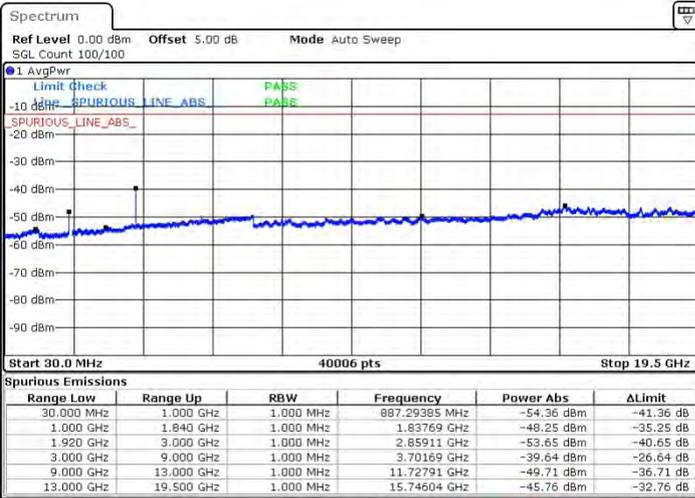
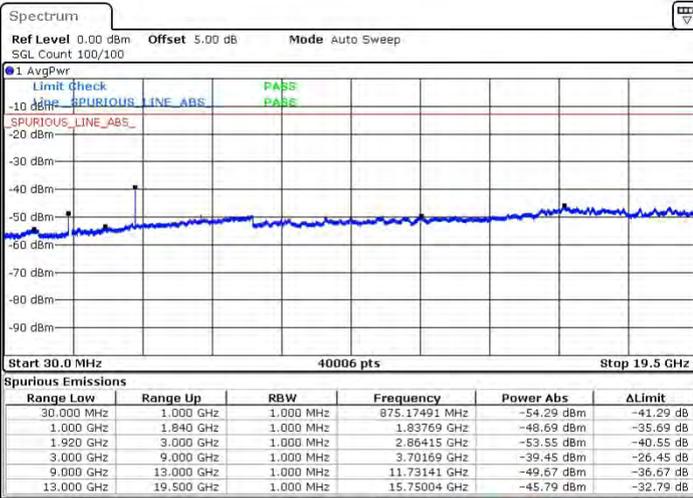




LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

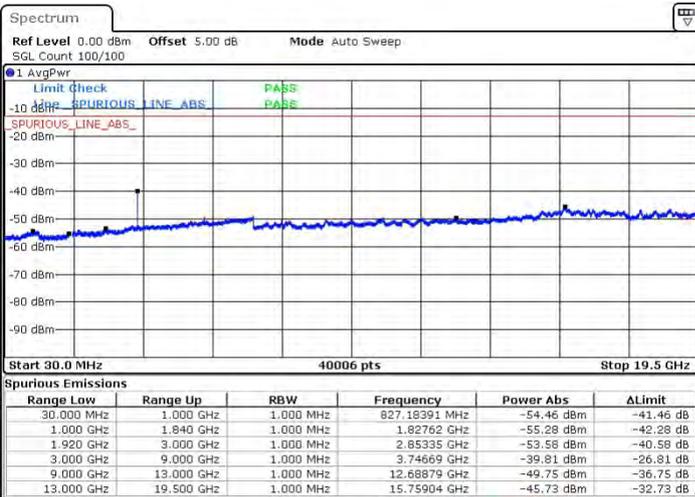
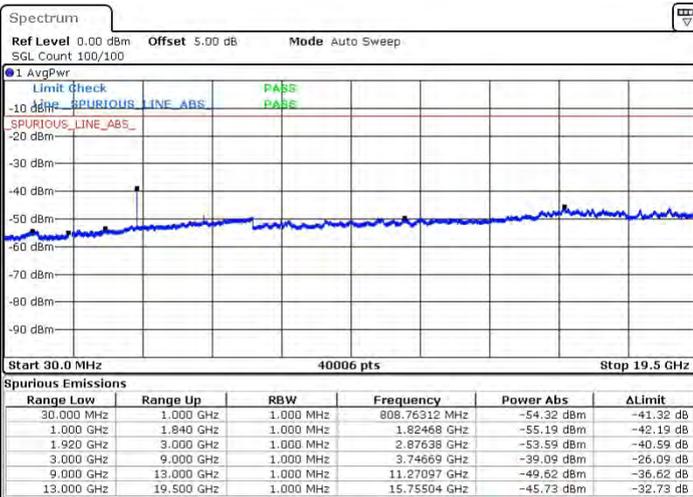


Date: 15 JAN 2015 19:37:19

Date: 15 JAN 2015 19:38:37

Middle Channel / QPSK

Middle Channel / 16QAM



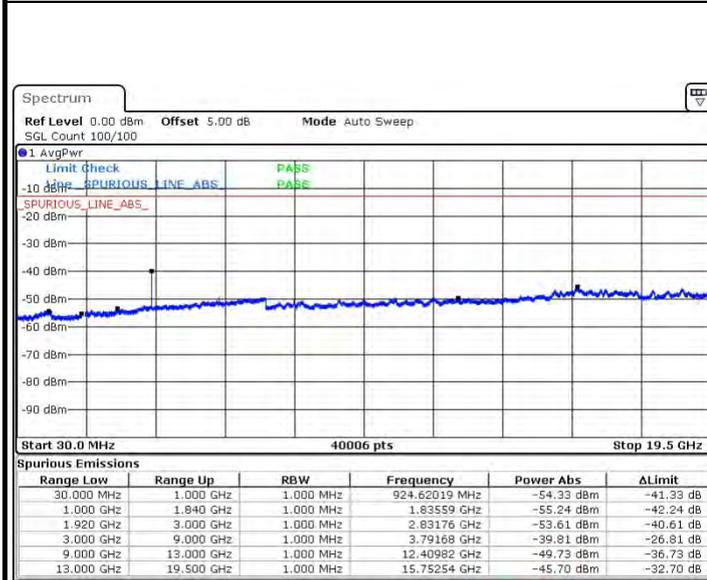
Date: 15 JAN 2015 19:40:39

Date: 15 JAN 2015 19:41:58



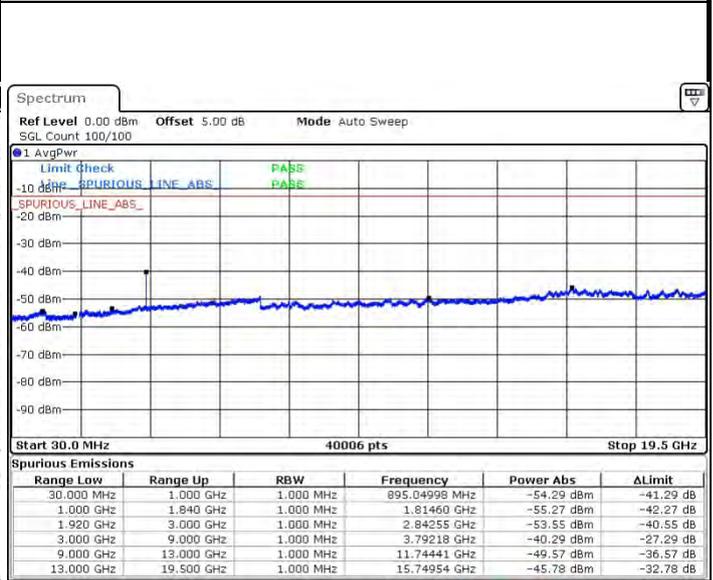
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 15 JAN 2015 19:44:00

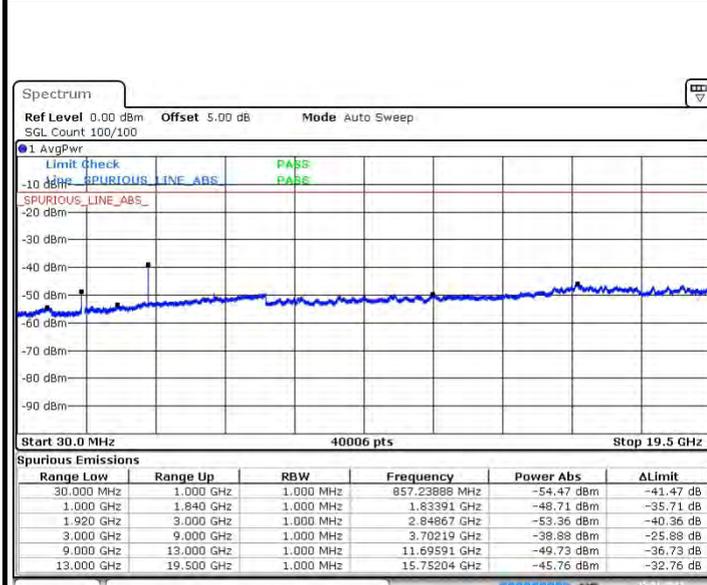
Highest Channel / 16QAM



Date: 15 JAN 2015 19:45:18

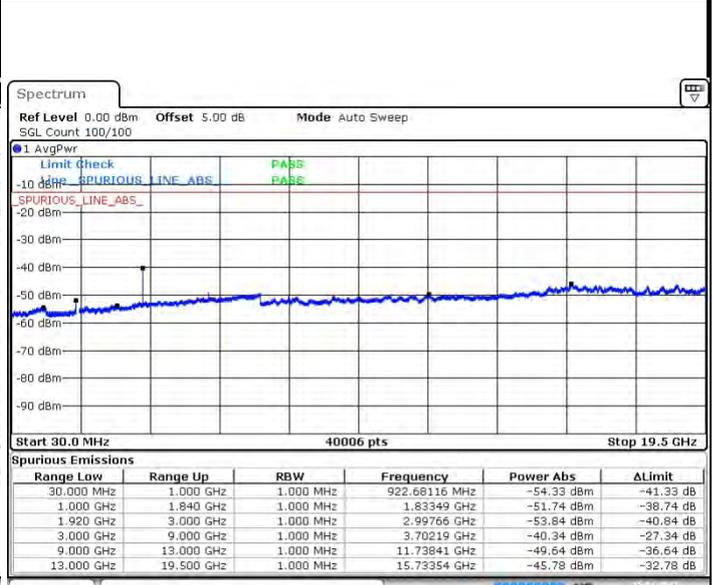
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 15 JAN 2015 19:47:20

Lowest Channel / 16QAM



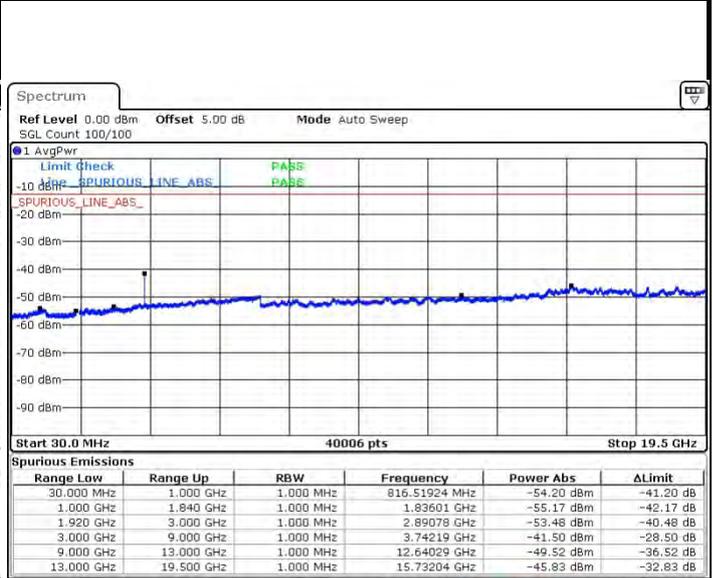
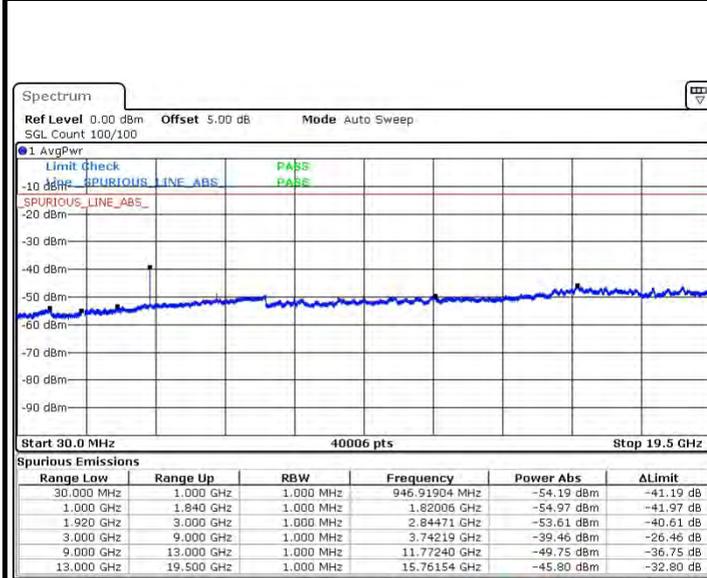
Date: 15 JAN 2015 19:48:39



LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

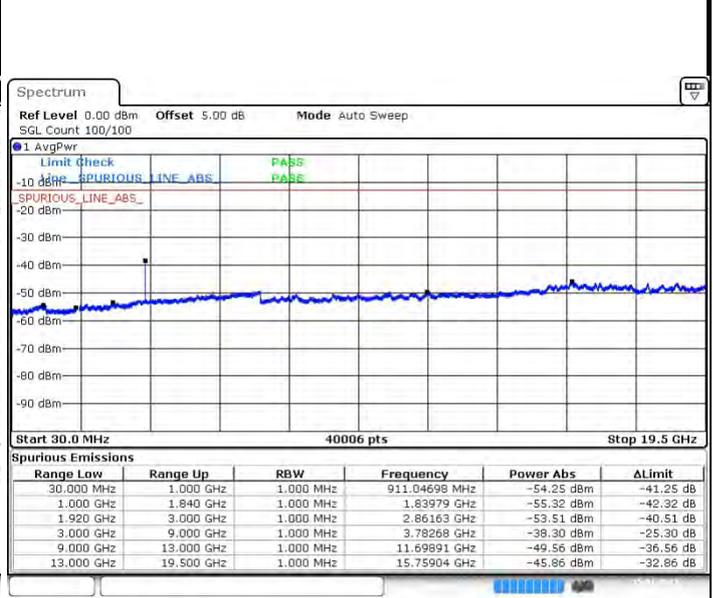
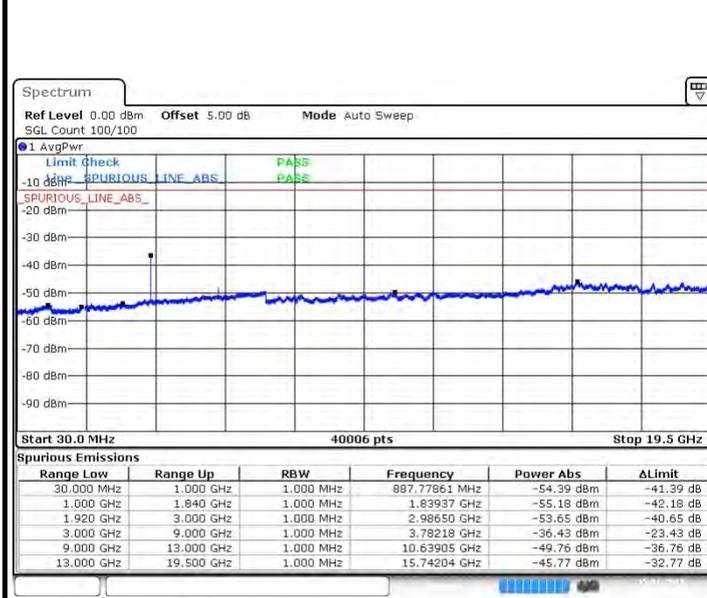


Date: 15 JAN 2015 19:50:40

Date: 15 JAN 2015 19:51:59

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 15 JAN 2015 19:54:01

Date: 15 JAN 2015 19:55:19



**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	0.0012	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0005	
20	Battery End Point	0.0016	

**Note:**

1. Normal Voltage = 3.8V ; Battery End Point (BEP) = 3.5 V ; Maximum Voltage =4.2 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



## LTE Band 4

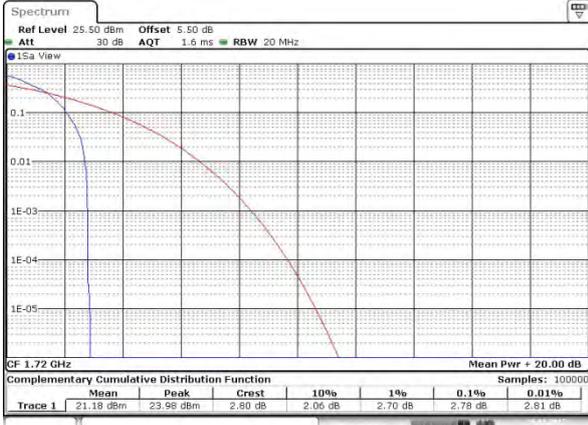
### Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	RB Size	Result
Lowest CH	2.78	4.29	3.68	5.3	PASS
Middle CH	3.57	4.55	4.46	5.57	
Highest CH	3.77	4.43	4.78	5.51	



LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



Date: 16 JAN 2015 15:09:12

Lowest Channel / Full RB



Date: 16 JAN 2015 15:09:36

Middle Channel / 1RB



Date: 16 JAN 2015 15:11:32

Middle Channel / Full RB



Date: 16 JAN 2015 15:11:50

Highest Channel / 1RB



Date: 16 JAN 2015 15:12:47

Highest Channel / Full RB



Date: 16 JAN 2015 15:13:07



LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



Date: 16 JAN 2015 15:08:43

Lowest Channel / Full RB



Date: 16 JAN 2015 15:10:26

Middle Channel / 1RB



Date: 16 JAN 2015 15:11:08

Middle Channel / Full RB



Date: 16 JAN 2015 15:12:06

Highest Channel / 1RB



Date: 16 JAN 2015 15:12:27

Highest Channel / Full RB



Date: 16 JAN 2015 15:13:22



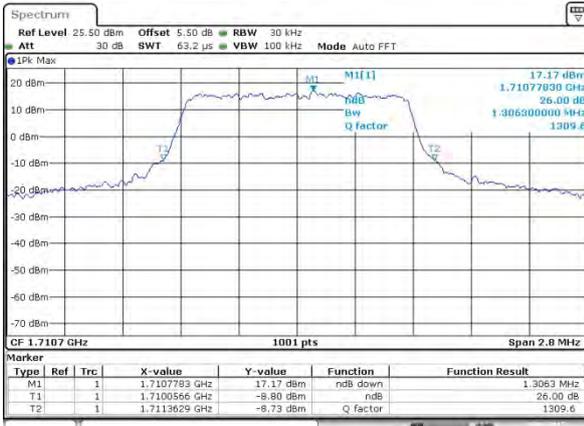
**26dB Bandwidth**

Mode	LTE Band 4 : 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	1.3063	1.3147	3.0629	3.0809	5.085	5.045	10.07	10.03	14.655	14.745	20.46	20.46
Middle CH	1.3035	1.3175	3.0569	3.0689	5.055	5.035	9.99	9.91	14.805	14.805	20.34	20.3
Highest CH	1.3147	1.3259	3.0509	3.0689	5.065	5.065	10.01	10.07	14.715	14.625	20.38	20.3



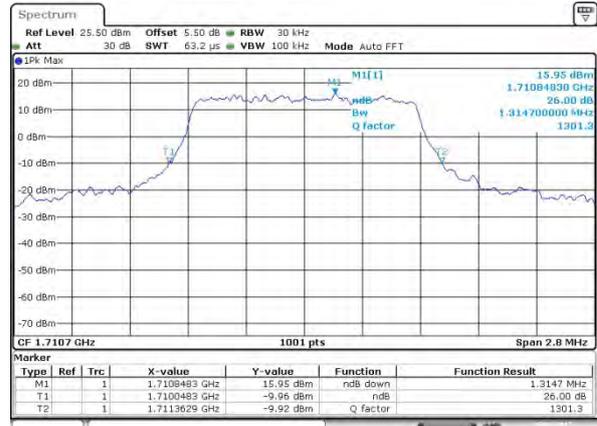
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



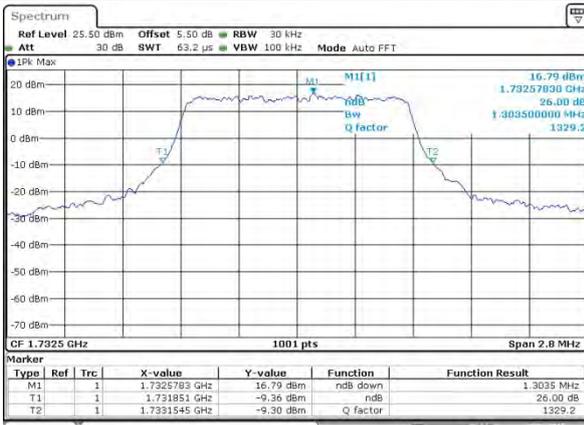
Date: 16 JAN 2015 09:41:07

Lowest Channel / 1.4MHz / 16QAM



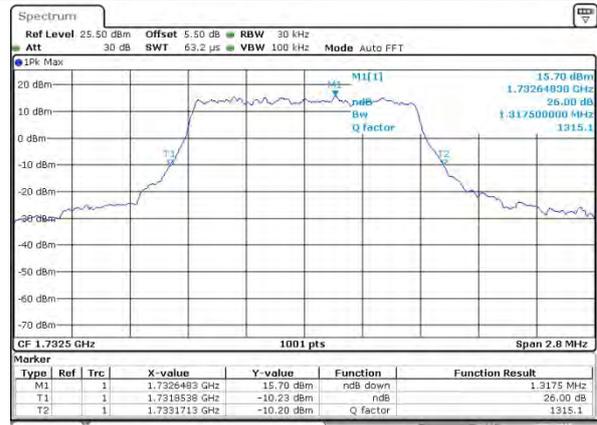
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Middle Channel / 1.4MHz / QPSK



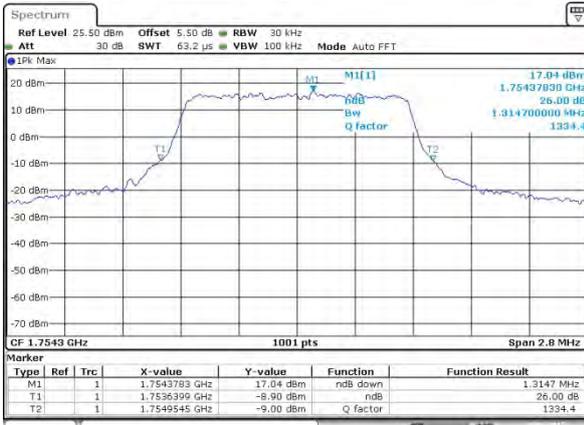
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Middle Channel / 1.4MHz / 16QAM



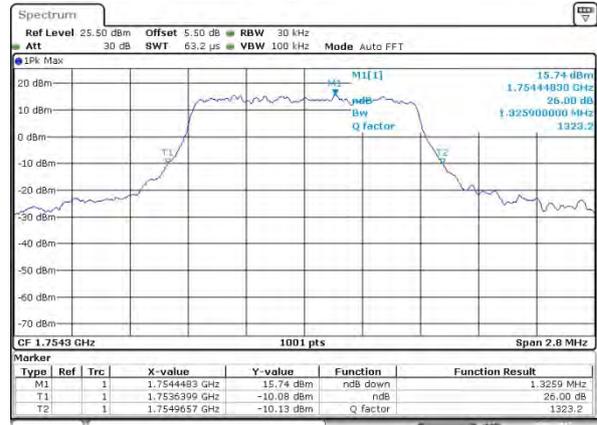
Date: 16 JAN 2015 09:44:39

Highest Channel / 1.4MHz / QPSK



Date: 16 JAN 2015 09:47:47

Highest Channel / 1.4MHz / 16QAM

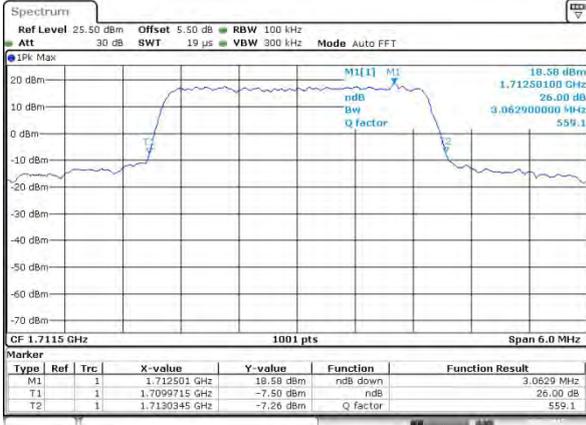


Date: 16 JAN 2015 09:47:59



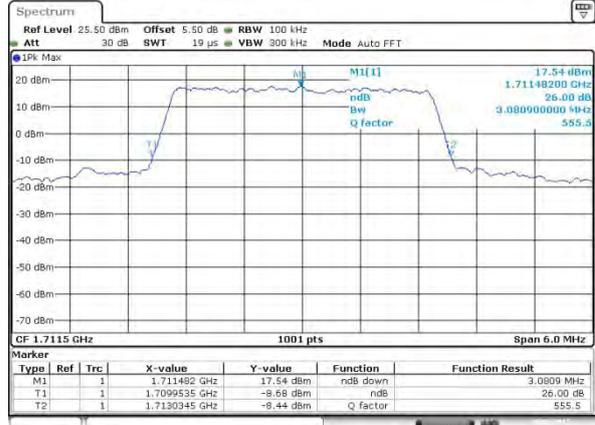
LTE Band 4

Lowest Channel / 3MHz / QPSK



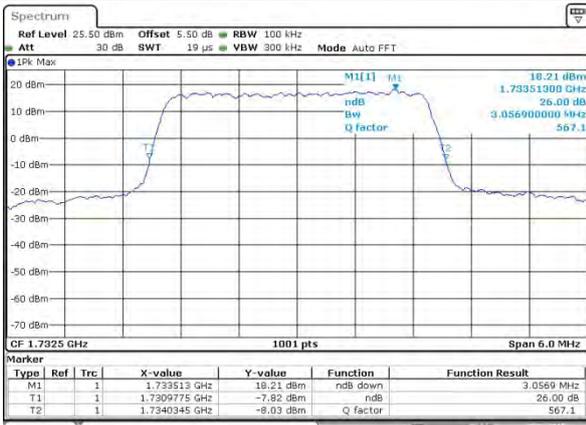
Date: 16 JAN 2015 09:51:08

Lowest Channel / 3MHz / 16QAM



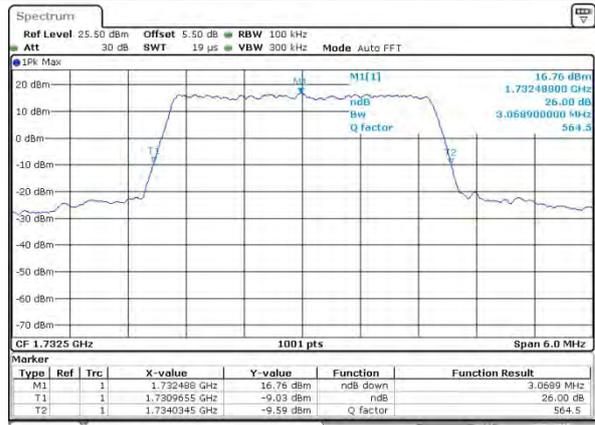
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Middle Channel / 3MHz / QPSK



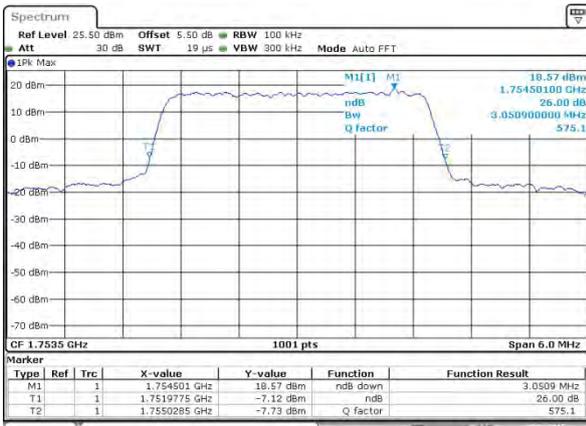
Date: 16 JAN 2015 09:54:28

Middle Channel / 3MHz / 16QAM



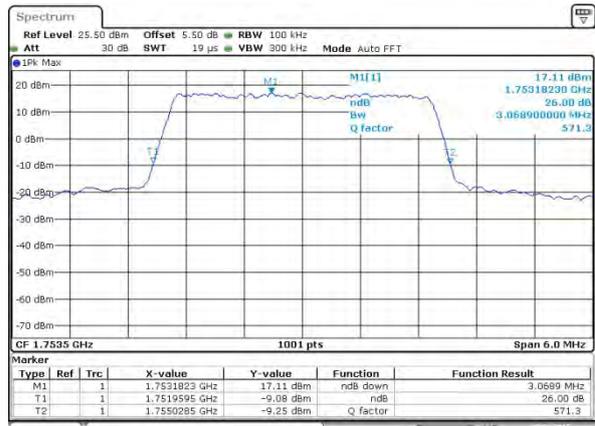
Date: 16 JAN 2015 09:54:40

Highest Channel / 3MHz / QPSK



Date: 16 JAN 2015 09:57:48

Highest Channel / 3MHz / 16QAM

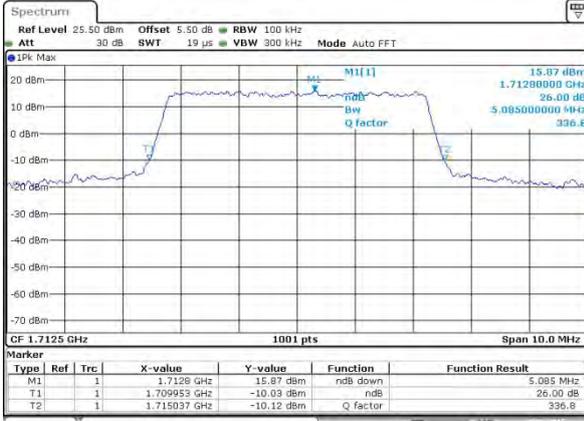


Date: 16 JAN 2015 09:58:00



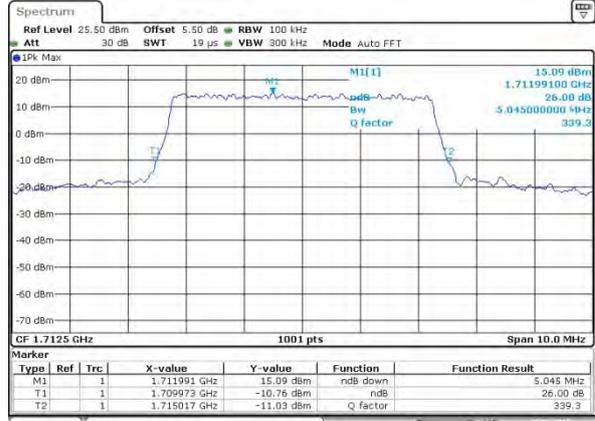
LTE Band 4

Lowest Channel / 5MHz / QPSK



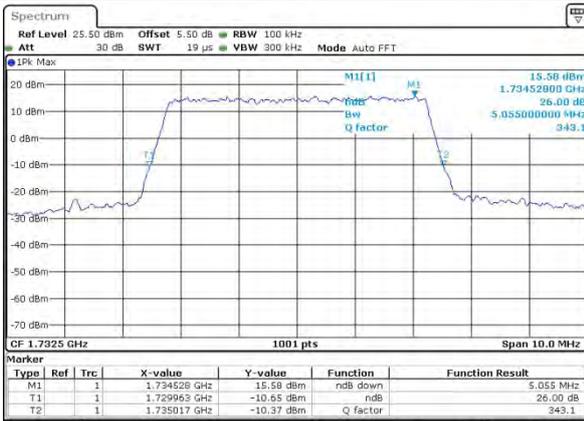
Date: 16 JAN 2015 10:01:08

Lowest Channel / 5MHz / 16QAM



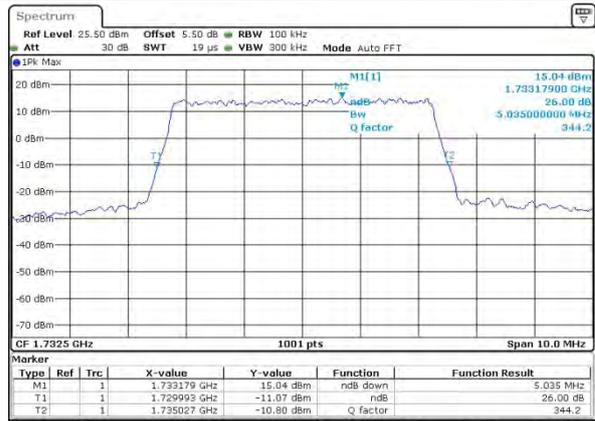
Date: 16 JAN 2015 10:01:20

Middle Channel / 5MHz / QPSK



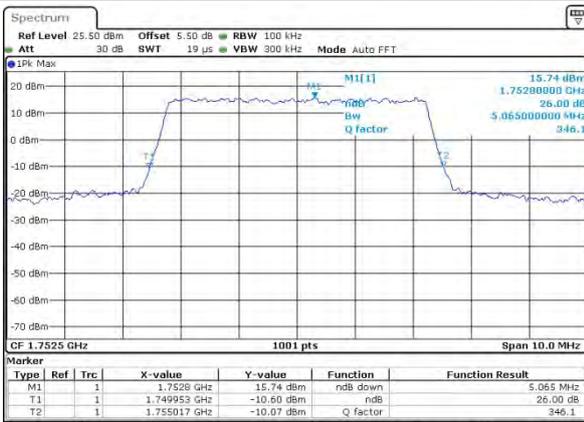
Date: 16 JAN 2015 10:04:28

Middle Channel / 5MHz / 16QAM



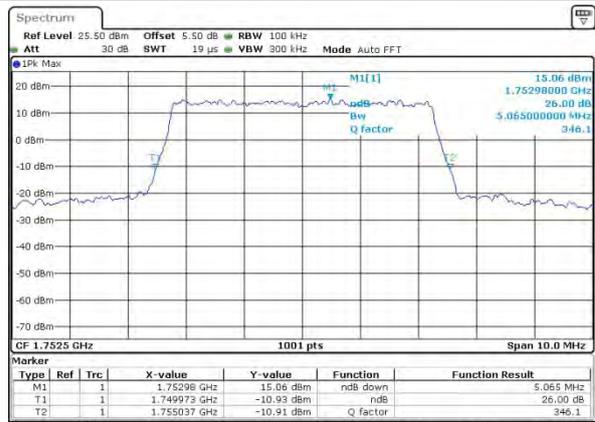
Date: 16 JAN 2015 10:04:40

Highest Channel / 5MHz / QPSK



Date: 16 JAN 2015 10:07:48

Highest Channel / 5MHz / 16QAM

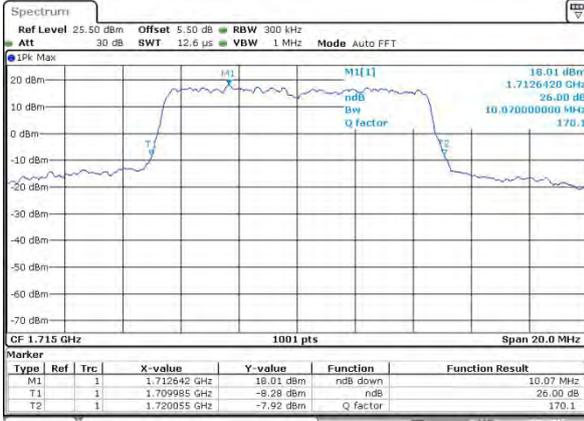


Date: 16 JAN 2015 10:08:01



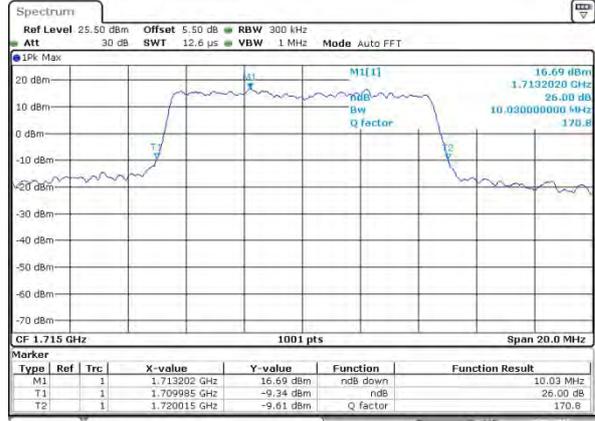
LTE Band 4

Lowest Channel / 10MHz / QPSK



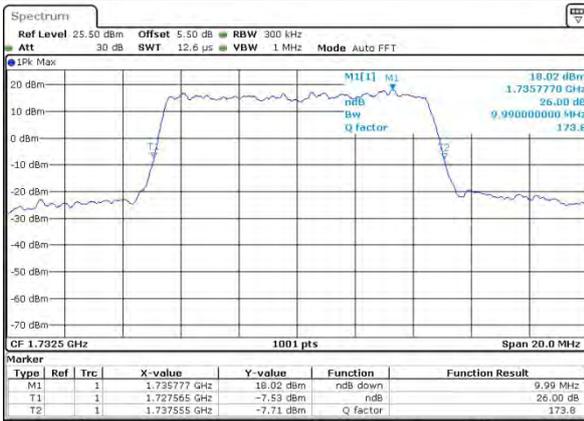
Date: 16 JAN 2015 10:11:08

Lowest Channel / 10MHz / 16QAM



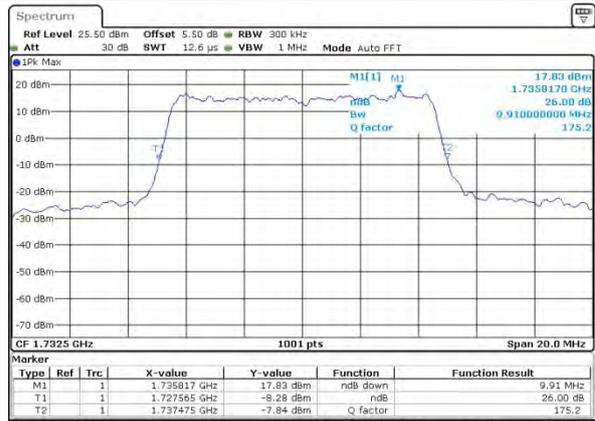
Date: 16 JAN 2015 10:11:21

Middle Channel / 10MHz / QPSK



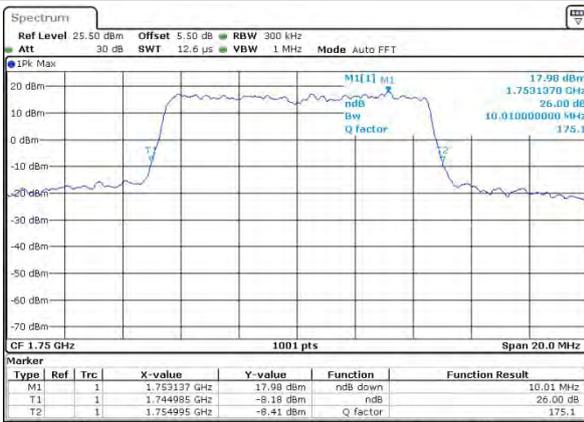
Date: 16 JAN 2015 10:14:28

Middle Channel / 10MHz / 16QAM



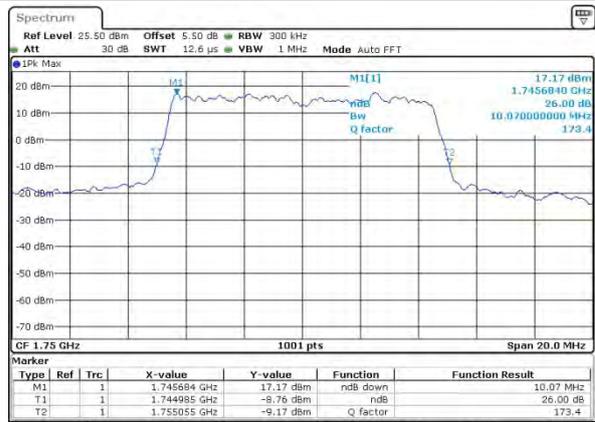
Date: 16 JAN 2015 10:14:41

Highest Channel / 10MHz / QPSK



Date: 16 JAN 2015 10:17:46

Highest Channel / 10MHz / 16QAM

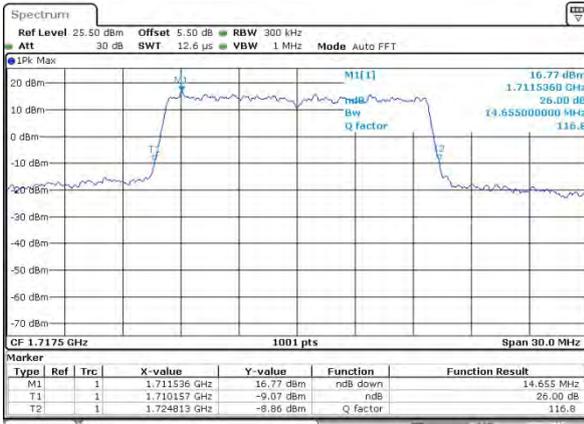


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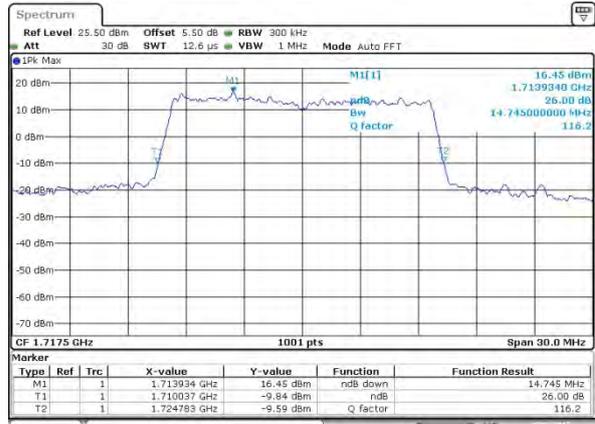
LTE Band 4

Lowest Channel / 15MHz / QPSK



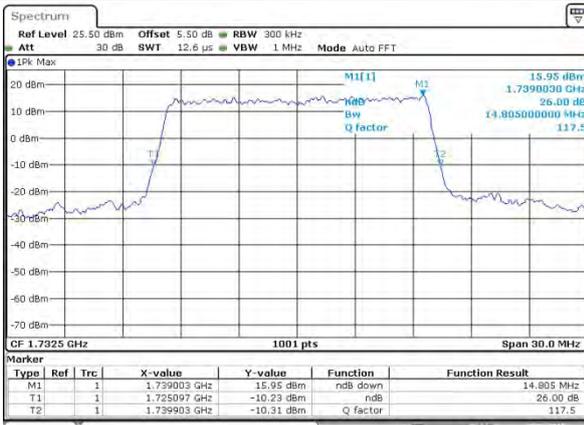
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Lowest Channel / 15MHz / 16QAM



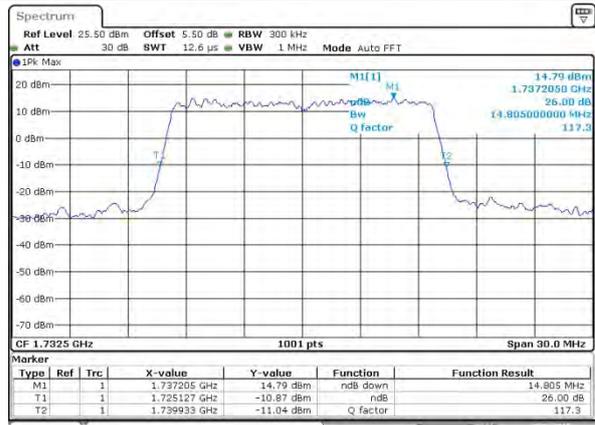
Date: 16 JAN 2015 10:21:21

Middle Channel / 15MHz / QPSK



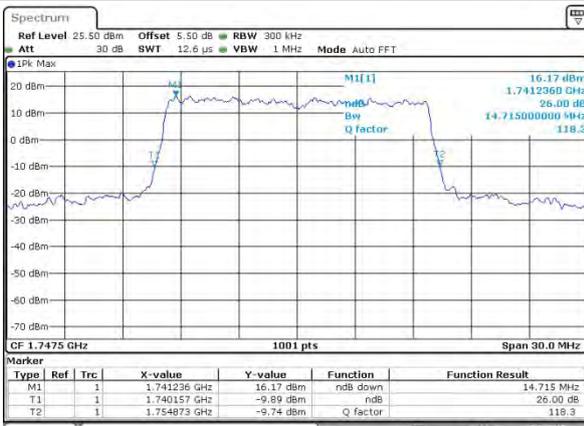
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Middle Channel / 15MHz / 16QAM



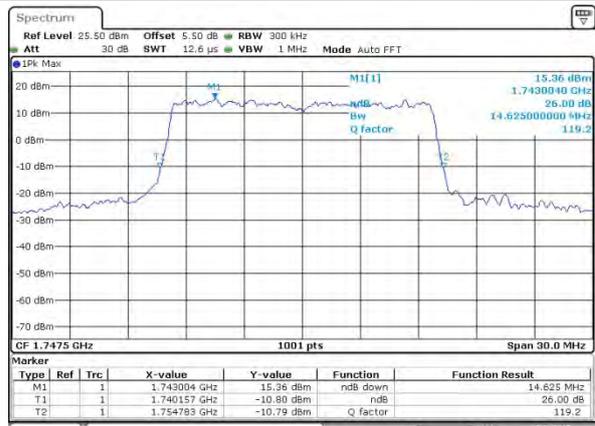
Date: 16 JAN 2015 10:24:41

Highest Channel / 15MHz / QPSK



Date: 16 JAN 2015 10:27:50

Highest Channel / 15MHz / 16QAM

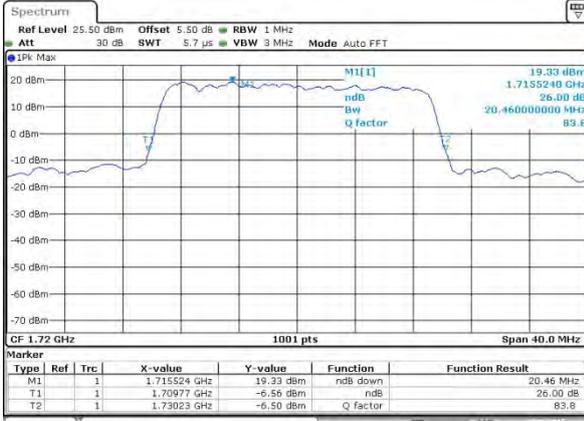


Date: 16 JAN 2015 10:28:02



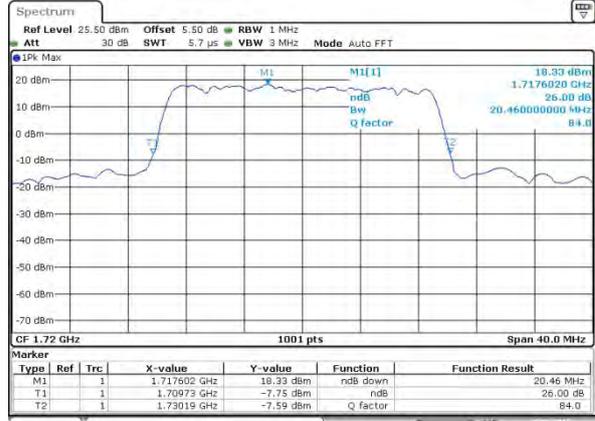
LTE Band 4

Lowest Channel / 20MHz / QPSK



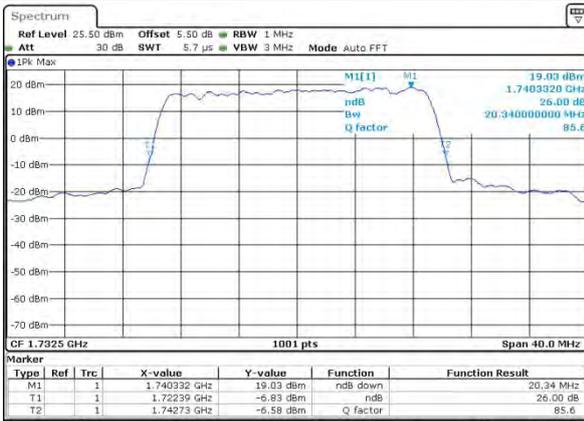
Date: 16 JAN 2015 10:31:10

Lowest Channel / 20MHz / 16QAM



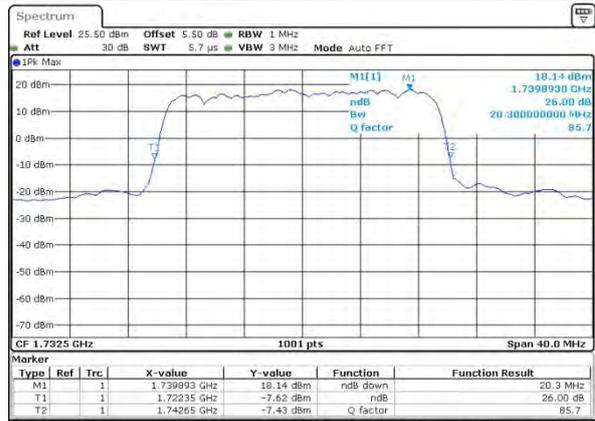
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Middle Channel / 20MHz / QPSK



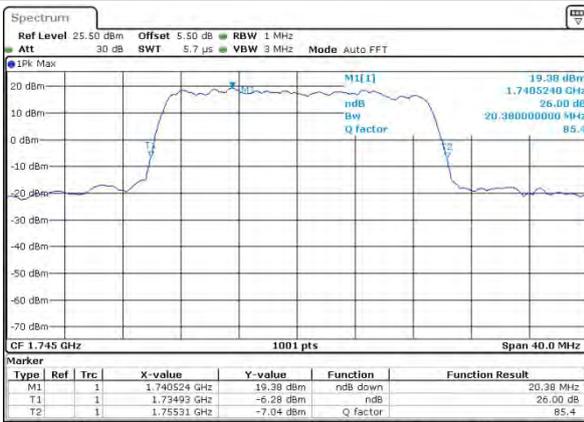
Date: 16 JAN 2015 10:34:30

Middle Channel / 20MHz / 16QAM



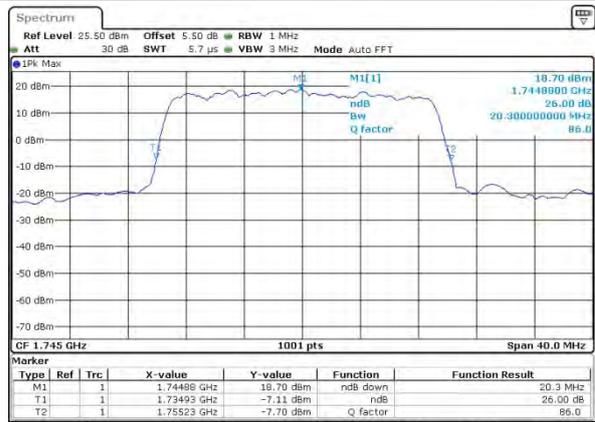
Date: 16 JAN 2015 10:34:42

Highest Channel / 20MHz / QPSK



Date: 16 JAN 2015 10:37:51

Highest Channel / 20MHz / 16QAM



Date: 16 JAN 2015 10:38:02



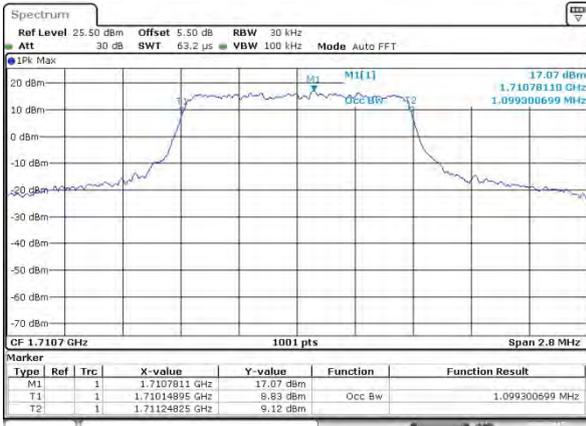
### Occupied Bandwidth

Mode	LTE Band 4 : 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	1.1	1.1	2.72	2.73	4.52	4.51	9.05	9.05	13.49	13.46	18.46	18.5
Middle CH	1.1	1.09	2.74	2.73	4.5	4.5	9.07	9.01	13.43	13.49	18.30	18.42
Highest CH	1.1	1.1	2.73	2.72	4.51	4.51	9.09	9.03	13.46	13.43	18.34	18.22



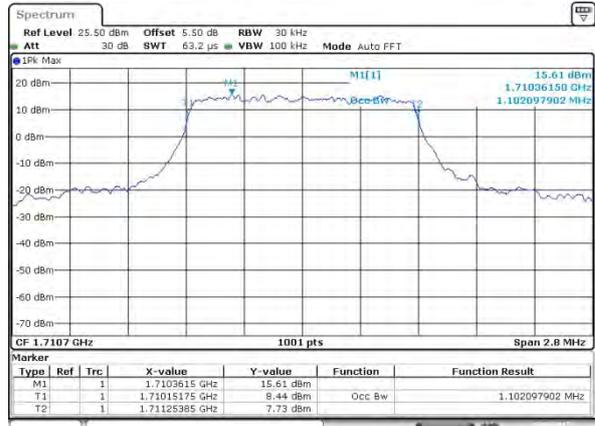
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



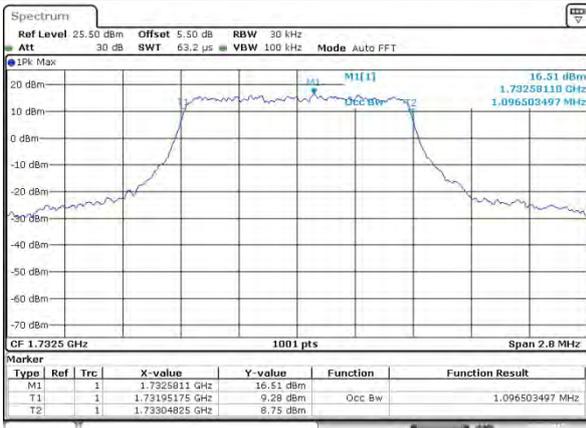
Date: 16 JAN 2015 10:51:08

Lowest Channel / 1.4MHz / 16QAM



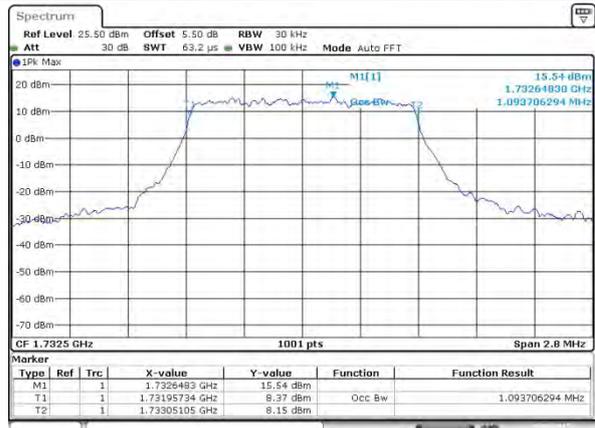
Date: 16 JAN 2015 09:40:55

Middle Channel / 1.4MHz / QPSK



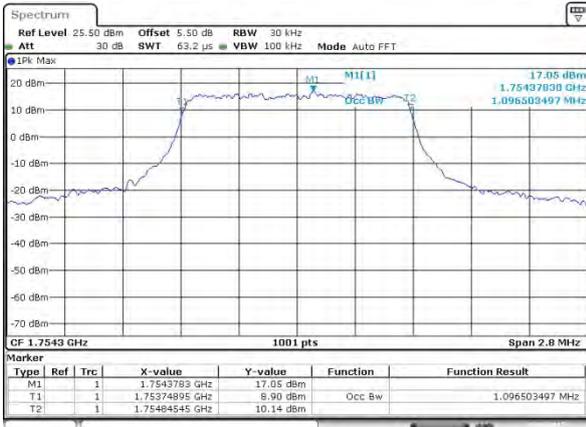
Date: 16 JAN 2015 09:44:08

Middle Channel / 1.4MHz / 16QAM



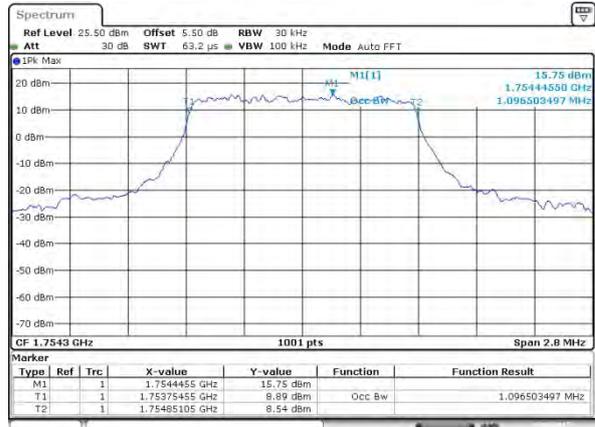
Date: 16 JAN 2015 09:44:15

Highest Channel / 1.4MHz / QPSK



Date: 16 JAN 2015 09:47:26

Highest Channel / 1.4MHz / 16QAM

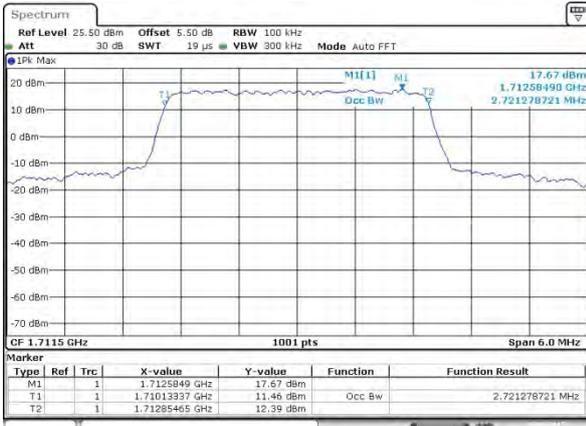


Date: 16 JAN 2015 09:47:36



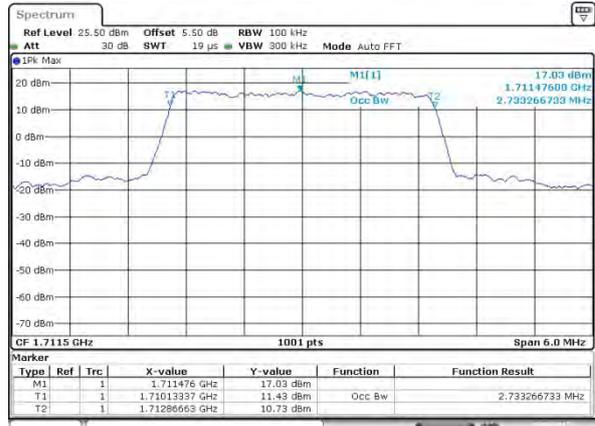
LTE Band 4

Lowest Channel / 3MHz / QPSK



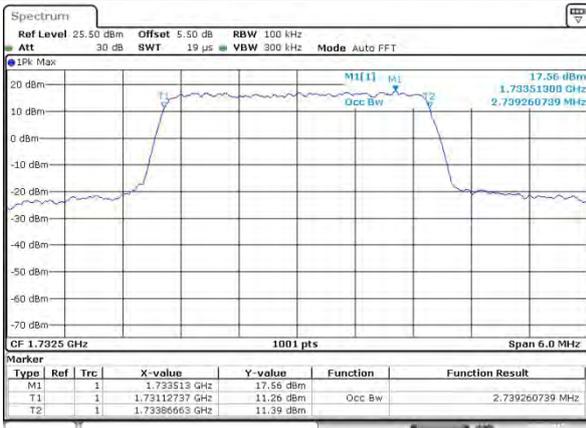
Date: 16 JAN 2015 09:50:48

Lowest Channel / 3MHz / 16QAM



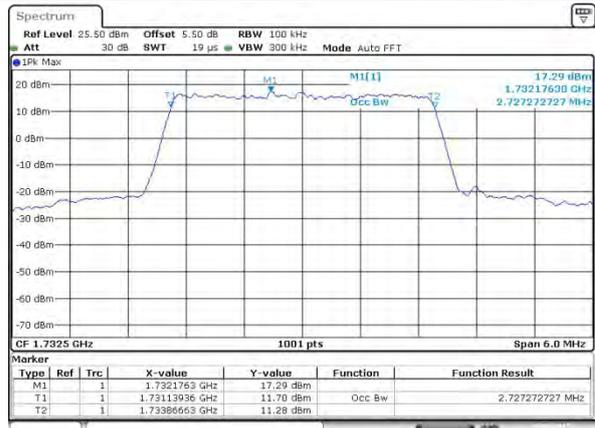
Date: 16 JAN 2015 09:50:56

Middle Channel / 3MHz / QPSK



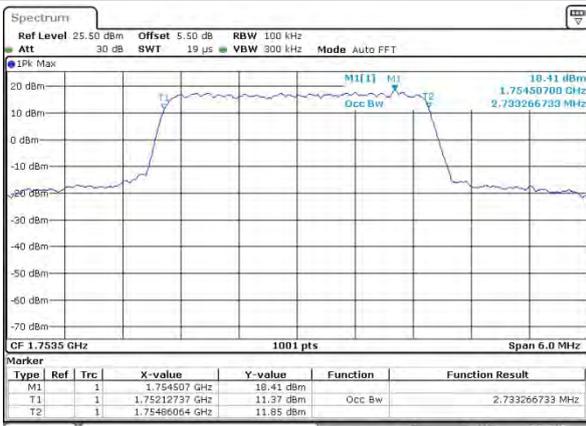
Date: 16 JAN 2015 09:54:08

Middle Channel / 3MHz / 16QAM



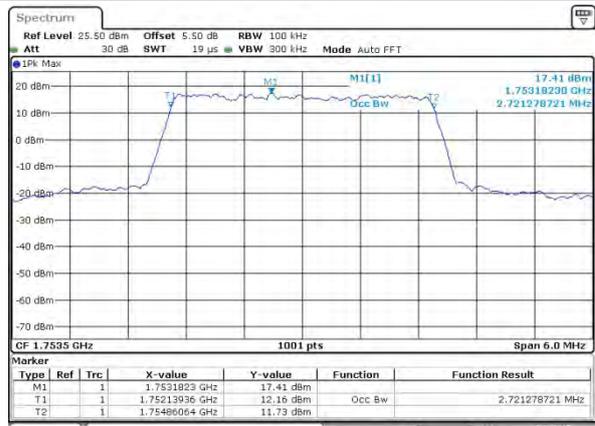
Date: 16 JAN 2015 09:54:16

Highest Channel / 3MHz / QPSK



Date: 16 JAN 2015 09:57:26

Highest Channel / 3MHz / 16QAM

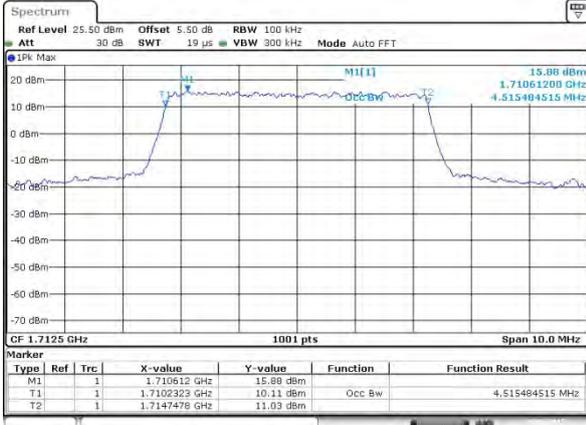


Date: 16 JAN 2015 09:57:36



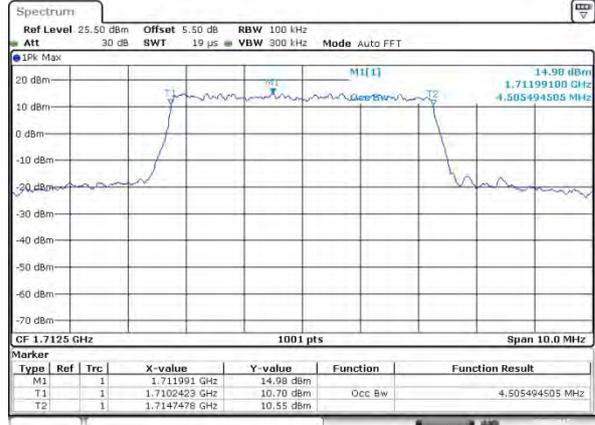
LTE Band 4

Lowest Channel / 5MHz / QPSK



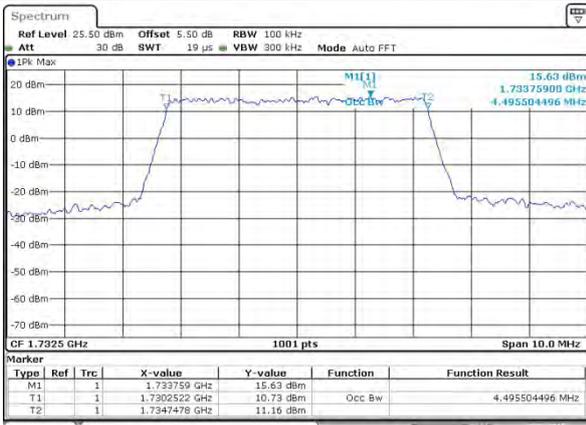
Date: 16 JAN 2015 10:00:47

Lowest Channel / 5MHz / 16QAM



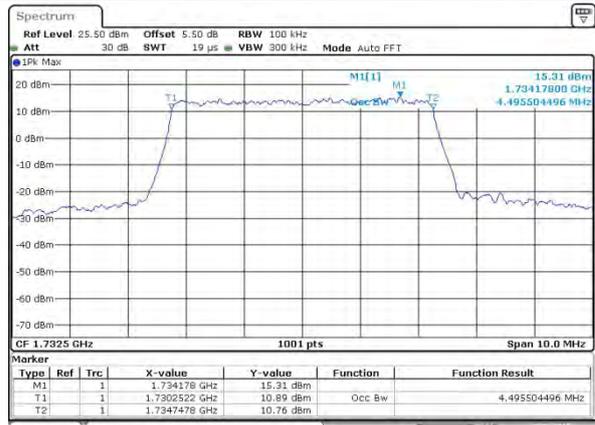
Date: 16 JAN 2015 10:00:56

Middle Channel / 5MHz / QPSK



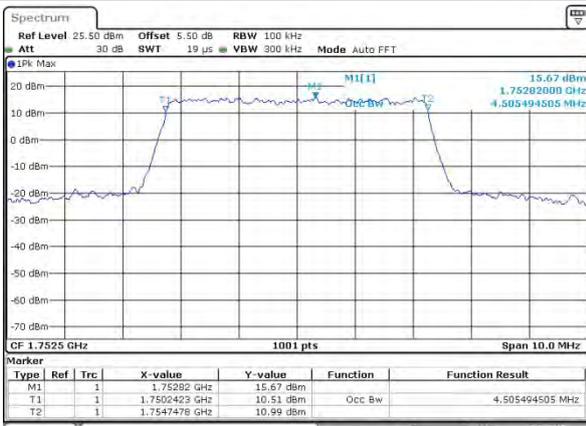
Date: 16 JAN 2015 10:04:07

Middle Channel / 5MHz / 16QAM



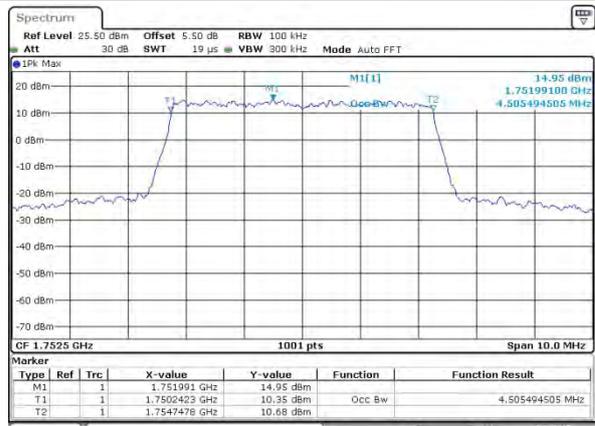
Date: 16 JAN 2015 10:04:16

Highest Channel / 5MHz / QPSK



Date: 16 JAN 2015 10:07:27

Highest Channel / 5MHz / 16QAM

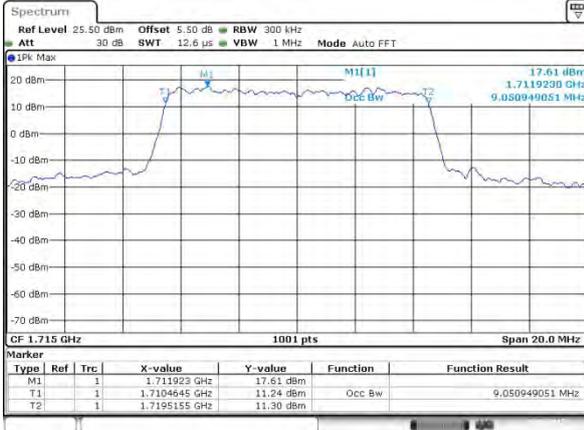


Date: 16 JAN 2015 10:07:37



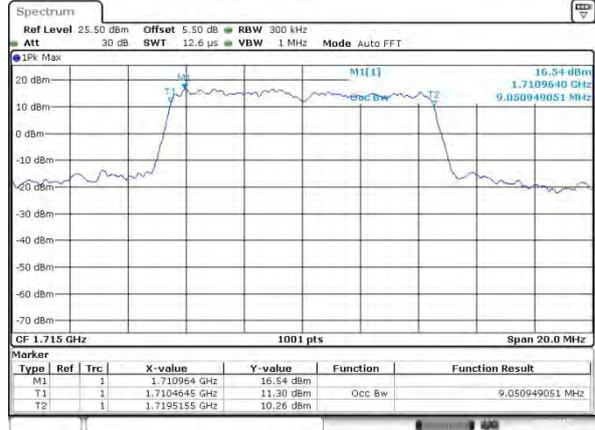
LTE Band 4

Lowest Channel / 10MHz / QPSK



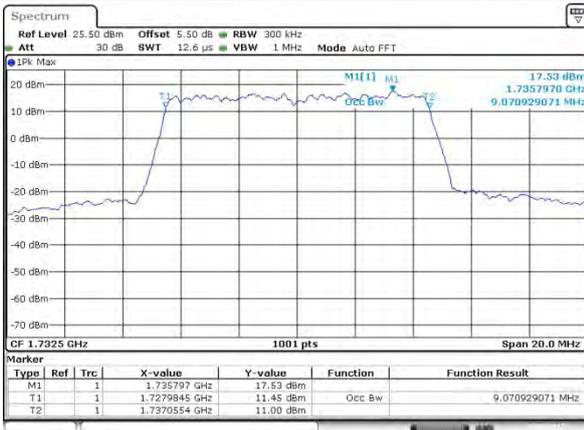
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Lowest Channel / 10MHz / 16QAM



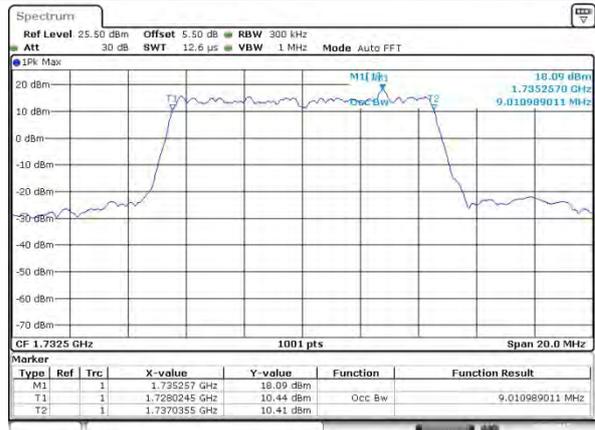
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Middle Channel / 10MHz / QPSK



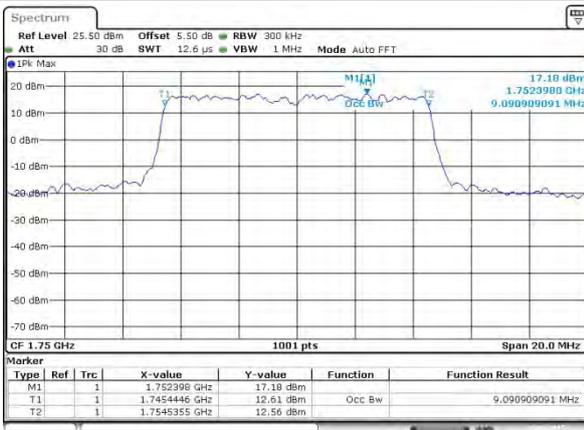
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Middle Channel / 10MHz / 16QAM



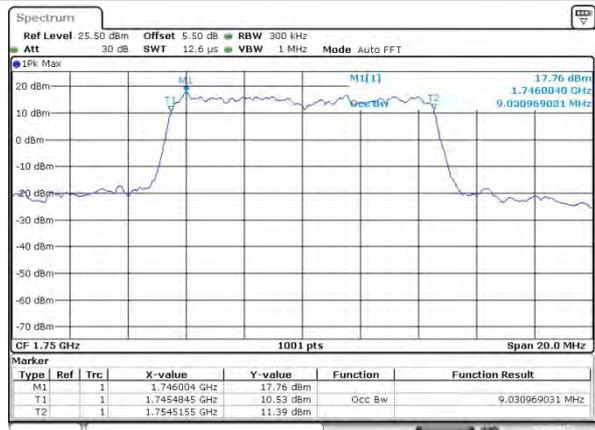
Date: 16 JAN 2015 10:14:17

Highest Channel / 10MHz / QPSK



Date: 16 JAN 2015 10:17:28

Highest Channel / 10MHz / 16QAM

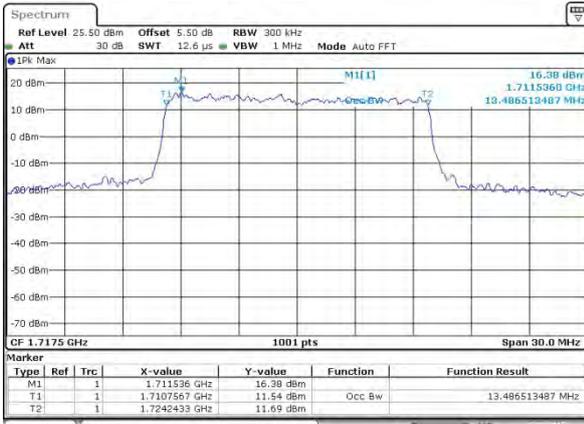


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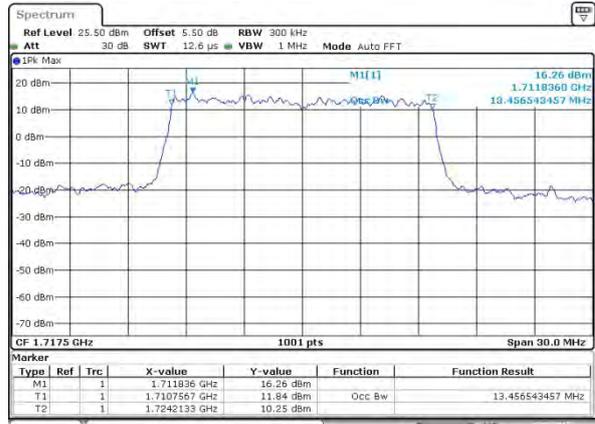


LTE Band 4

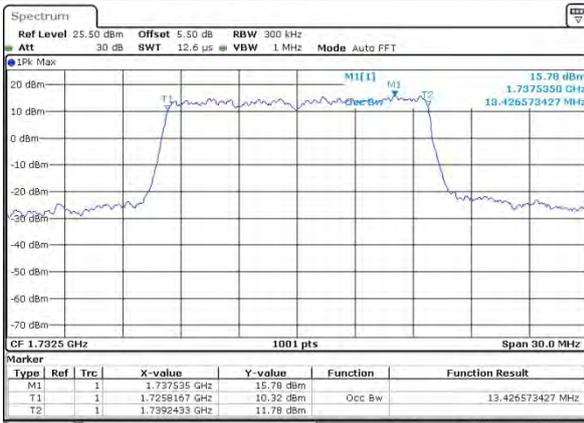
Lowest Channel / 15MHz / QPSK



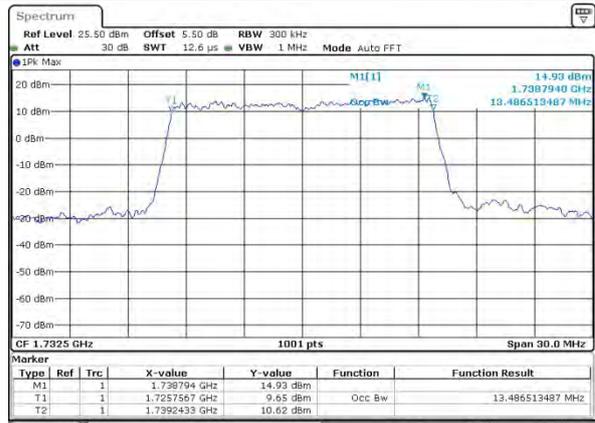
Lowest Channel / 15MHz / 16QAM



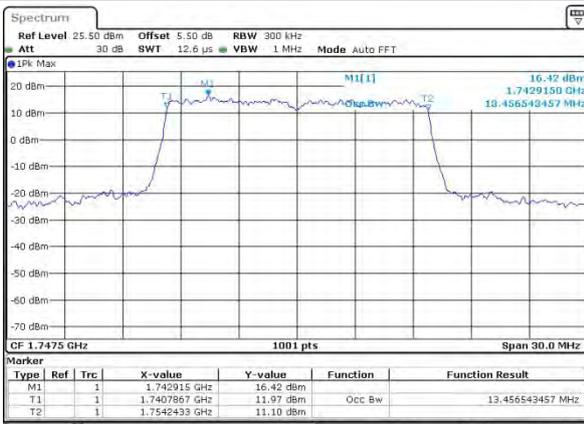
Middle Channel / 15MHz / QPSK



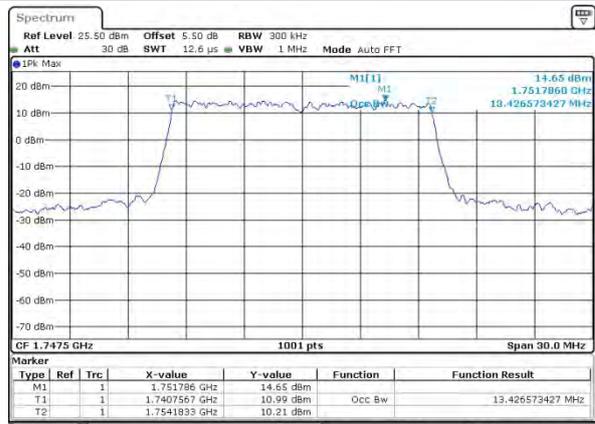
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



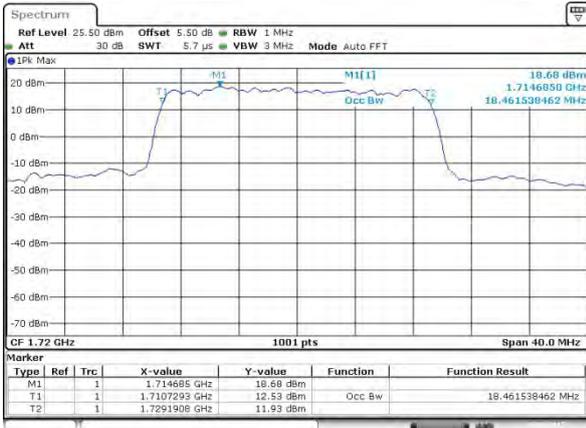
Highest Channel / 15MHz / 16QAM





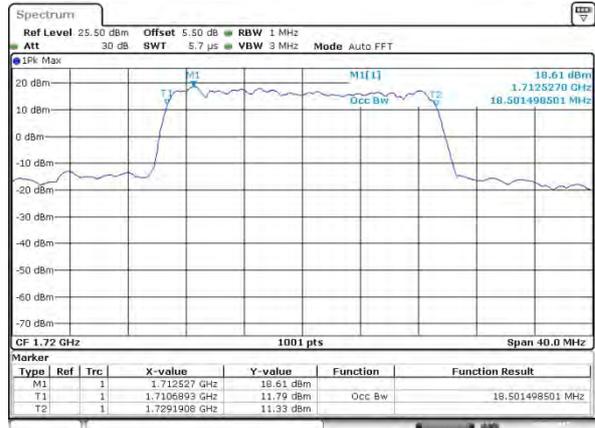
LTE Band 4

Lowest Channel / 20MHz / QPSK



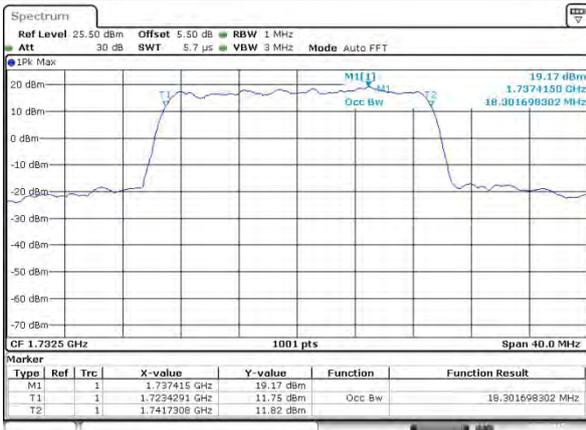
Date: 16 JAN 2015 10:30:48

Lowest Channel / 20MHz / 16QAM



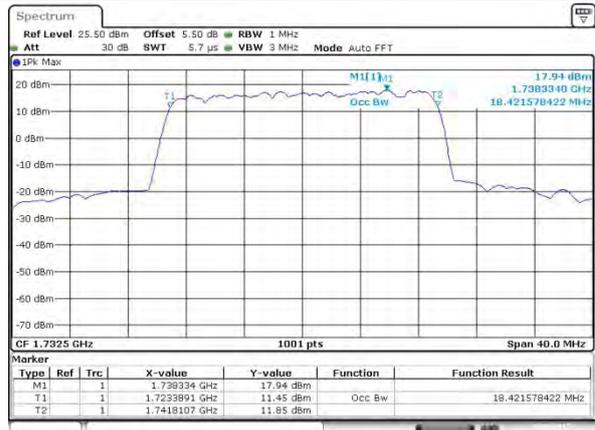
Date: 16 JAN 2015 10:30:58

Middle Channel / 20MHz / QPSK



Date: 16 JAN 2015 10:34:08

Middle Channel / 20MHz / 16QAM



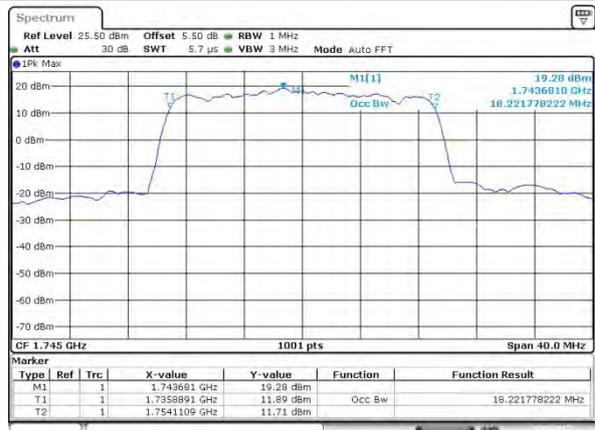
Date: 16 JAN 2015 10:34:18

Highest Channel / 20MHz / QPSK



Date: 16 JAN 2015 10:37:28

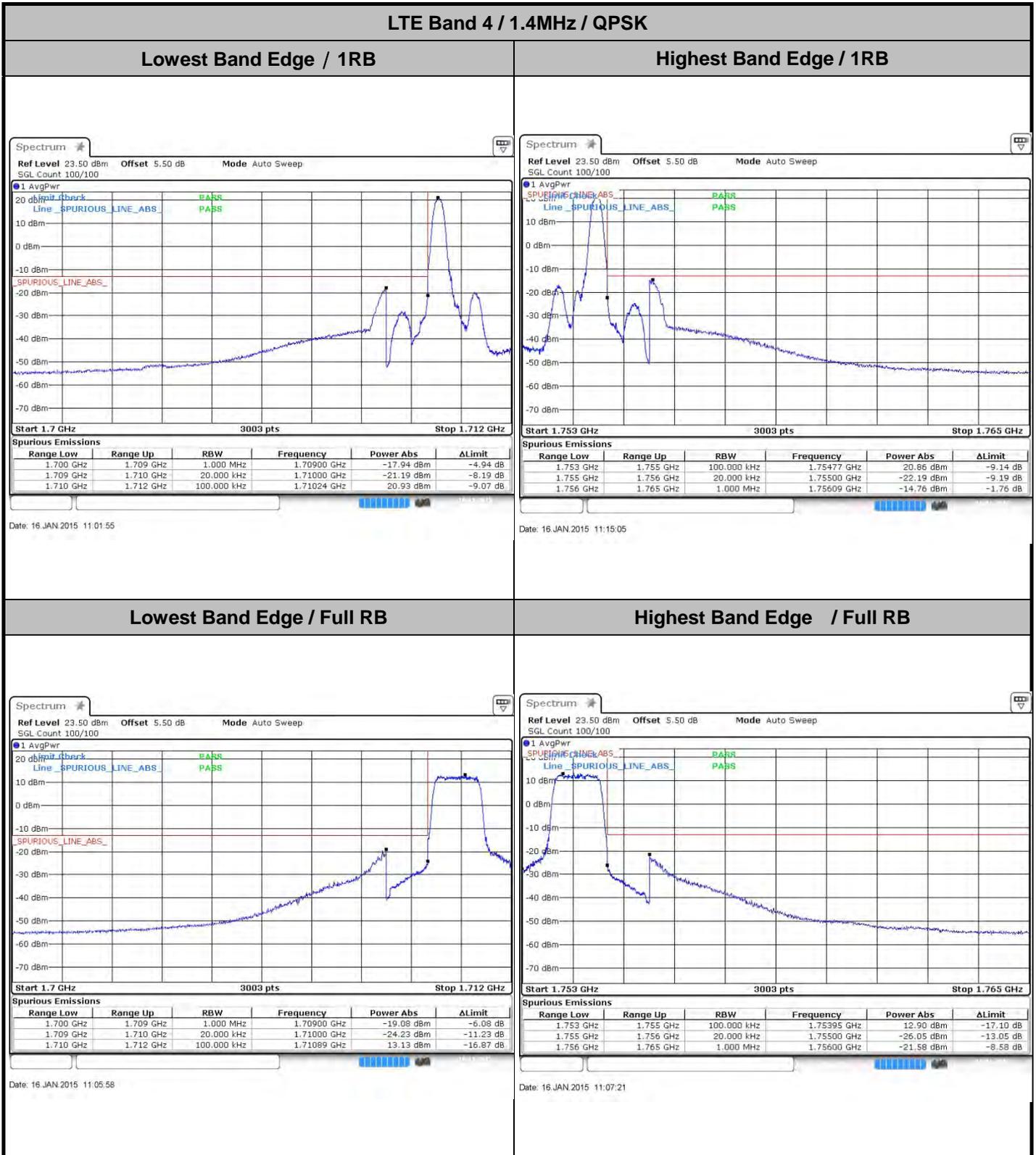
Highest Channel / 20MHz / 16QAM



Date: 16 JAN 2015 10:37:39



# Conducted Band Edge





LTE Band 4 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Date: 16 JAN 2015 11:03:16



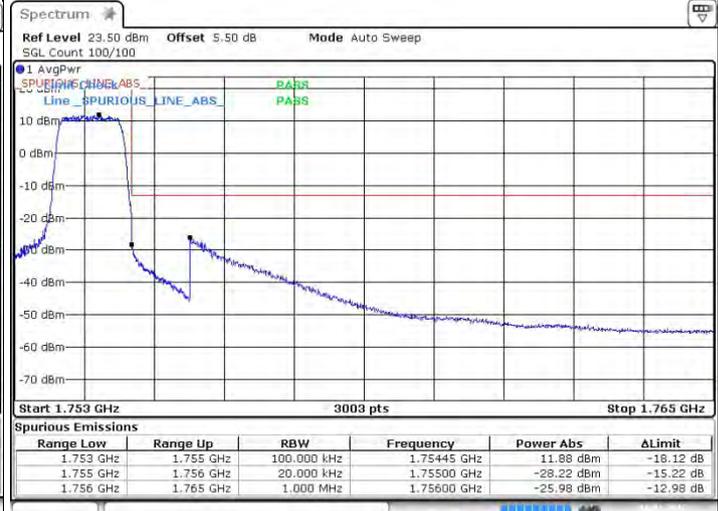
Date: 16 JAN 2015 11:12:33

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:04:46



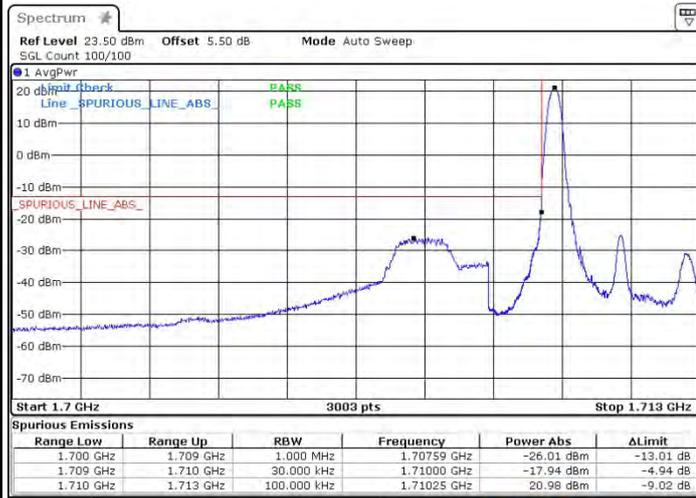
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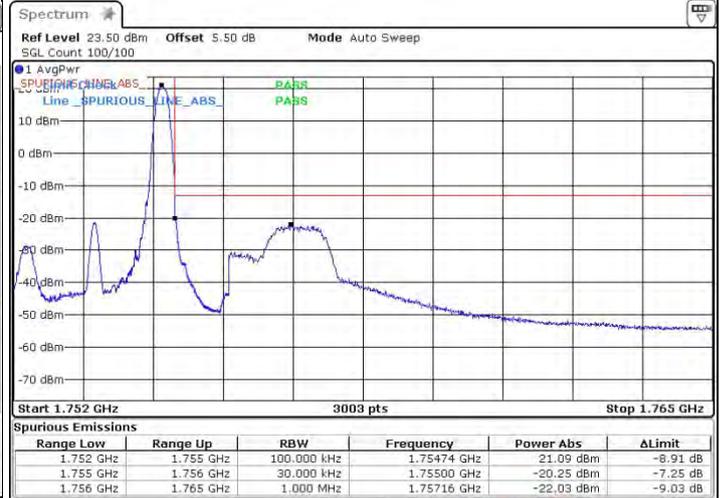
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



Date: 16 JAN 2015 11:19:19



Date: 16 JAN 2015 11:27:49

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:24:16



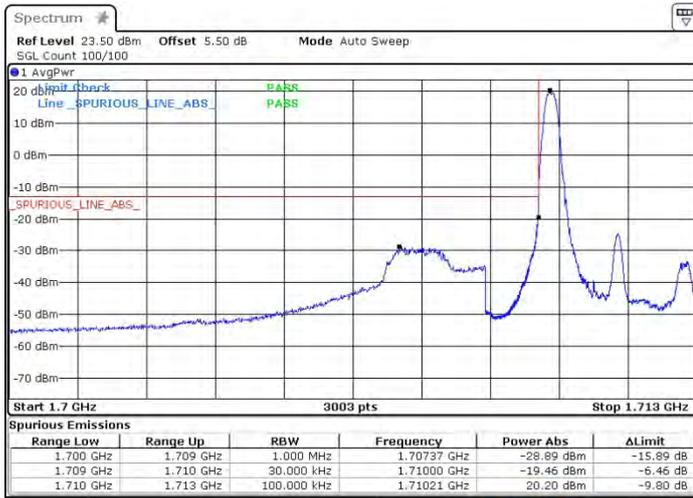
Date: 16 JAN 2015 11:24:58



LTE Band 4 / 3MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Date: 16 JAN 2015 11:22:16



Date: 16 JAN 2015 11:26:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:23:27



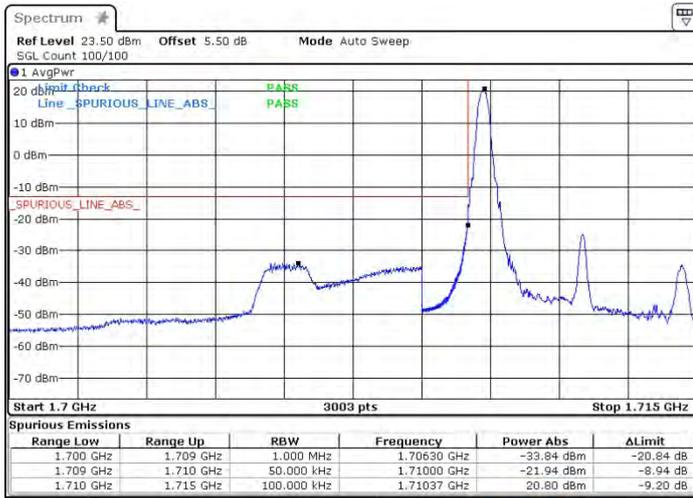
Date: 16 JAN 2015 11:25:44



LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Date: 16 JAN 2015 11:28:29



Date: 16 JAN 2015 11:32:41

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:30:10



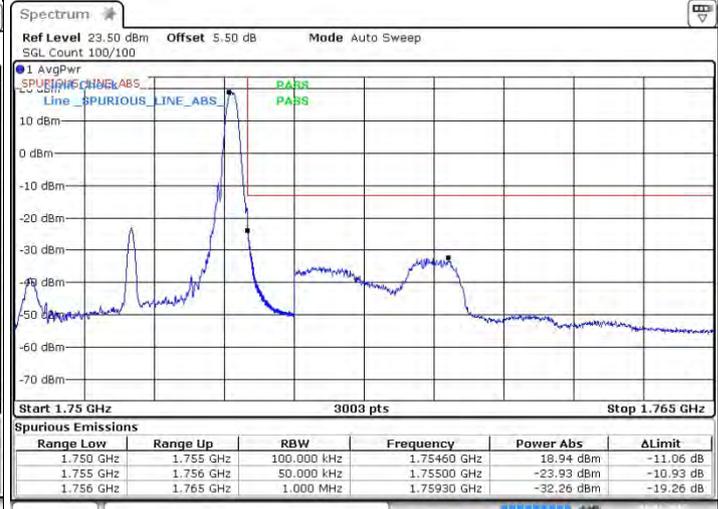
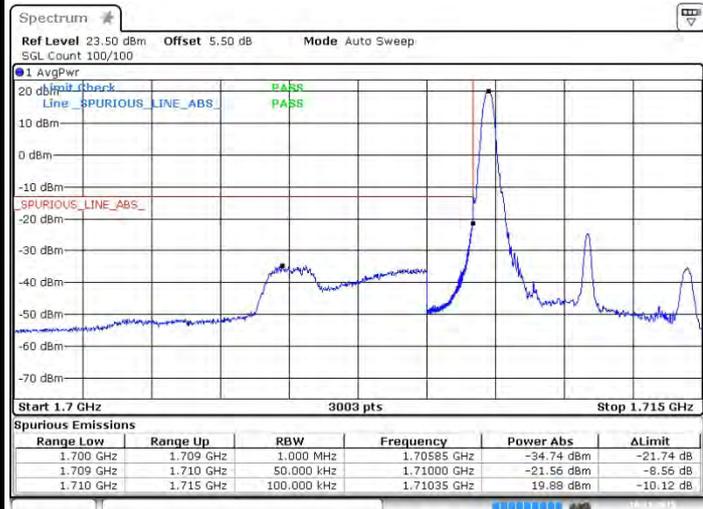
Date: 16 JAN 2015 11:30:48



LTE Band 4 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

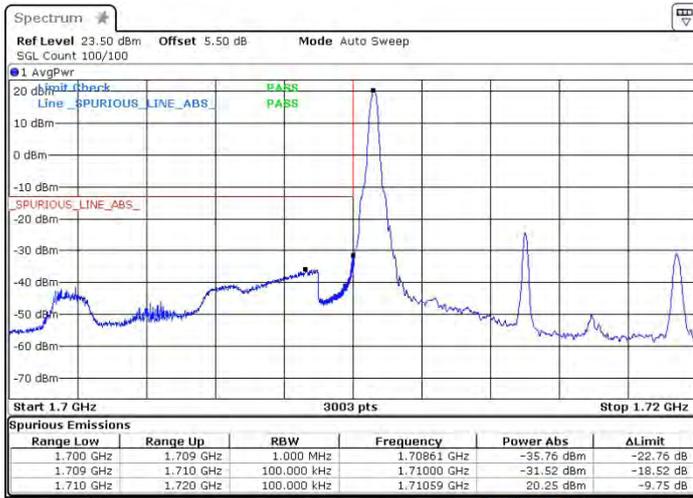




LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



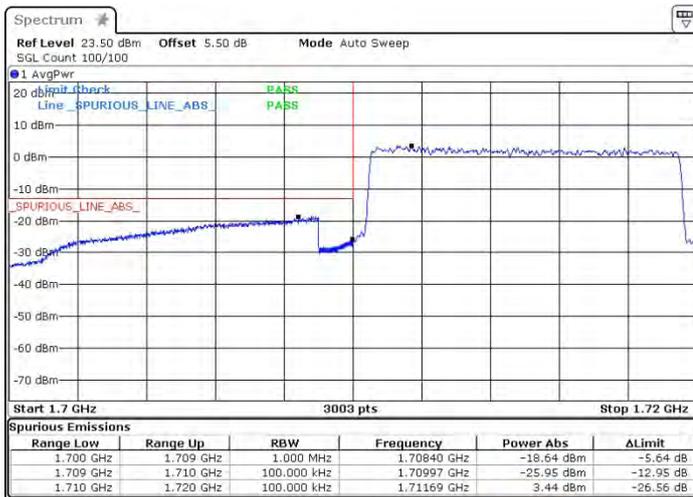
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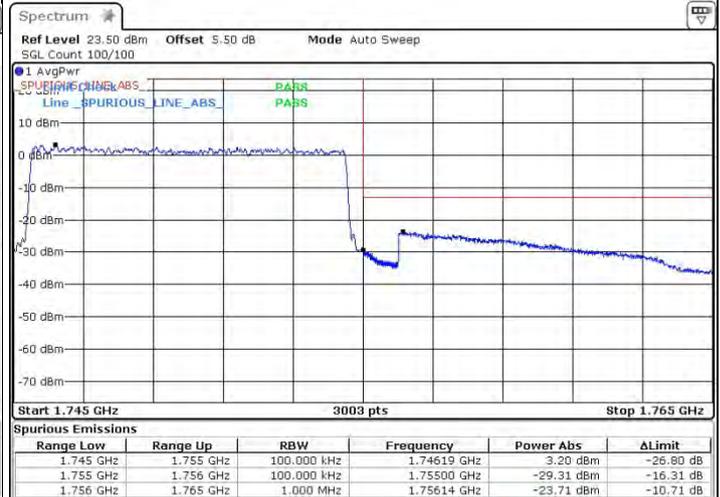
Date: 16 JAN 2015 11:36:20

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:34:40



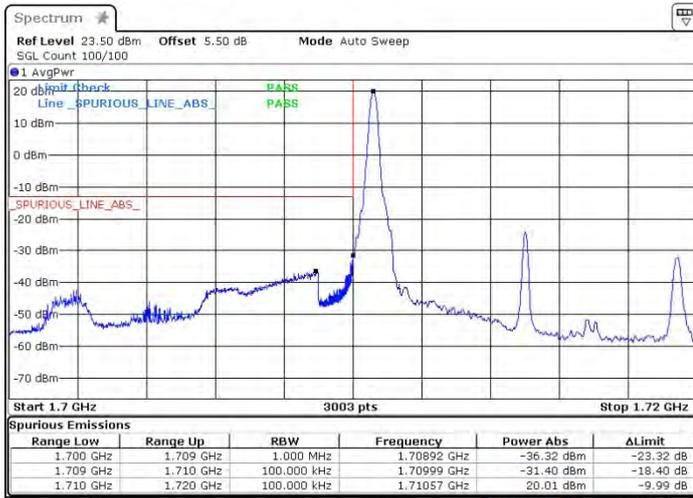
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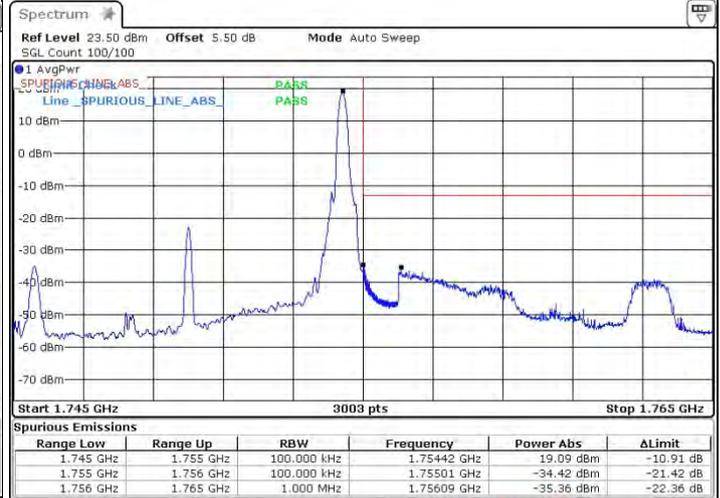
LTE Band 4 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



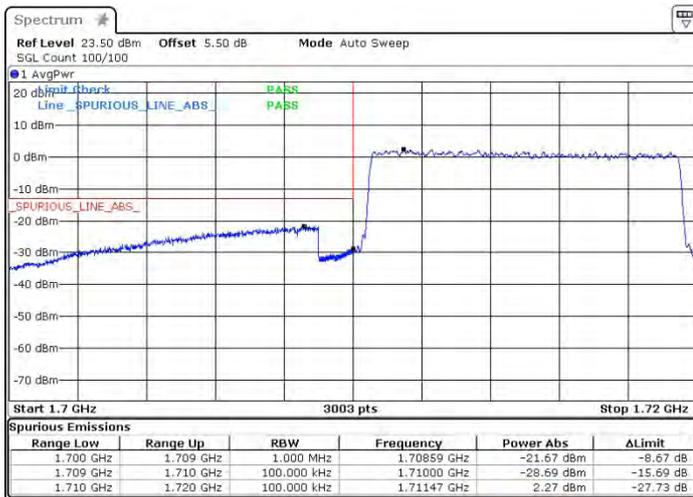
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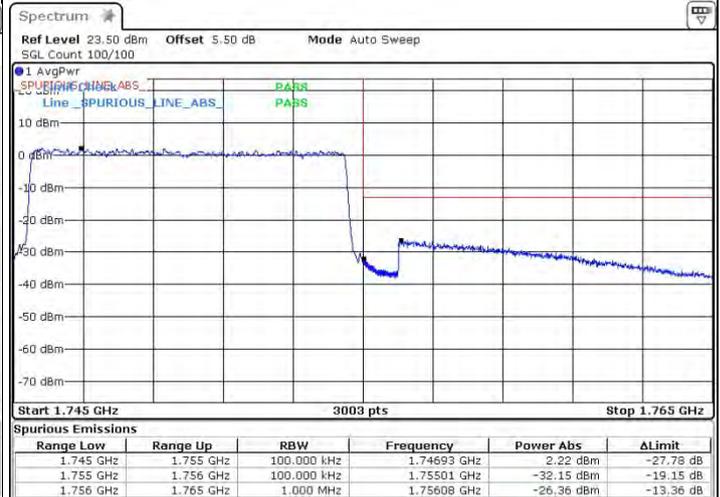
Date: 16 JAN 2015 11:35:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:34:14



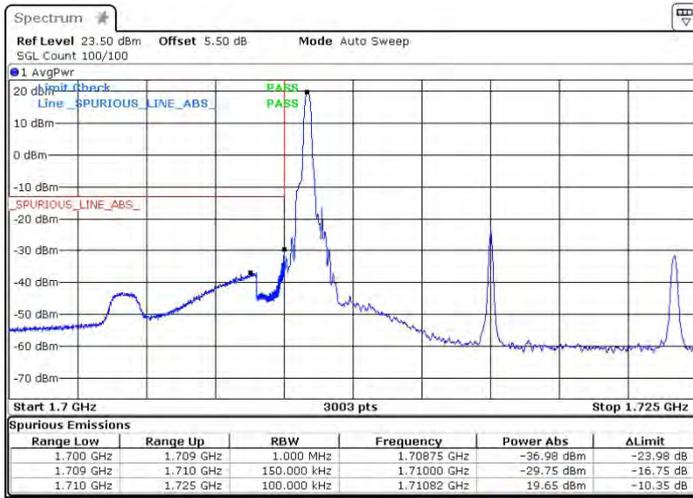
Date: 16 JAN 2015 11:35:38



LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



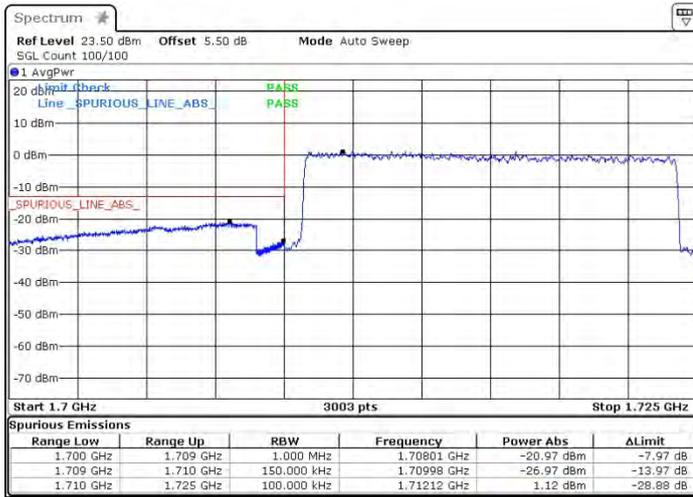
Date: 16 JAN 2015 11:37:07



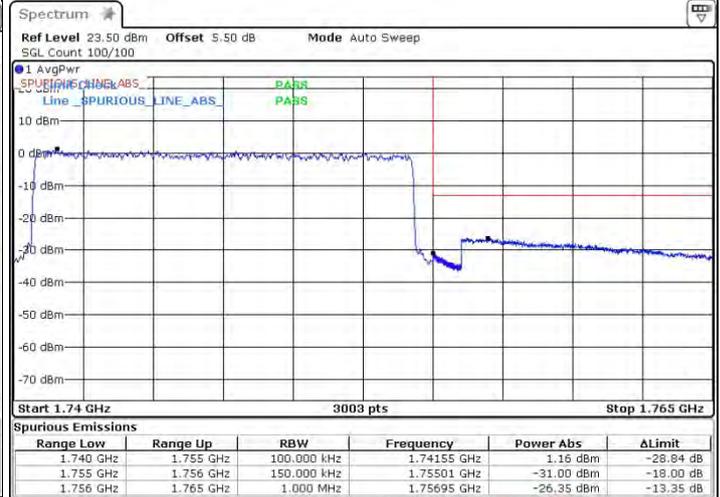
Date: 16 JAN 2015 11:39:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:38:10



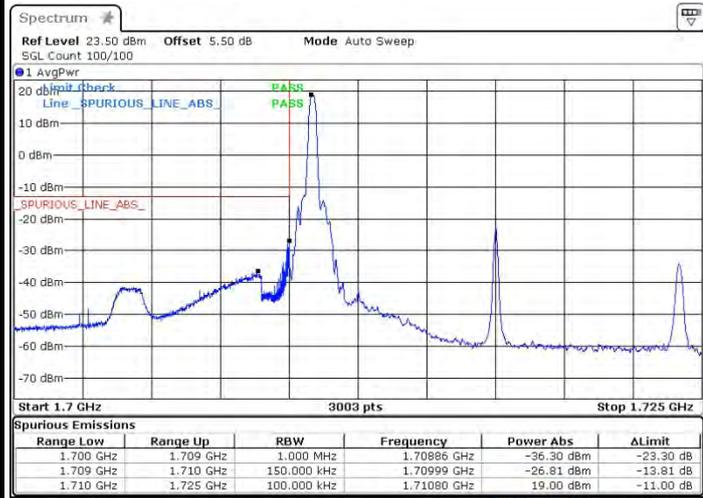
Date: 16 JAN 2015 11:38:37



LTE Band 4 / 15MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

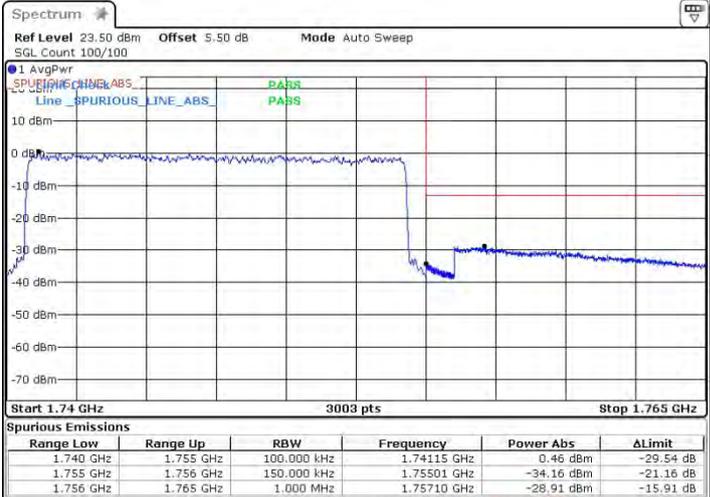
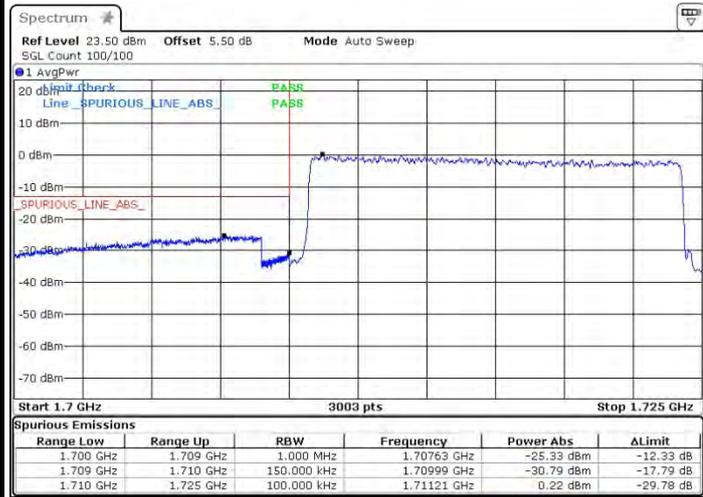


Date: 16 JAN 2015 11:37:25

Date: 16 JAN 2015 11:39:13

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:37:46

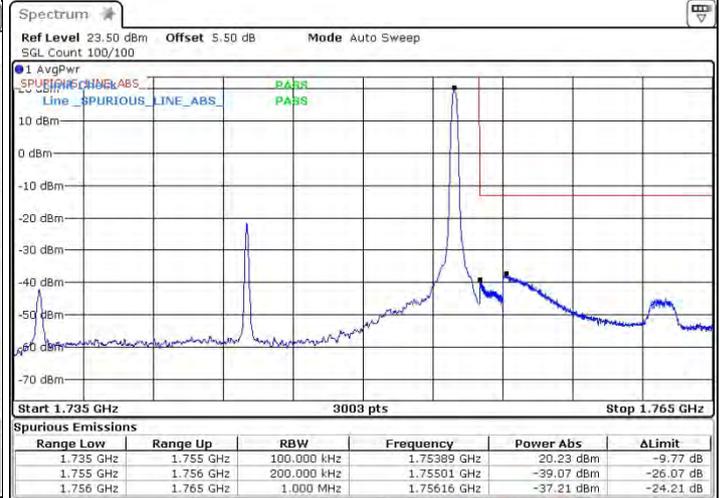
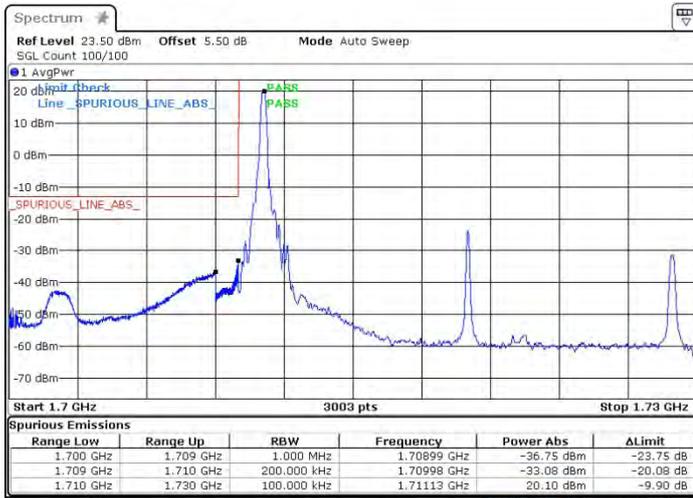
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LTE Band 4 / 20MHz / QPSK

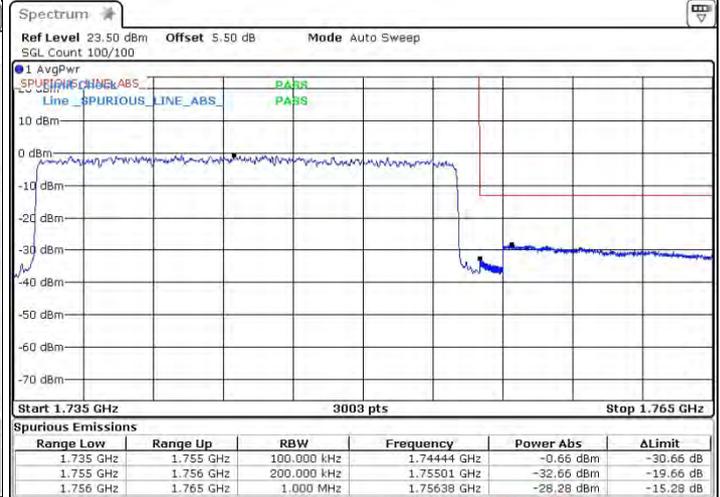
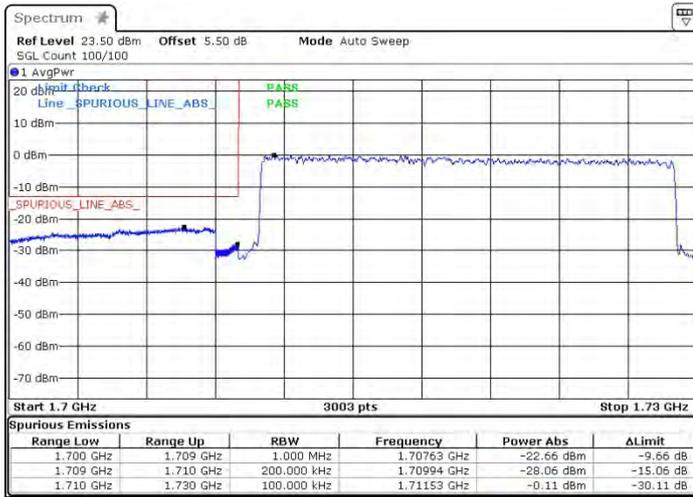
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

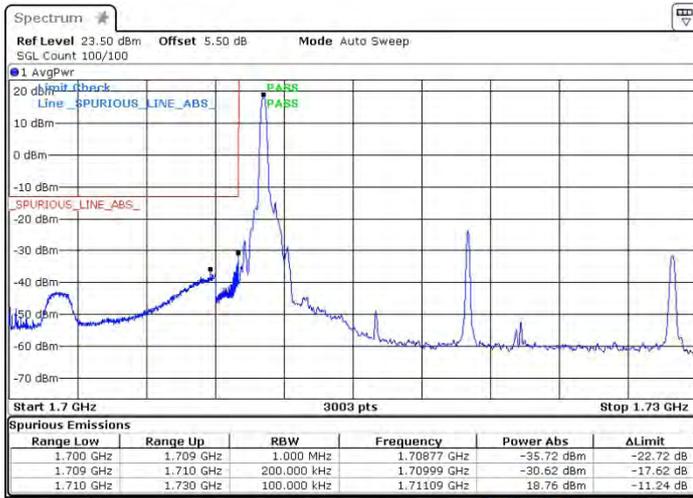




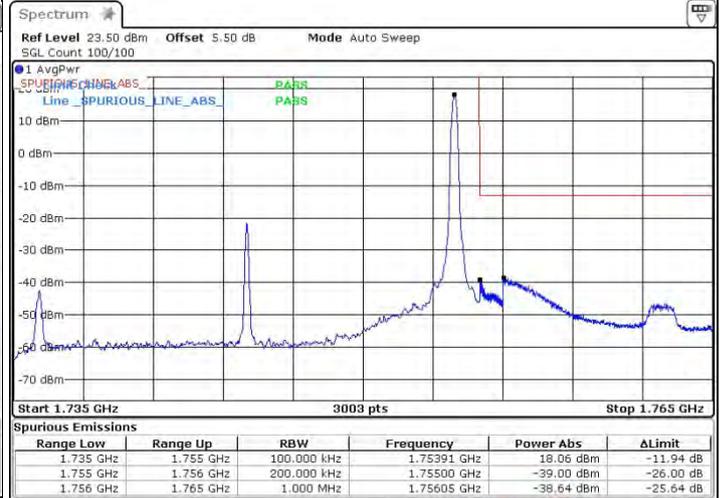
LTE Band 4 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



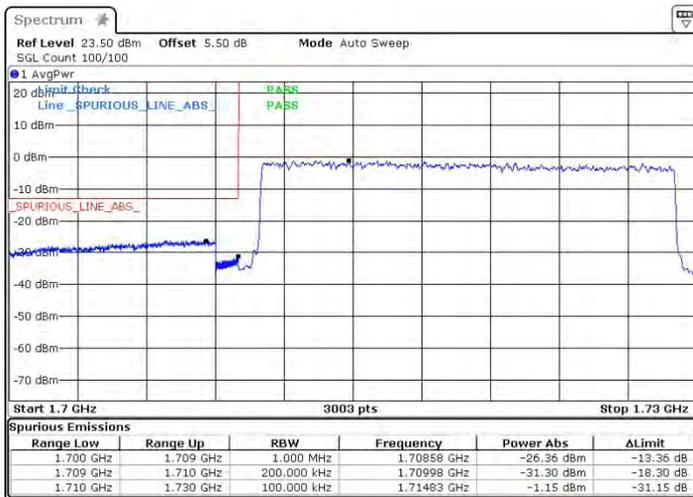
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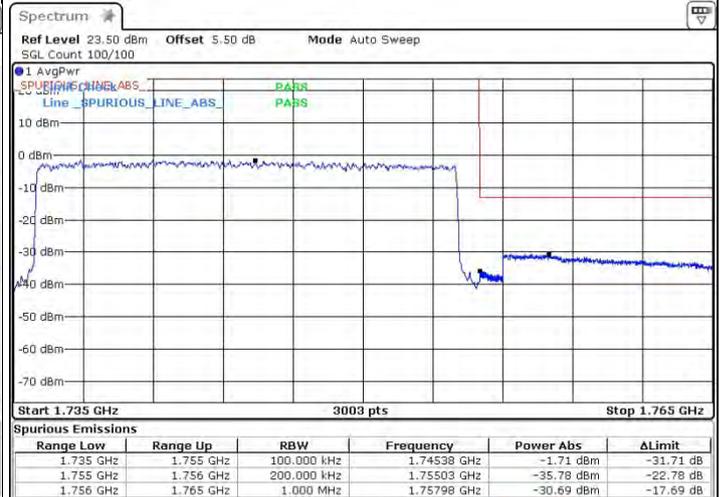
Date: 16 JAN 2015 11:44:18

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16 JAN 2015 11:42:37



Date: 16 JAN 2015 11:44:00



# Conducted Spurious Emission

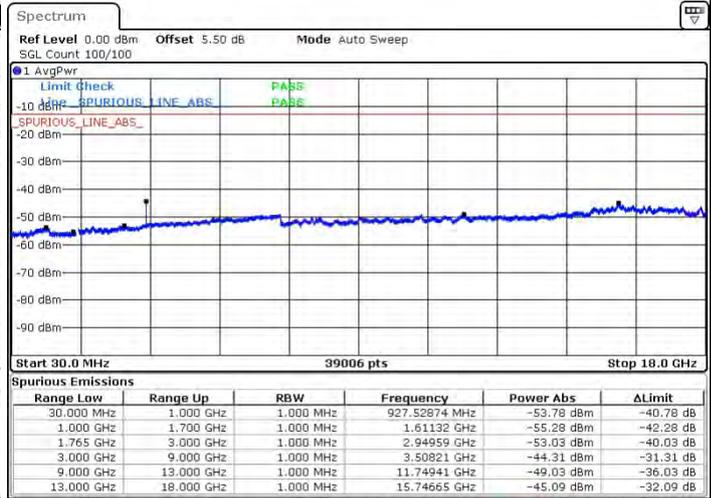
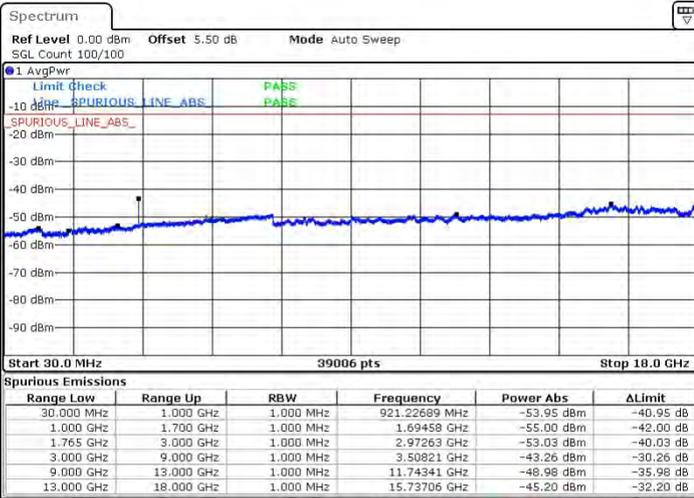




LTE Band 4 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



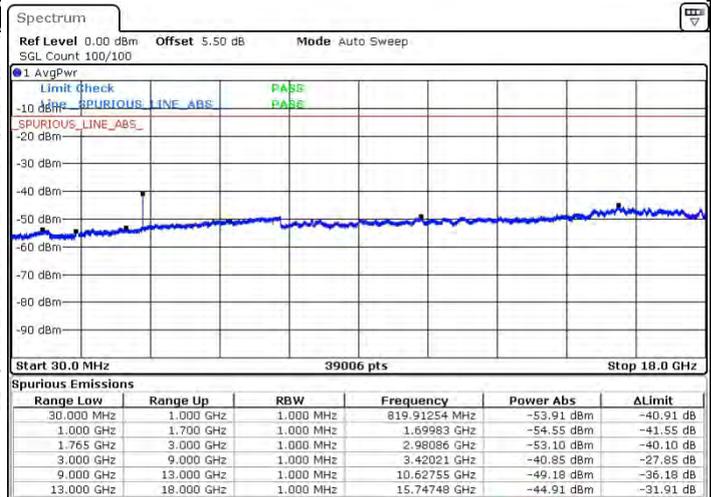
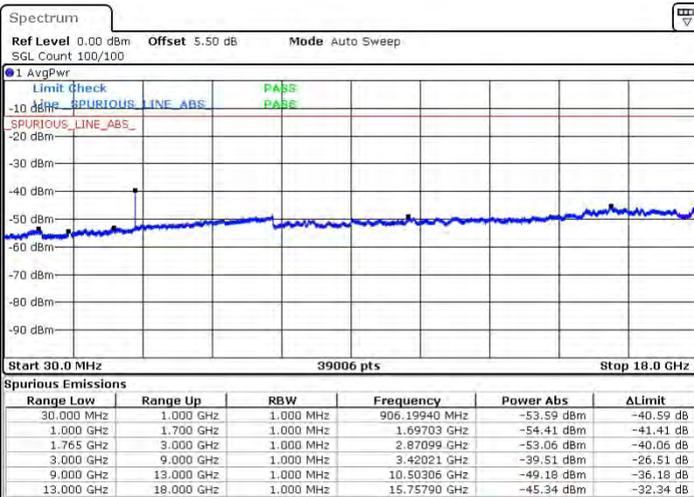
Date: 16 JAN 2015 09:49:07

Date: 16 JAN 2015 09:50:26

LTE Band 4 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 16 JAN 2015 09:52:27

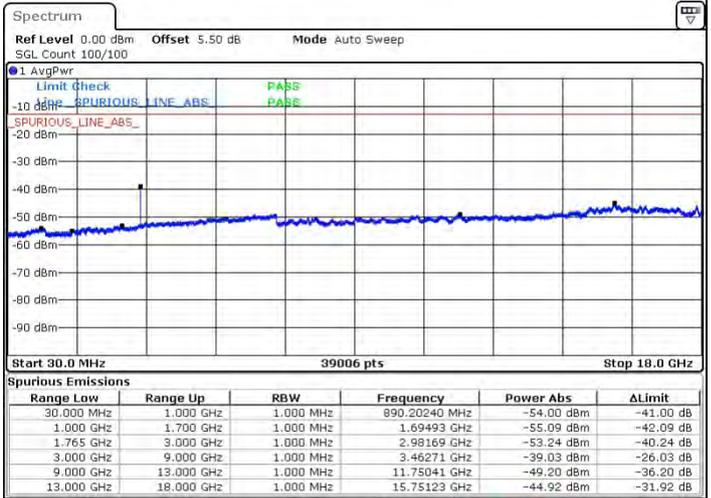
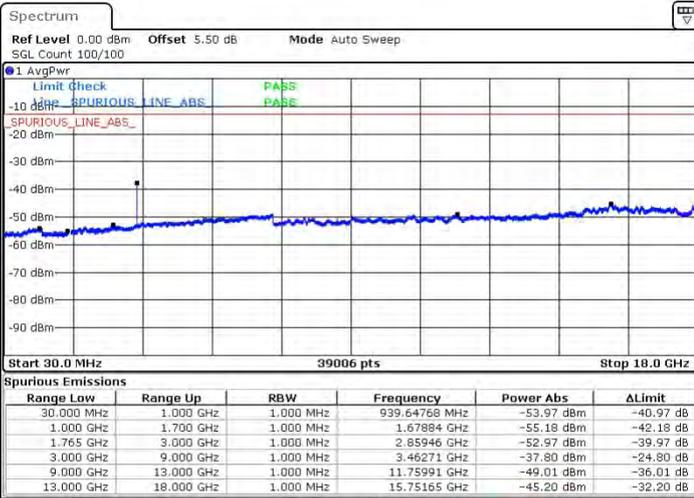
Date: 16 JAN 2015 09:53:46



LTE Band 4 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

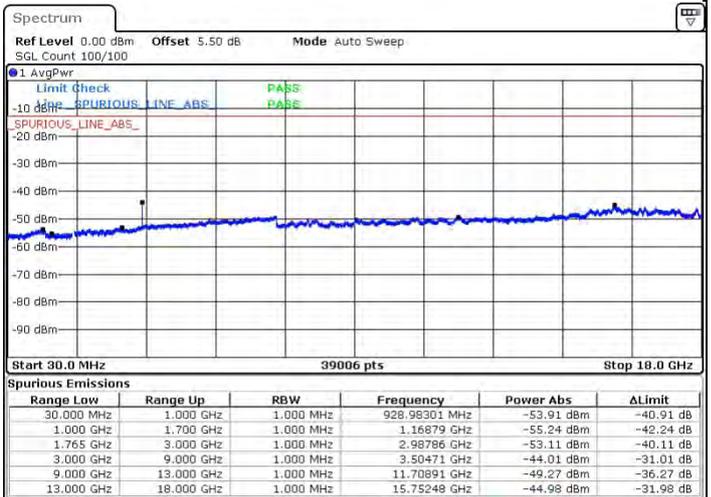
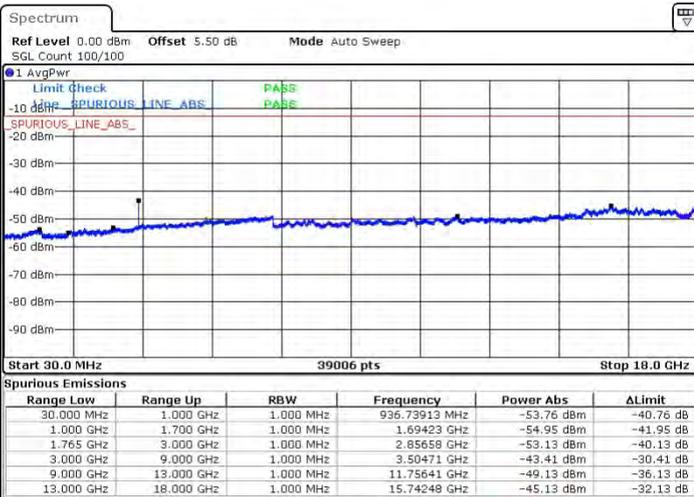


Date: 16 JAN 2015 09:55:48

Date: 16 JAN 2015 09:57:06

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16 JAN 2015 09:59:08

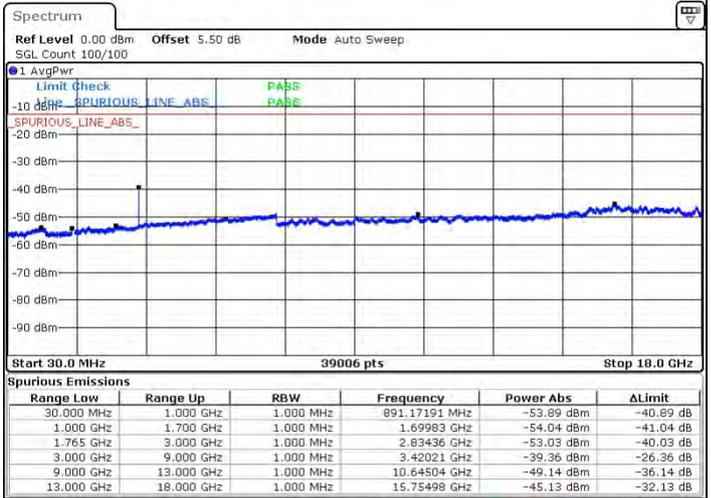
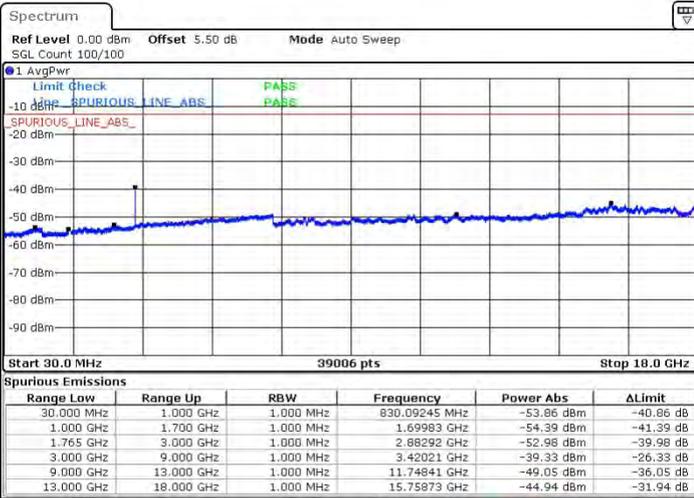
Date: 16 JAN 2015 10:00:26



LTE Band 4 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

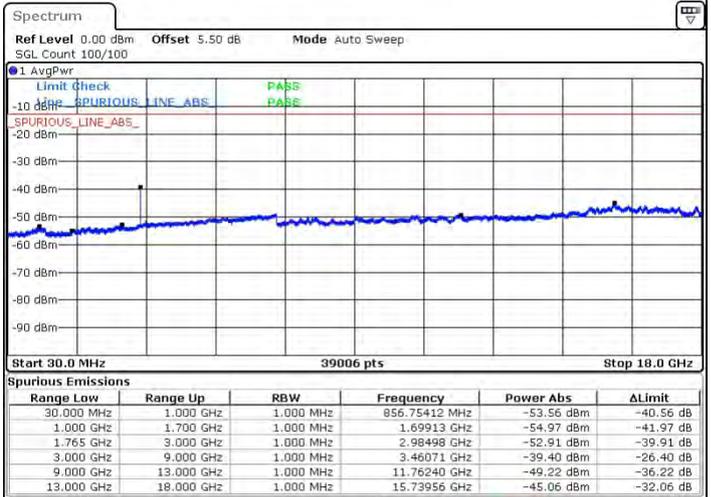
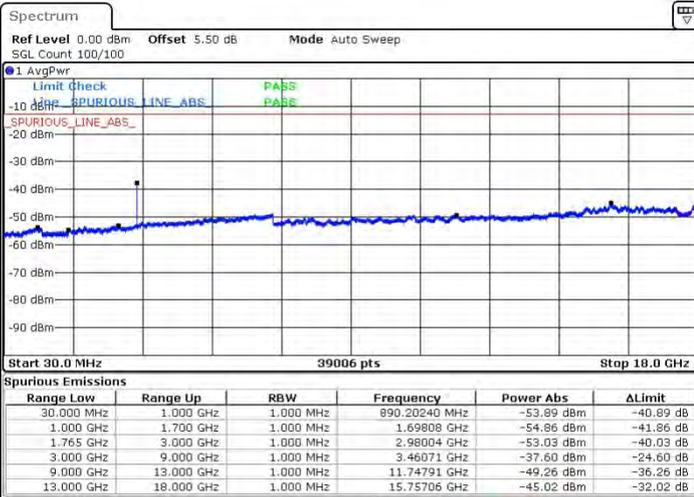


Date: 16 JAN 2015 10:02:28

Date: 16 JAN 2015 10:03:46

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 16 JAN 2015 10:05:48

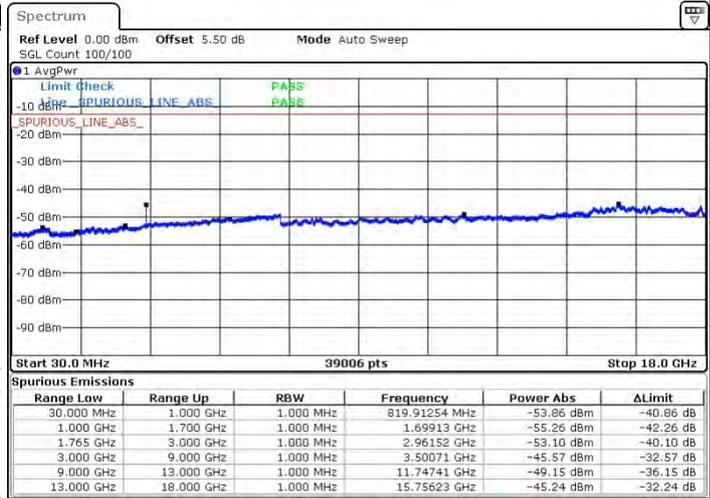
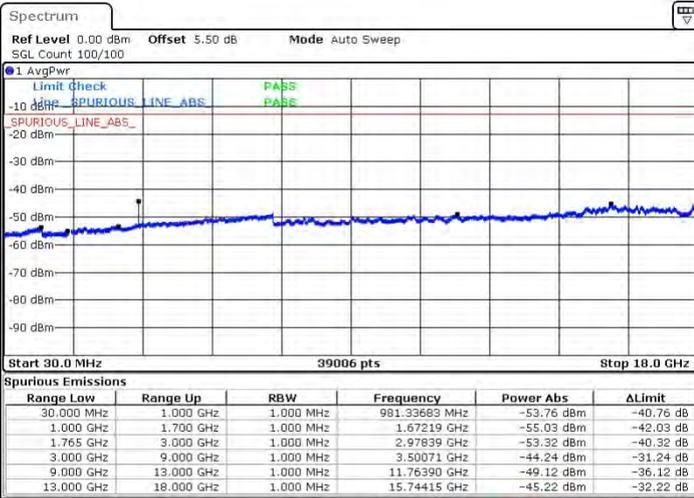
Date: 16 JAN 2015 10:07:07



LTE Band 4 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



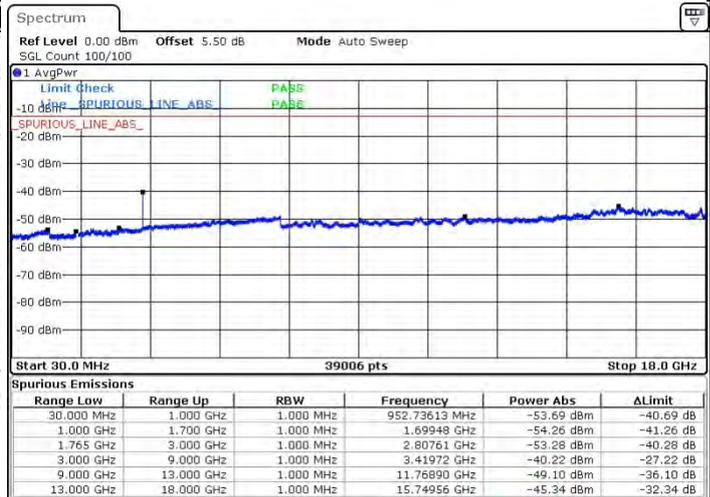
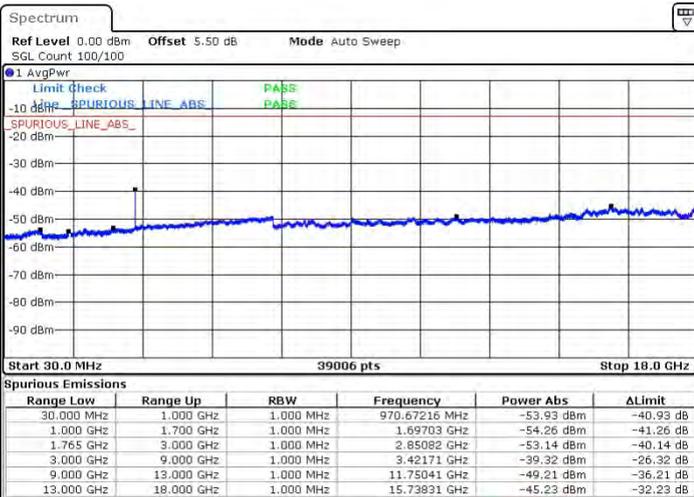
Date: 16 JAN 2015 10:09:08

Date: 16 JAN 2015 10:10:27

LTE Band 4 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 16 JAN 2015 10:12:29

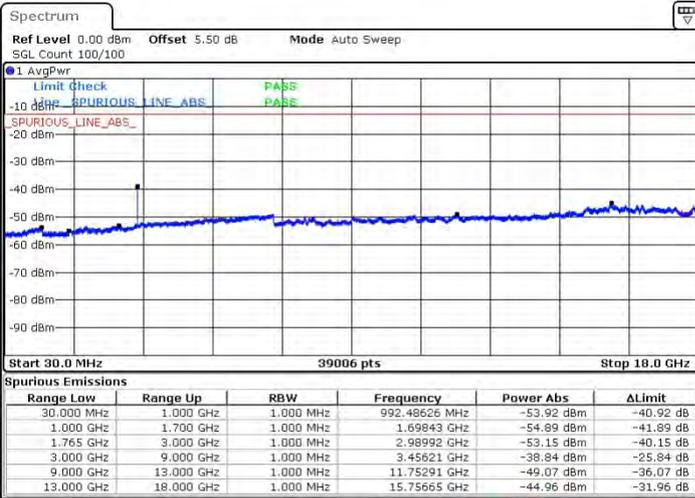
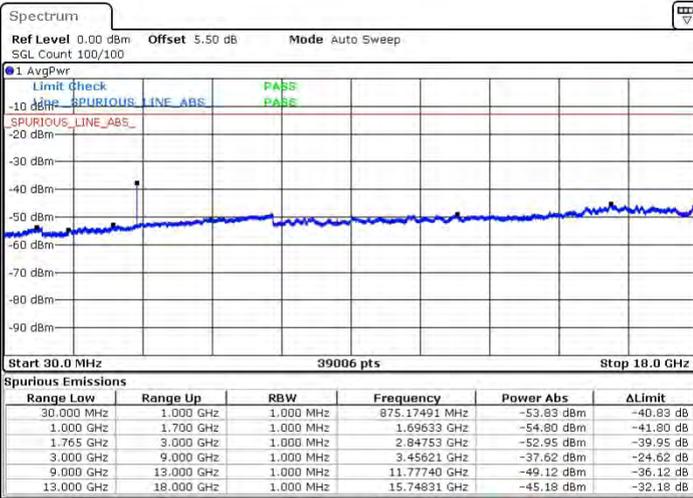
Date: 16 JAN 2015 10:13:47



LTE Band 4 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

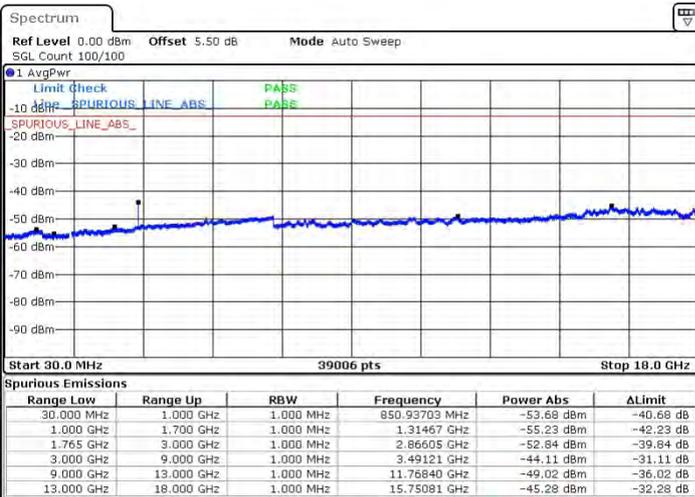
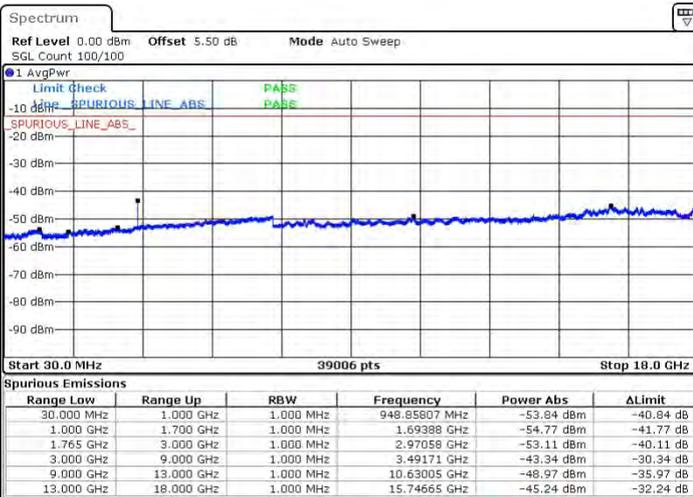


Date: 16 JAN 2015 10:15:49

Date: 16 JAN 2015 10:17:07

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16 JAN 2015 10:19:09

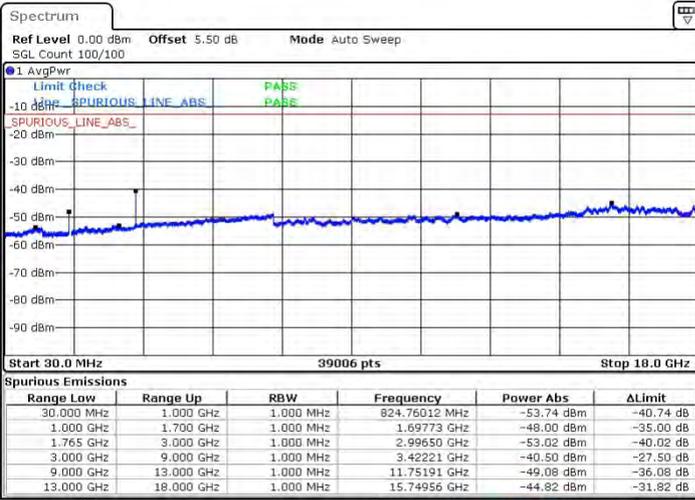
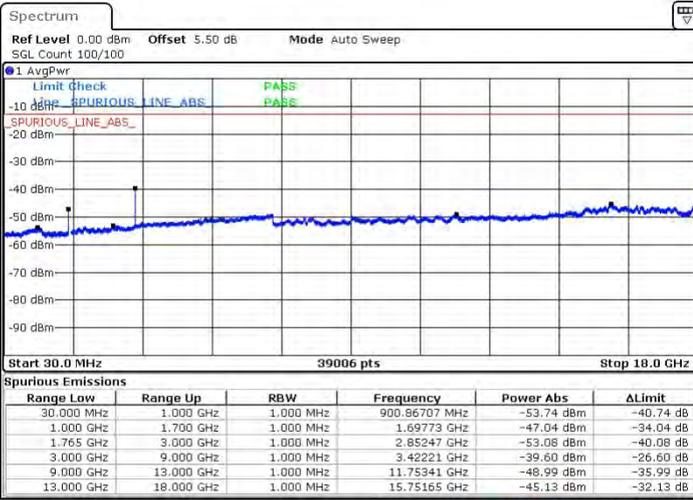
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LTE Band 4 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

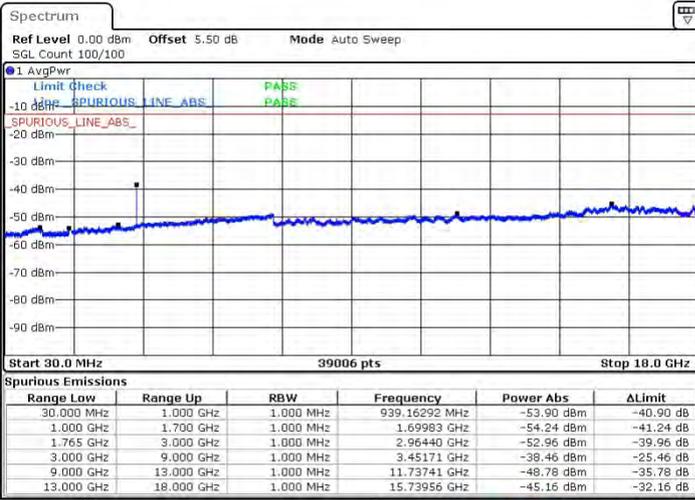
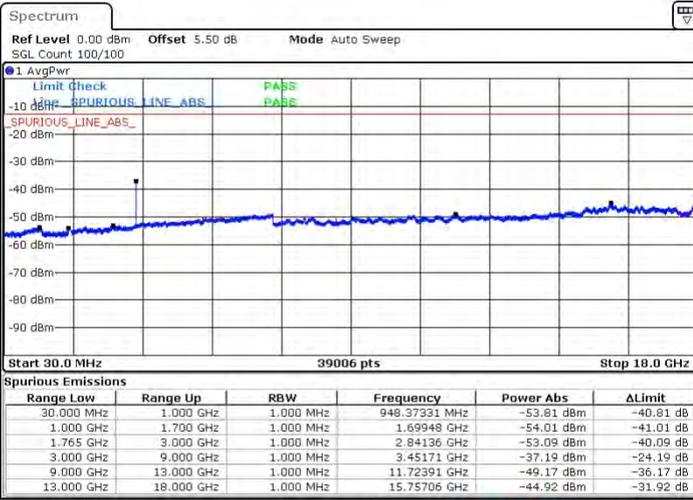


Date: 16 JAN 2015 10:22:29

Date: 16 JAN 2015 10:23:48

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 16 JAN 2015 10:25:49

Date: 16 JAN 2015 10:27:08