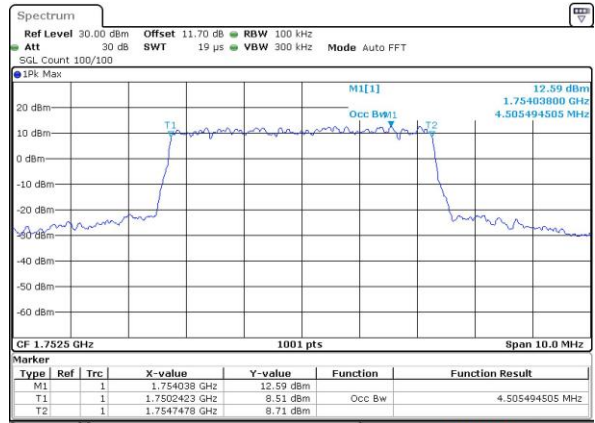
Date: 7.OCT.2018 02:55:20

Highest Channel / 5MHz / QPSK



Date: 7.OCT.2018 02:57:35

Highest Channel / 5MHz / 16QAM



Date: 7.OCT.2018 02:57:46