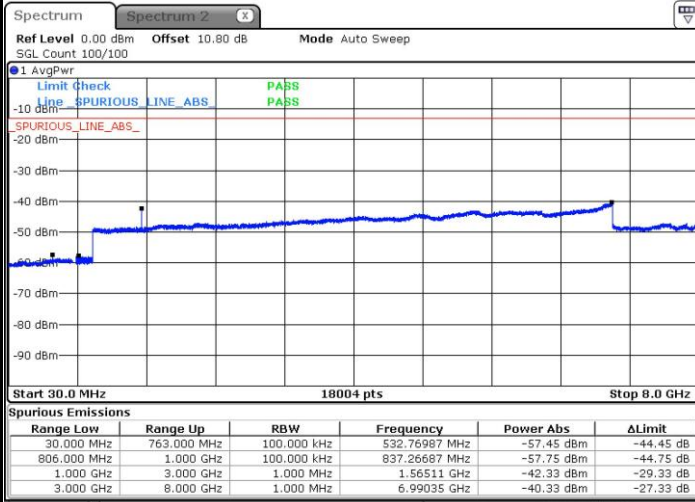




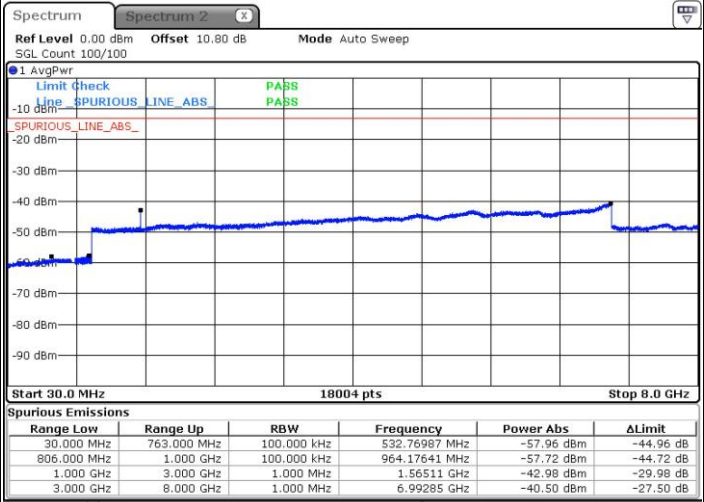
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 6.NOV.2016 19:23:09

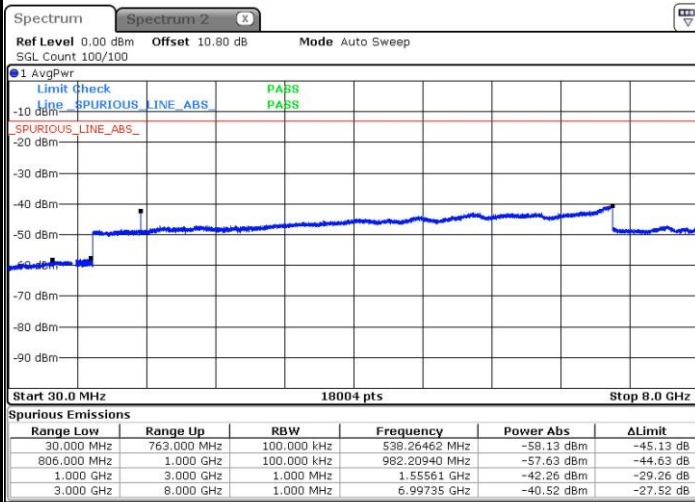
Highest Channel / 16QAM



Date: 6.NOV.2016 19:24:06

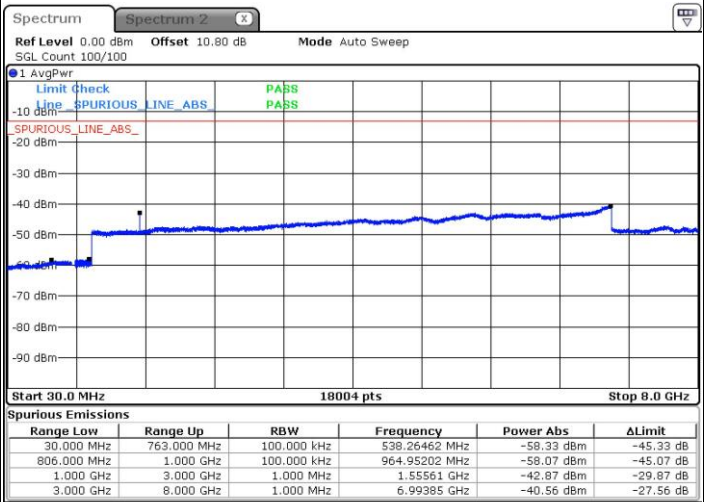
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 6.NOV.2016 19:36:43

Middle Channel / 16QAM



Date: 6.NOV.2016 19:35:47



**Frequency Stability**

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0205	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0191	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0194	

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## 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	3.51	4.75	4.75	5.51	<b>PASS</b>
Middle CH	3.68	4.78	4.78	5.71	
Highest CH	3.77	4.81	4.7	5.62	



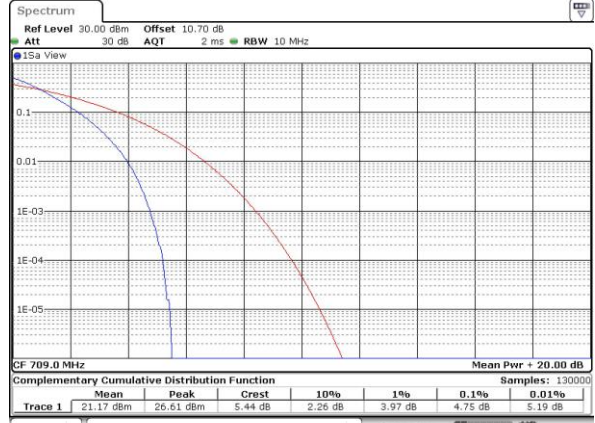
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 4.NOV.2016 11:16:26

Lowest Channel / Full RB



Date: 4.NOV.2016 11:16:45

Middle Channel/ 1RB



Date: 4.NOV.2016 11:17:02

Middle Channel / Full RB



Date: 4.NOV.2016 11:17:13

Highest Channel/ 1RB



Date: 4.NOV.2016 11:17:25

Highest Channel / Full RB

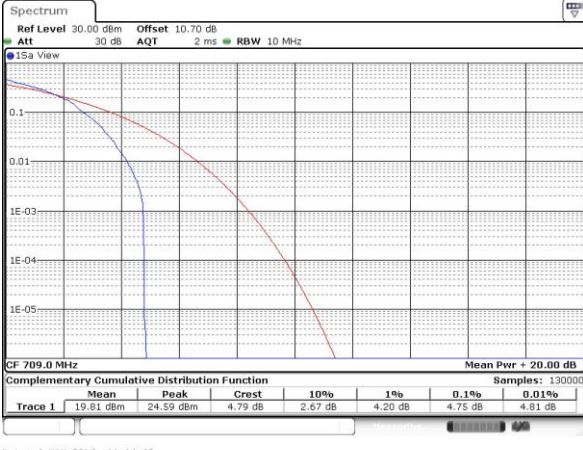


Date: 4.NOV.2016 11:17:41



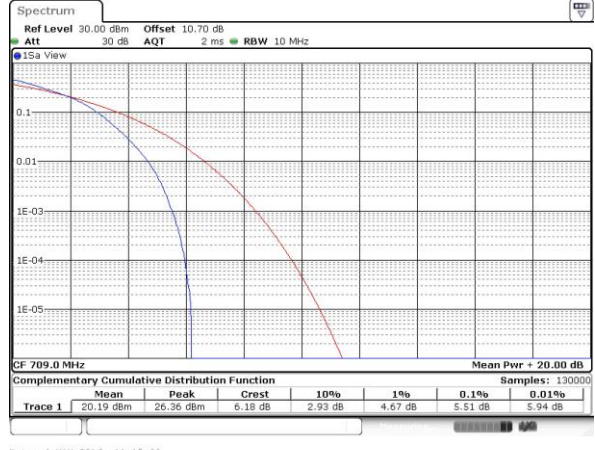
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



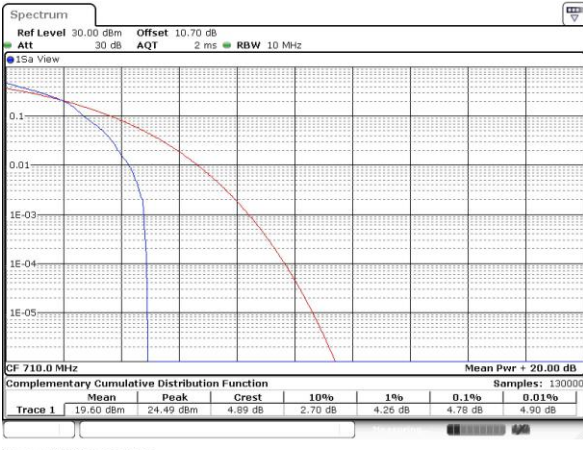
Date: 4.NOV.2016 11:14:49

Lowest Channel / Full RB



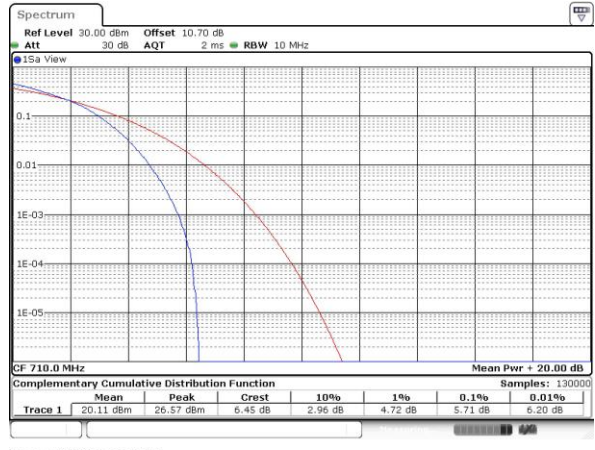
Date: 4.NOV.2016 11:15:00

Middle Channel/ 1RB



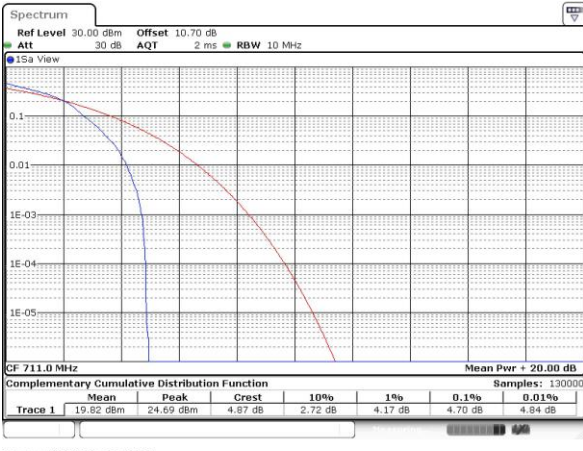
Date: 4.NOV.2016 11:15:16

Middle Channel / Full RB



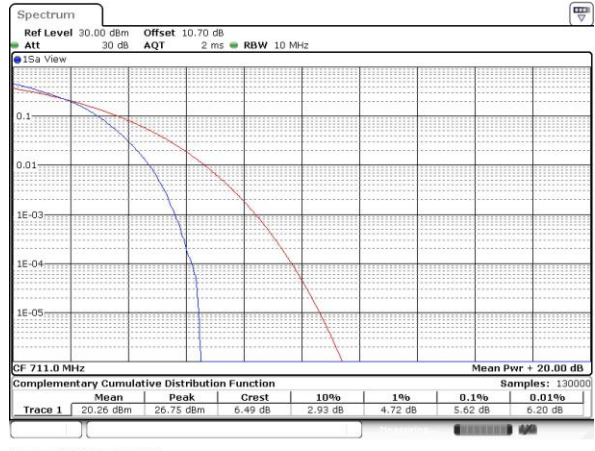
Date: 4.NOV.2016 11:15:32

Highest Channel/ 1RB



Date: 4.NOV.2016 11:15:52

Highest Channel / Full RB



Date: 4.NOV.2016 11:16:05



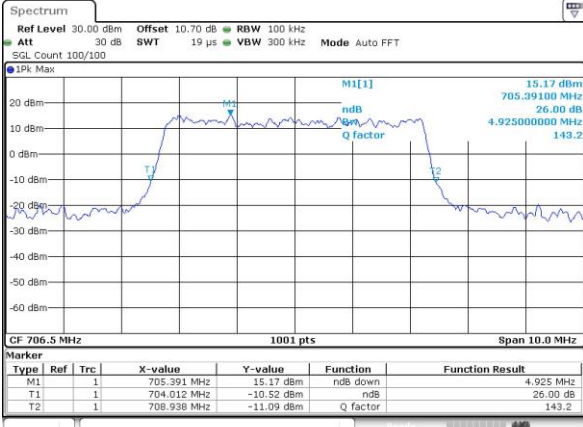
**26dB Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	4.93	4.90	9.81	10.01	-	-	-	-
Middle CH	-	-	-	-	4.96	4.86	9.93	9.91	-	-	-	-
Highest CH	-	-	-	-	4.92	5.01	9.83	9.71	-	-	-	-



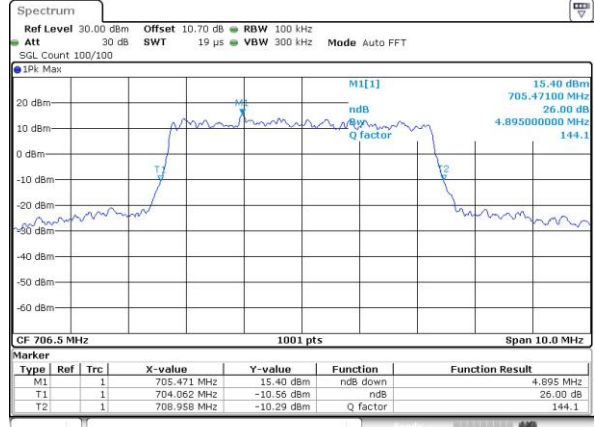
LTE Band 17

Lowest Channel / 5MHz / QPSK



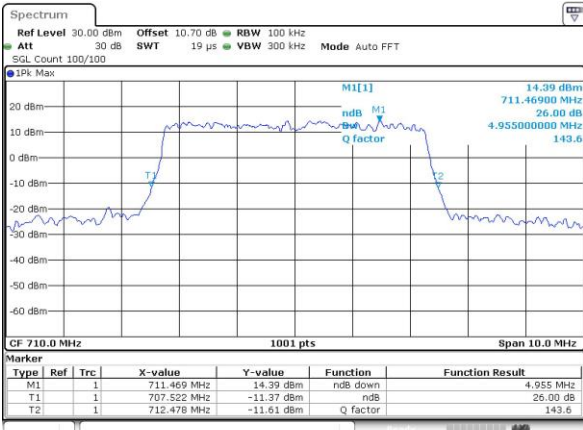
Date: 4.NOV.2016 10:27:36

Lowest Channel / 5MHz / 16QAM



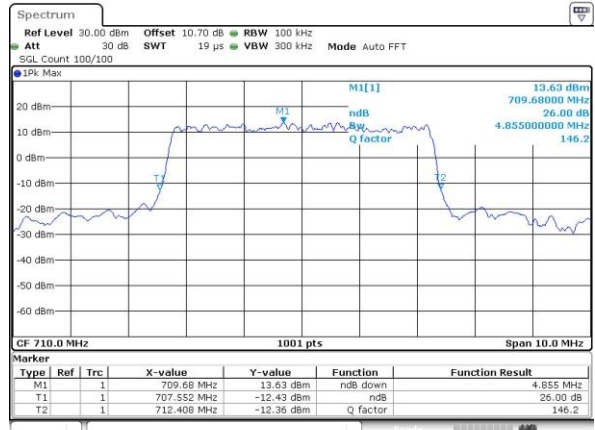
Date: 4.NOV.2016 10:27:48

Middle Channel / 5MHz / QPSK



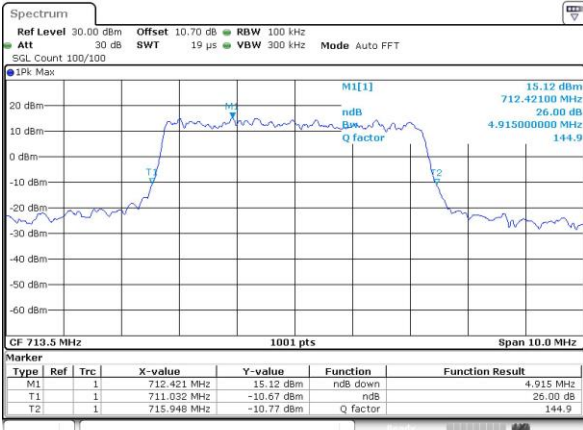
Date: 4.NOV.2016 10:34:58

Middle Channel / 5MHz / 16QAM



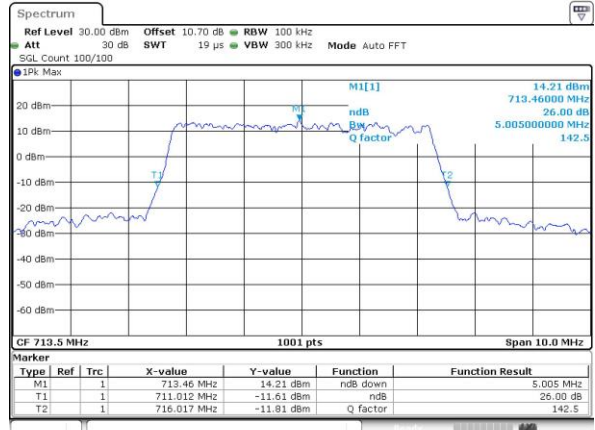
Date: 4.NOV.2016 10:35:09

Highest Channel / 5MHz / QPSK



Date: 4.NOV.2016 10:37:41

Highest Channel / 5MHz / 16QAM

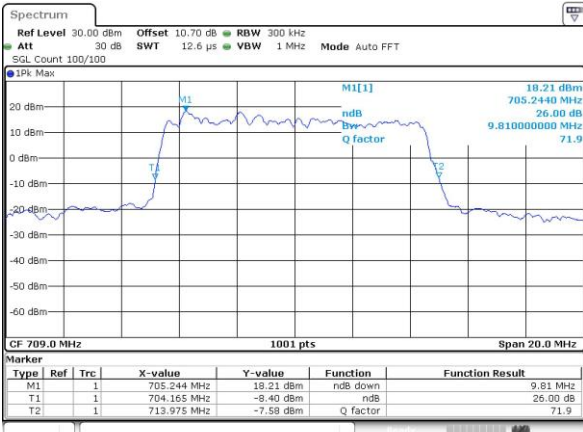


Date: 4.NOV.2016 10:37:53



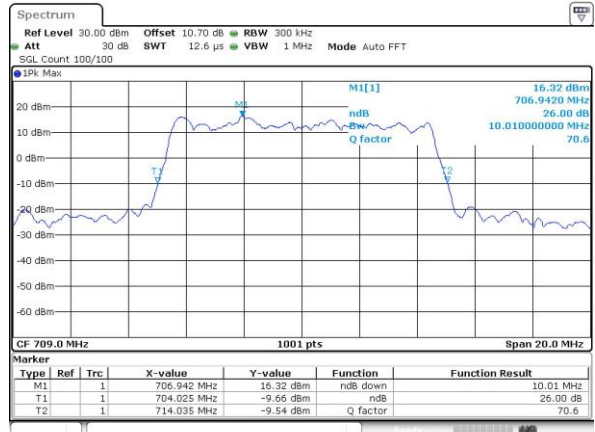
LTE Band 17

Lowest Channel / 10MHz / QPSK



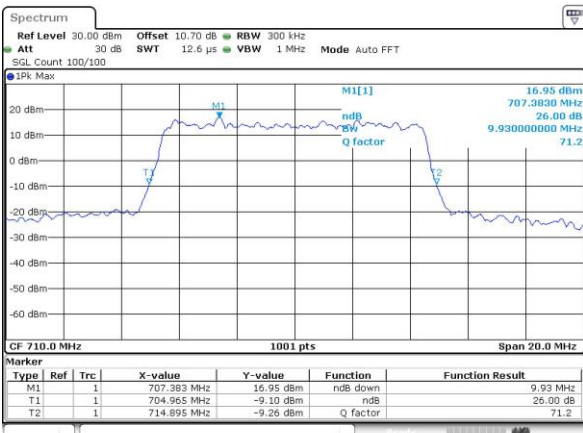
Date: 4.NOV.2016 10:45:03

Lowest Channel / 10MHz / 16QAM



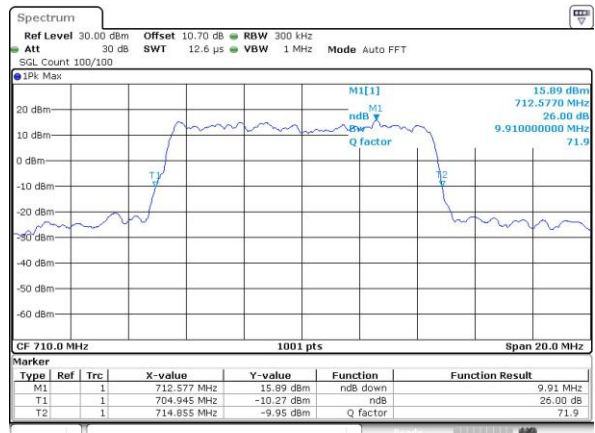
Date: 4.NOV.2016 10:45:14

Middle Channel / 10MHz / QPSK



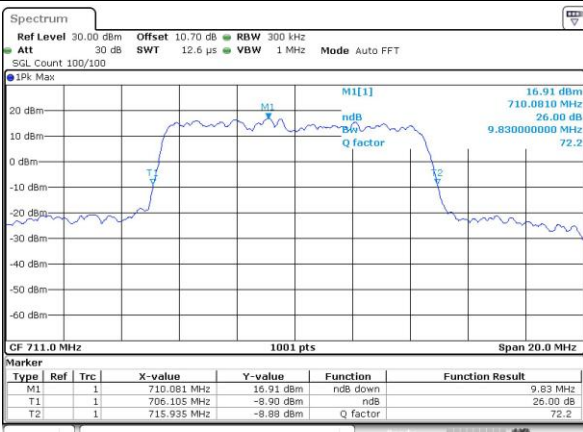
Date: 4.NOV.2016 10:52:24

Middle Channel / 10MHz / 16QAM



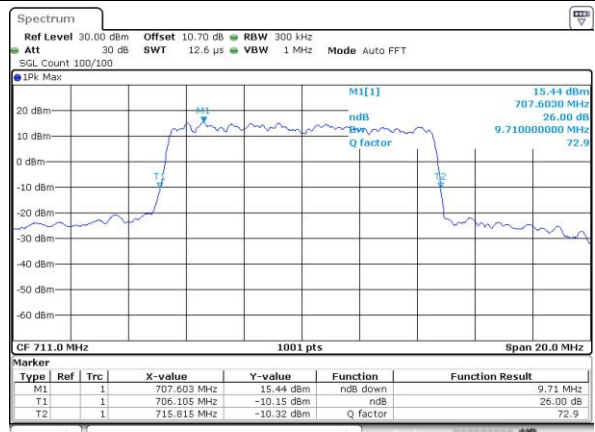
Date: 4.NOV.2016 10:52:36

Highest Channel / 10MHz / QPSK



Date: 4.NOV.2016 10:55:08

Highest Channel / 10MHz / 16QAM



Date: 4.NOV.2016 10:55:19





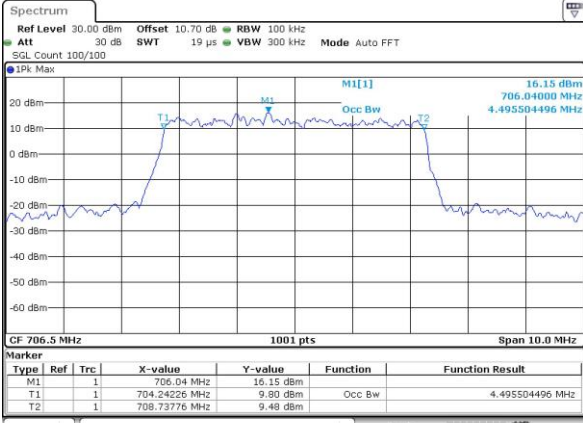
**Occupied Bandwidth**

Mode	LTE Band 17 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.												
Lowest CH	-	-	-	-	4.5	4.49	9.05	9.07	-	-	-	-
Middle CH	-	-	-	-	4.48	4.52	9.05	9.05	-	-	-	-
Highest CH	-	-	-	-	4.51	4.54	9.01	8.99	-	-	-	-



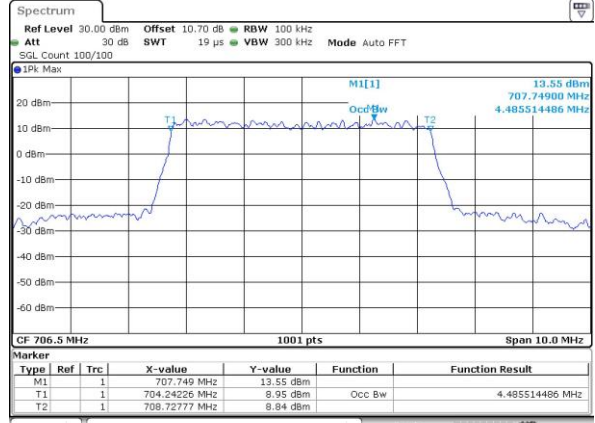
LTE Band 17

Lowest Channel / 5MHz / QPSK



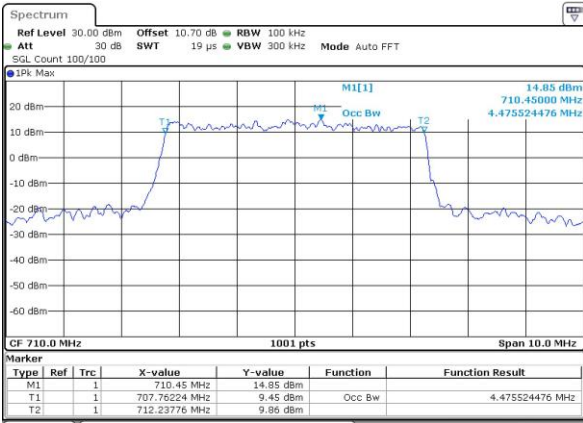
Date: 4.NOV.2016 10:27:10

Lowest Channel / 5MHz / 16QAM



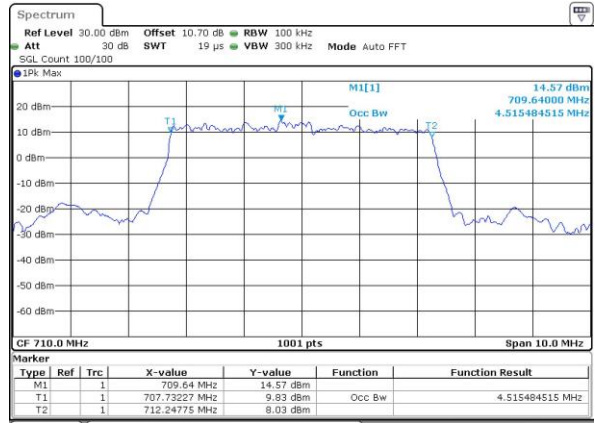
Date: 4.NOV.2016 10:27:24

Middle Channel / 5MHz / QPSK



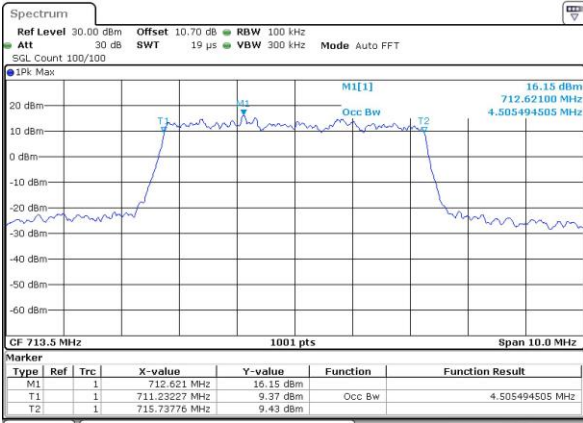
Date: 4.NOV.2016 10:34:34

Middle Channel / 5MHz / 16QAM



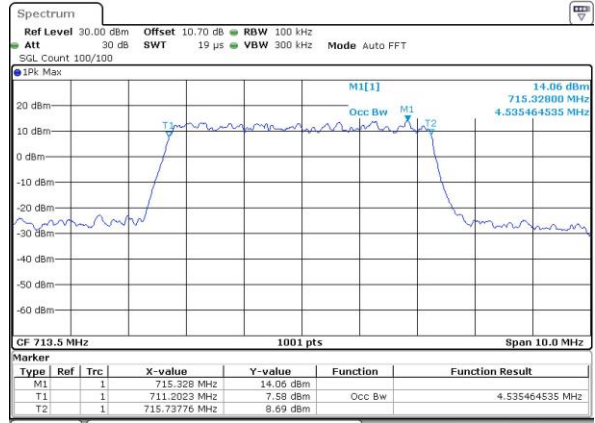
Date: 4.NOV.2016 10:34:46

Highest Channel / 5MHz / QPSK



Date: 4.NOV.2016 10:37:18

Highest Channel / 5MHz / 16QAM

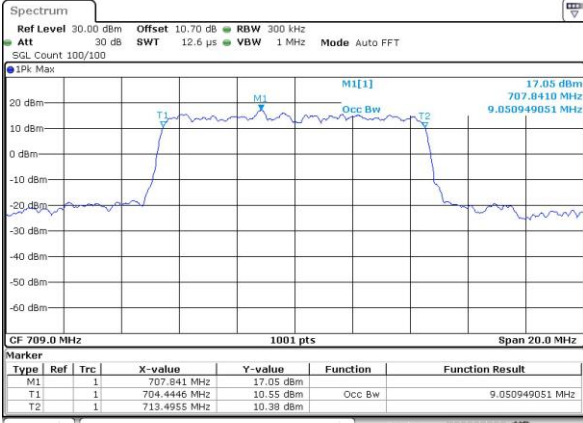


Date: 4.NOV.2016 10:37:30



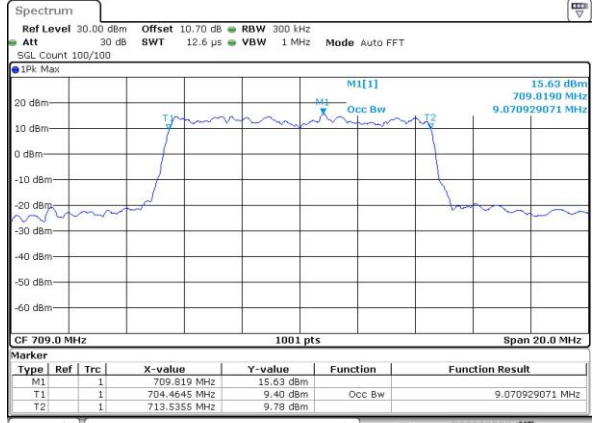
LTE Band 17

Lowest Channel / 10MHz / QPSK



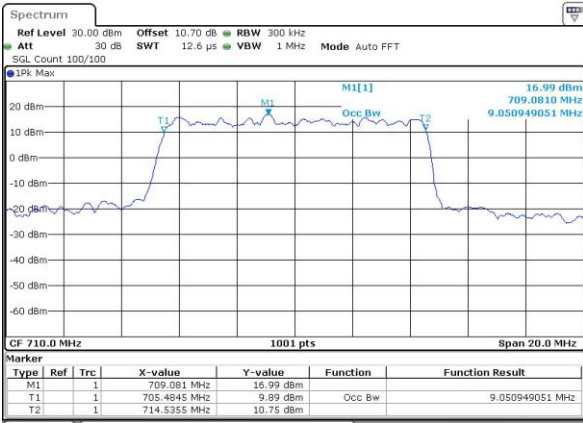
Date: 4.NOV.2016 10:44:39

Lowest Channel / 10MHz / 16QAM



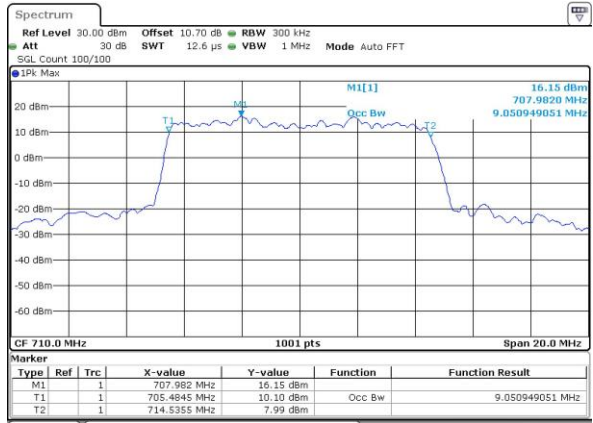
Date: 4.NOV.2016 10:44:51

Middle Channel / 10MHz / QPSK



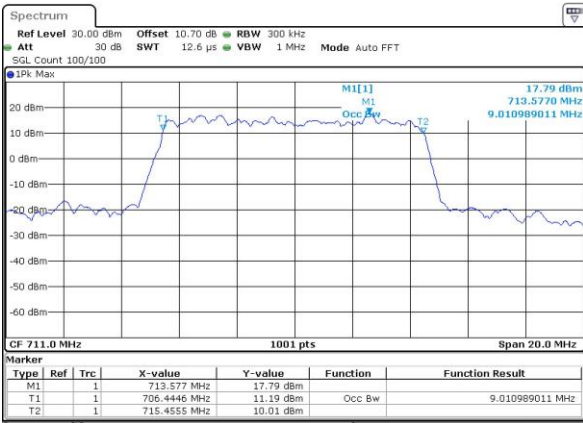
Date: 4.NOV.2016 10:52:00

Middle Channel / 10MHz / 16QAM



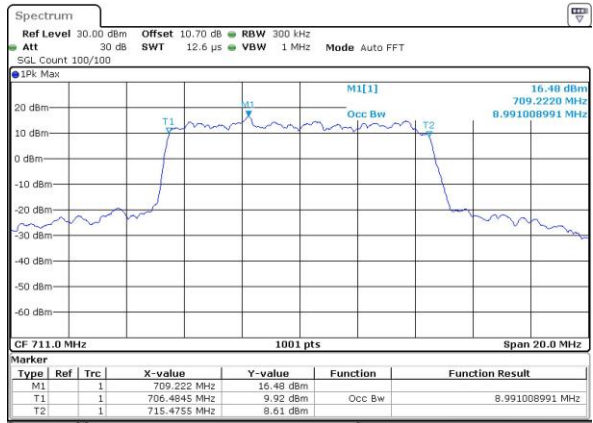
Date: 4.NOV.2016 10:52:12

Highest Channel / 10MHz / QPSK



Date: 4.NOV.2016 10:54:44

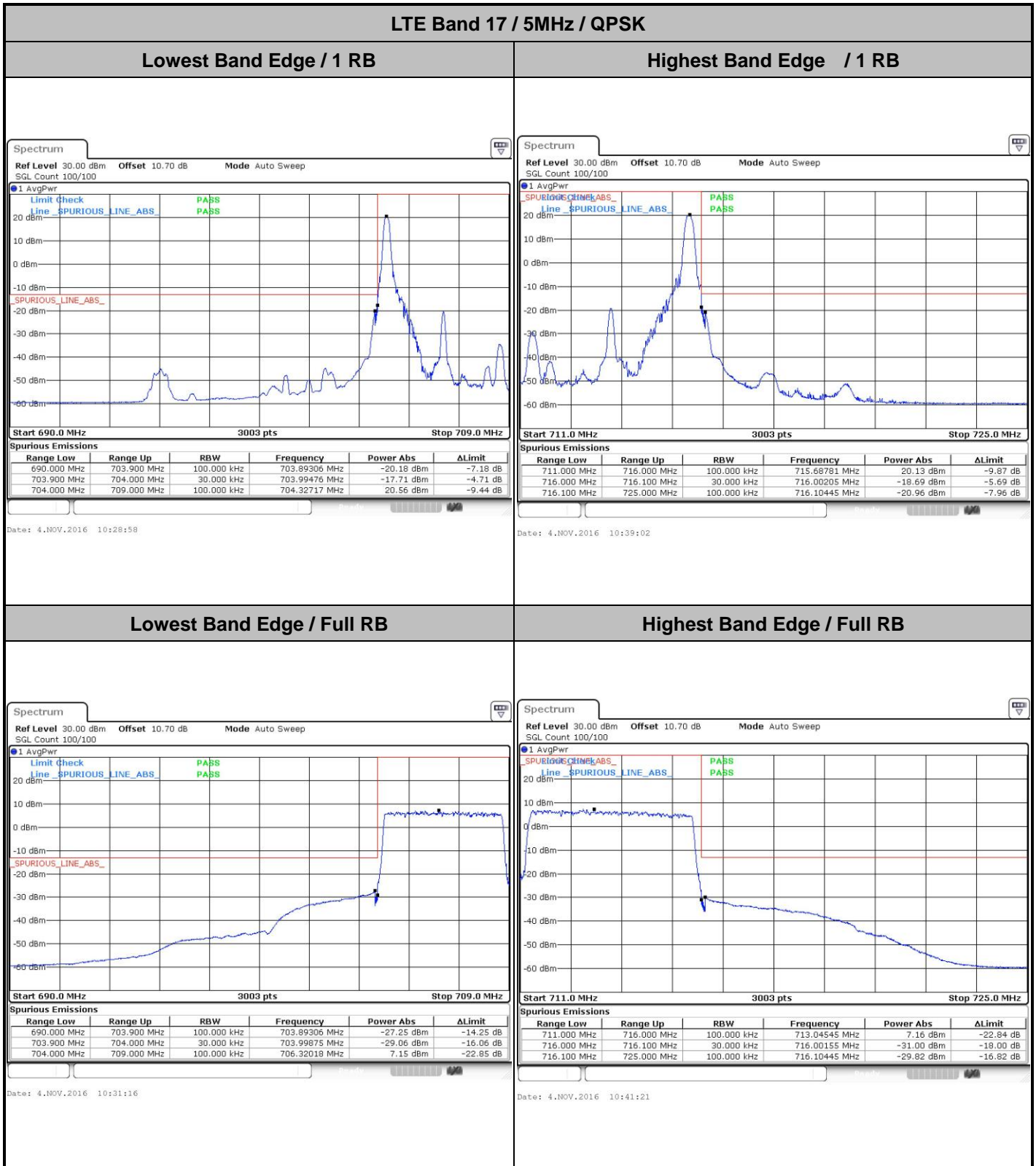
Highest Channel / 10MHz / 16QAM



Date: 4.NOV.2016 10:54:56



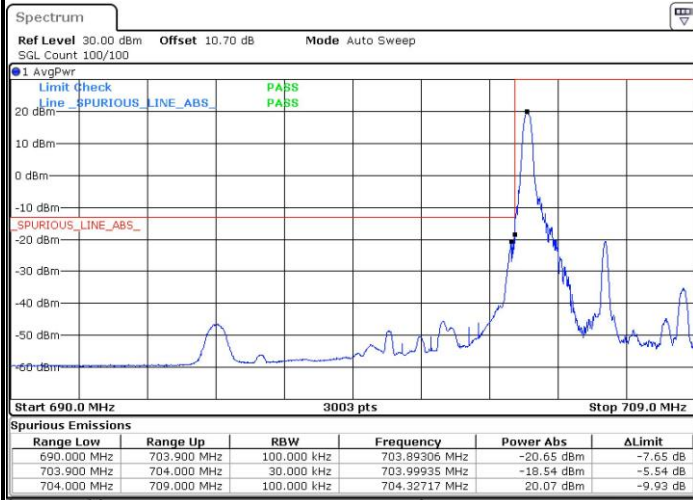
# Conducted Band Edge





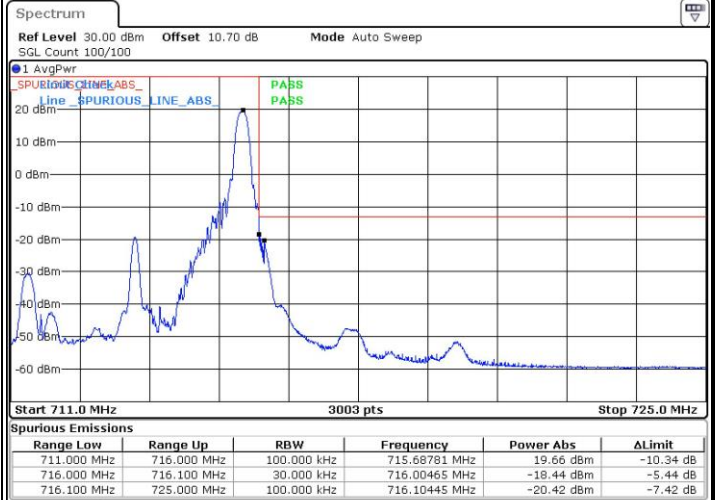
LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



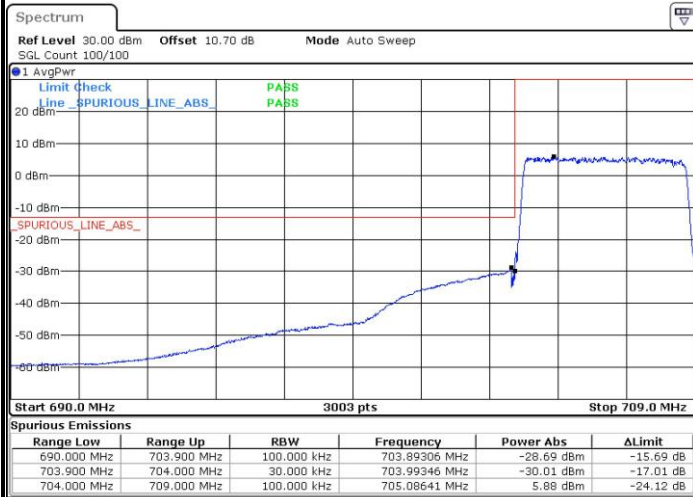
Date: 4.NOV.2016 10:30:07

Highest Band Edge / 1 RB



Date: 4.NOV.2016 10:40:12

Lowest Band Edge / Full RB



Date: 4.NOV.2016 10:32:26

Highest Band Edge / Full RB

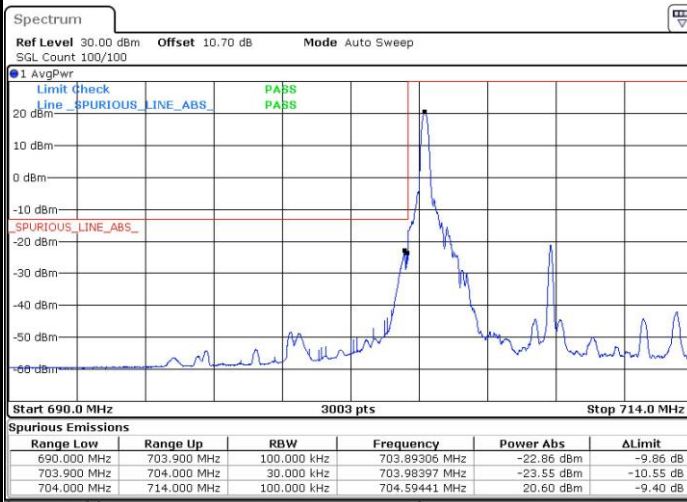


Date: 4.NOV.2016 10:42:30



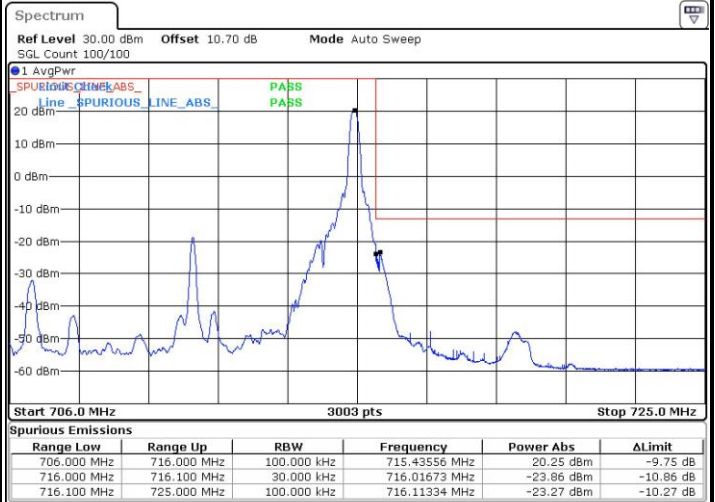
LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB



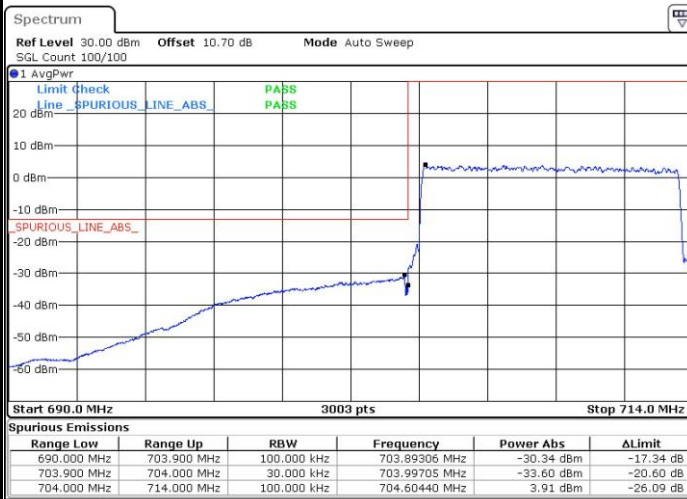
Date: 4.NOV.2016 10:46:24

Highest Band Edge / 1 RB



Date: 4.NOV.2016 10:56:29

Lowest Band Edge / Full RB



Date: 4.NOV.2016 10:48:43

Highest Band Edge / Full RB

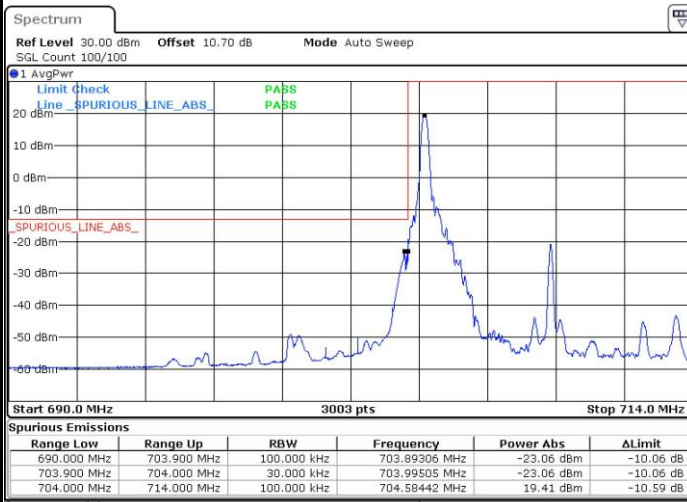


Date: 4.NOV.2016 10:58:48



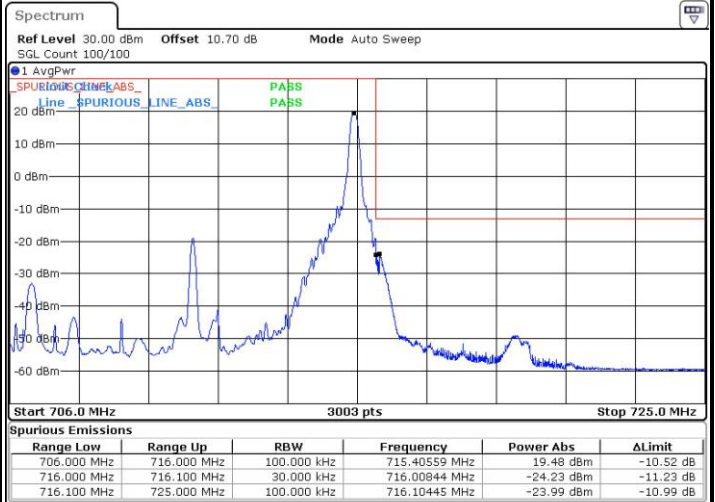
LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



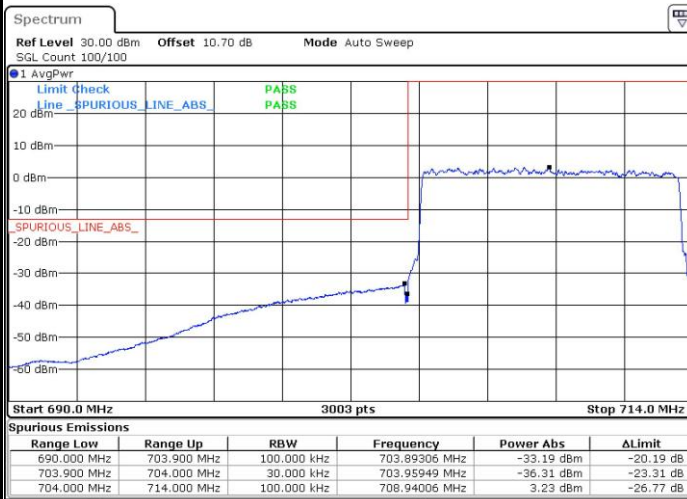
Date: 4.NOV.2016 10:47:33

Highest Band Edge / 1 RB



Date: 4.NOV.2016 10:57:38

Lowest Band Edge / Full RB



Date: 4.NOV.2016 10:49:52

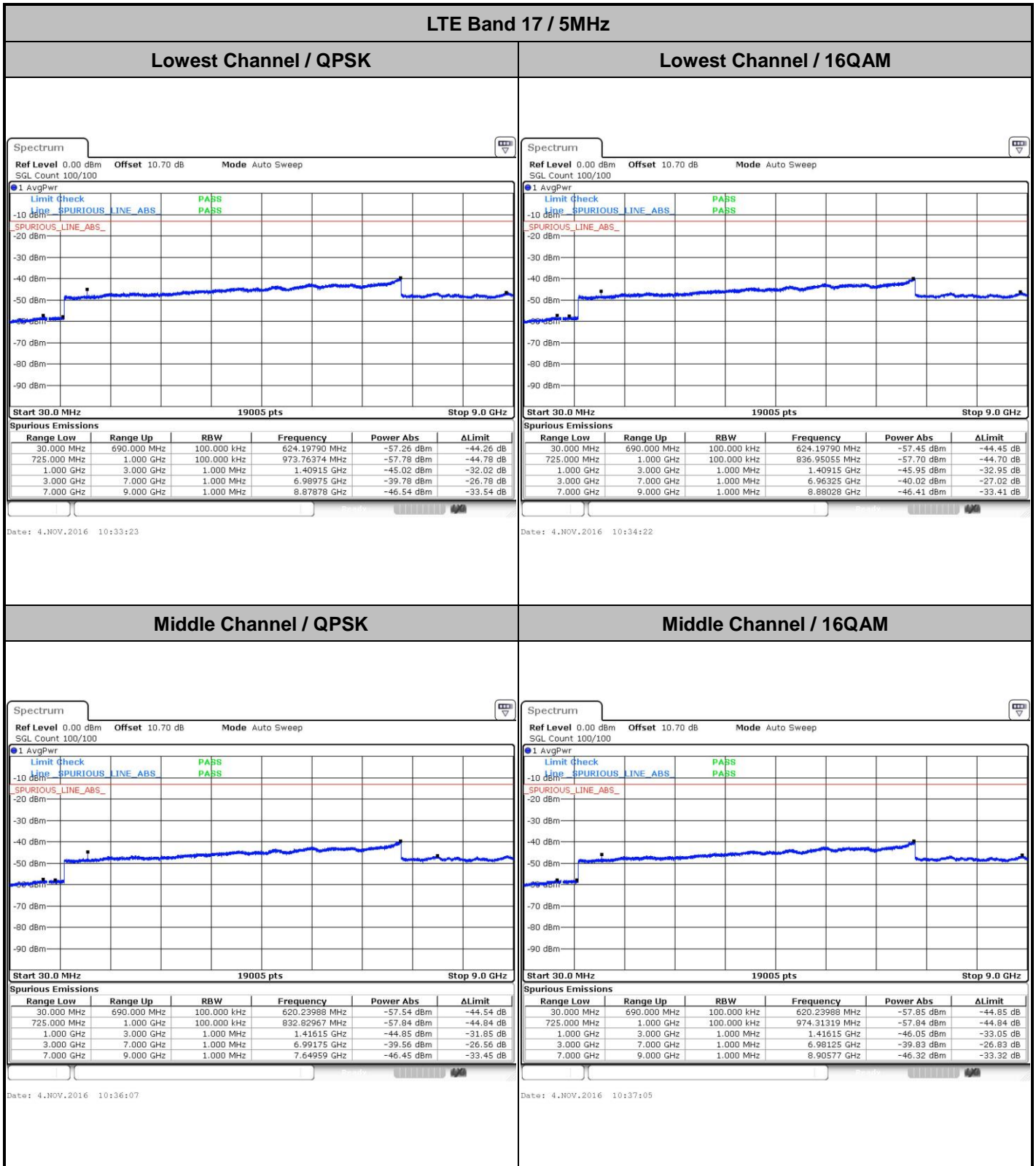
Highest Band Edge / Full RB



Date: 4.NOV.2016 10:59:57



# Conducted Spurious Emission

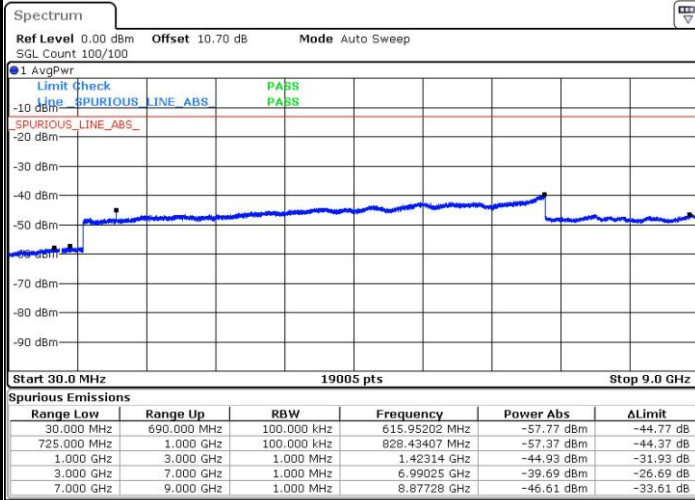






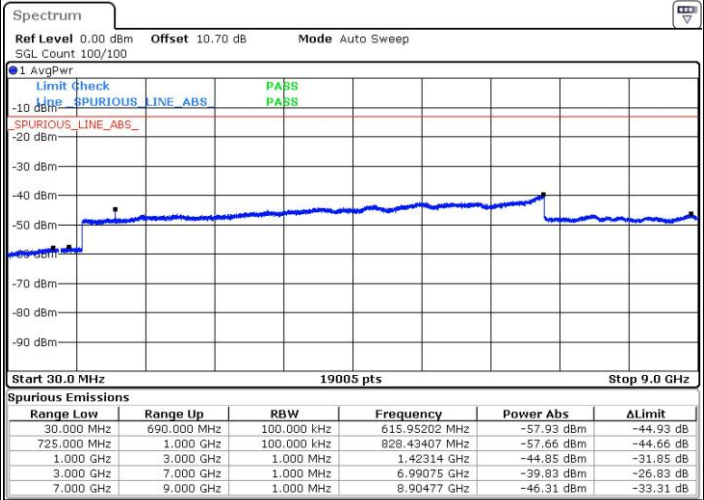
LTE Band 17 / 5MHz

Highest Channel / QPSK



Date: 4.NOV.2016 10:43:28

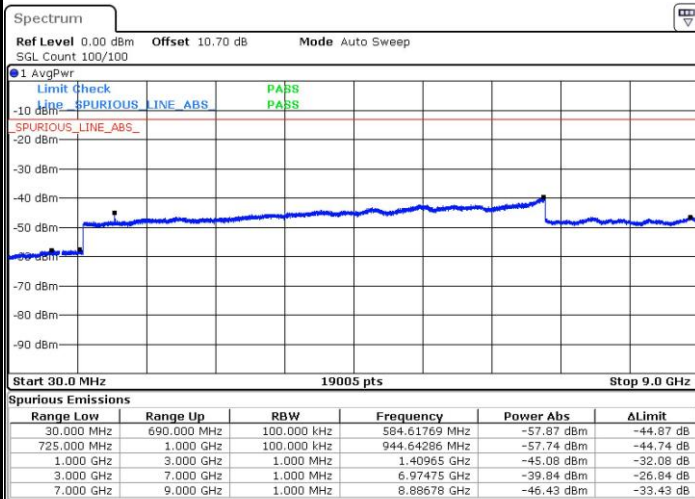
Highest Channel / 16QAM



Date: 4.NOV.2016 10:44:26

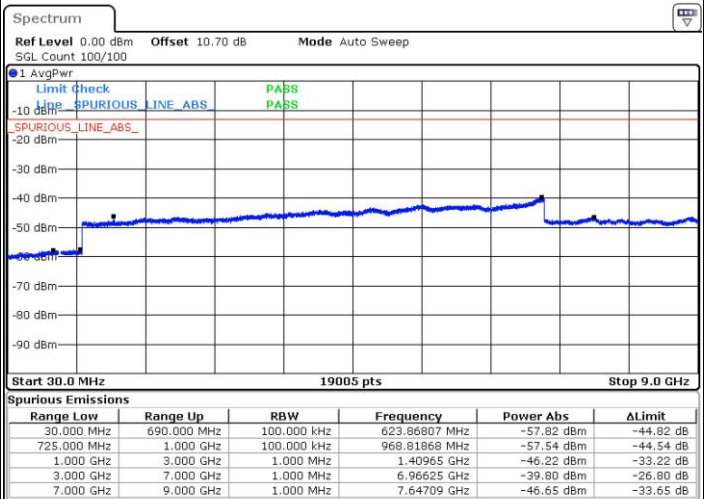
LTE Band 17 / 10MHz

Lowest Channel / QPSK



Date: 4.NOV.2016 10:50:49

Lowest Channel / 16QAM



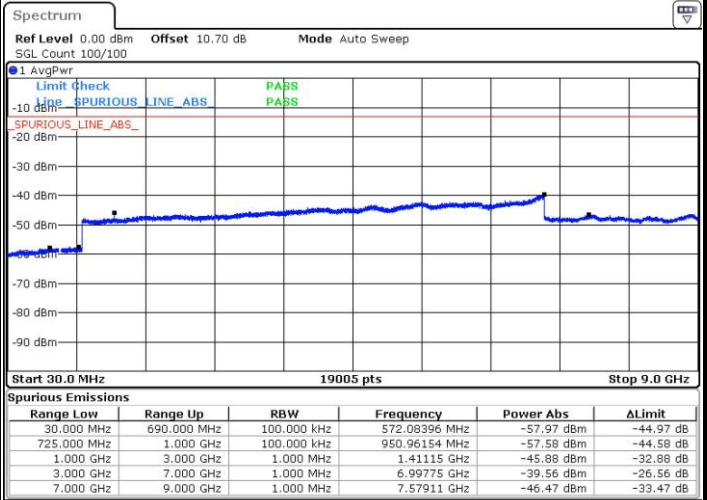
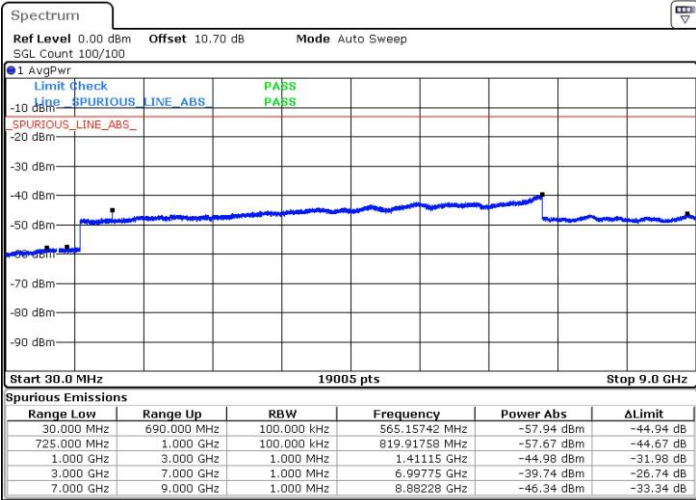
Date: 4.NOV.2016 10:51:48



LTE Band 17 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

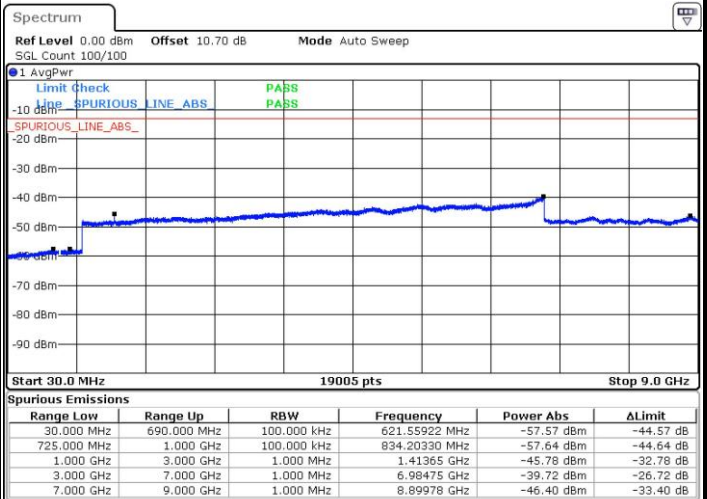
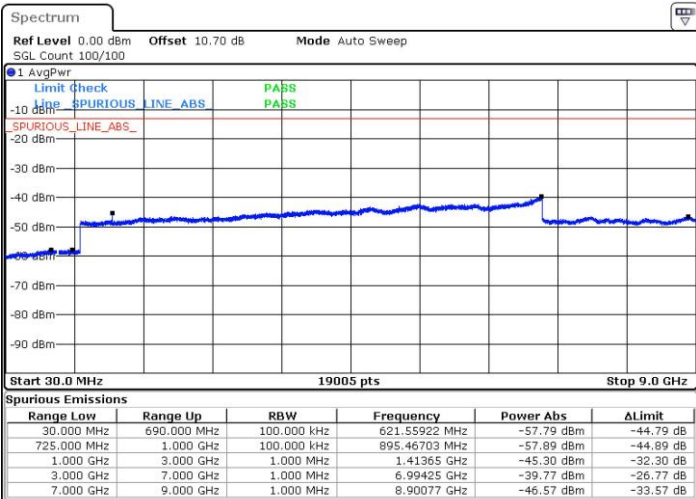


Date: 4.NOV.2016 10:53:33

Date: 4.NOV.2016 10:54:31

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 4.NOV.2016 11:00:54

Date: 4.NOV.2016 11:01:53



**Frequency Stability**

Test Conditions		LTE Band 17 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0221	
30	Normal Voltage	0.0027	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0210	
0	Normal Voltage	0.0028	
-10	Normal Voltage	0.0034	
-20	Normal Voltage	0.0201	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0223	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0218	

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 66

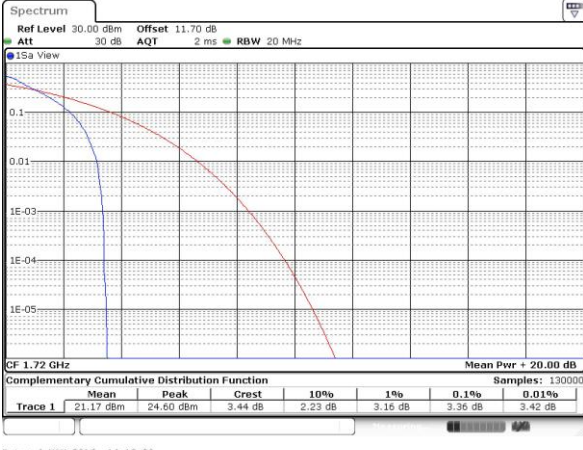
### Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.36	4.52	4.14	5.36	<b>PASS</b>
Middle CH	4.03	4.55	4.64	5.45	
Highest CH	3.28	4.55	4.49	5.45	



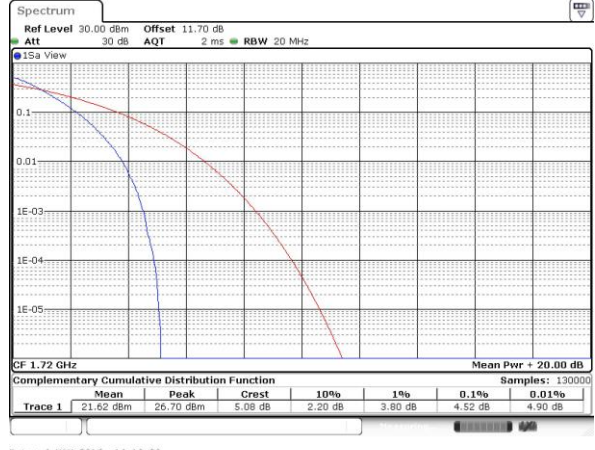
LTE Band 66 / 20MHz / QPSK

Lowest Channel / 1RB



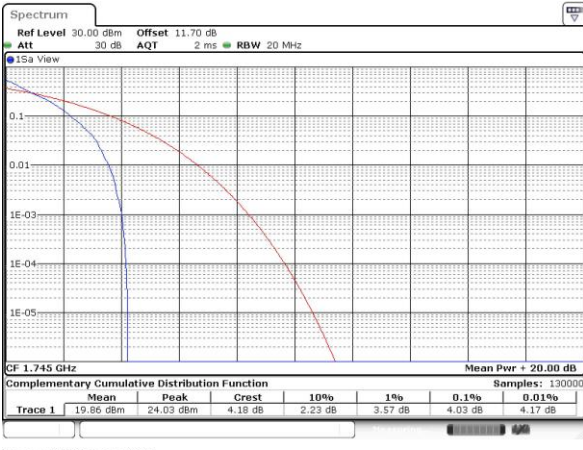
Date: 4.NOV.2016 14:12:20

Lowest Channel / Full RB



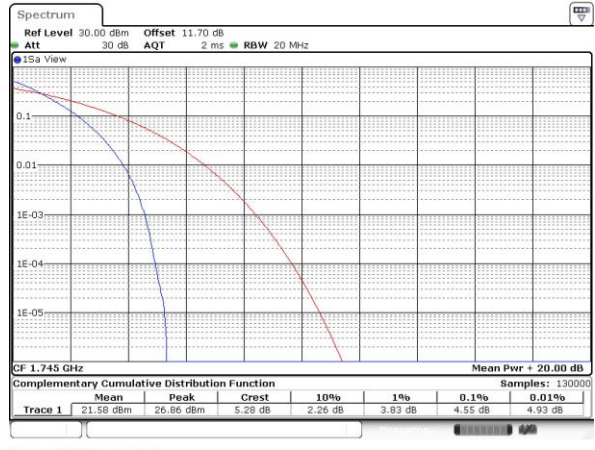
Date: 4.NOV.2016 14:10:20

Middle Channel / 1RB



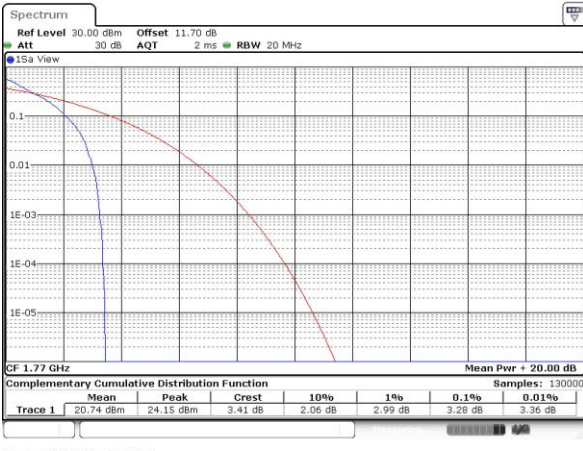
Date: 4.NOV.2016 14:06:22

Middle Channel / Full RB



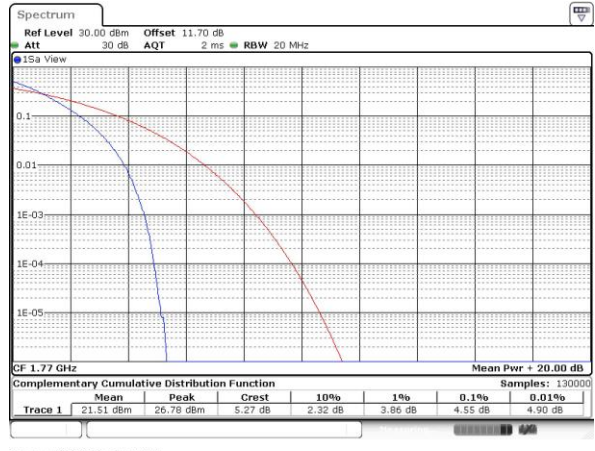
Date: 4.NOV.2016 14:09:13

Highest Channel / 1RB



Date: 4.NOV.2016 14:05:35

Highest Channel / Full RB

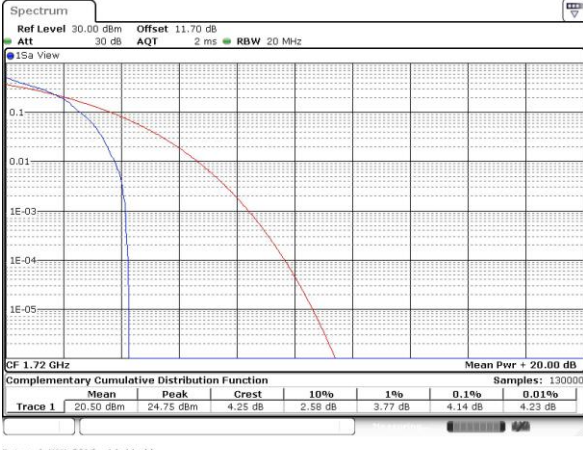


Date: 4.NOV.2016 14:04:08



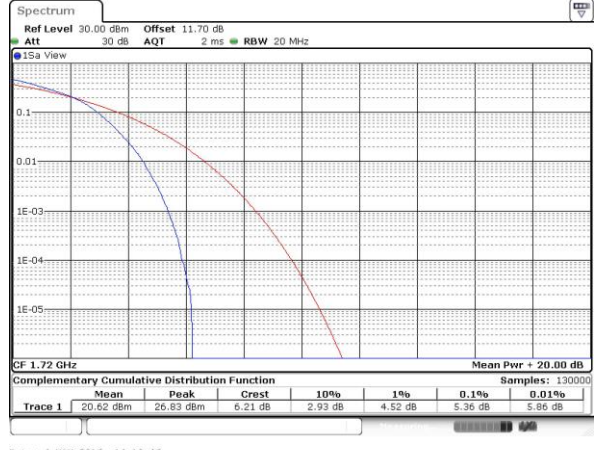
LTE Band 66 / 20MHz / 16QAM

Lowest Channel / 1RB



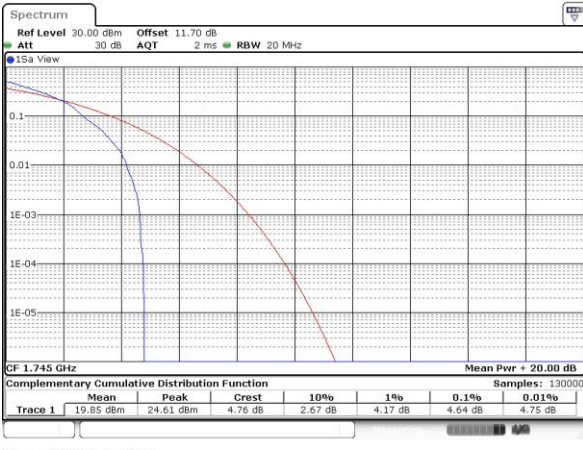
Date: 4.NOV.2016 14:11:44

Lowest Channel / Full RB



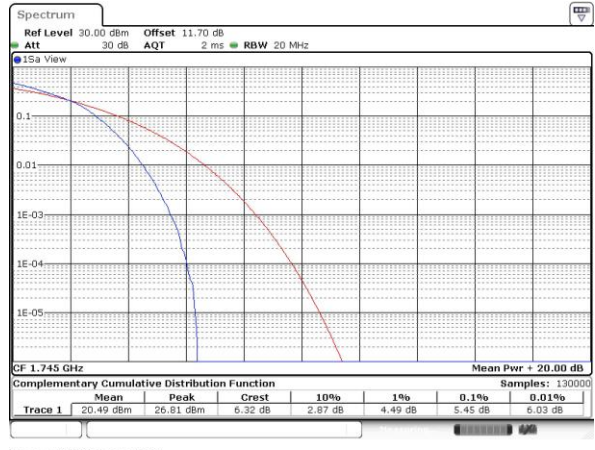
Date: 4.NOV.2016 14:10:46

Middle Channel / 1RB



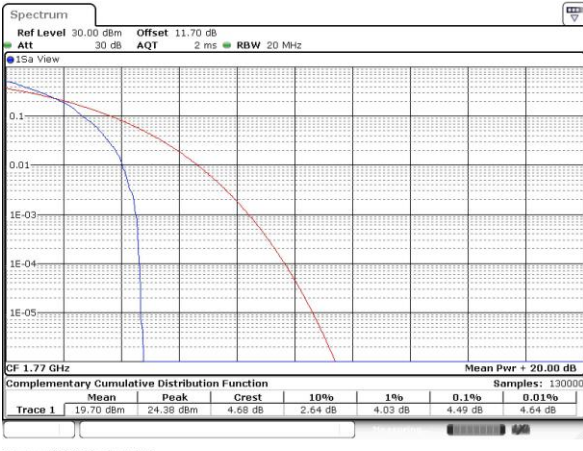
Date: 4.NOV.2016 14:07:10

Middle Channel / Full RB



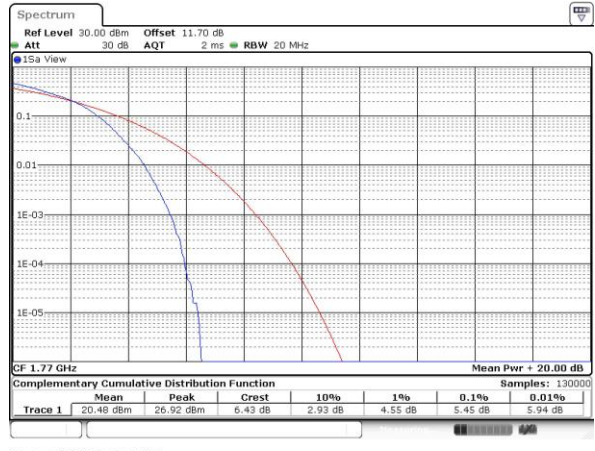
Date: 4.NOV.2016 14:08:50

Highest Channel / 1RB



Date: 4.NOV.2016 14:05:06

Highest Channel / Full RB



Date: 4.NOV.2016 14:04:30



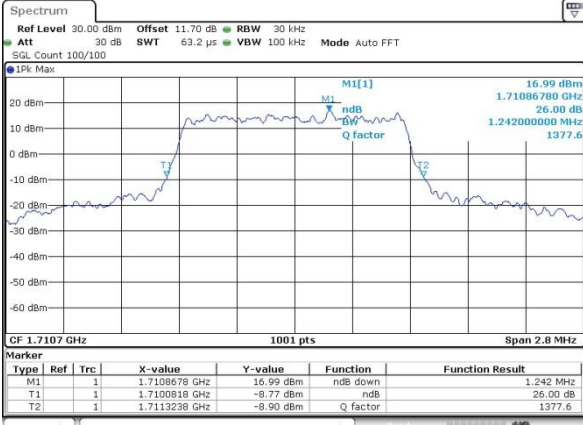
**26dB Bandwidth**

Mode	LTE Band 66 : 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	1.24	1.27	3.04	3.00	5.06	5.10	9.81	9.83	14.57	14.42	20.30	20.38
Middle CH	1.28	1.26	2.99	2.99	4.97	5.01	10.07	9.75	14.69	14.39	20.26	20.14
Highest CH	1.24	1.26	3.05	3.02	4.93	4.97	9.87	9.91	14.63	14.33	20.18	20.18



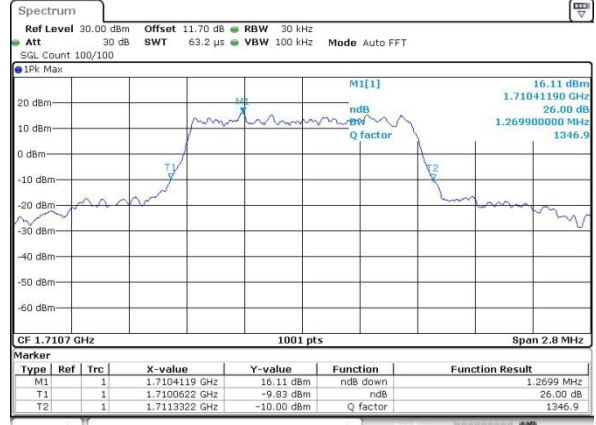
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



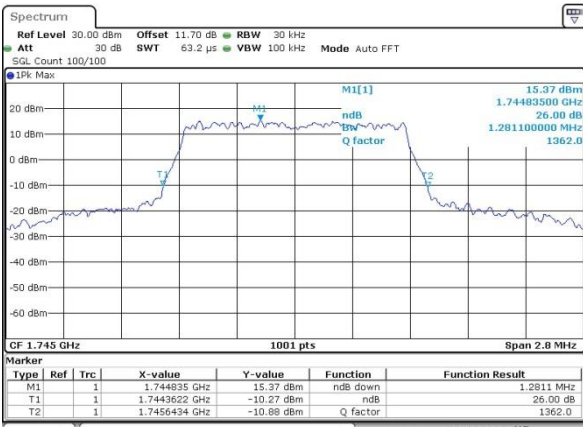
Date: 4.NOV.2016 11:31:48

Lowest Channel / 1.4MHz / 16QAM



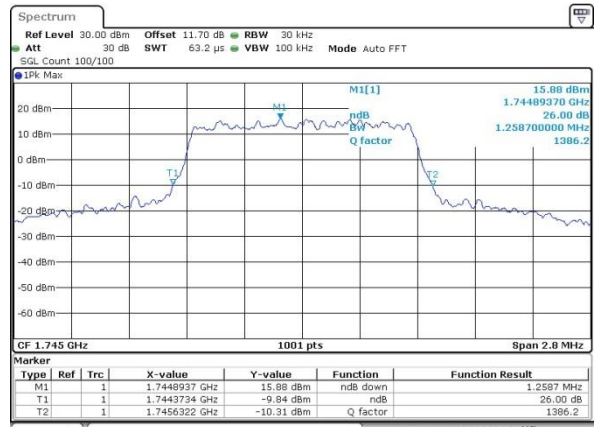
Date: 4.NOV.2016 11:31:12

Middle Channel / 1.4MHz / QPSK



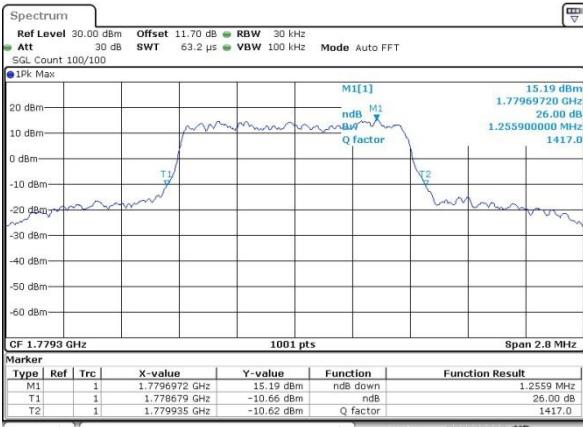
Date: 4.NOV.2016 11:28:10

Middle Channel / 1.4MHz / 16QAM



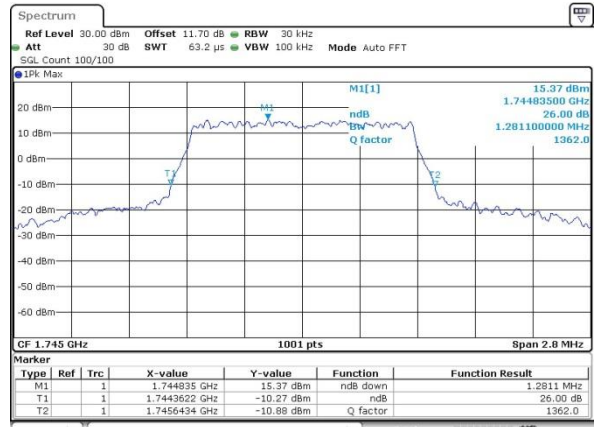
Date: 4.NOV.2016 11:28:09

Highest Channel / 1.4MHz / QPSK



Date: 4.NOV.2016 11:27:21

Highest Channel / 1.4MHz / 16QAM



Date: 4.NOV.2016 11:28:18