



### Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

**Note:**

1. Normal Voltage = 3.95V. ; Battery End Point (BEP) = 3.55 V. ; Maximum Voltage =4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



## LTE Band 17

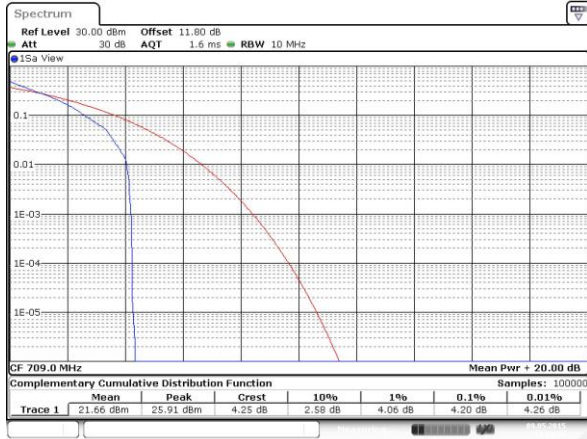
### Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.2	4.9	5.42	5.8	<b>PASS</b>
Middle CH	4.26	4.84	4.58	5.86	
Highest CH	4.14	4.87	5.13	5.77	



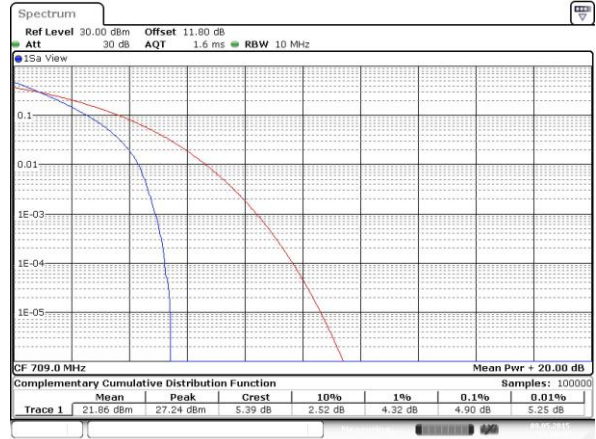
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



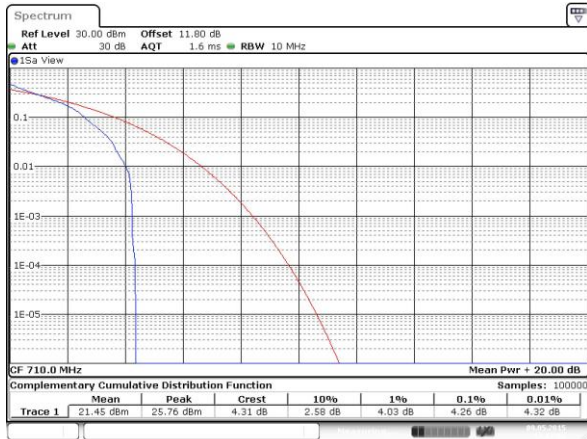
Date: 9 MAY 2015 12:16:36

Lowest Channel / Full RB



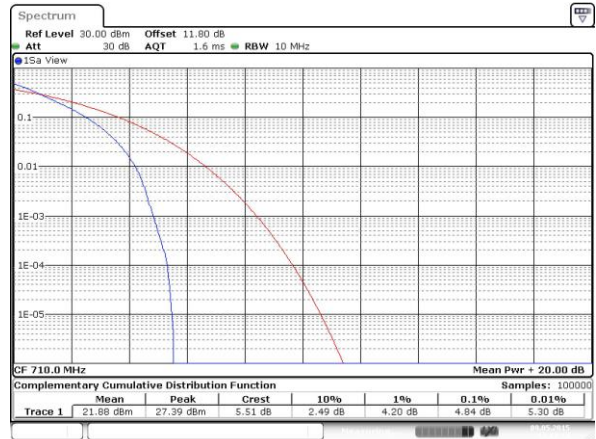
Date: 9 MAY 2015 12:16:48

Middle Channel / 1RB



Date: 9 MAY 2015 12:17:01

Middle Channel / Full RB



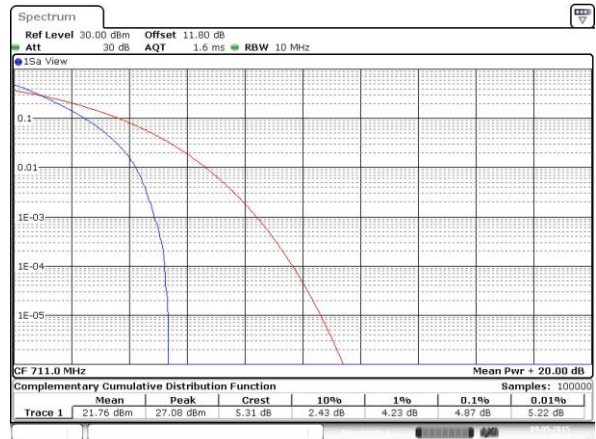
Date: 9 MAY 2015 12:17:14

Highest Channel / 1RB



Date: 9 MAY 2015 12:17:27

Highest Channel / Full RB

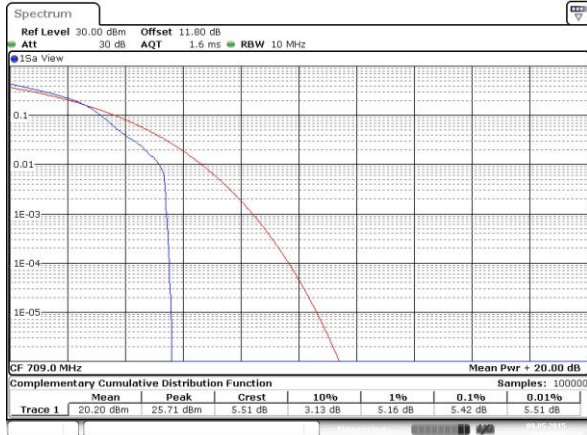


Date: 9 MAY 2015 12:17:40



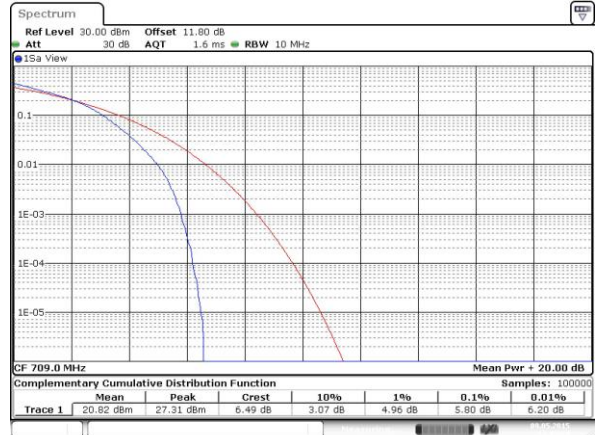
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



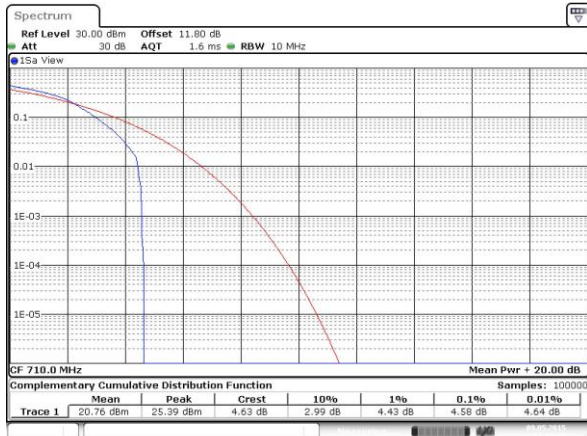
Date: 9 MAY 2015 12:15:05

Lowest Channel / Full RB



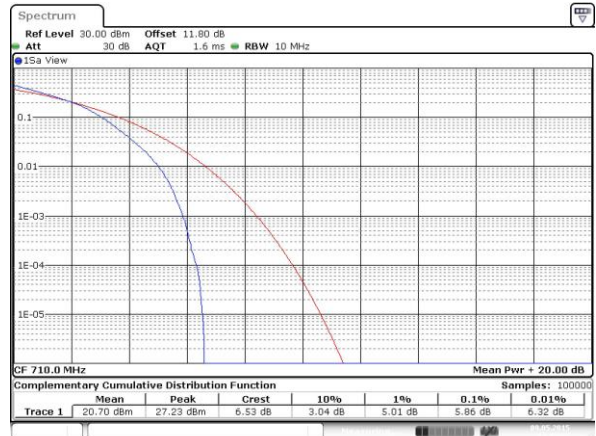
Date: 9 MAY 2015 12:15:25

Middle Channel / 1RB



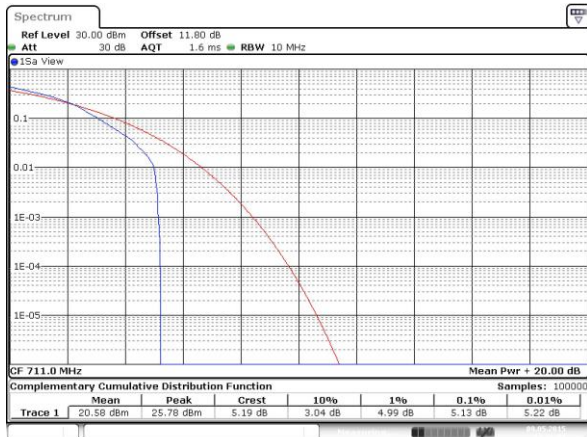
Date: 9 MAY 2015 12:15:37

Middle Channel / Full RB



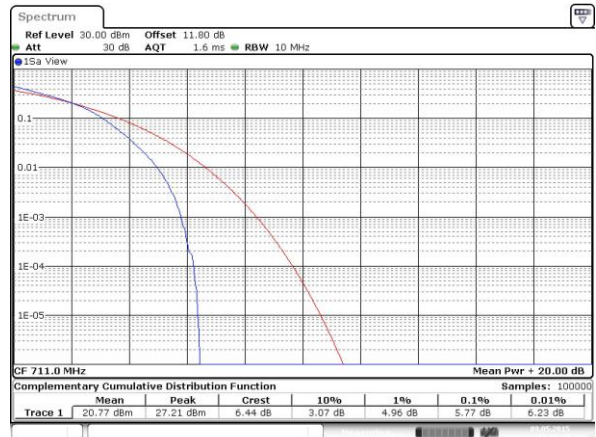
Date: 9 MAY 2015 12:15:50

Highest Channel / 1RB



Date: 9 MAY 2015 12:16:01

Highest Channel / Full RB



Date: 9 MAY 2015 12:16:19



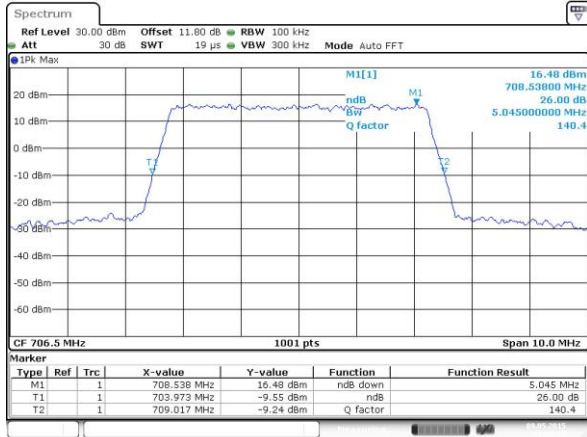
**26dB Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	5.05	5.06	10.01	10.07	-	-	-	-
Middle CH	-	-	-	-	5.04	5.07	10.09	9.97	-	-	-	-
Highest CH	-	-	-	-	5.05	5.03	10.09	9.95	-	-	-	-



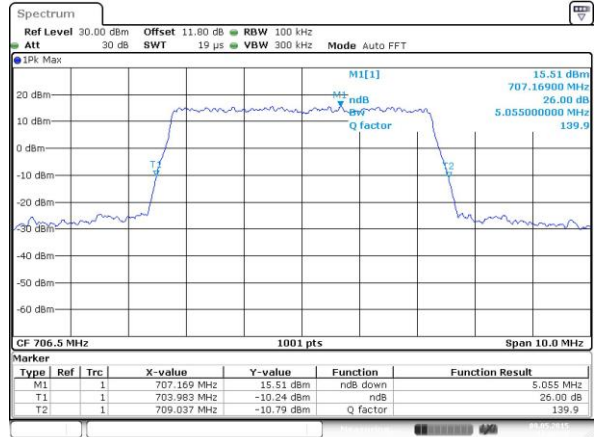
LTE Band 17

Lowest Channel / 5MHz / QPSK



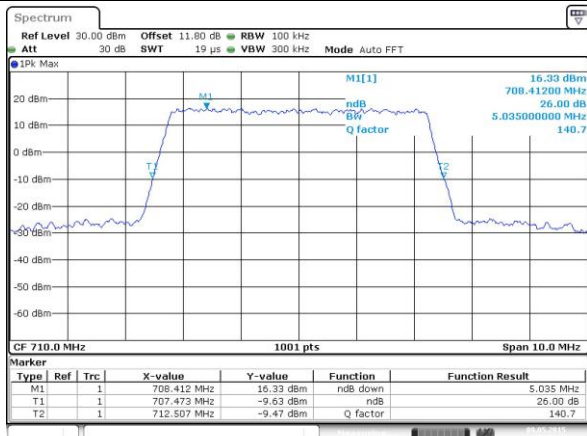
Date: 9 MAY 2015 11:37:19

Lowest Channel / 5MHz / 16QAM



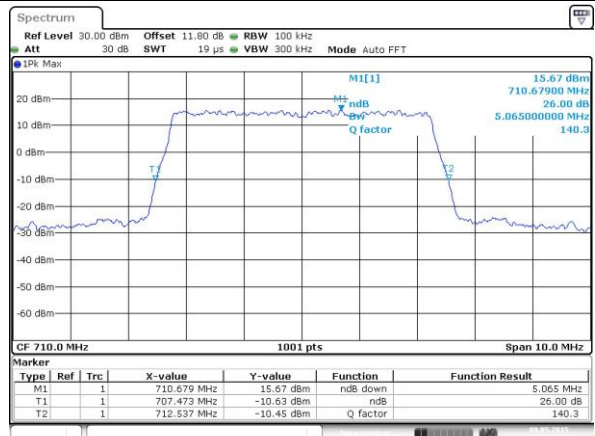
Date: 9 MAY 2015 11:37:32

Middle Channel / 5MHz / QPSK



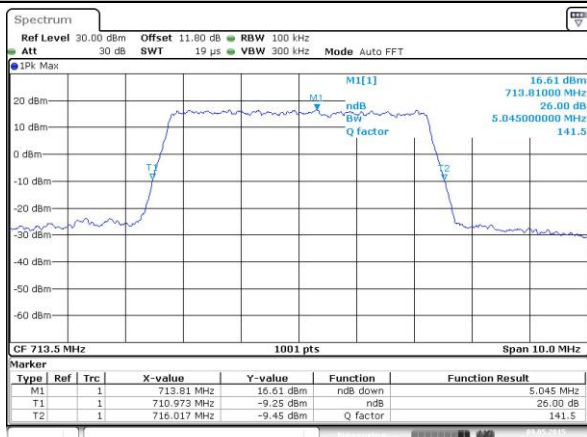
Date: 9 MAY 2015 11:45:12

Middle Channel / 5MHz / 16QAM



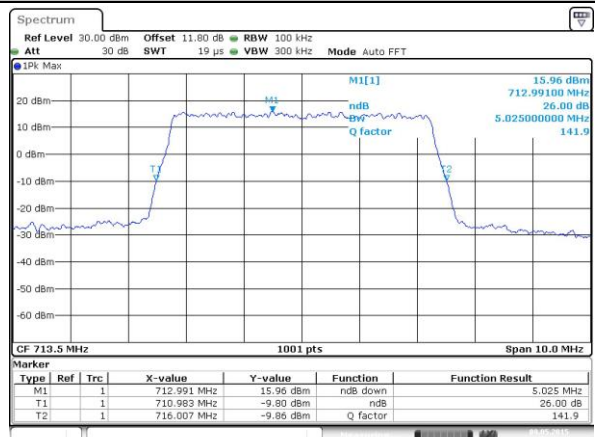
Date: 9 MAY 2015 11:45:25

Highest Channel / 5MHz / QPSK



Date: 9 MAY 2015 11:48:25

Highest Channel / 5MHz / 16QAM

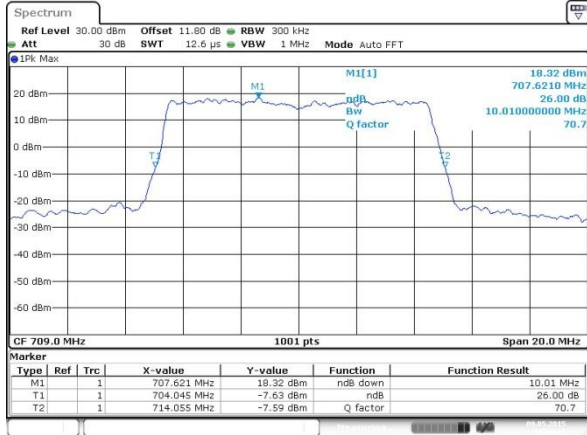


Date: 9 MAY 2015 11:48:38



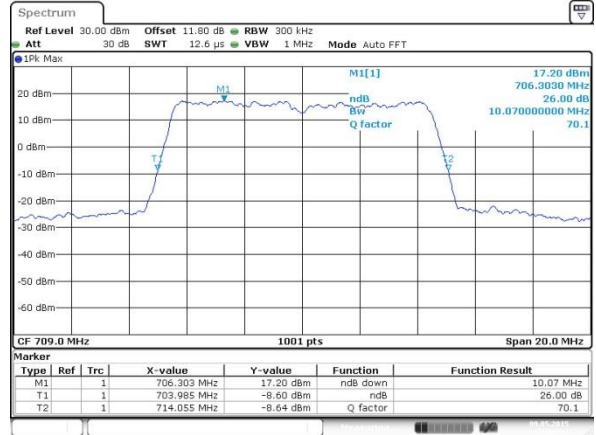
LTE Band 17

Lowest Channel / 10MHz / QPSK



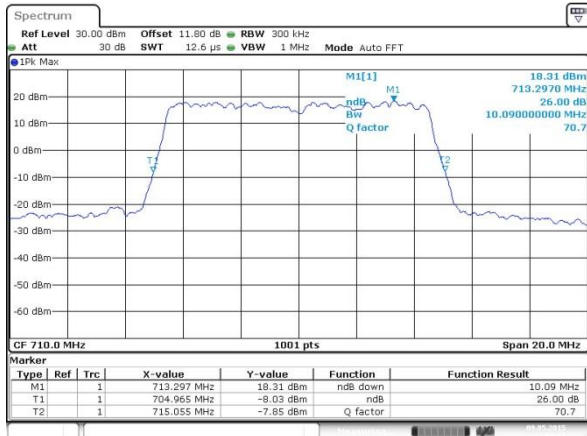
Date: 9 MAY 2015 11:56:18

Lowest Channel / 10MHz / 16QAM



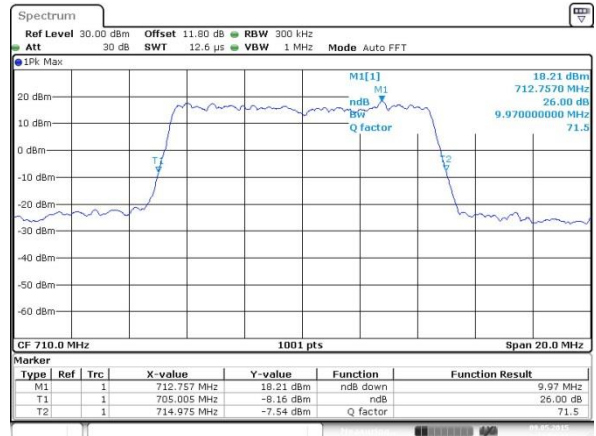
Date: 9 MAY 2015 11:56:31

Middle Channel / 10MHz / QPSK



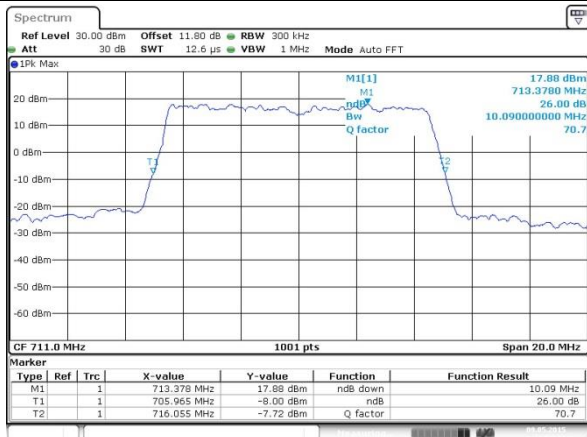
Date: 9 MAY 2015 12:04:10

Middle Channel / 10MHz / 16QAM



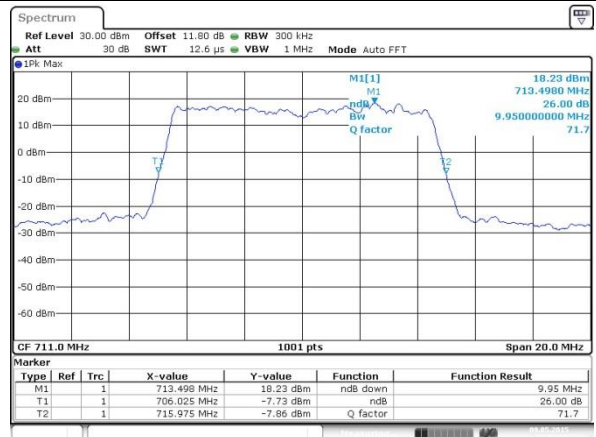
Date: 9 MAY 2015 12:04:23

Highest Channel / 10MHz / QPSK



Date: 9 MAY 2015 12:07:23

Highest Channel / 10MHz / 16QAM



Date: 9 MAY 2015 12:07:36



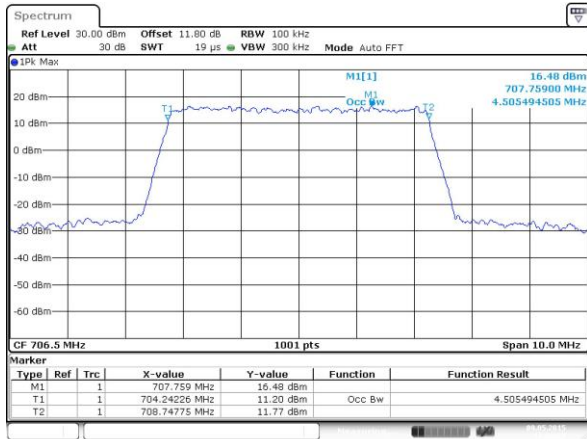
### Occupied Bandwidth

Mode	LTE Band 17 : 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	-	-	-	-	4.51	4.5	9.03	9.01	-	-	-	-
Middle CH	-	-	-	-	4.51	4.49	9.13	9.03	-	-	-	-
Highest CH	-	-	-	-	4.51	4.5	9.05	9.03	-	-	-	-



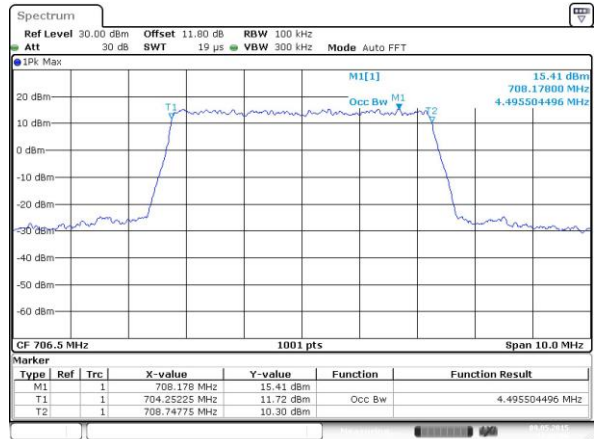
LTE Band 17

Lowest Channel / 5MHz / QPSK



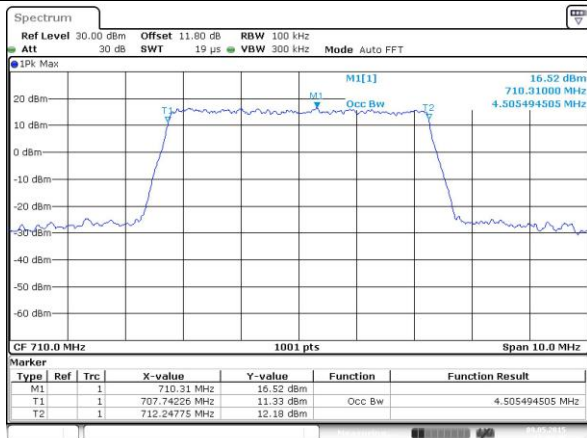
Date: 9 MAY 2015 11:36:55

Lowest Channel / 5MHz / 16QAM



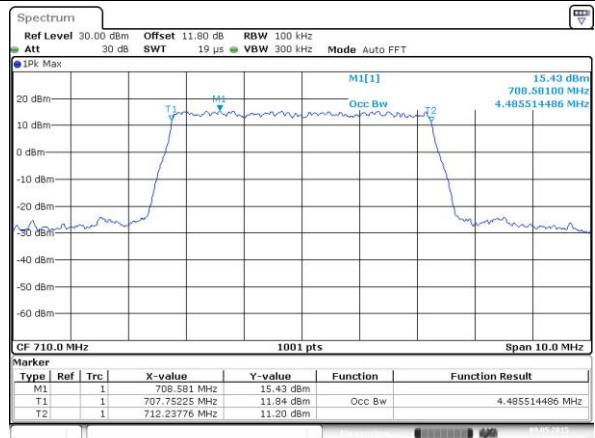
Date: 9 MAY 2015 11:37:06

Middle Channel / 5MHz / QPSK



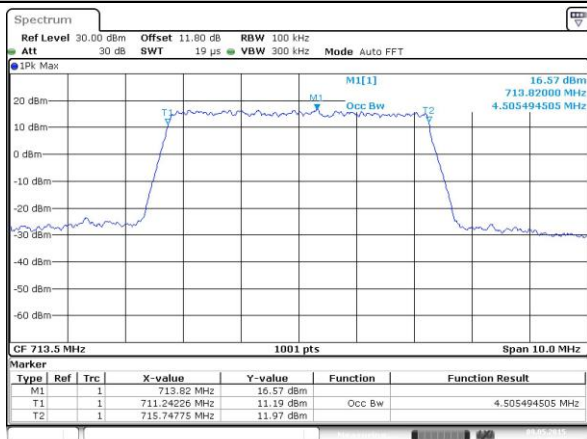
Date: 9 MAY 2015 11:44:48

Middle Channel / 5MHz / 16QAM



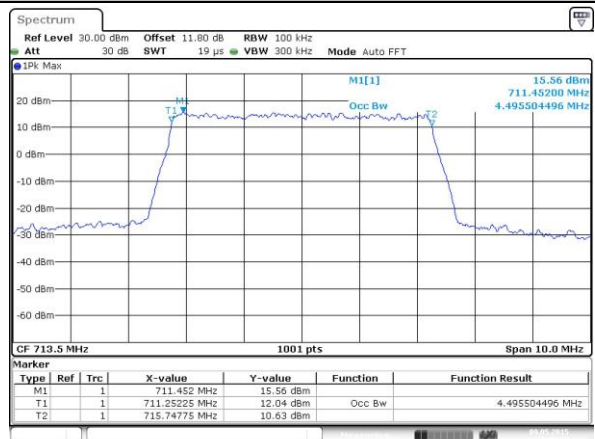
Date: 9 MAY 2015 11:44:59

Highest Channel / 5MHz / QPSK



Date: 9 MAY 2015 11:48:01

Highest Channel / 5MHz / 16QAM

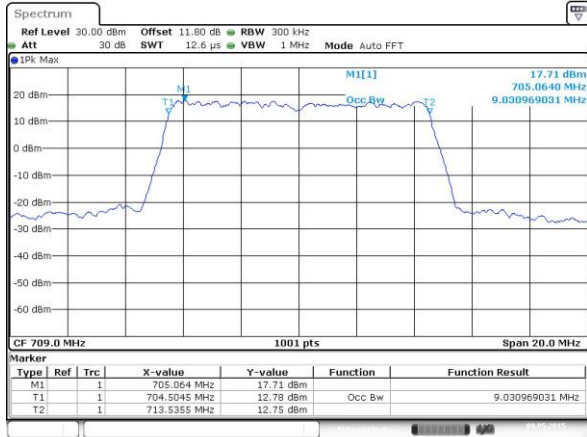


Date: 9 MAY 2015 11:48:12



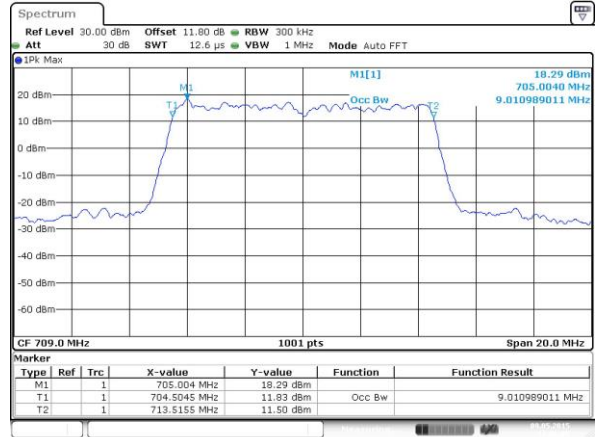
LTE Band 17

Lowest Channel / 10MHz / QPSK



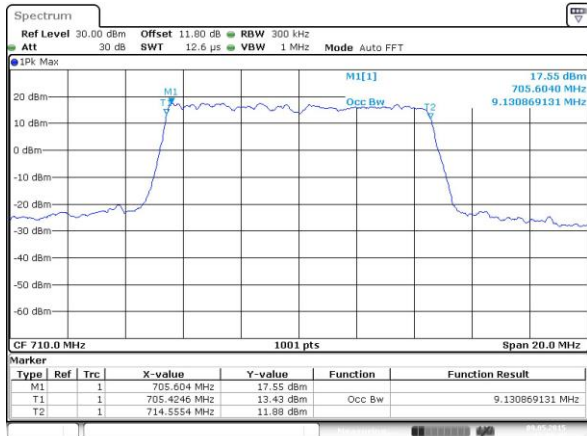
Date: 9 MAY 2015 11:55:55

Lowest Channel / 10MHz / 16QAM



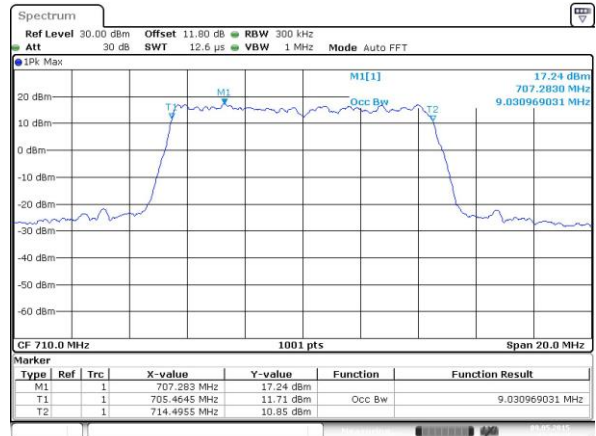
Date: 9 MAY 2015 11:56:05

Middle Channel / 10MHz / QPSK



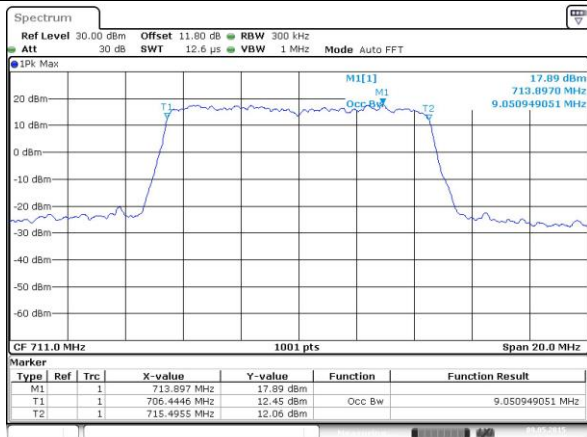
Date: 9 MAY 2015 12:03:46

Middle Channel / 10MHz / 16QAM



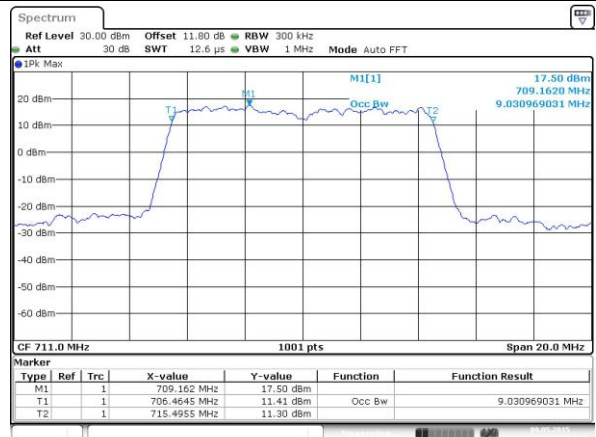
Date: 9 MAY 2015 12:03:57

Highest Channel / 10MHz / QPSK



Date: 9 MAY 2015 12:06:59

Highest Channel / 10MHz / 16QAM



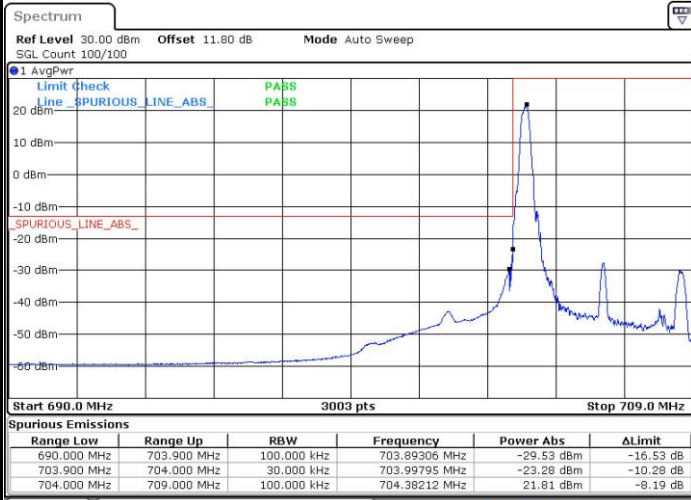
Date: 9 MAY 2015 12:07:10



# Conducted Band Edge

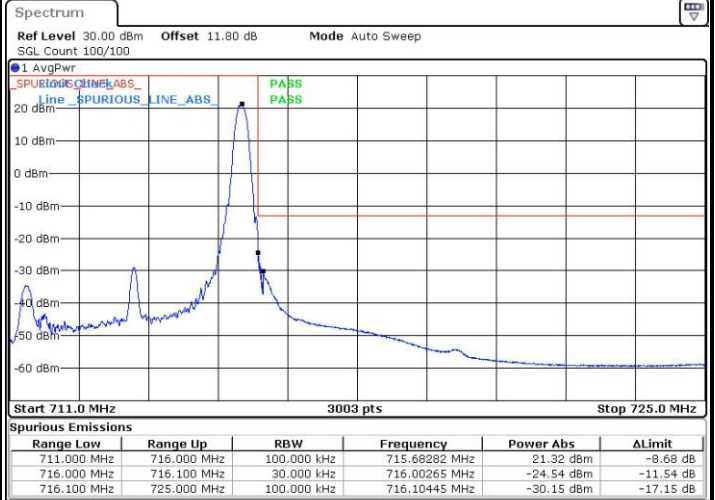
## LTE Band 17 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



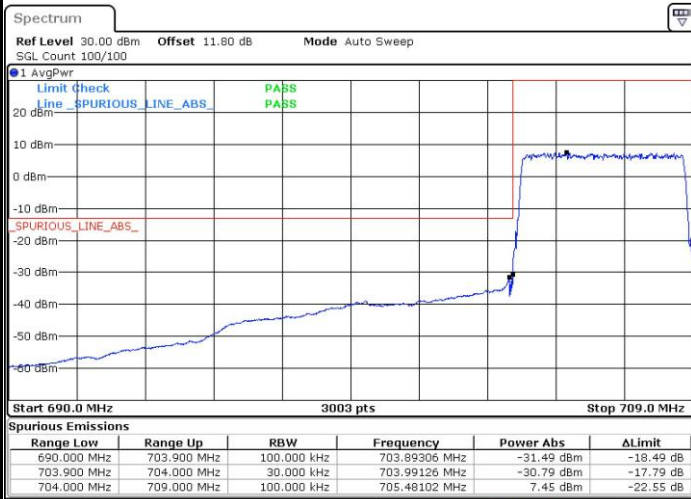
Date: 9 MAY 2015 11:38:41

### Highest Band Edge / 1 RB



Date: 9 MAY 2015 11:49:47

### Lowest Band Edge / Full RB



Date: 9 MAY 2015 11:41:01

### Highest Band Edge / Full RB

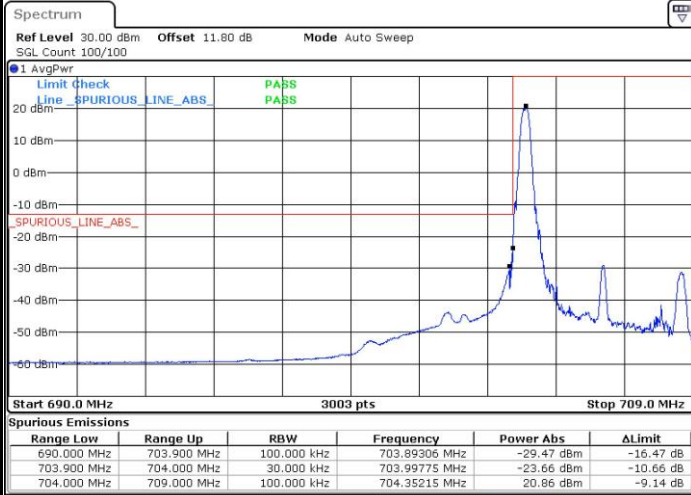


Date: 9 MAY 2015 11:52:07



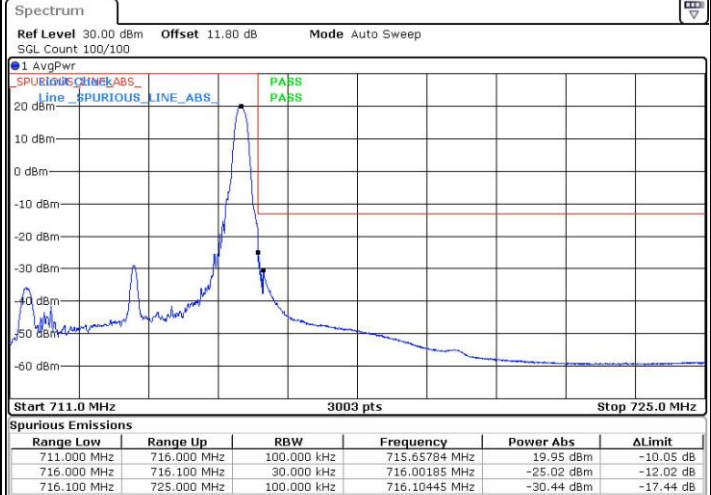
LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 9 MAY 2015 11:39:51

Highest Band Edge / 1 RB



Date: 9 MAY 2015 11:50:57

Lowest Band Edge / Full RB



Date: 9 MAY 2015 11:42:11

Highest Band Edge / Full RB

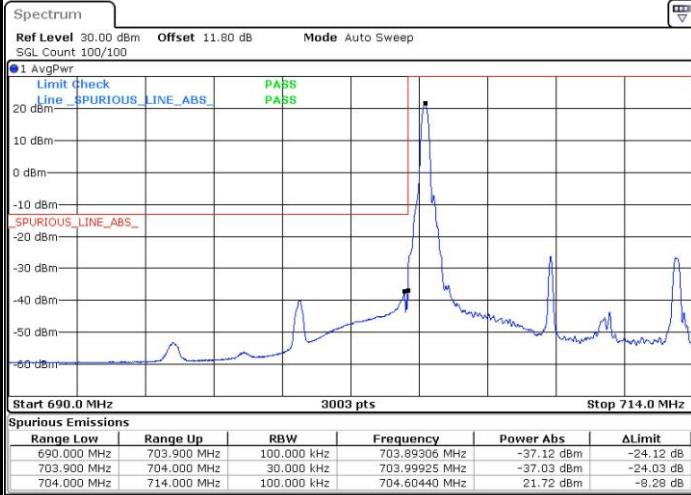


Date: 9 MAY 2015 11:53:18



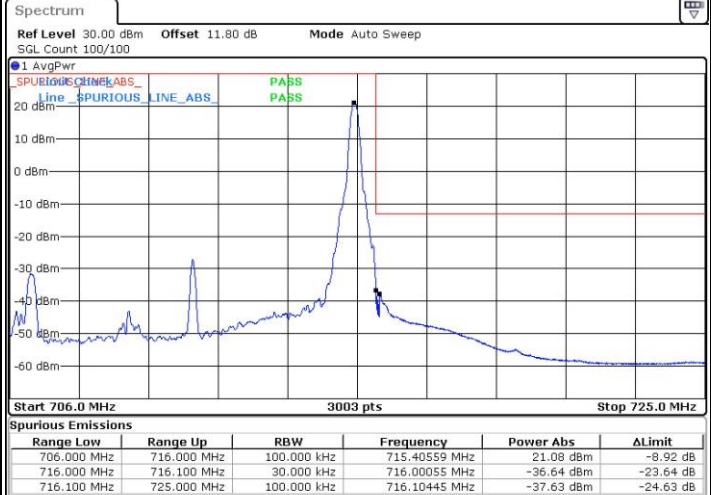
LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB



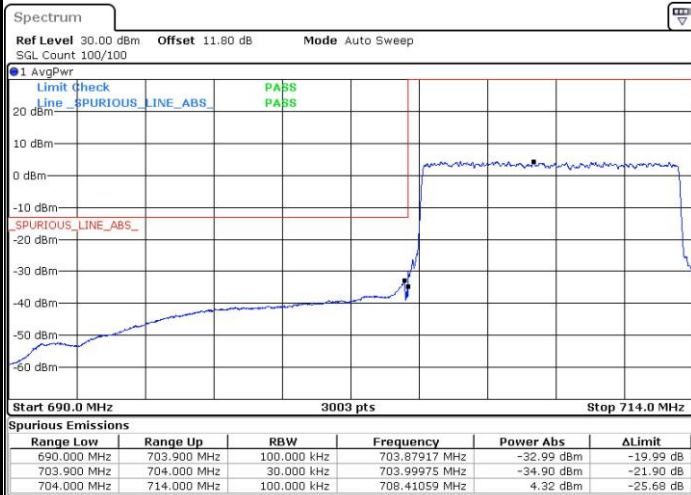
Date: 9 MAY 2015 11:57:40

Highest Band Edge / 1 RB



Date: 9 MAY 2015 12:08:45

Lowest Band Edge / Full RB



Date: 9 MAY 2015 12:00:00

Highest Band Edge / Full RB

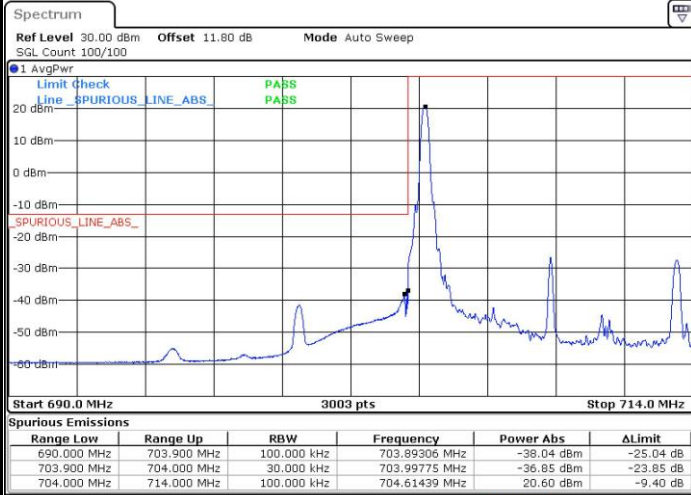


Date: 9 MAY 2015 12:11:05



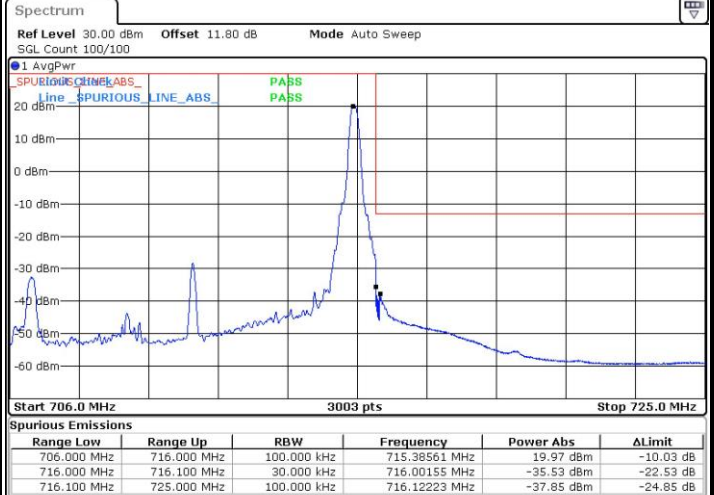
LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



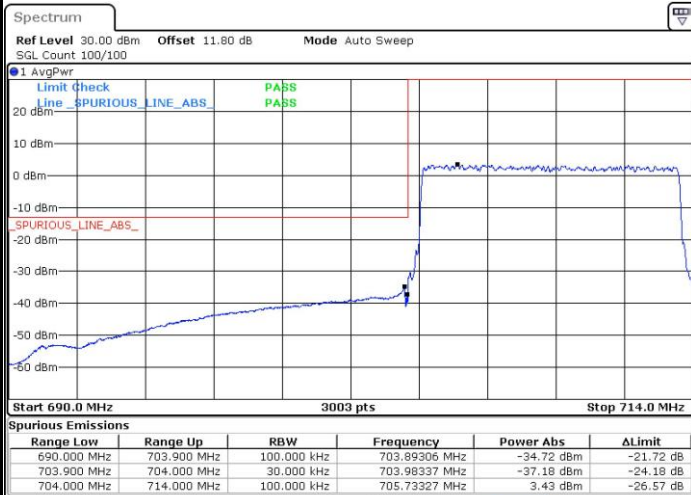
Date: 9 MAY 2015 11:58:50

Highest Band Edge / 1 RB



Date: 9 MAY 2015 12:09:55

Lowest Band Edge / Full RB



Date: 9 MAY 2015 12:01:10

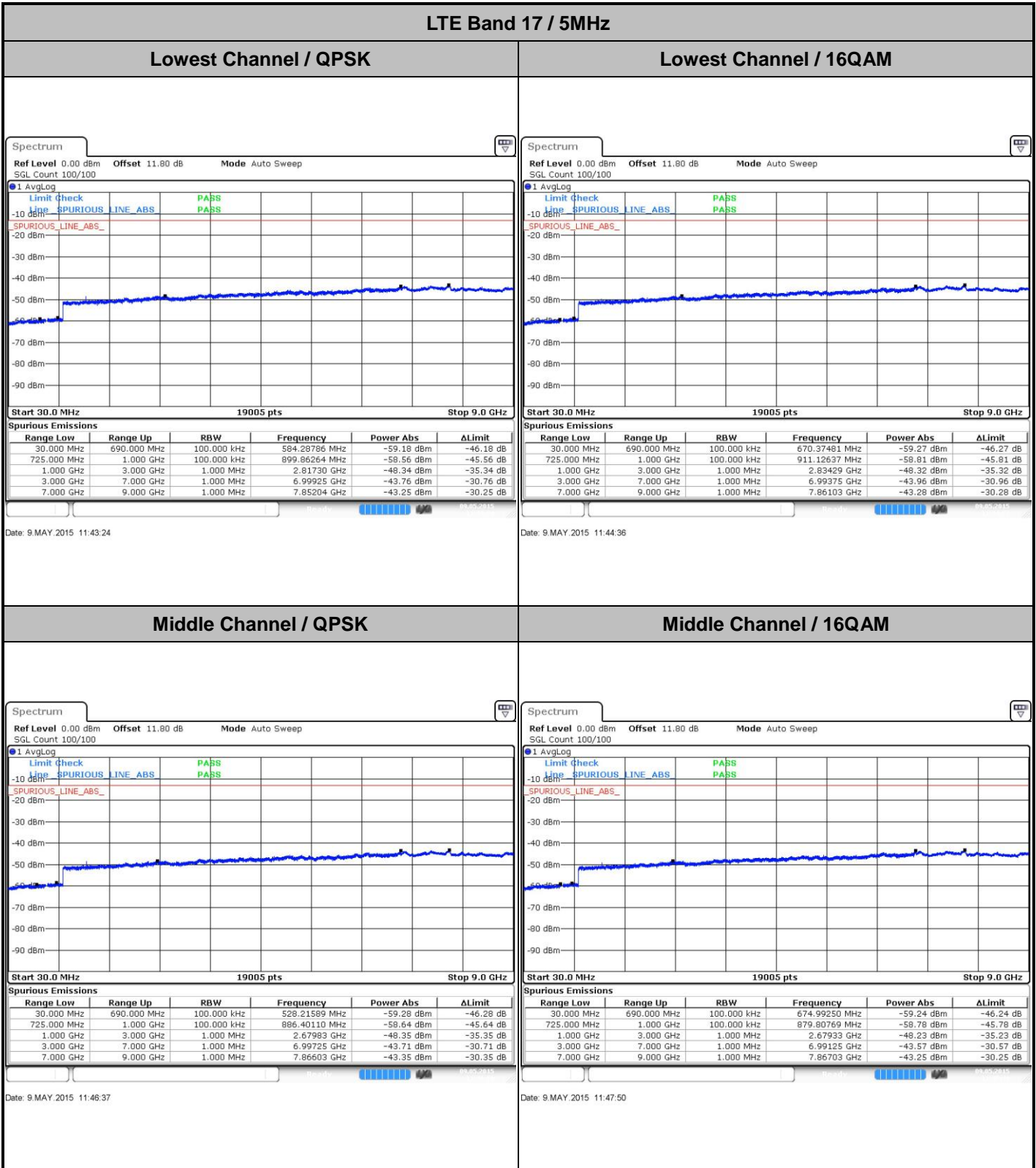
Highest Band Edge / Full RB



Date: 9 MAY 2015 12:12:15



# Conducted Spurious Emission

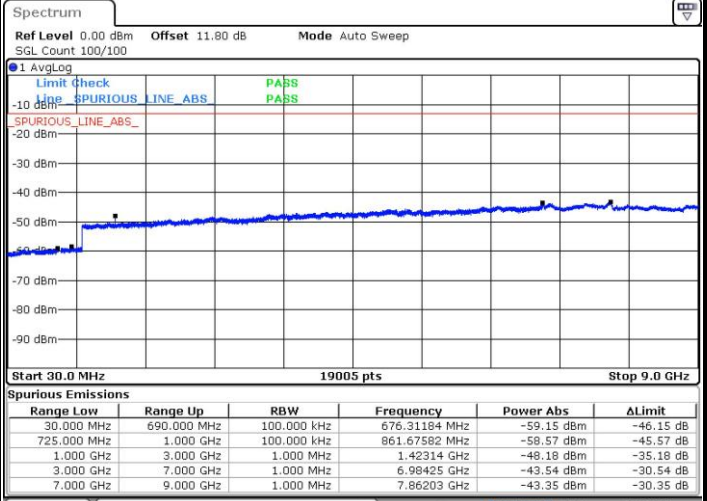
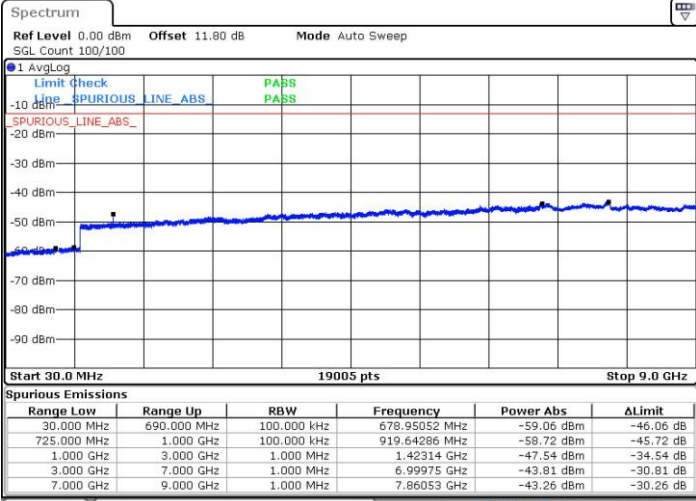




LTE Band 17 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



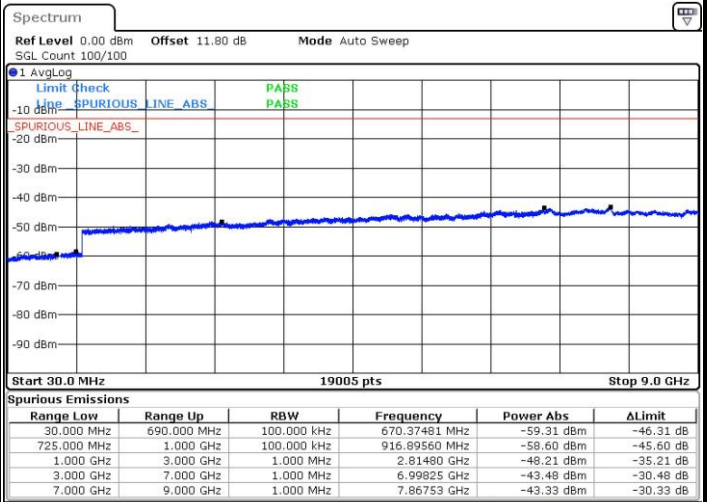
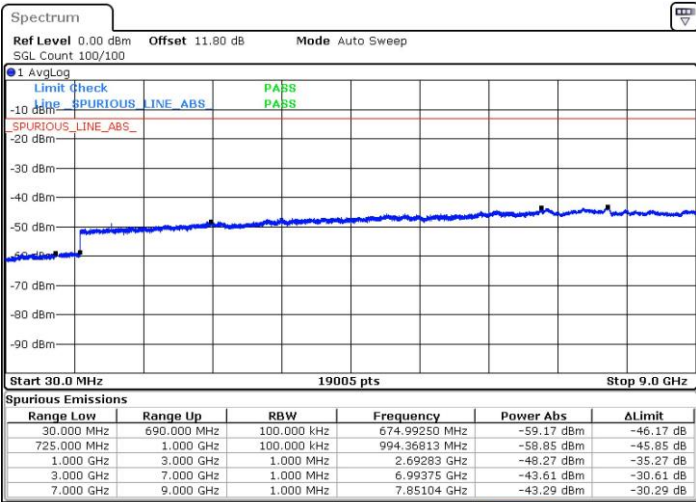
Date: 9 MAY 2015 11:54:30

Date: 9 MAY 2015 11:55:43

LTE Band 17 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 9 MAY 2015 12:02:22

Date: 9 MAY 2015 12:03:35