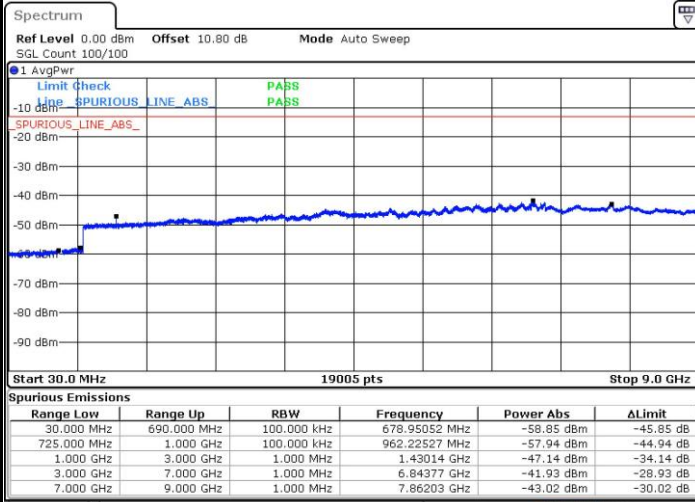




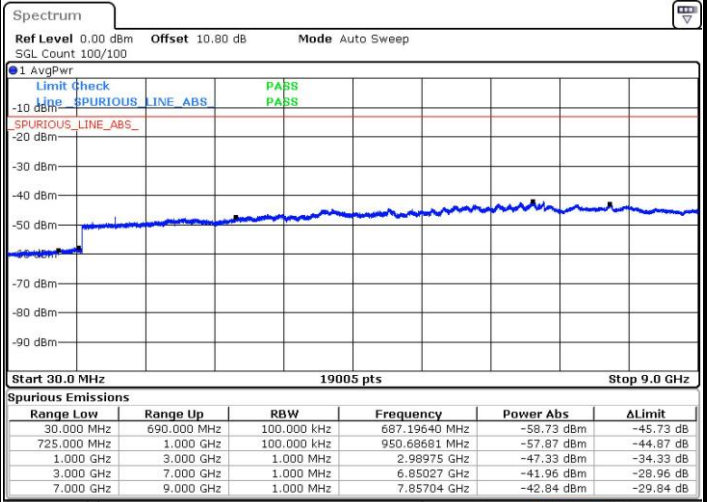
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 17.FEB.2017 17:03:03

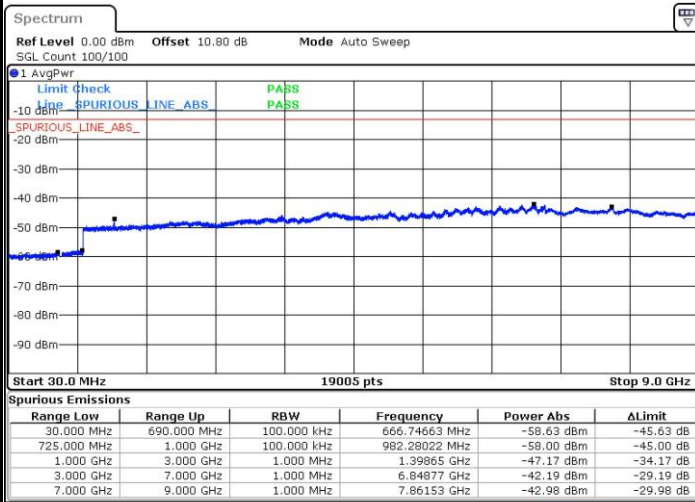
Highest Channel / 16QAM



Date: 17.FEB.2017 17:03:57

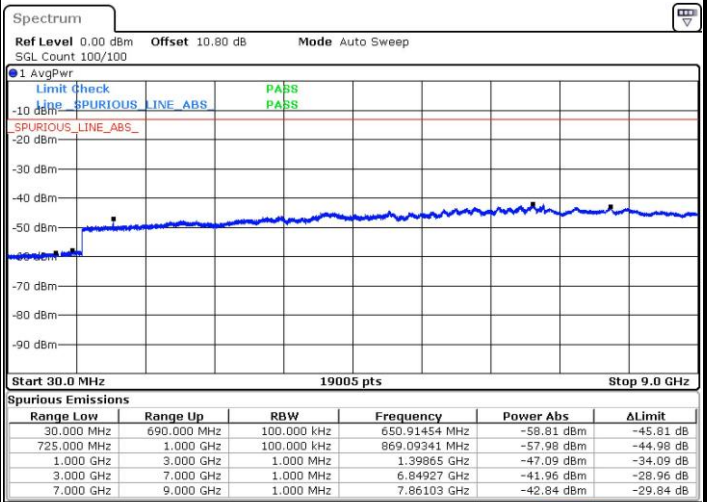
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 17.FEB.2017 17:10:10

Lowest Channel / 16QAM



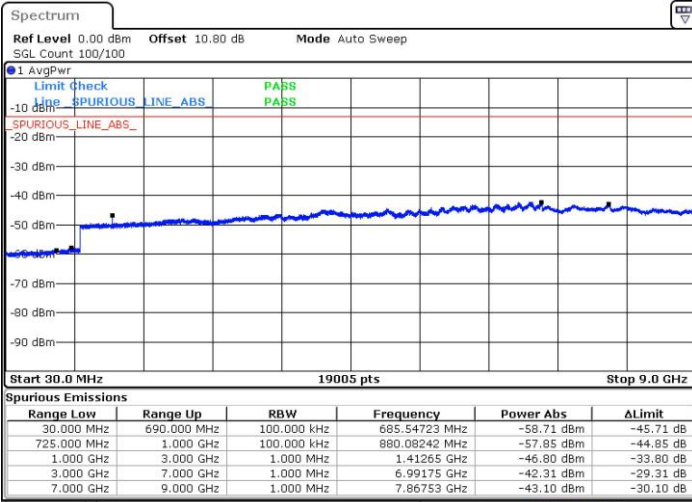
Date: 17.FEB.2017 17:11:04



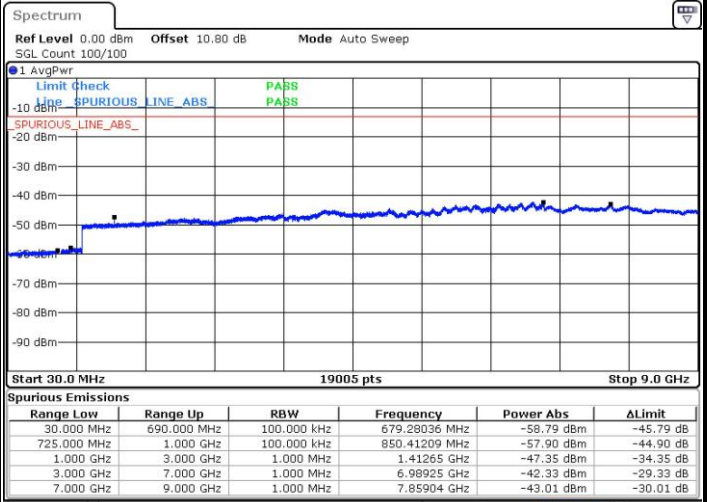
LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



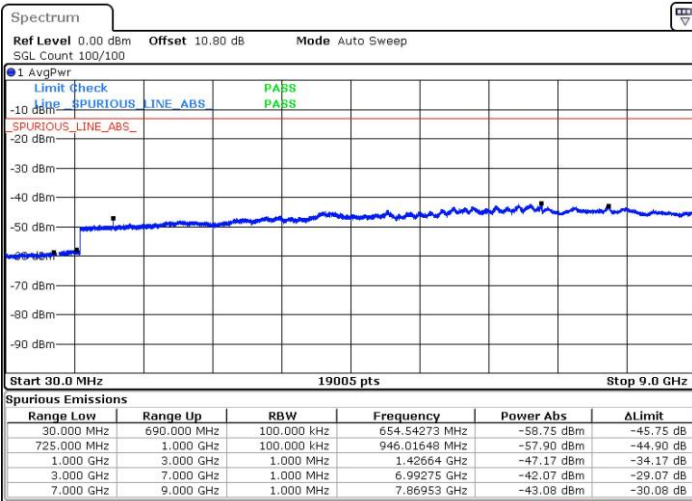
Date: 17.FEB.2017 17:13:34



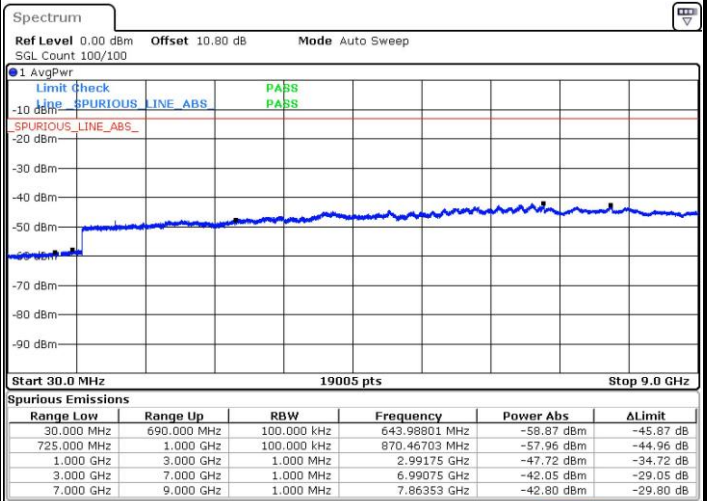
Date: 17.FEB.2017 17:12:40

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 17.FEB.2017 17:19:46



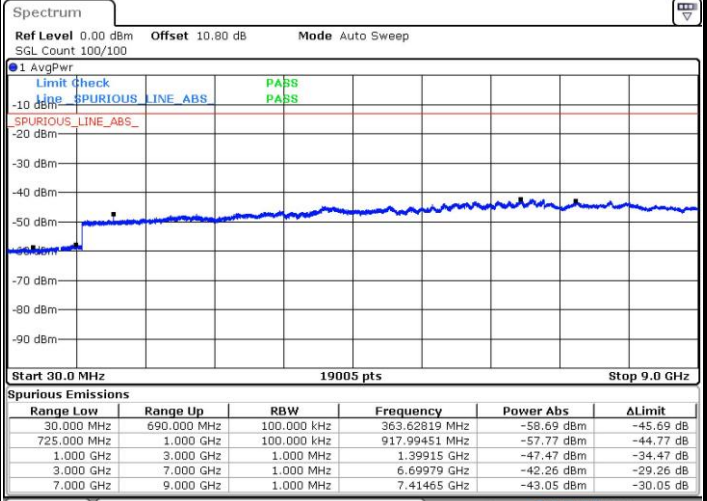
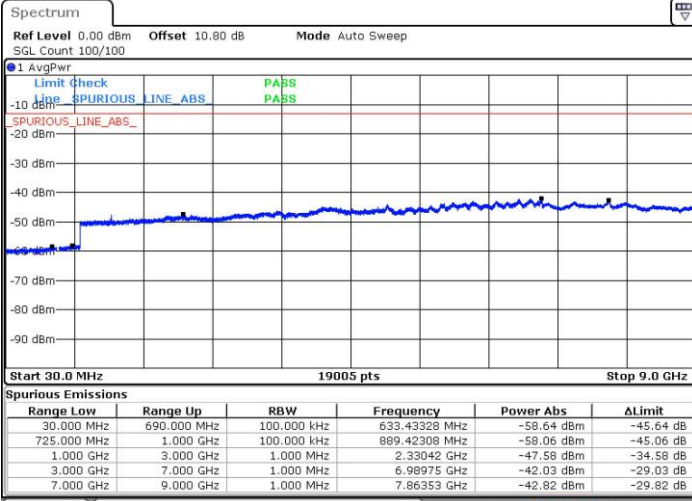
Date: 17.FEB.2017 17:20:40



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

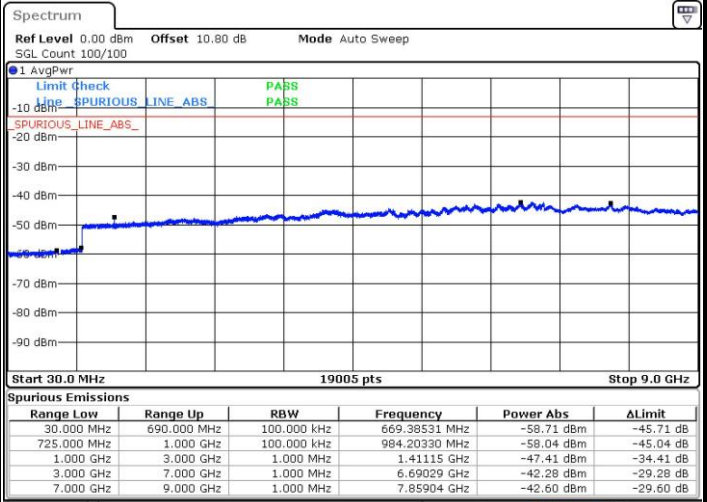
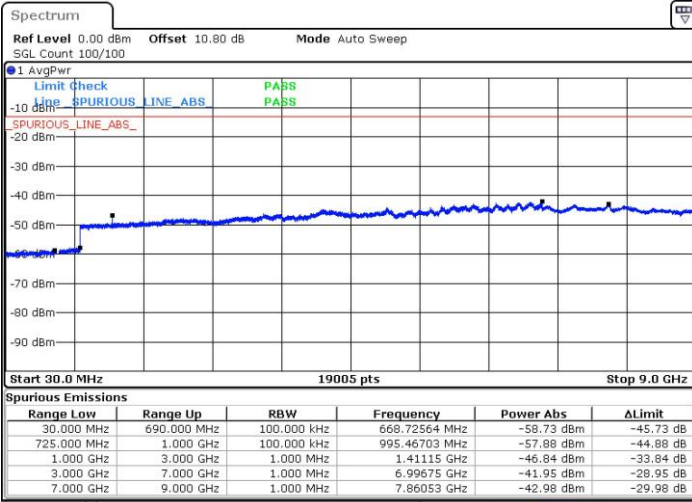


Date: 17.FEB.2017 17:26:53

Date: 17.FEB.2017 17:27:47

Middle Channel / QPSK

Middle Channel / 16QAM



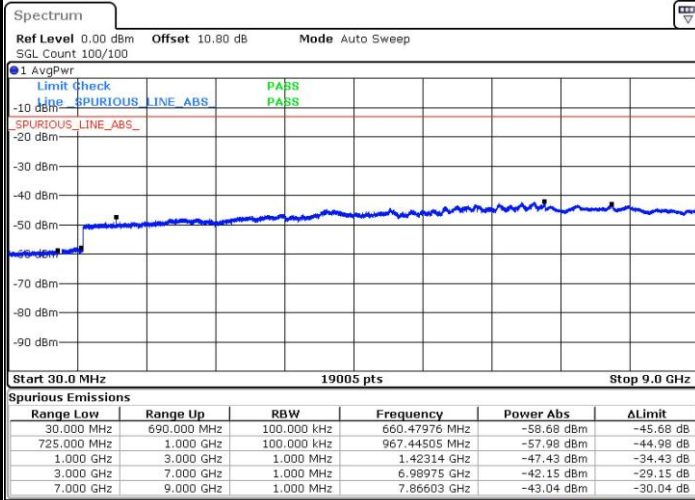
Date: 17.FEB.2017 17:30:17

Date: 17.FEB.2017 17:29:23



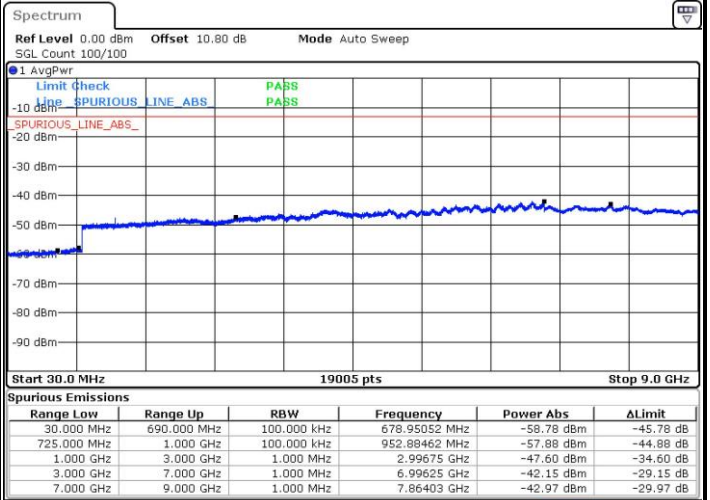
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 17.FEB.2017 17:37:24

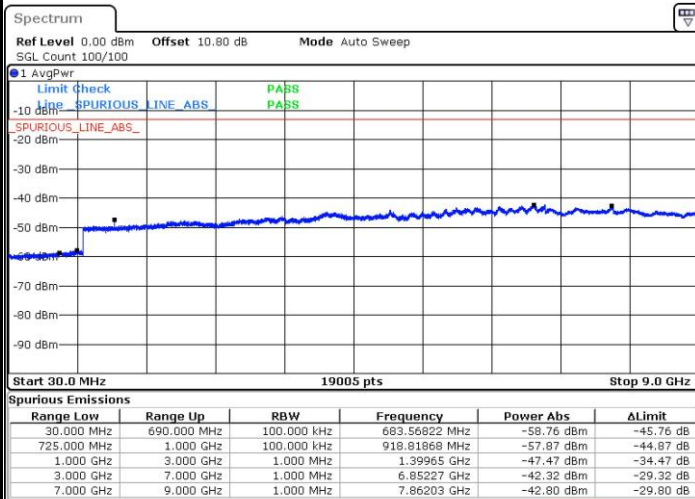
Highest Channel / 16QAM



Date: 17.FEB.2017 17:36:29

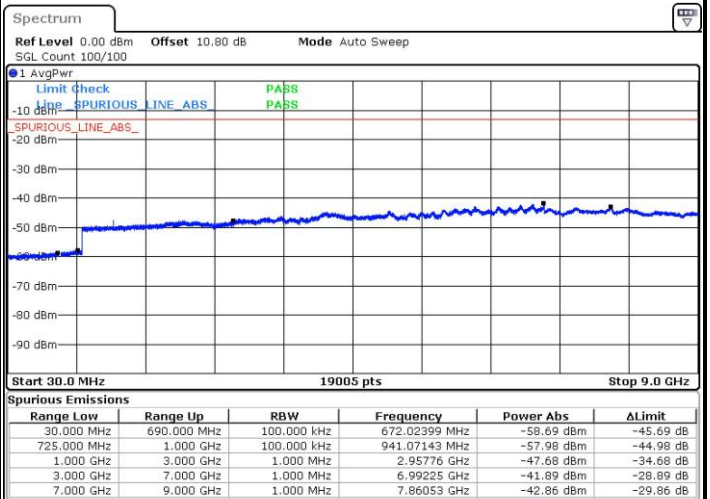
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 17.FEB.2017 17:43:36

Lowest Channel / 16QAM



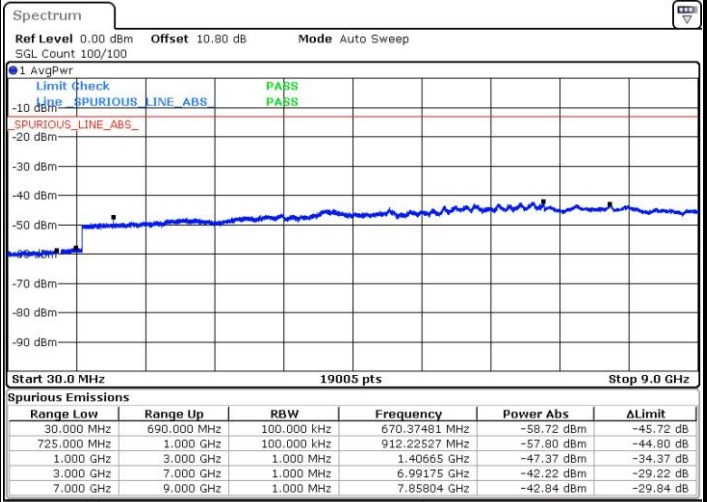
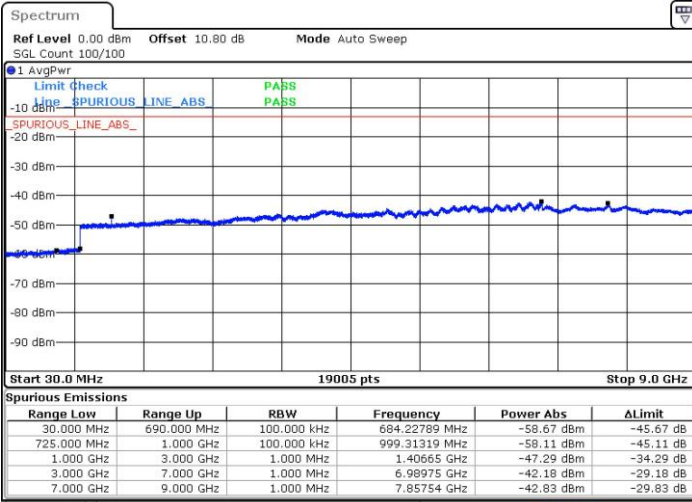
Date: 17.FEB.2017 17:44:30



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

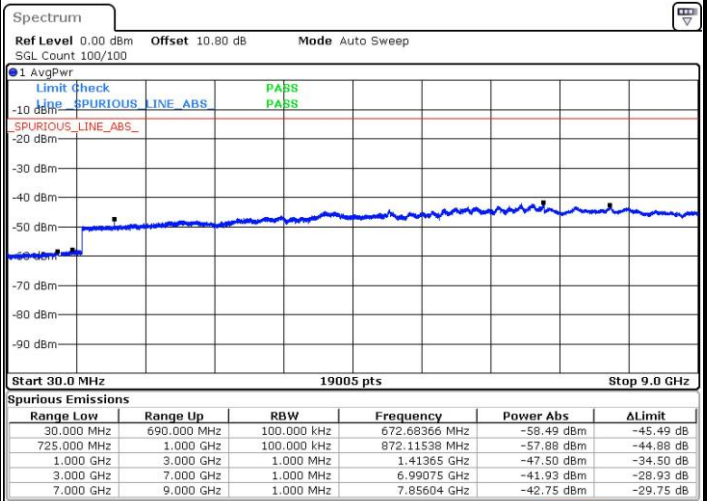
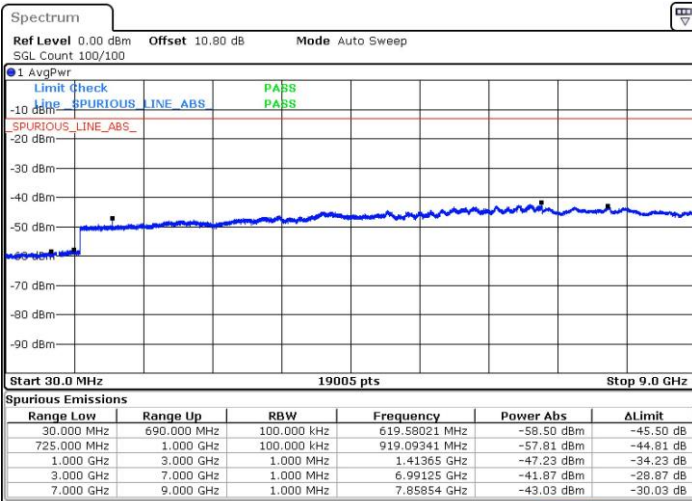


Date: 17.FEB.2017 17:47:00

Date: 17.FEB.2017 17:46:05

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 17.FEB.2017 17:53:11

Date: 17.FEB.2017 17:54:05



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	0.0055	PASS
40	Normal Voltage	0.0079	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0054	
-10	Normal Voltage	0.0068	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0049	

Note:

1. Normal Voltage =3.9 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 13

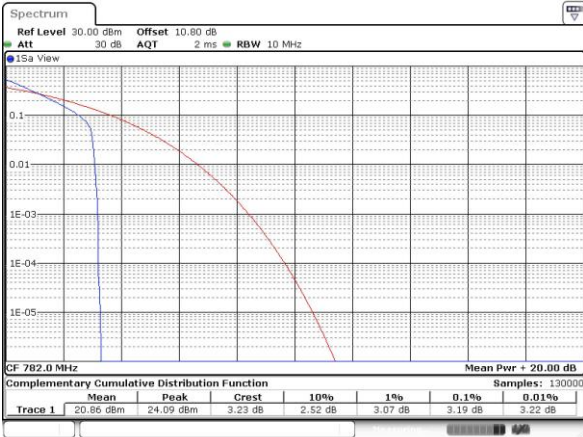
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.19	4.81	4.2	5.83	
Highest CH	-	-	-	-	



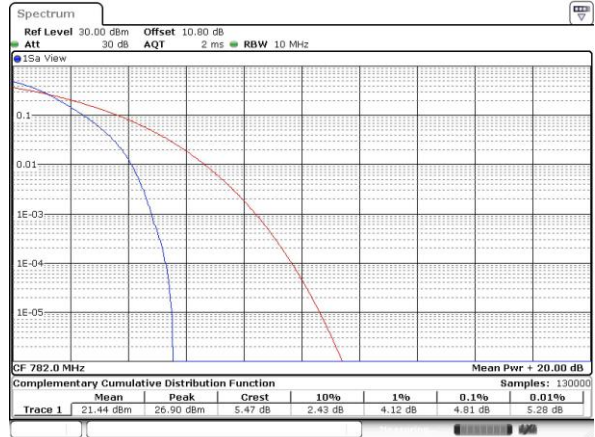
LTE Band 13 / 10MHz / QPSK

Middle Channel/ 1RB



Date: 19 FEB 2017 03:56:23

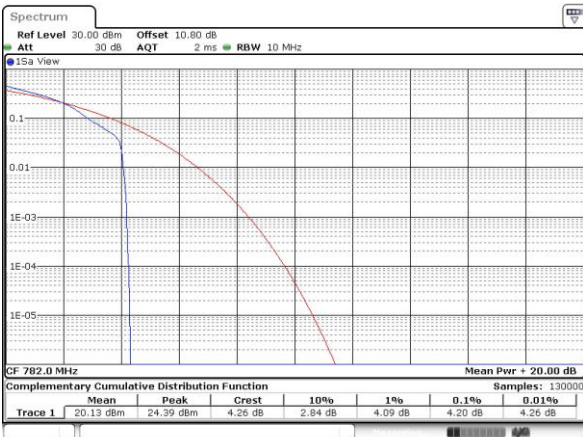
Middle Channel / Full RB



Date: 19 FEB 2017 03:56:33

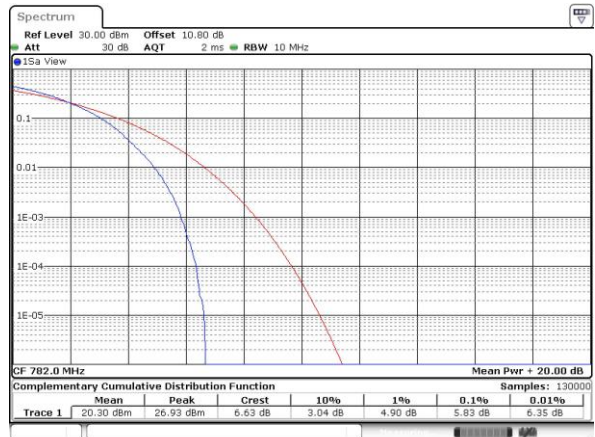
LTE Band 13 / 10MHz / 16QAM

Middle Channel/ 1RB



Date: 19 FEB 2017 03:55:04

Middle Channel / Full RB



Date: 19 FEB 2017 03:56:15



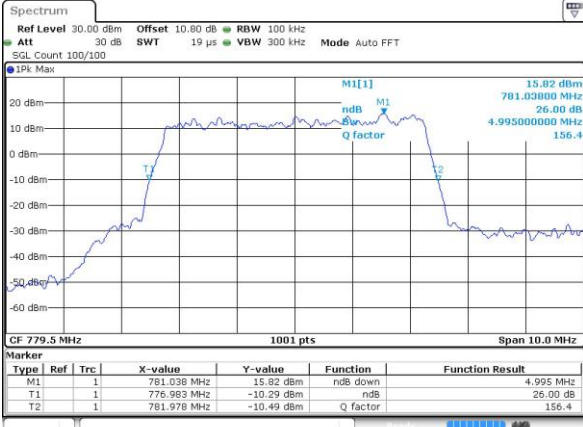
26dB Bandwidth

Mode	LTE Band 13 : 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	-	-	-	-	5.00	4.91	-	-	-	-	-	-
Middle CH	-	-	-	-	5.00	4.91	9.91	9.91	-	-	-	-
Highest CH	-	-	-	-	4.98	4.87	-	-	-	-	-	-



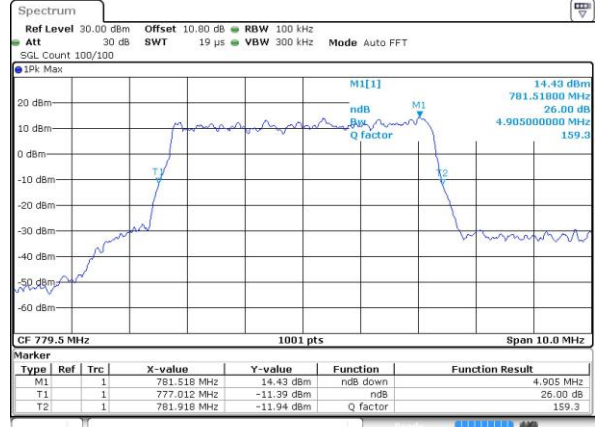
LTE Band 13

Lowest Channel / 5MHz / QPSK



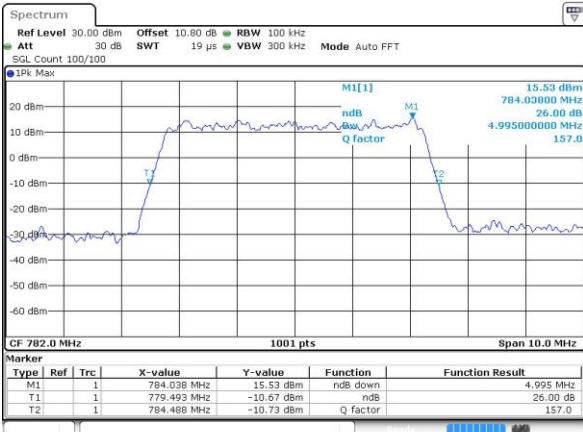
Date: 19 FEB 2017 03:10:16

Lowest Channel / 5MHz / 16QAM



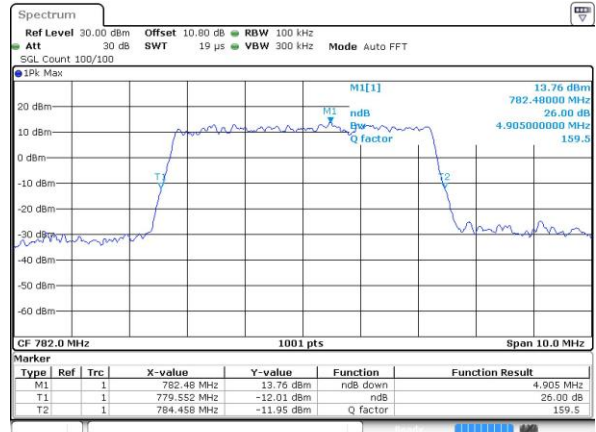
Date: 19 FEB 2017 03:10:05

Middle Channel / 5MHz / QPSK



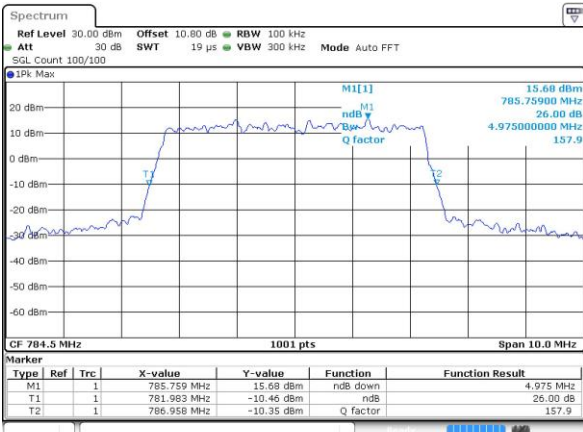
Date: 19 FEB 2017 03:20:39

Middle Channel / 5MHz / 16QAM



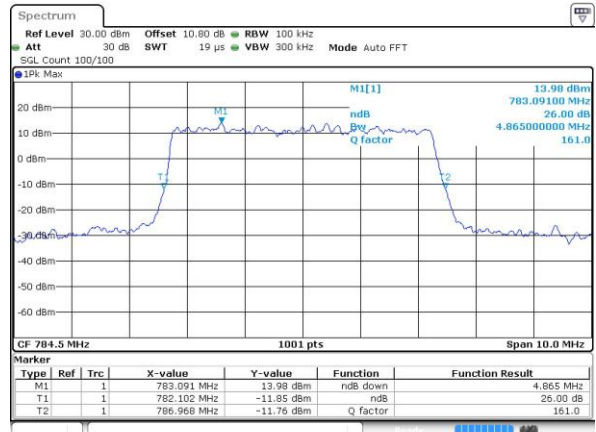
Date: 19 FEB 2017 03:20:50

Highest Channel / 5MHz / QPSK



Date: 19 FEB 2017 03:21:52

Highest Channel / 5MHz / 16QAM

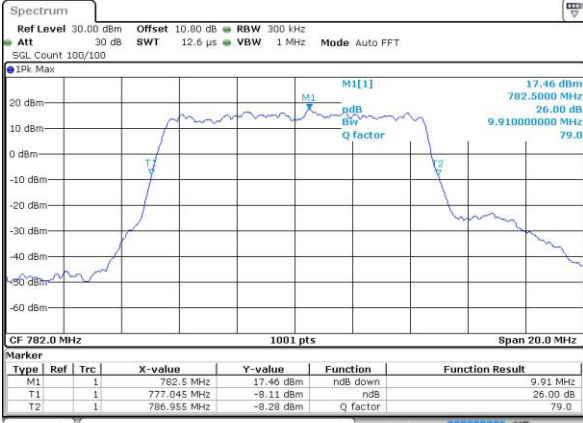


Date: 19 FEB 2017 03:21:41



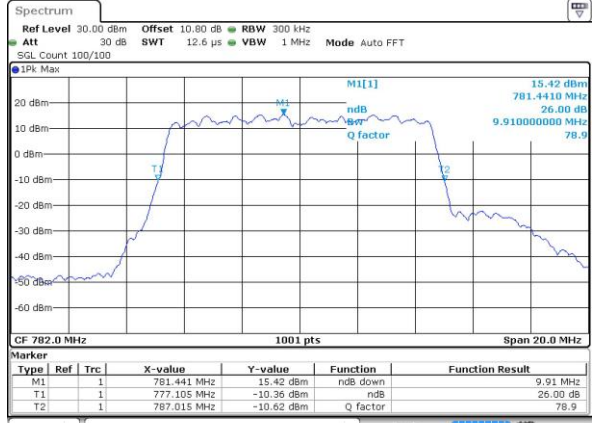
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 19 FEB 2017 03:30:58

Middle Channel / 10MHz / 16QAM



Date: 19 FEB 2017 03:30:48



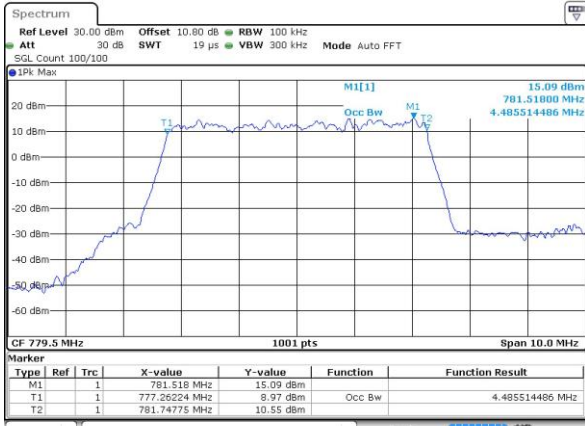
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(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	-	-	-	-	4.49	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.47	4.5	9.07	8.93	-	-	-	-
Highest CH	-	-	-	-	4.5	4.49	-	-	-	-	-	-



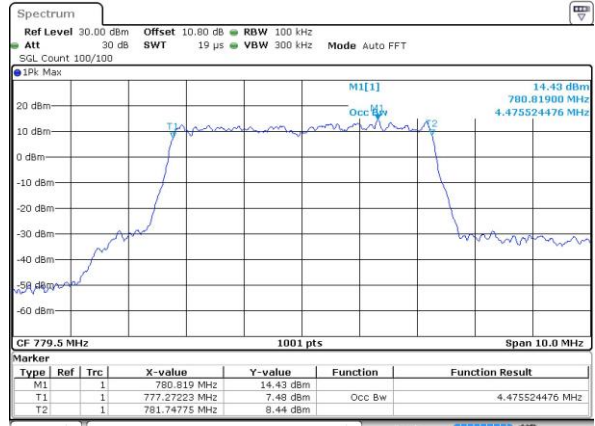
LTE Band 13

Lowest Channel / 5MHz / QPSK



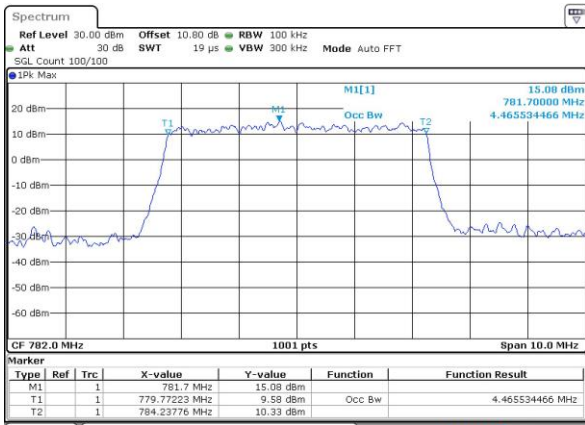
Date: 19 FEB 2017 03:09:45

Lowest Channel / 5MHz / 16QAM



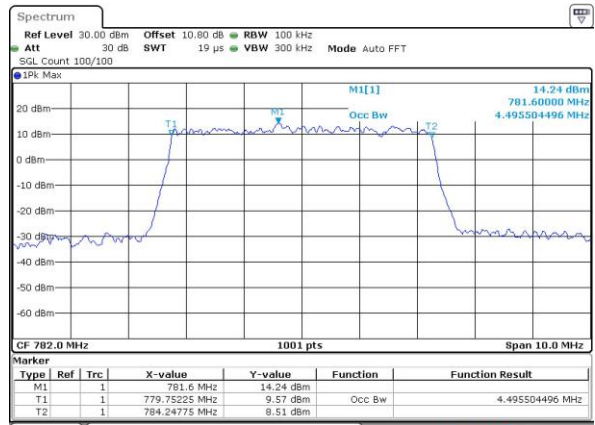
Date: 19 FEB 2017 03:09:55

Middle Channel / 5MHz / QPSK



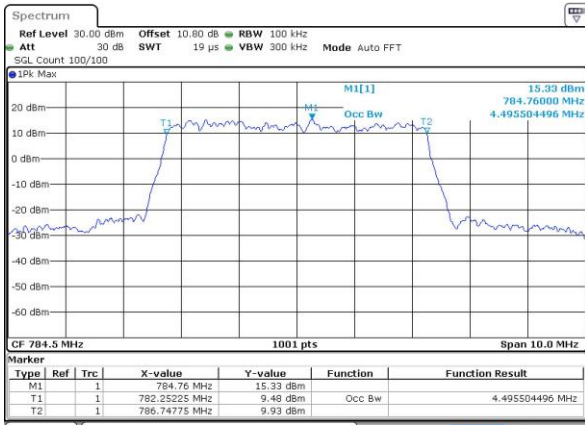
Date: 19 FEB 2017 03:21:10

Middle Channel / 5MHz / 16QAM



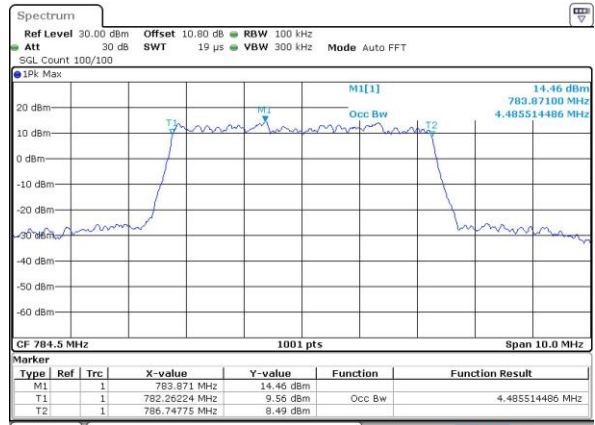
Date: 19 FEB 2017 03:21:00

Highest Channel / 5MHz / QPSK



Date: 19 FEB 2017 03:21:21

Highest Channel / 5MHz / 16QAM

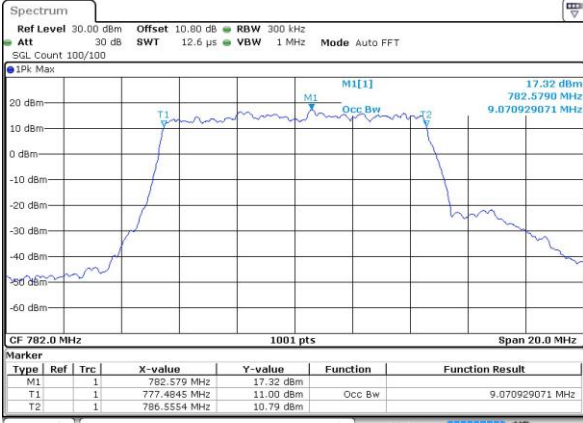


Date: 19 FEB 2017 03:21:31



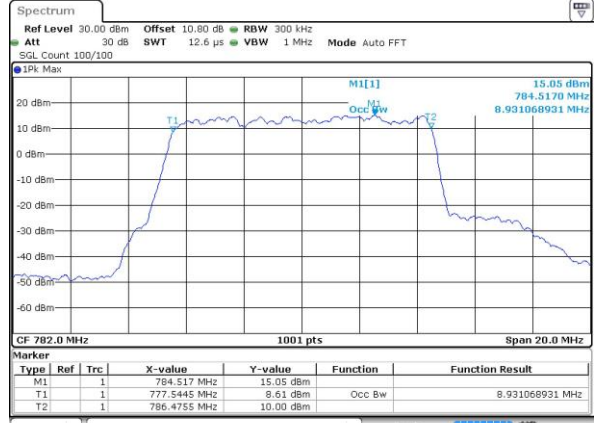
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 19 FEB 2017 03:30:27

Middle Channel / 10MHz / 16QAM



Date: 19 FEB 2017 03:30:38



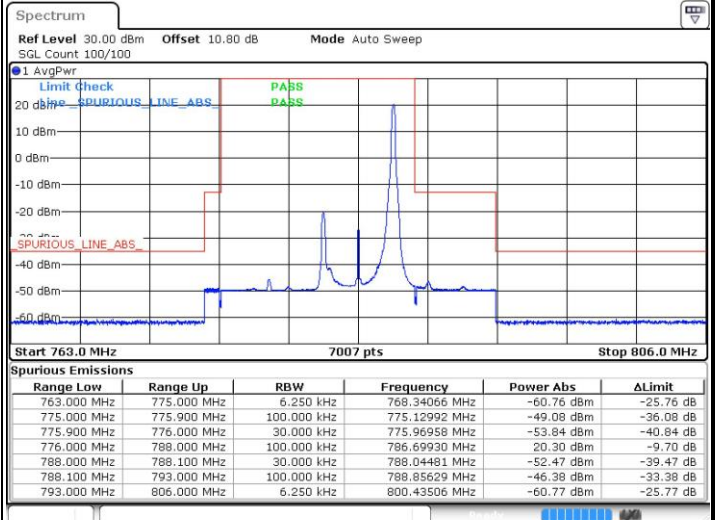
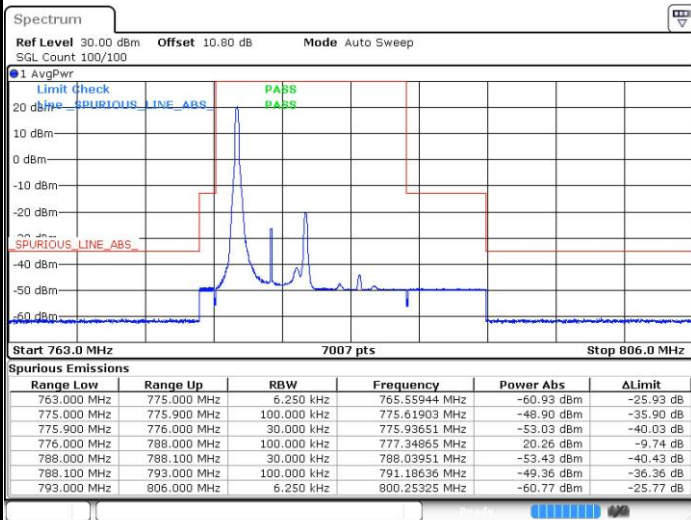
Conducted Band Edge



LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

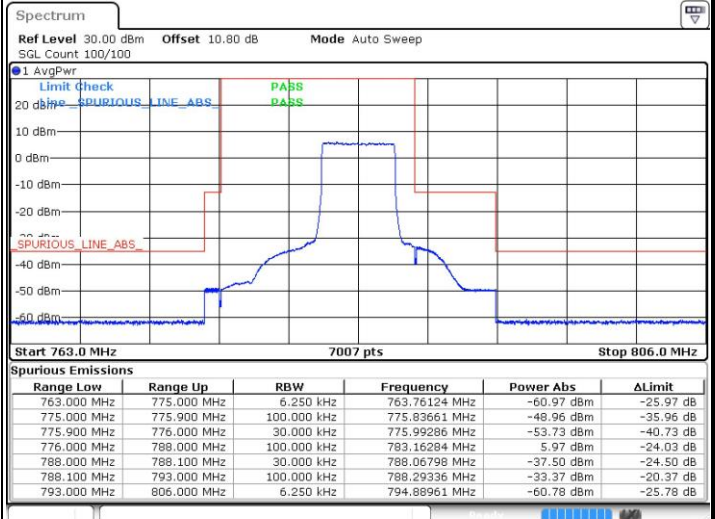
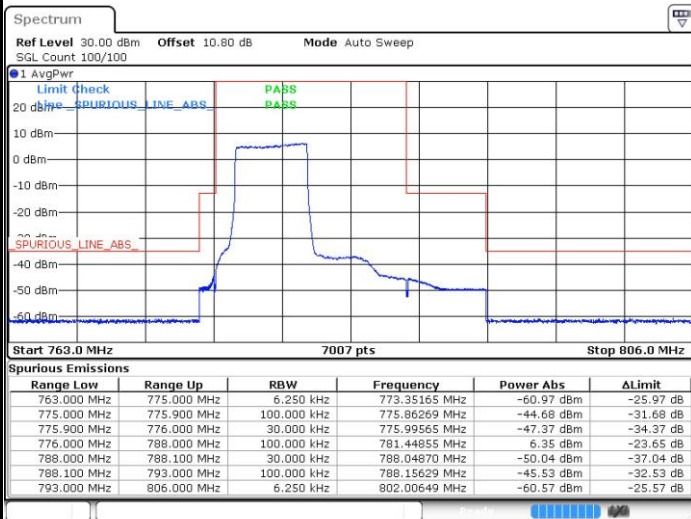


Date: 19.FEB.2017 03:16:52

Date: 19.FEB.2017 03:28:28

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19.FEB.2017 03:11:55

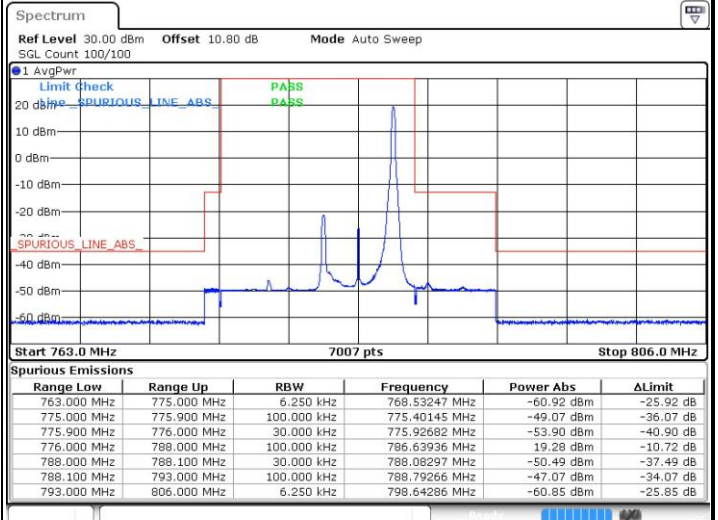
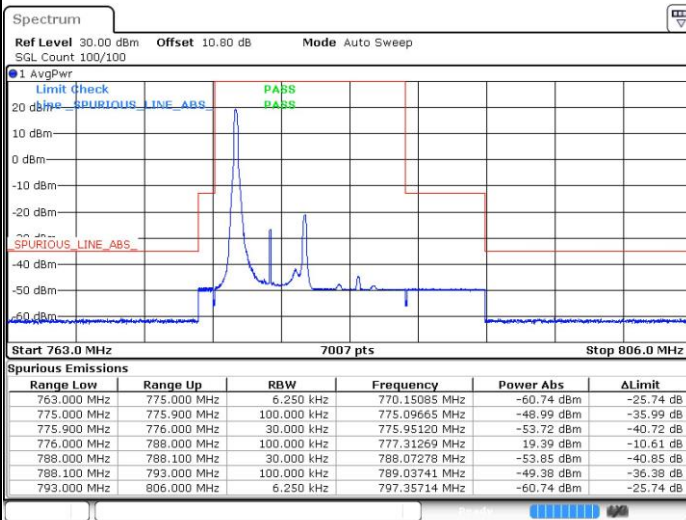
Date: 19.FEB.2017 03:23:30



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

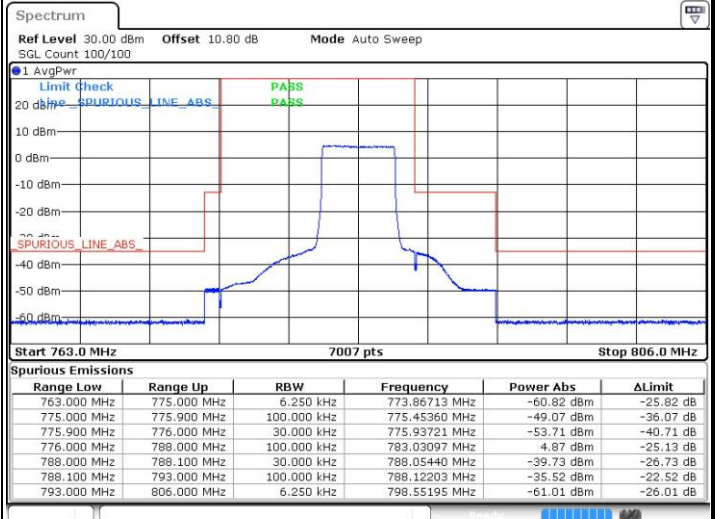
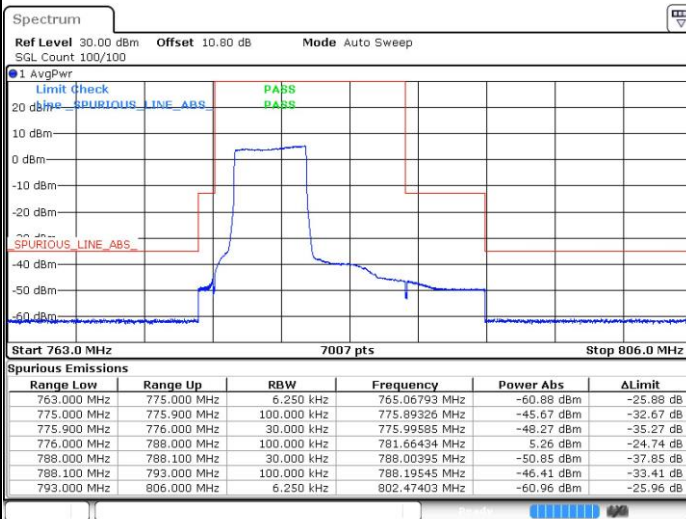


Date: 19.FEB.2017 03:15:13

Date: 19.FEB.2017 03:26:49

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19.FEB.2017 03:13:34

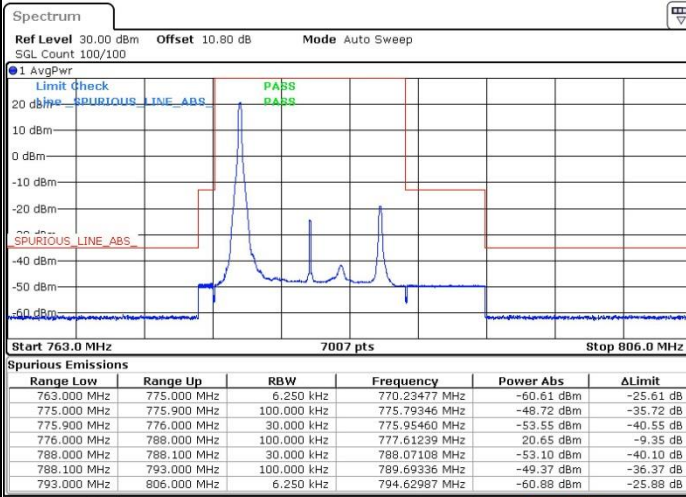
Date: 19.FEB.2017 03:25:10



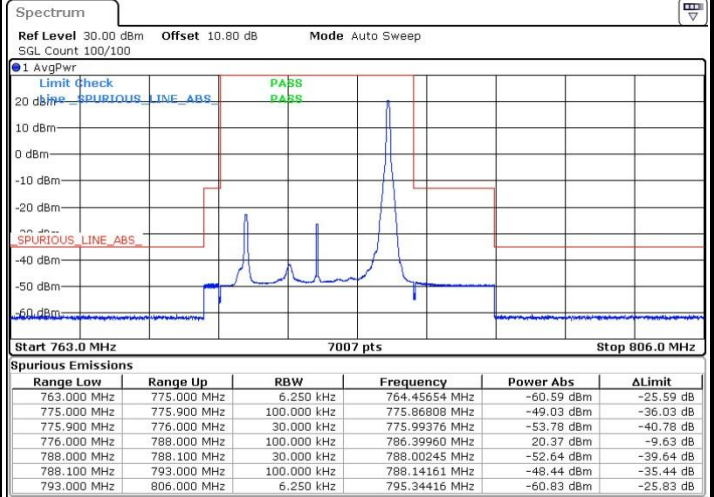
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

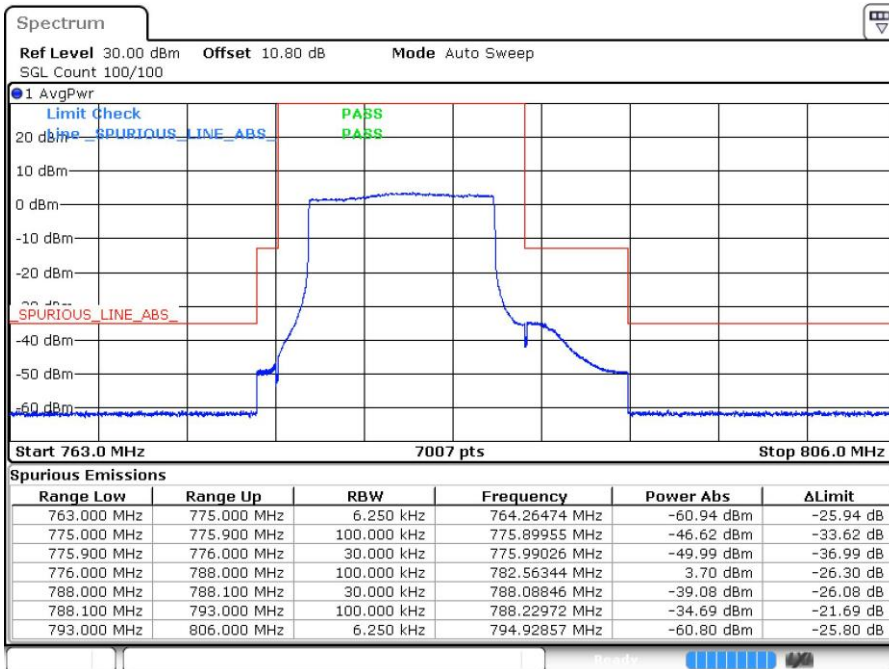


Date: 19.FEB.2017 03:37:35



Date: 19.FEB.2017 03:39:14

Band Edge / Full RB

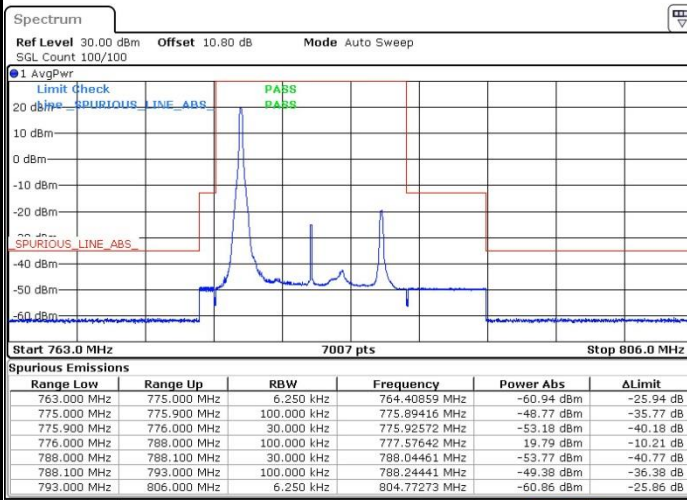


Date: 19.FEB.2017 03:32:37



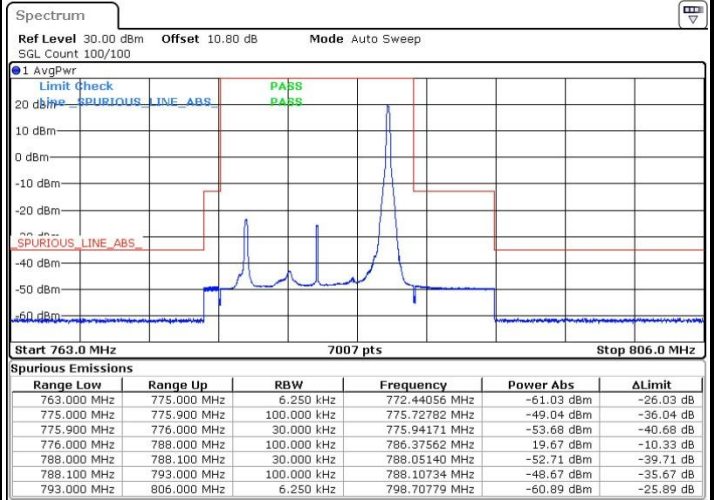
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



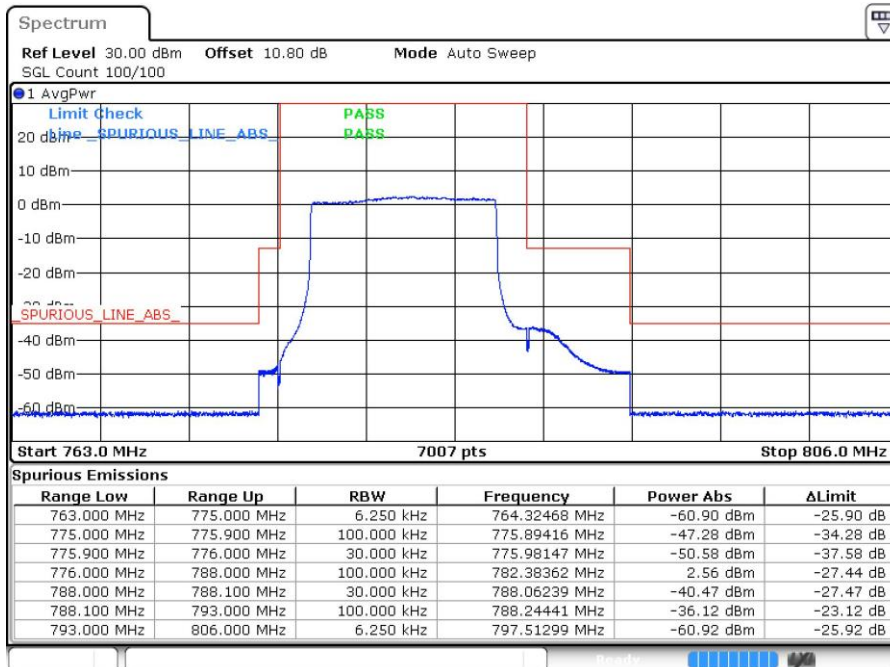
Date: 19.FEB.2017 03:35:56

Highest Band Edge / 1 RB



Date: 19.FEB.2017 03:40:53

Band Edge / Full RB



Date: 19.FEB.2017 03:34:16

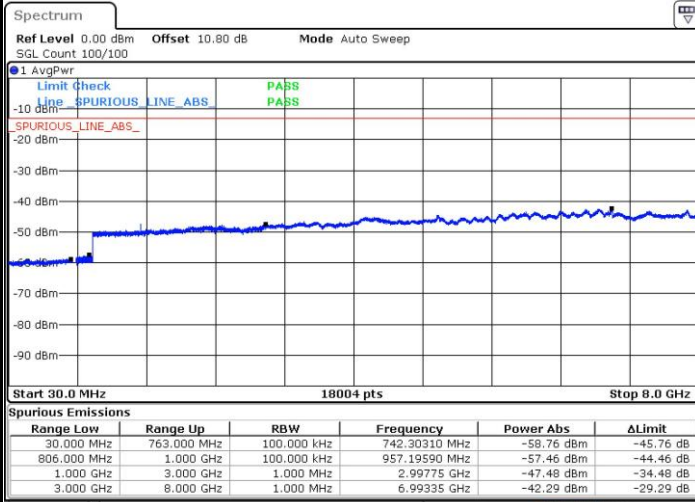


Conducted Spurious Emission



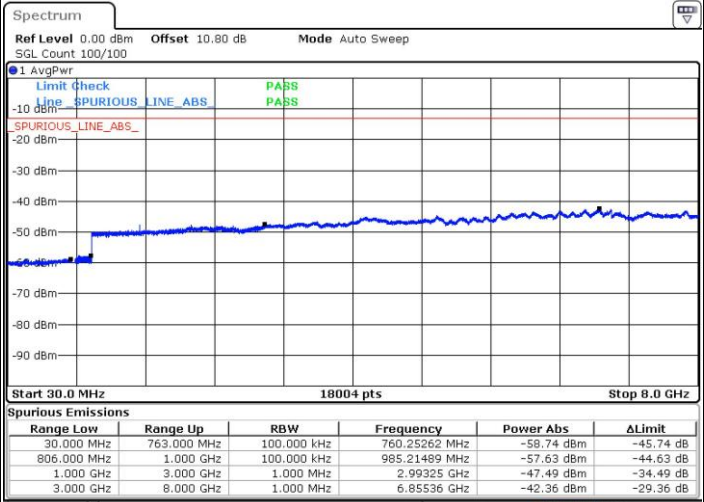
LTE Band 13 / 5MHz

Lowest Channel / QPSK



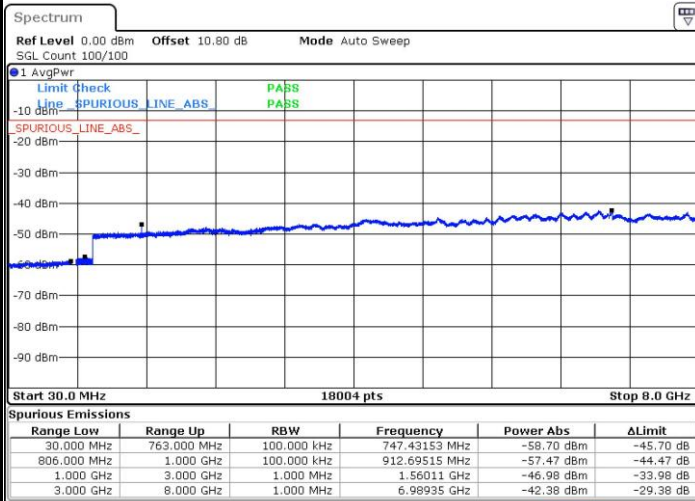
Date: 19.FEB.2017 03:17:47

Lowest Channel / 16QAM



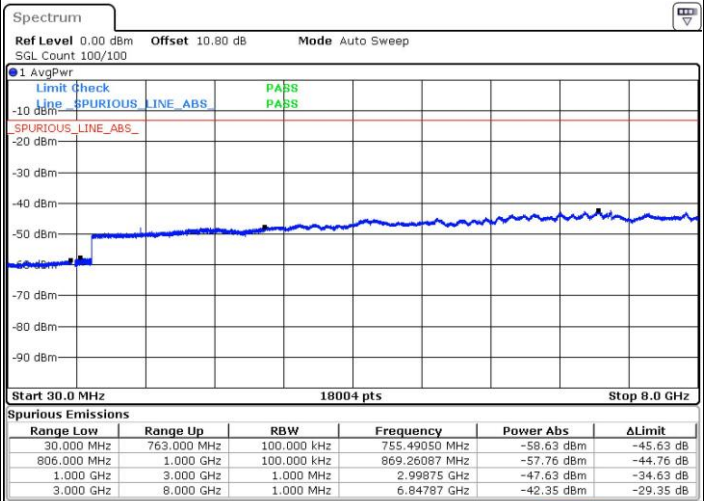
Date: 19.FEB.2017 03:18:41

Middle Channel / QPSK



Date: 19.FEB.2017 03:20:29

Middle Channel / 16QAM

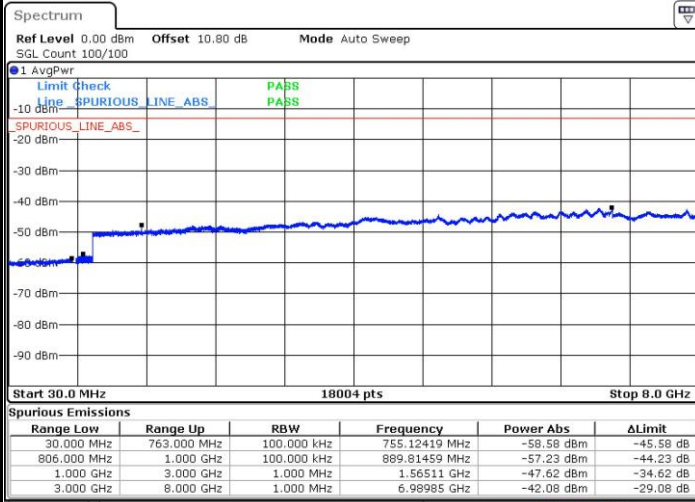


Date: 19.FEB.2017 03:19:35



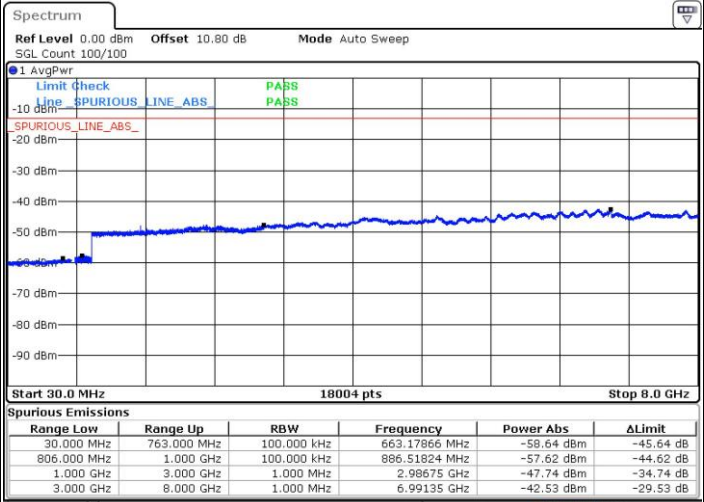
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 19.FEB.2017 03:29:23

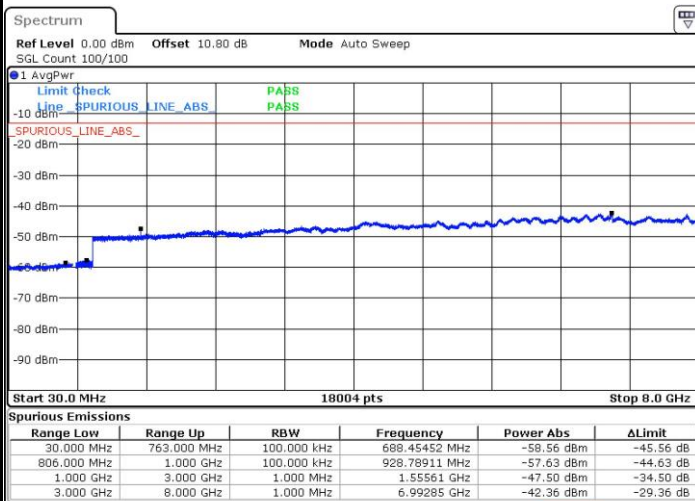
Highest Channel / 16QAM



Date: 19.FEB.2017 03:30:17

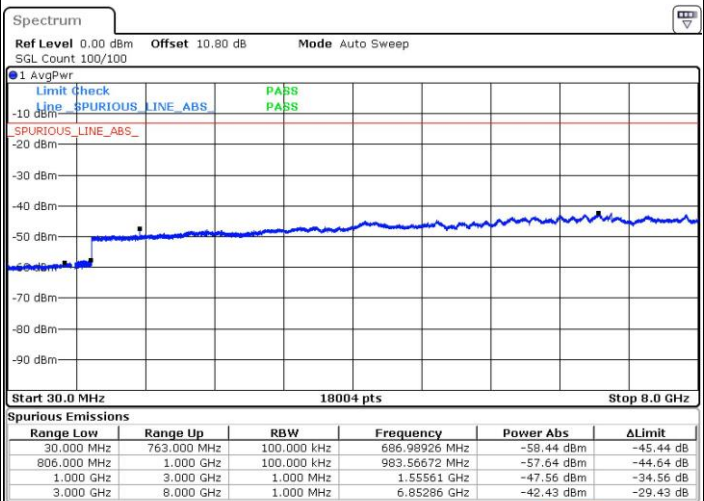
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 19.FEB.2017 03:42:42

Middle Channel / 16QAM



Date: 19.FEB.2017 03:41:48



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	0.0028	PASS
40	Normal Voltage	0.0069	
30	Normal Voltage	0.0075	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0084	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0069	
-20	Normal Voltage	0.0098	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0077	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0042	

Note:

1. Normal Voltage =3.9 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

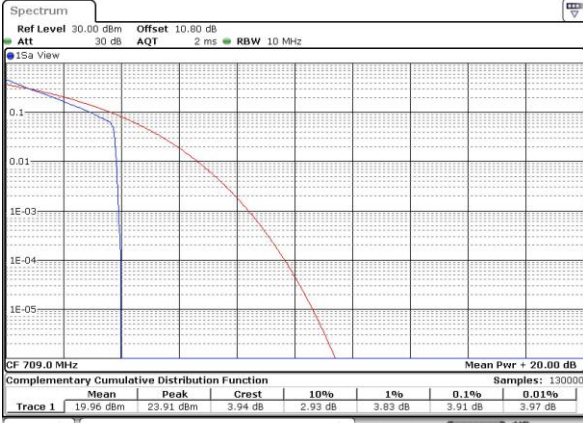
Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.91	4.75	4.78	5.71	PASS
Middle CH	3.83	4.67	4.72	5.68	
Highest CH	3.8	4.72	4.75	5.65	



LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 19 FEB 2017 03:04:47

Lowest Channel / Full RB



Date: 19 FEB 2017 03:04:56

Middle Channel / 1RB



Date: 19 FEB 2017 03:05:05

Middle Channel / Full RB



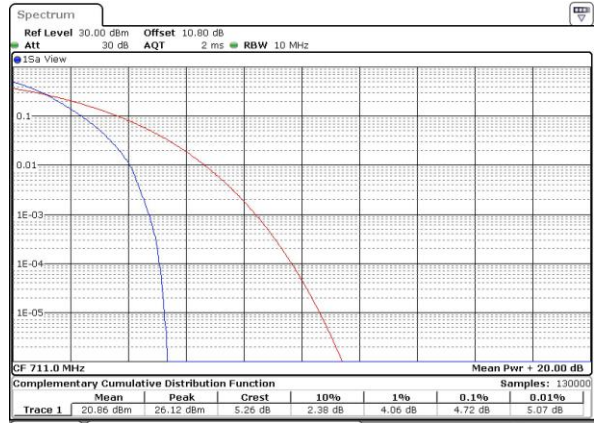
Date: 19 FEB 2017 03:05:14

Highest Channel / 1RB



Date: 19 FEB 2017 03:05:23

Highest Channel / Full RB

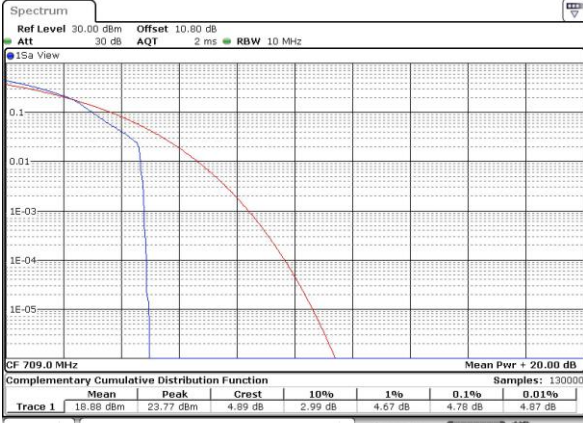


Date: 19 FEB 2017 03:05:32



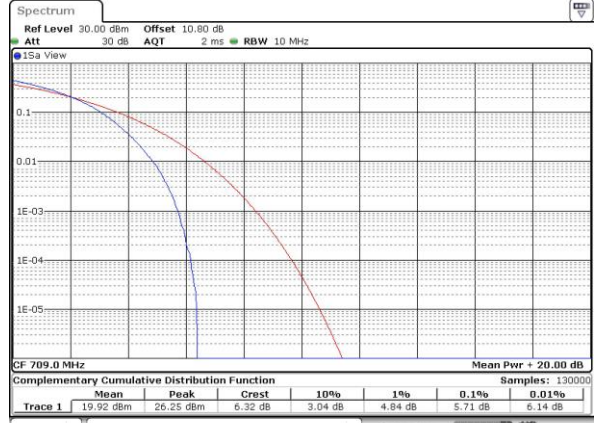
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 19 FEB 2017 03:00:41

Lowest Channel / Full RB



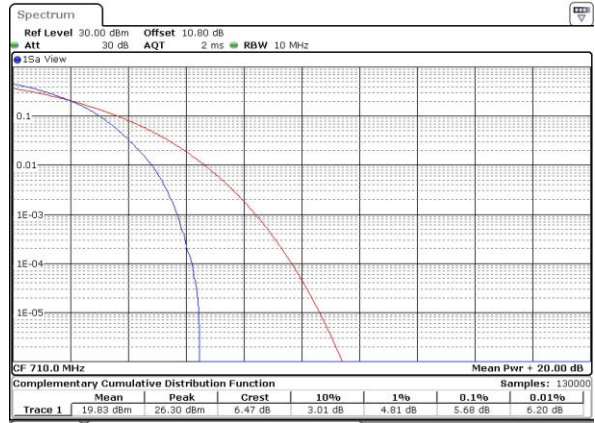
Date: 19 FEB 2017 03:03:56

Middle Channel/ 1RB



Date: 19 FEB 2017 03:04:06

Middle Channel / Full RB



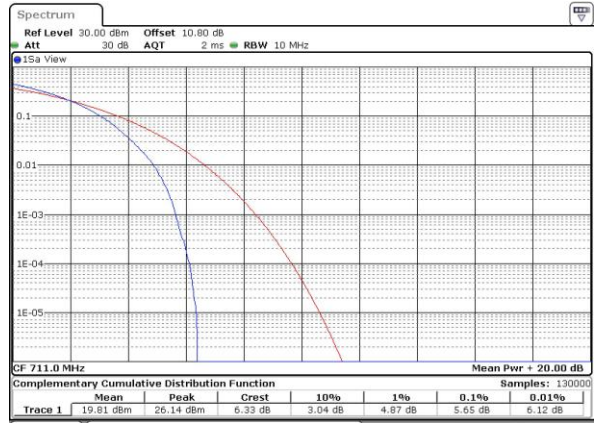
Date: 19 FEB 2017 03:04:19

Highest Channel/ 1RB



Date: 19 FEB 2017 03:04:28

Highest Channel / Full RB



Date: 19 FEB 2017 03:04:37



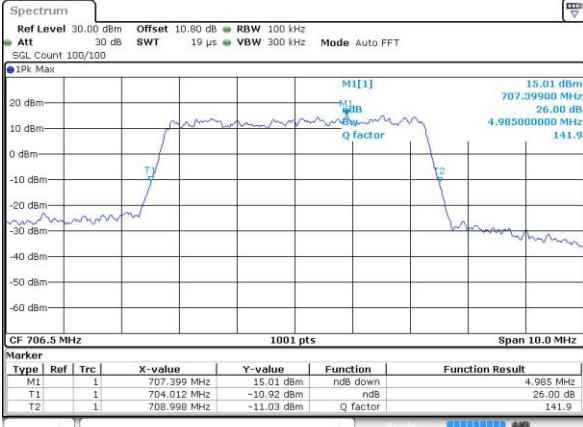
26dB Bandwidth

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
Lowest CH	-	-	-	-	4.99	4.91	9.75	9.93	-	-	-	-
Middle CH	-	-	-	-	4.88	4.86	9.89	9.67	-	-	-	-
Highest CH	-	-	-	-	4.98	4.96	9.73	9.75	-	-	-	-



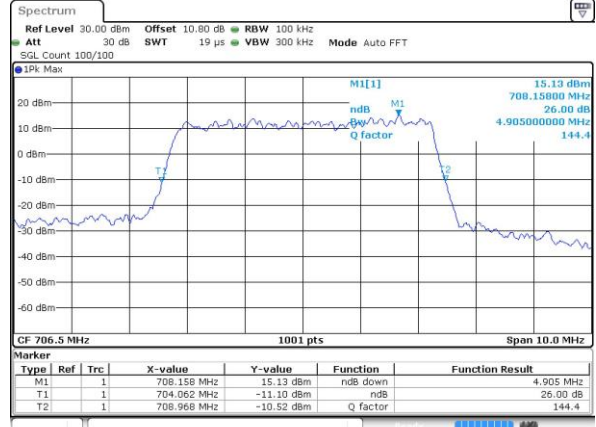
LTE Band 17

Lowest Channel / 5MHz / QPSK



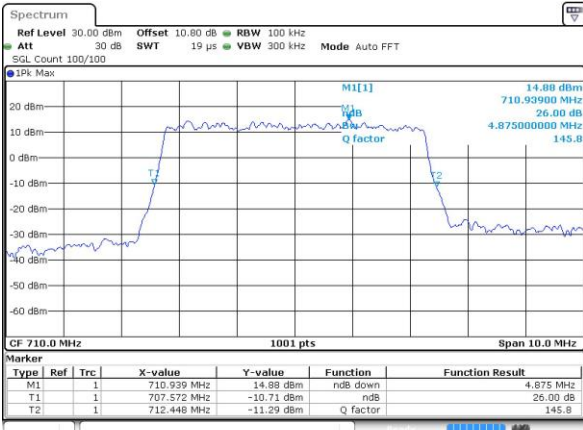
Date: 17.FEB.2017 17:54:36

Lowest Channel / 5MHz / 16QAM



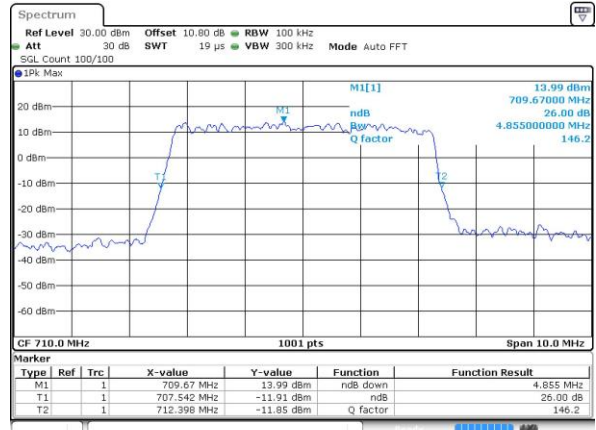
Date: 17.FEB.2017 17:54:46

Middle Channel / 5MHz / QPSK



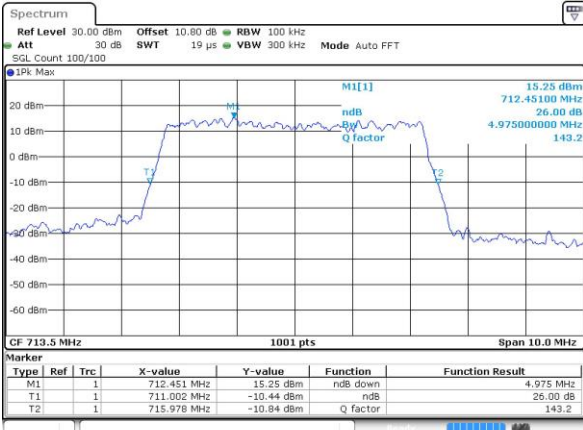
Date: 17.FEB.2017 18:01:42

Middle Channel / 5MHz / 16QAM



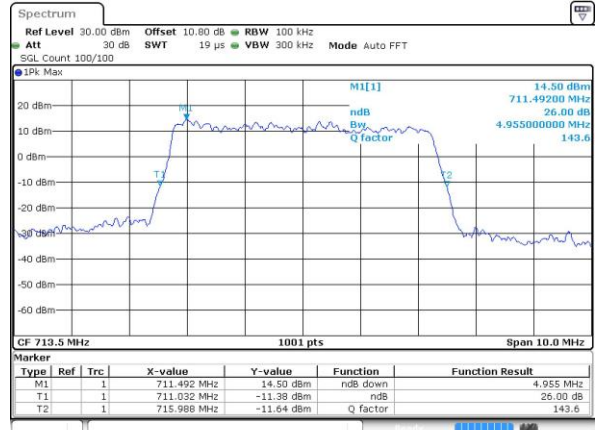
Date: 17.FEB.2017 18:01:52

Highest Channel / 5MHz / QPSK



Date: 17.FEB.2017 18:04:12

Highest Channel / 5MHz / 16QAM



Date: 17.FEB.2017 18:04:22