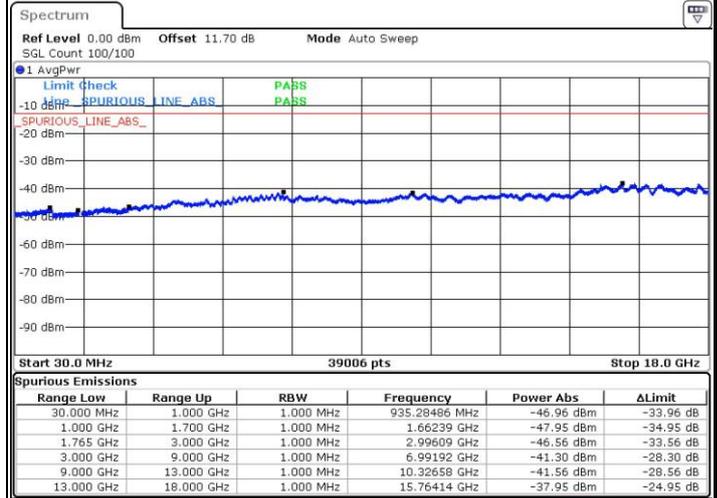




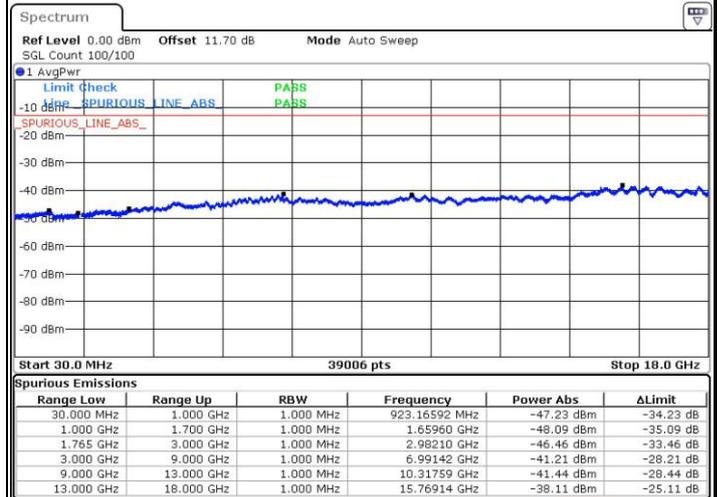
LTE Band 4 / 10MHz

Middle Channel / 64QAM



Date: 15 JUN 2017 10:56:39

Highest Channel / 64QAM



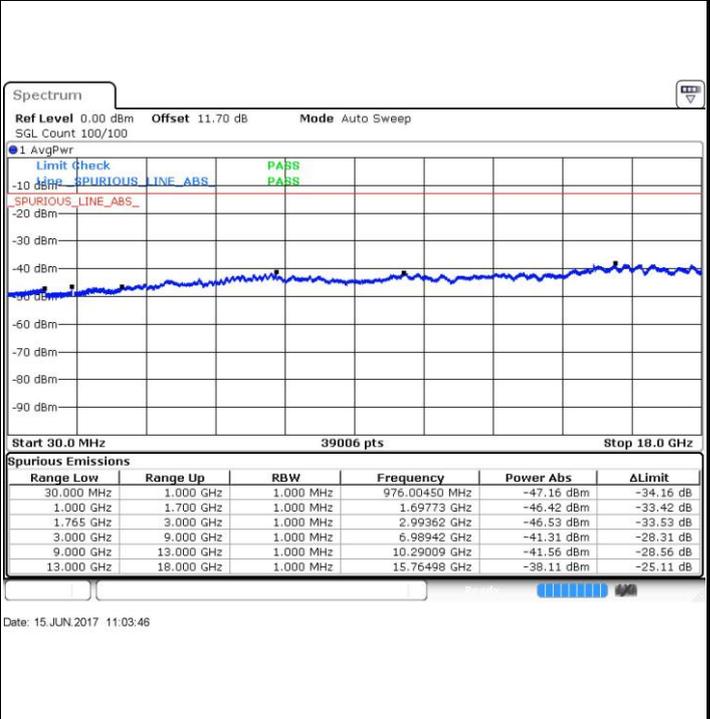
Date: 15 JUN 2017 11:00:12



LTE Band 4 / 15MHz

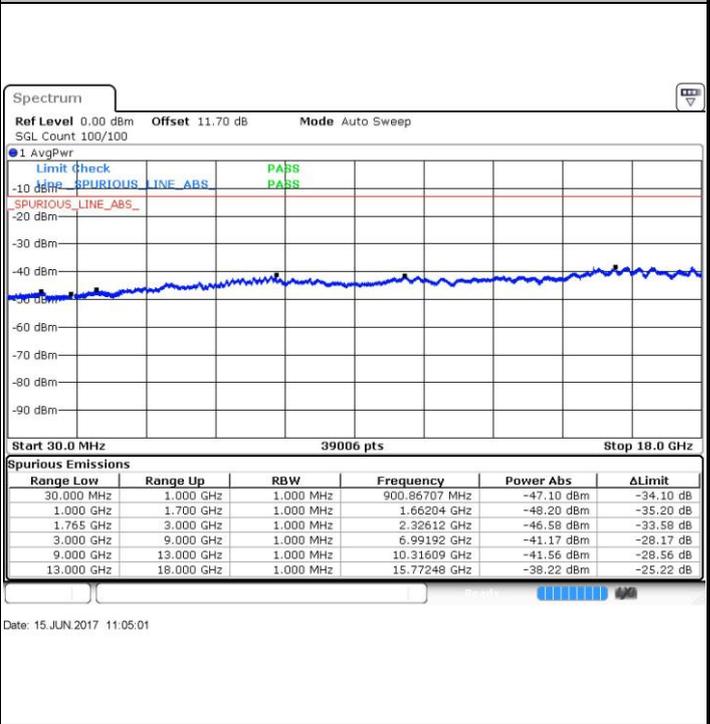
-

Lowest Channel / 64QAM



-

Middle Channel / 64QAM

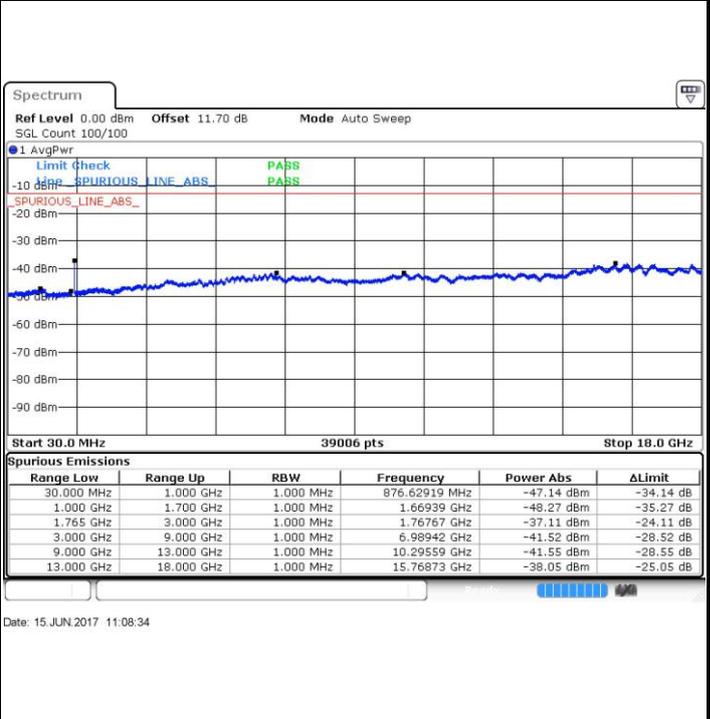




**LTE Band 4 / 15MHz**

-

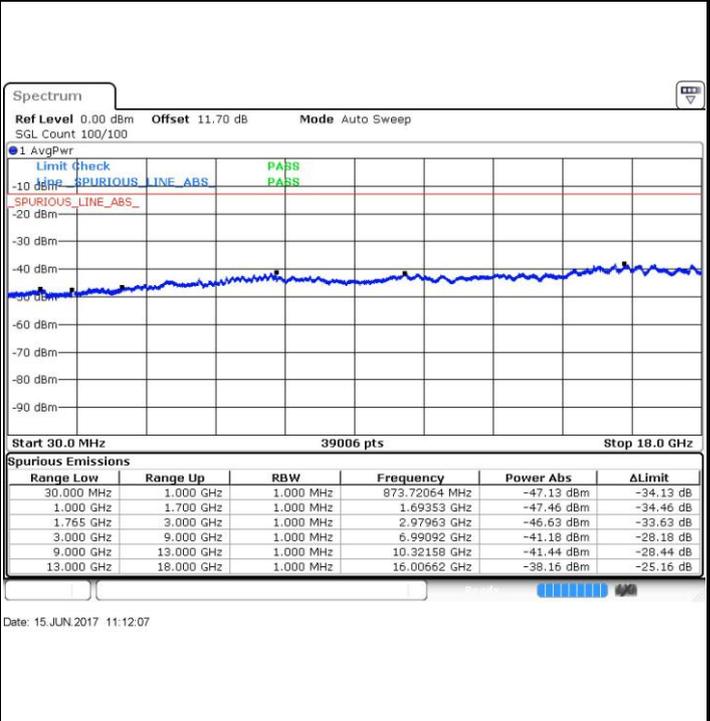
**Highest Channel / 64QAM**



**LTE Band 4 / 20MHz**

-

**Lowest Channel / 64QAM**







### Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0040	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0009	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0038	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0017	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 5

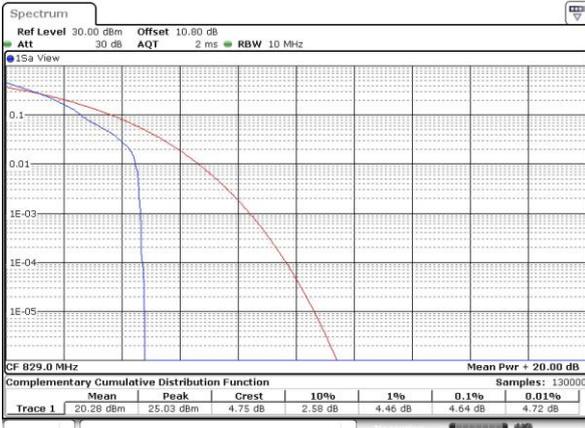
## Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.64	5.28	5.36	6.17	PASS
Middle CH	4.58	4.96	5.33	5.83	
Highest CH	4.29	4.9	5.3	5.91	
Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		64QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	5.28	6.2	PASS
Middle CH	-	-	5.39	5.86	
Highest CH	-	-	5.13	5.94	



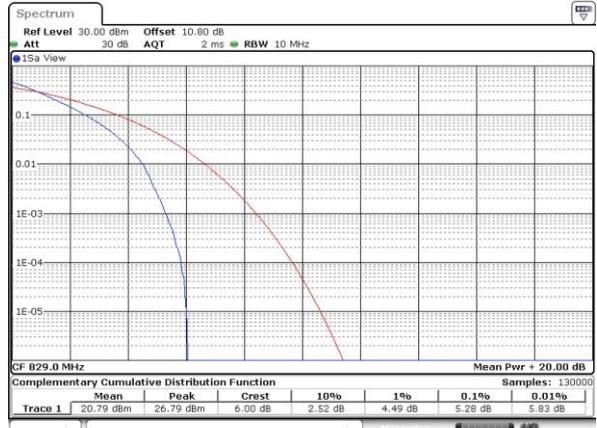
LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



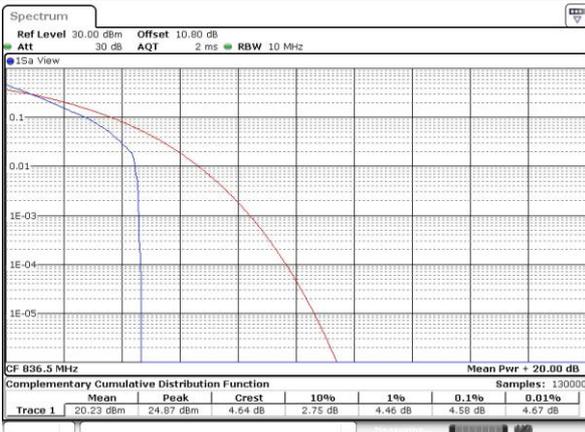
Date: 12 JUN 2017 17:55:18

Lowest Channel / Full RB



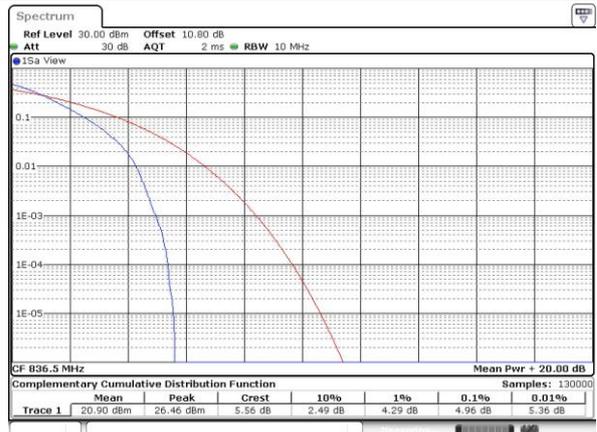
Date: 12 JUN 2017 17:55:28

Middle Channel / 1RB



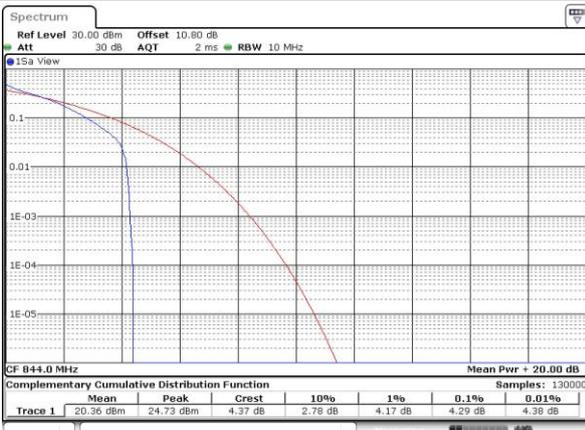
Date: 12 JUN 2017 17:55:38

Middle Channel / Full RB



Date: 12 JUN 2017 17:55:47

Highest Channel / 1RB



Date: 12 JUN 2017 17:55:59

Highest Channel / Full RB



Date: 12 JUN 2017 17:56:10



LTE Band 5 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 13 JUN 2017 08:47:48

Lowest Channel / Full RB



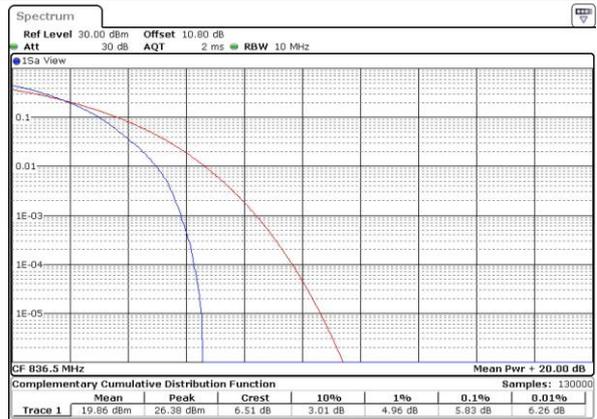
Date: 12 JUN 2017 17:47:53

Middle Channel / 1RB



Date: 12 JUN 2017 17:51:47

Middle Channel / Full RB



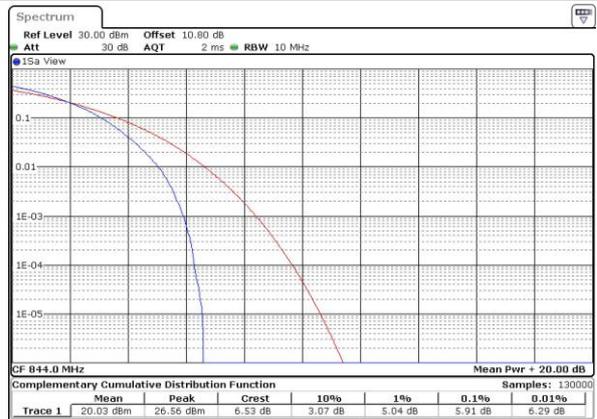
Date: 12 JUN 2017 17:52:39

Highest Channel / 1RB



Date: 12 JUN 2017 17:54:58

Highest Channel / Full RB



Date: 12 JUN 2017 17:55:08



LTE Band 5 / 10MHz / 64QAM

Lowest Channel / 1RB



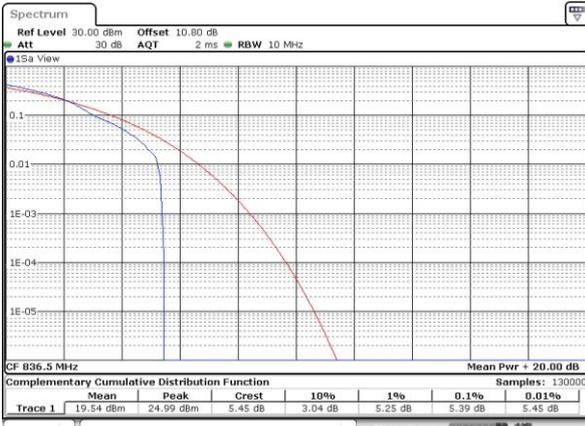
Date: 13 JUN 2017 09:00:11

Lowest Channel / Full RB



Date: 13 JUN 2017 09:00:22

Middle Channel / 1RB



Date: 13 JUN 2017 09:00:37

Middle Channel / Full RB



Date: 13 JUN 2017 09:00:47

Highest Channel / 1RB



Date: 13 JUN 2017 09:00:58

Highest Channel / Full RB



Date: 13 JUN 2017 09:01:09



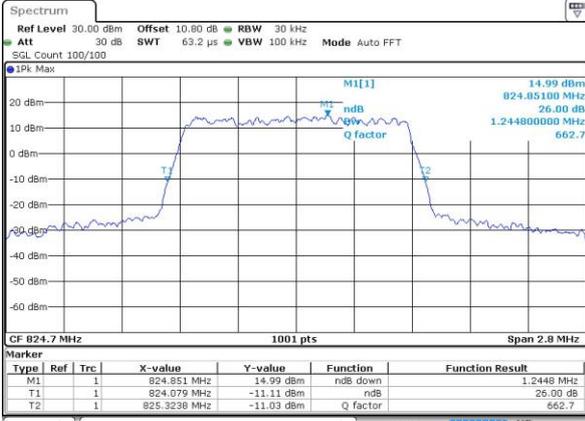
**26dB Bandwidth**

Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.245	1.236	3.009	2.997	4.935	4.915	9.85	9.81	-	-	-	-
Middle CH	1.234	1.225	3.021	2.961	4.825	4.855	9.75	9.85	-	-	-	-
Highest CH	1.239	1.228	3.027	3.027	4.895	4.945	9.69	9.67	-	-	-	-
Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM
Lowest CH	-	1.236	-	3.015	-	4.835	-	9.81	-	-	-	-
Middle CH	-	1.225	-	2.991	-	4.895	-	9.69	-	-	-	-
Highest CH	-	1.228	-	3.039	-	4.825	-	9.65	-	-	-	-



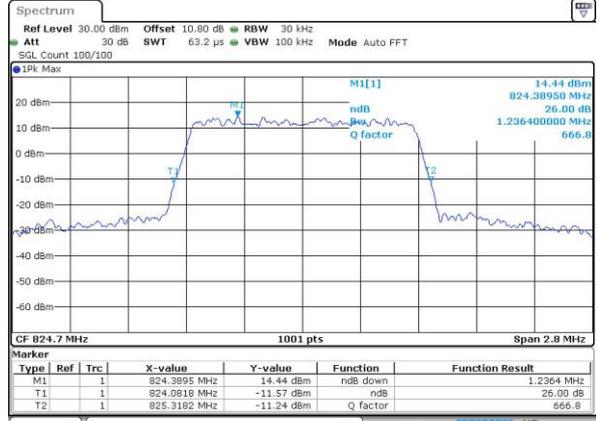
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



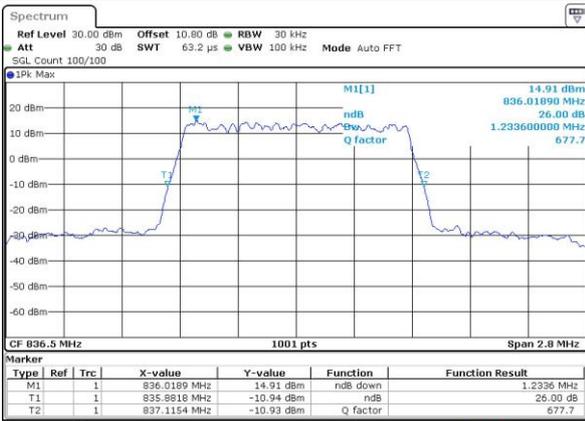
Date: 12 JUN 2017 17:24:01

Lowest Channel / 1.4MHz / 16QAM



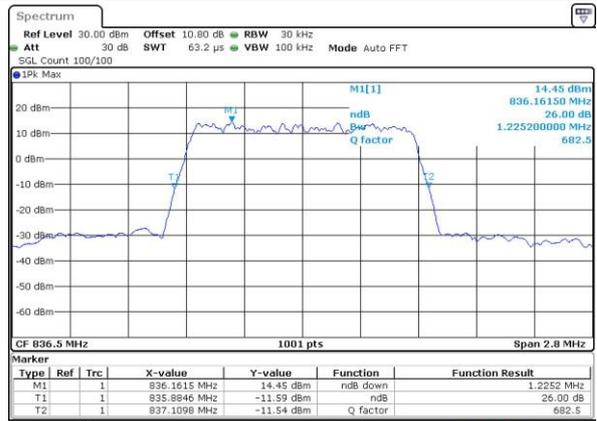
Date: 13 JUN 2017 08:37:19

Middle Channel / 1.4MHz / QPSK



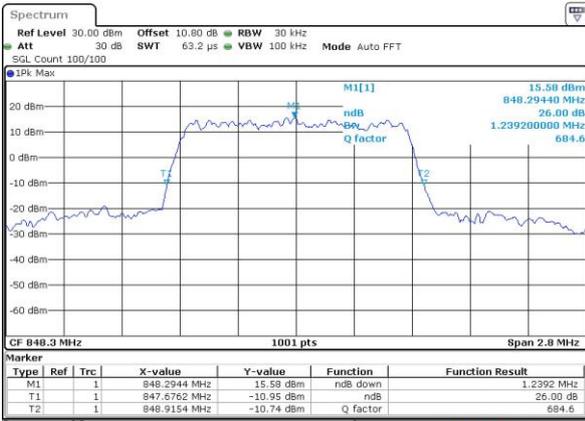
Date: 12 JUN 2017 17:32:58

Middle Channel / 1.4MHz / 16QAM



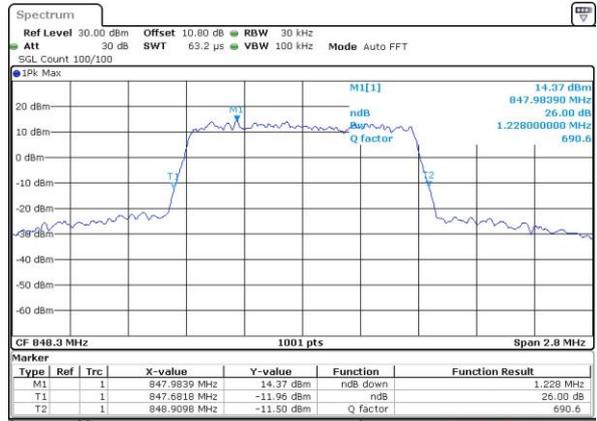
Date: 13 JUN 2017 08:41:53

Highest Channel / 1.4MHz / QPSK



Date: 12 JUN 2017 17:35:28

Highest Channel / 1.4MHz / 16QAM

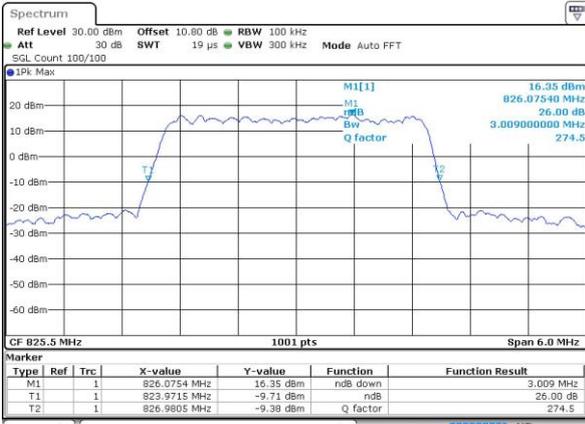


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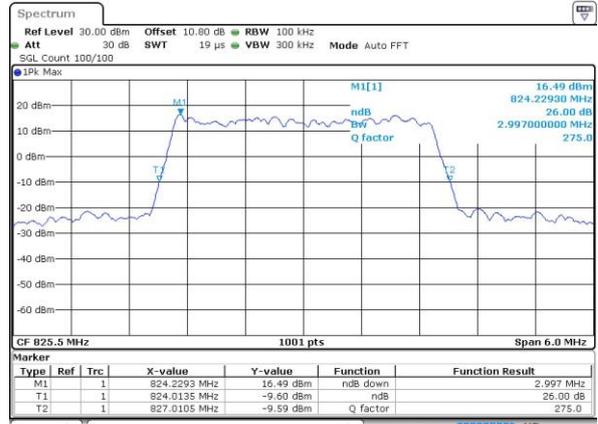
LTE Band 5

Lowest Channel / 3MHz / QPSK



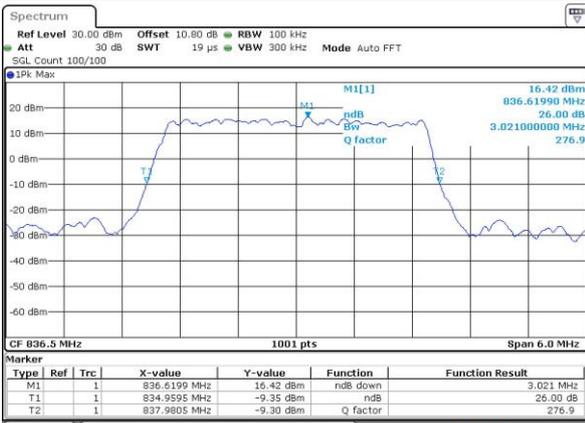
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Lowest Channel / 3MHz / 16QAM



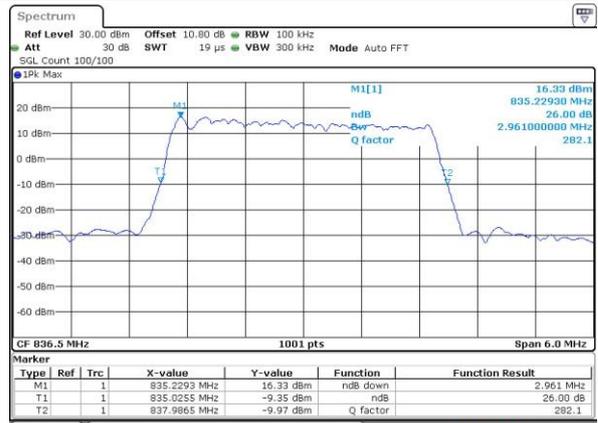
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Middle Channel / 3MHz / QPSK



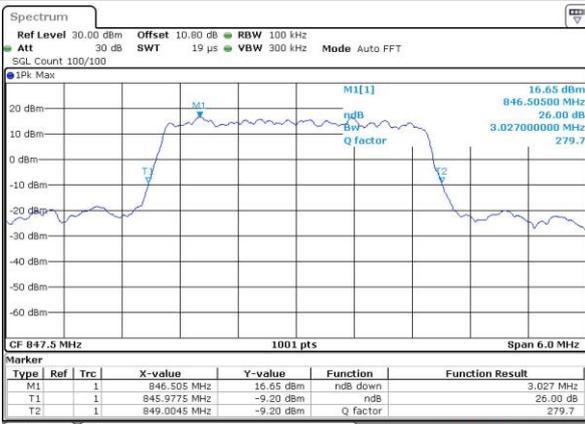
Date: 12 JUN 2017 16:30:00

Middle Channel / 3MHz / 16QAM



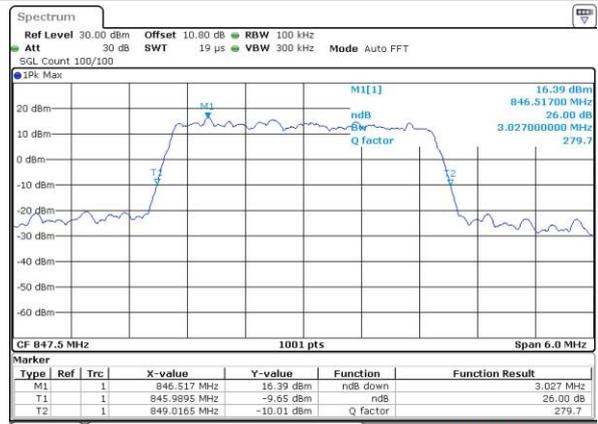
Date: 12 JUN 2017 16:30:10

Highest Channel / 3MHz / QPSK



Date: 12 JUN 2017 16:32:30

Highest Channel / 3MHz / 16QAM

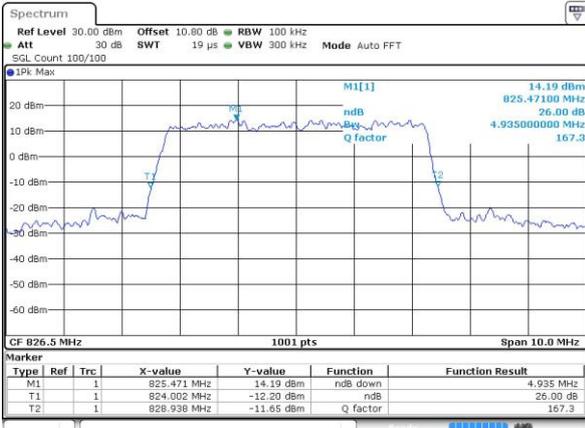


Date: 12 JUN 2017 16:32:40



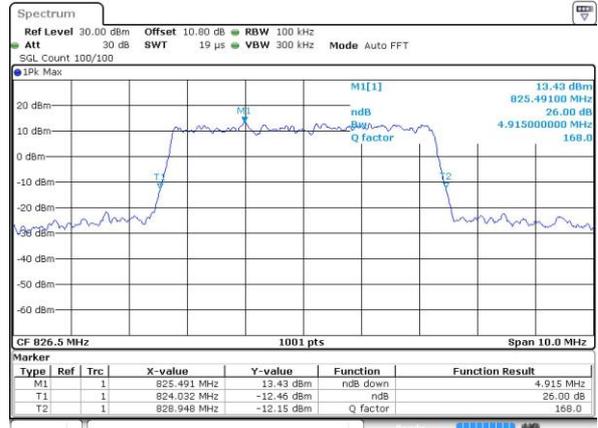
LTE Band 5

Lowest Channel / 5MHz / QPSK



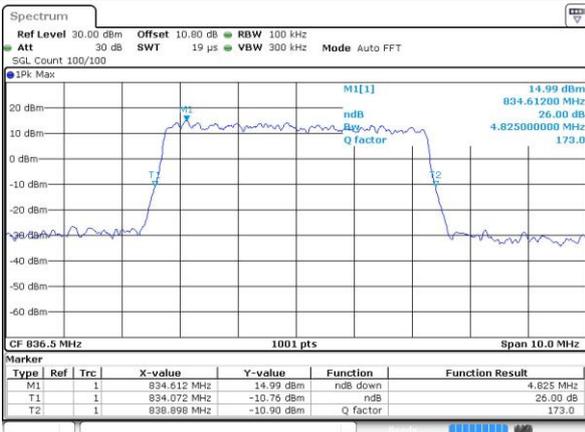
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Lowest Channel / 5MHz / 16QAM



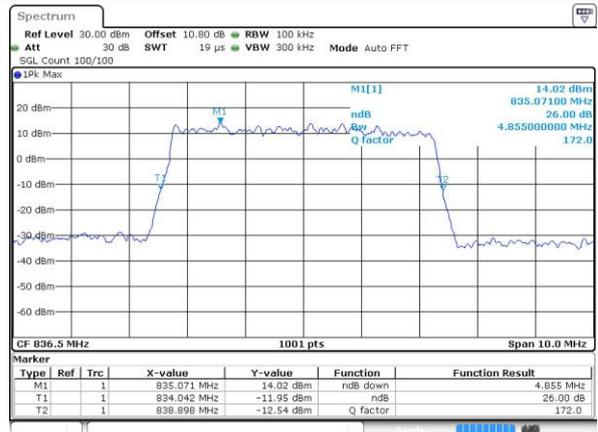
Date: 12 JUN 2017 16:41:47

Middle Channel / 5MHz / QPSK



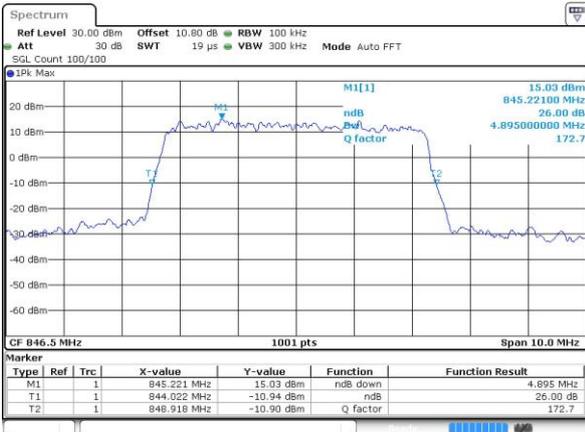
Date: 12 JUN 2017 16:50:43

Middle Channel / 5MHz / 16QAM



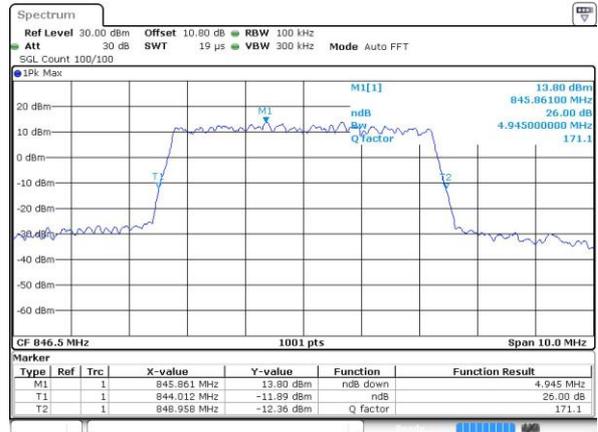
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Highest Channel / 5MHz / QPSK



Date: 12 JUN 2017 16:53:13

Highest Channel / 5MHz / 16QAM

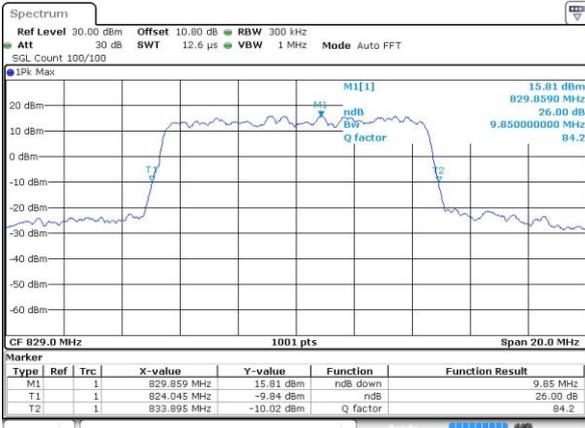


Date: 12 JUN 2017 16:53:24



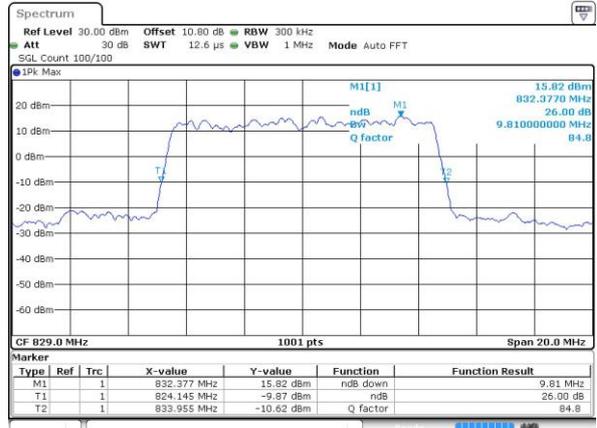
LTE Band 5

Lowest Channel / 10MHz / QPSK



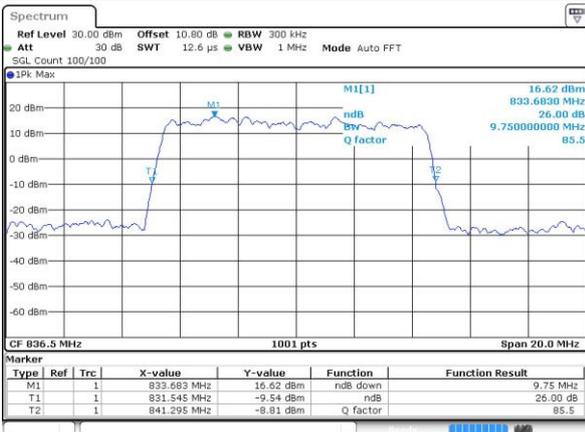
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Lowest Channel / 10MHz / 16QAM



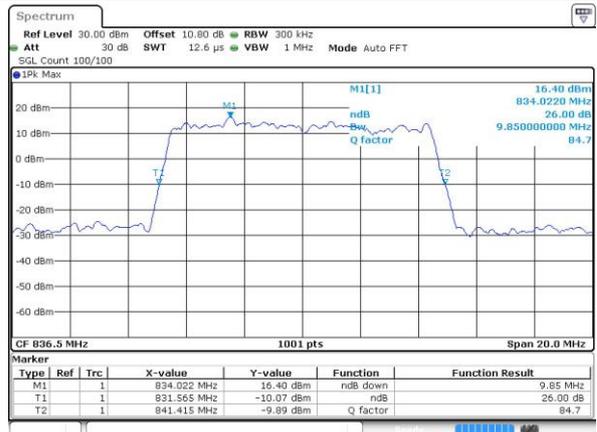
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Middle Channel / 10MHz / QPSK



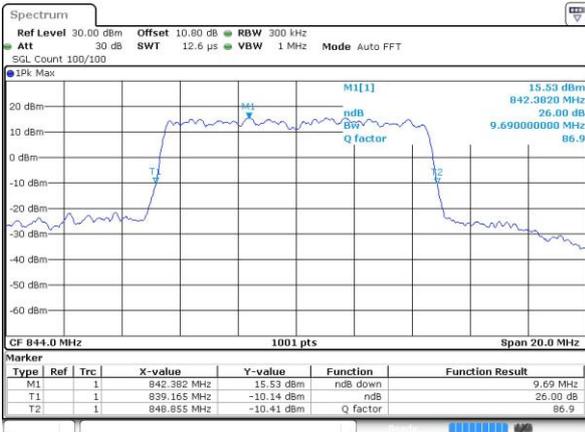
Date: 12 JUN 2017 17:11:27

Middle Channel / 10MHz / 16QAM



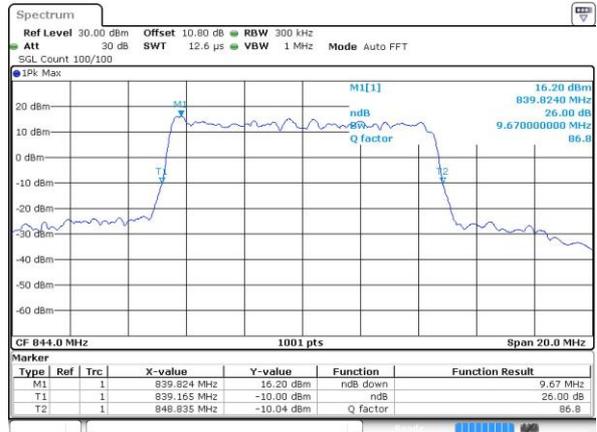
Date: 12 JUN 2017 17:11:38

Highest Channel / 10MHz / QPSK



Date: 12 JUN 2017 17:13:57

Highest Channel / 10MHz / 16QAM

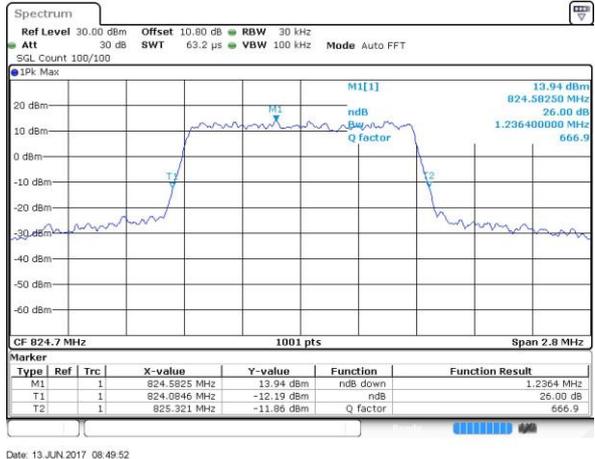


Date: 12 JUN 2017 17:14:07

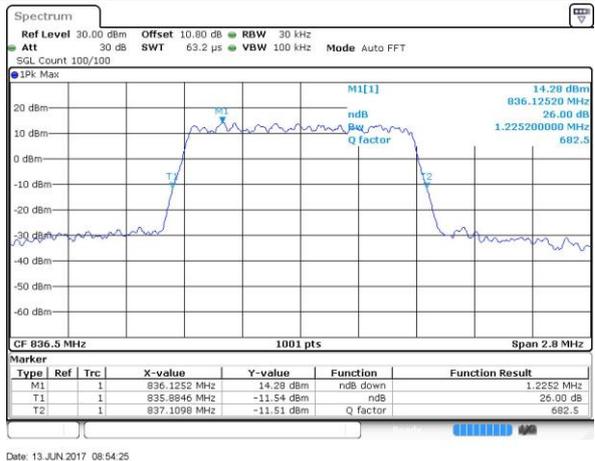


LTE Band 5

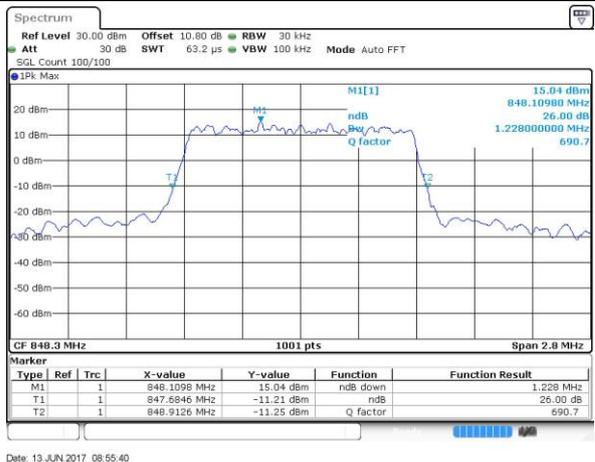
Lowest Channel / 1.4MHz / 64QAM



Middle Channel / 1.4MHz / 64QAM



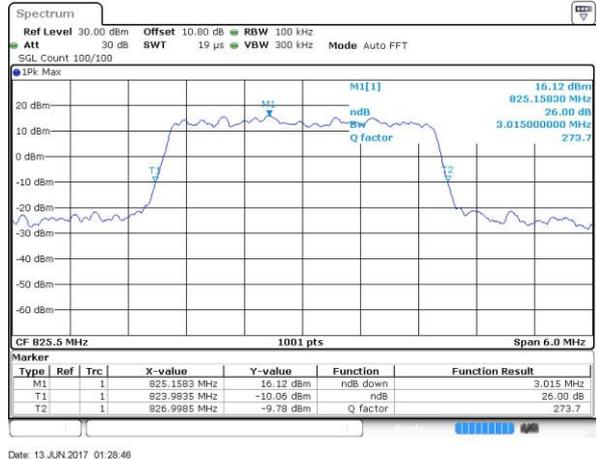
Highest Channel / 1.4MHz / 64QAM



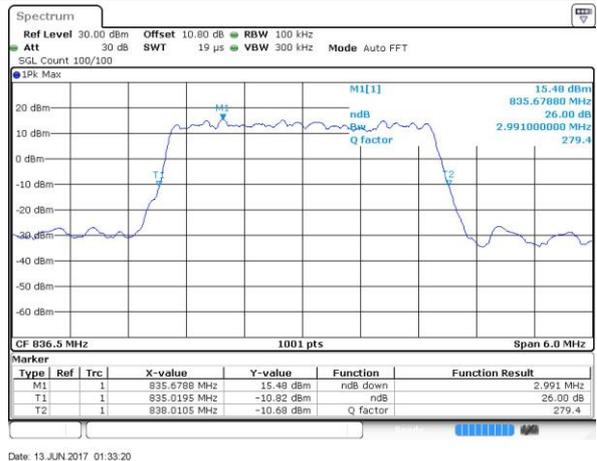


LTE Band 5

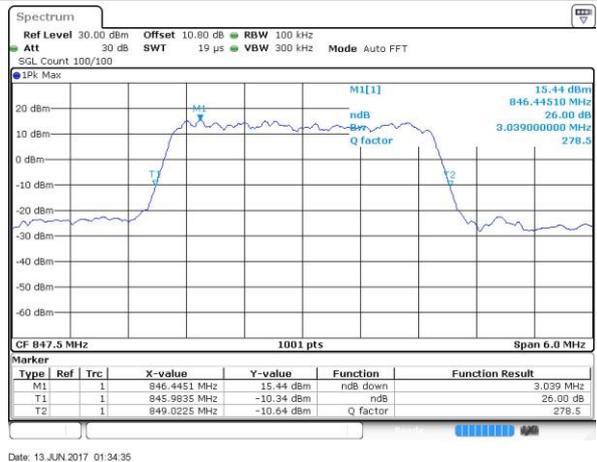
Lowest Channel / 3MHz / 64QAM



Middle Channel /3MHz / 64QAM



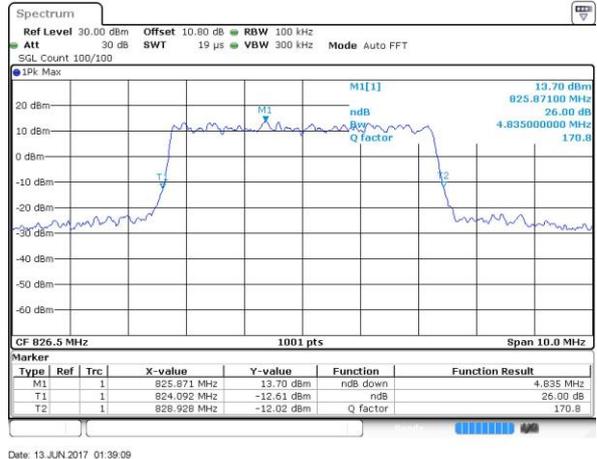
Highest Channel /3MHz / 64QAM





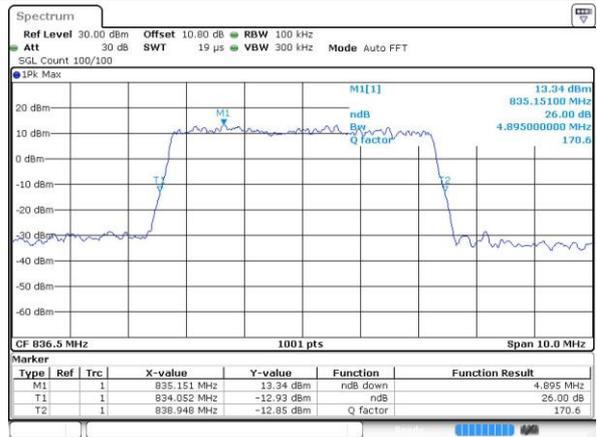
LTE Band 5

Lowest Channel / 5MHz / 64QAM



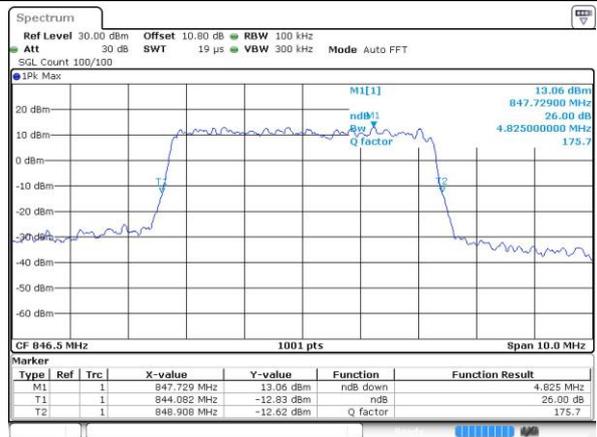
Date: 13 JUN 2017 01:39:09

Middle Channel / 5MHz / 64QAM



Date: 13 JUN 2017 01:43:43

Highest Channel / 5MHz / 64QAM

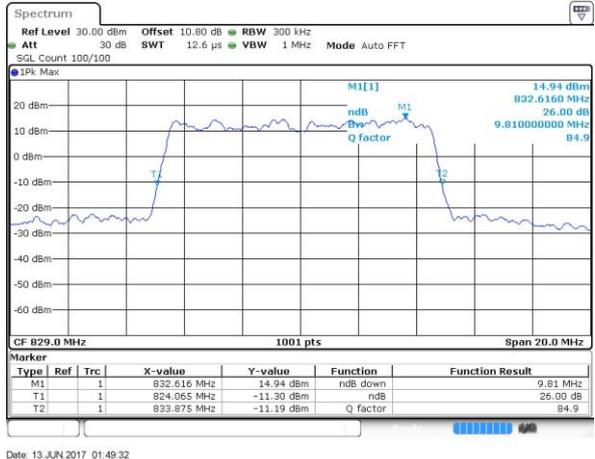


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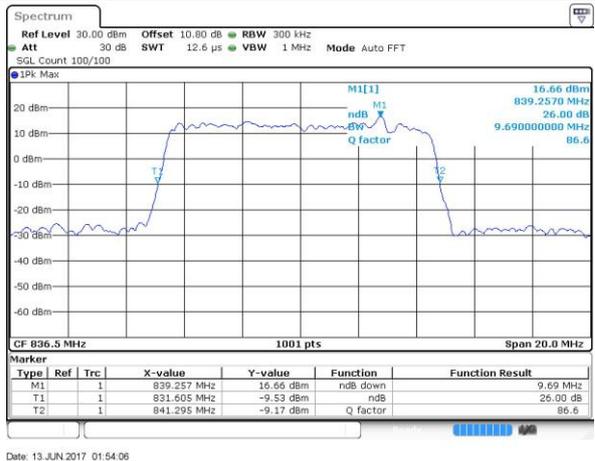


LTE Band 5

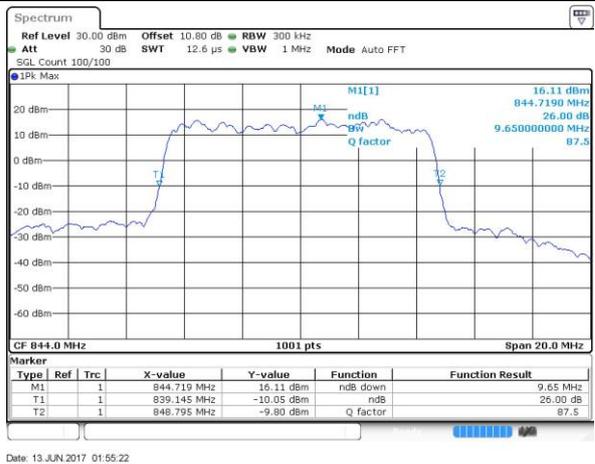
Lowest Channel / 10MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 10MHz / 64QAM





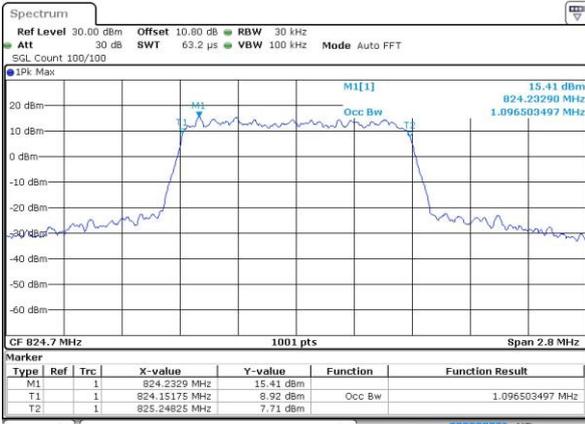
**Occupied Bandwidth**

Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.1	1.09	2.72	2.72	4.49	4.5	9.03	8.99	-	-	-	-
Middle CH	1.09	1.09	2.72	2.72	4.46	4.47	8.99	8.95	-	-	-	-
Highest CH	1.09	1.1	2.72	2.72	4.45	4.48	9.03	9.01	-	-	-	-
Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM
Lowest CH	-	1.08	-	2.75	-	4.5	-	9.05	-	-	-	-
Middle CH	-	1.08	-	2.72	-	4.49	-	9.03	-	-	-	-
Highest CH	-	1.09	-	2.72	-	4.47	-	9.01	-	-	-	-



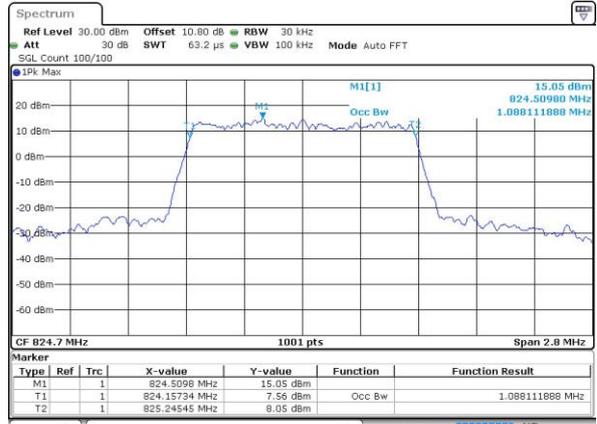
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



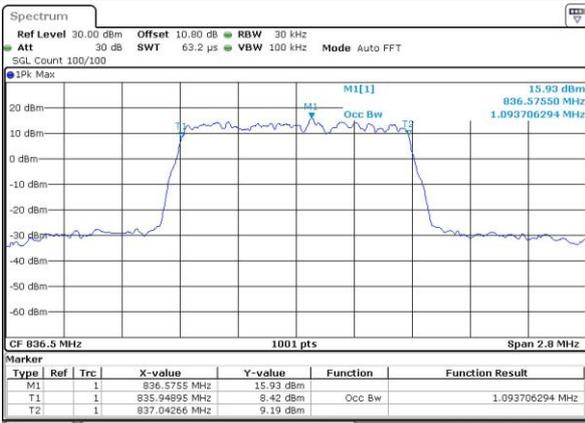
Date: 12 JUN 2017 17:23:30

Lowest Channel / 1.4MHz / 16QAM



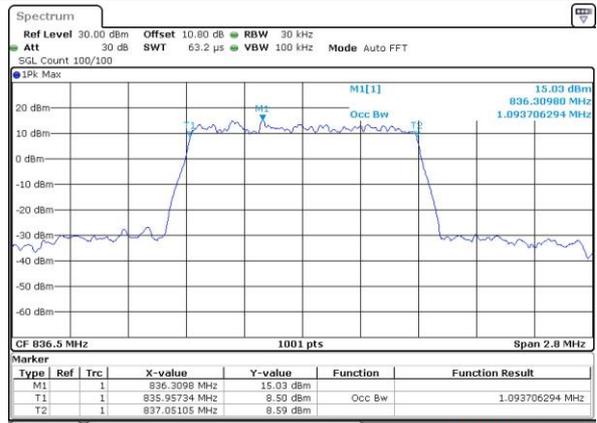
Date: 13 JUN 2017 08:37:08

Middle Channel / 1.4MHz / QPSK



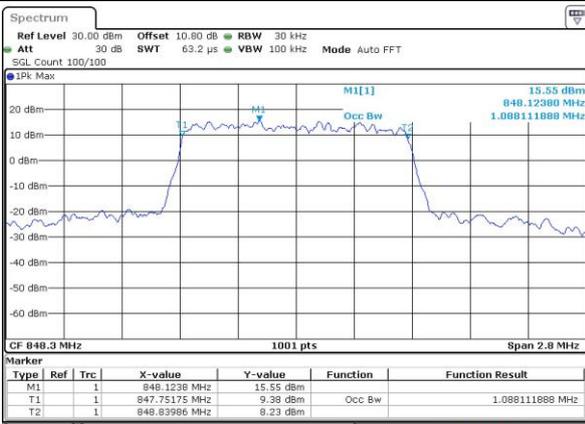
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Middle Channel / 1.4MHz / 16QAM



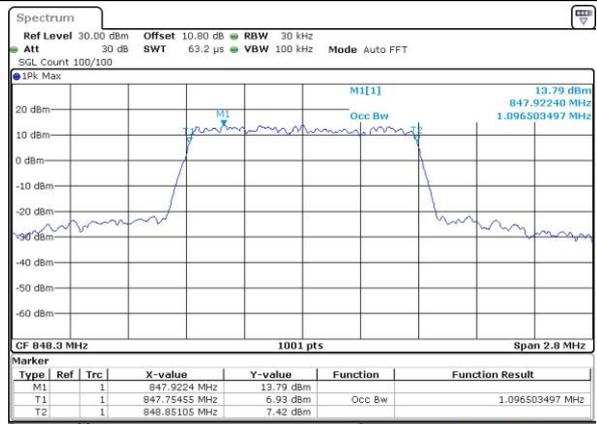
Date: 13 JUN 2017 08:41:42

Highest Channel / 1.4MHz / QPSK



Date: 12 JUN 2017 17:35:07

Highest Channel / 1.4MHz / 16QAM

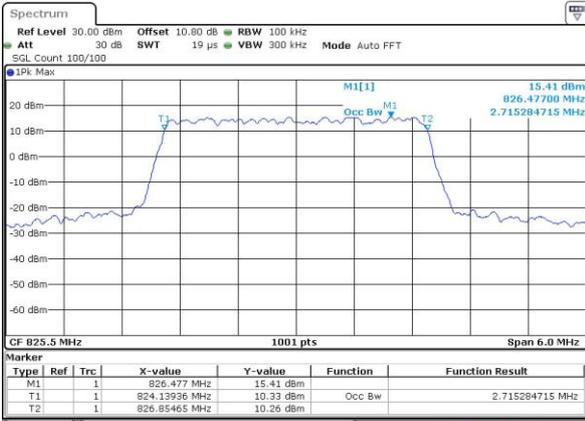


Date: 13 JUN 2017 08:42:57



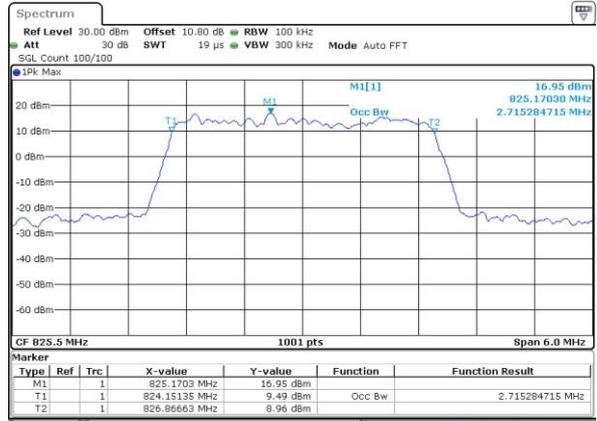
LTE Band 5

Lowest Channel / 3MHz / QPSK



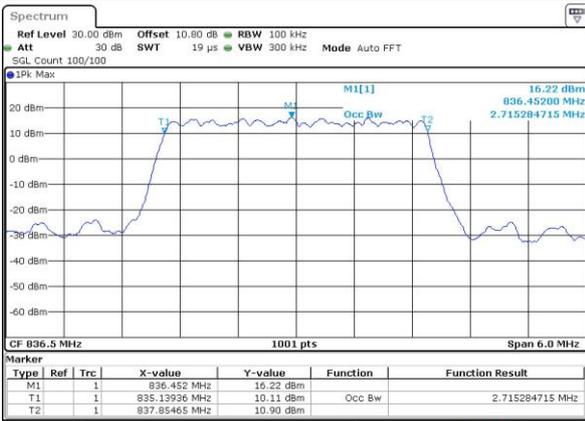
Date: 12 JUN 2017 16:20:33

Lowest Channel / 3MHz / 16QAM



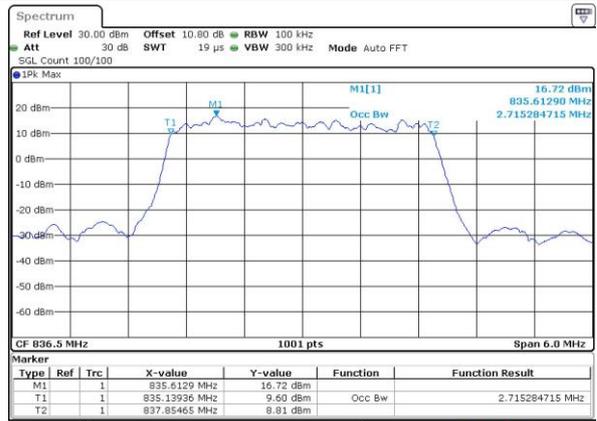
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Middle Channel / 3MHz / QPSK



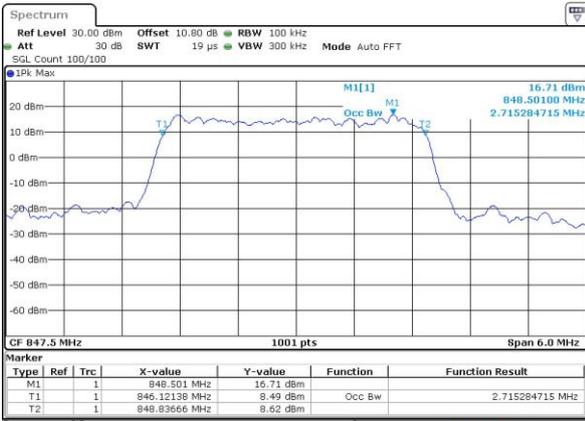
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Middle Channel / 3MHz / 16QAM



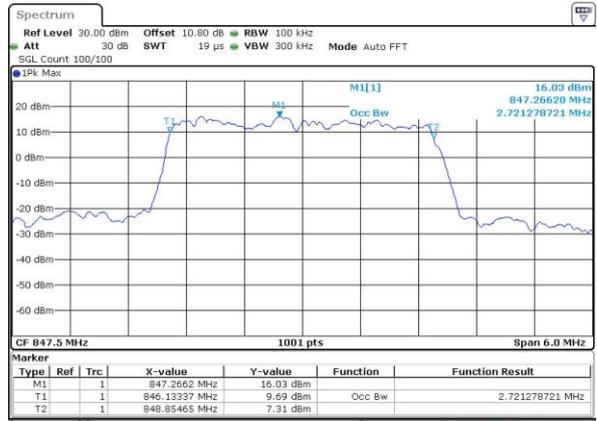
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Highest Channel / 3MHz / QPSK



Date: 12 JUN 2017 16:32:09

Highest Channel / 3MHz / 16QAM

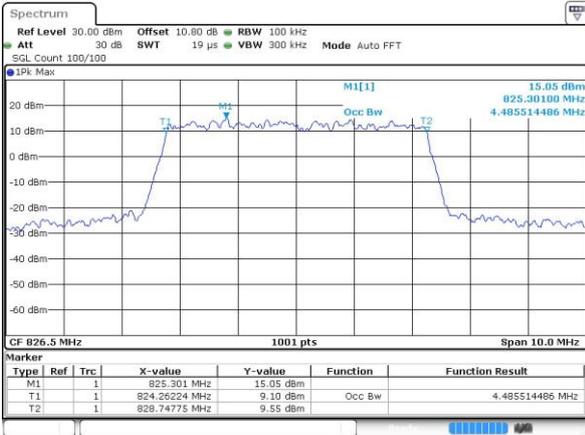


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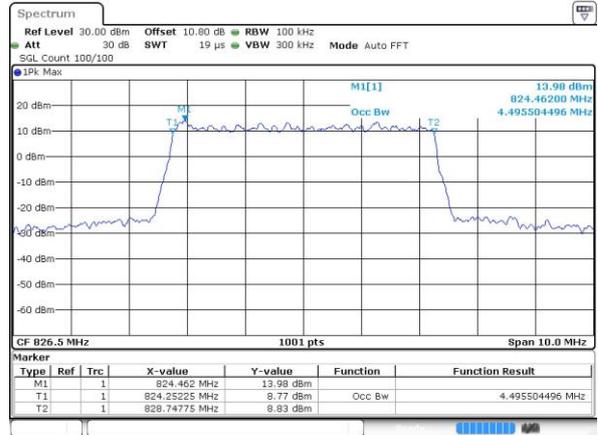
LTE Band 5

Lowest Channel / 5MHz / QPSK



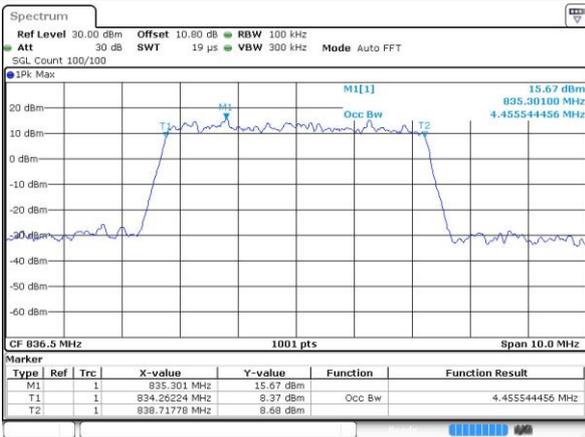
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Lowest Channel / 5MHz / 16QAM



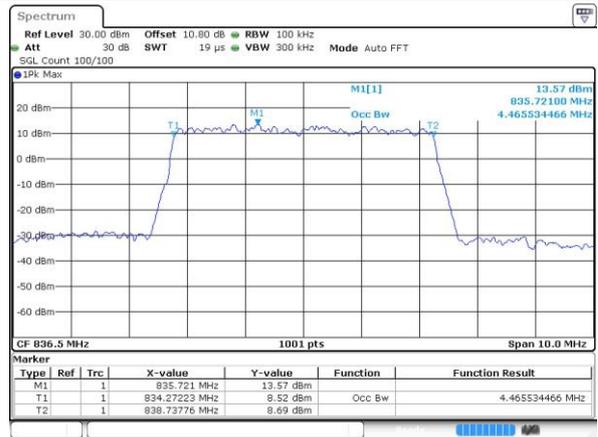
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Middle Channel / 5MHz / QPSK



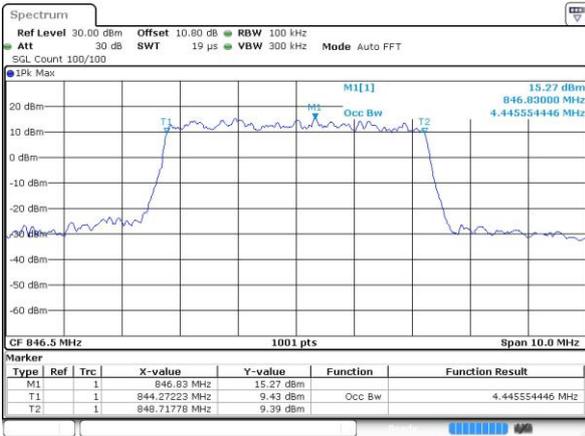
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Middle Channel / 5MHz / 16QAM



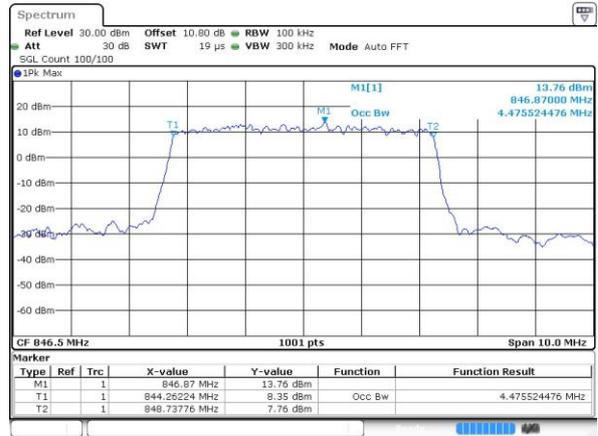
Date: 12 JUN 2017 16:50:33

Highest Channel / 5MHz / QPSK



Date: 12 JUN 2017 16:52:53

Highest Channel / 5MHz / 16QAM

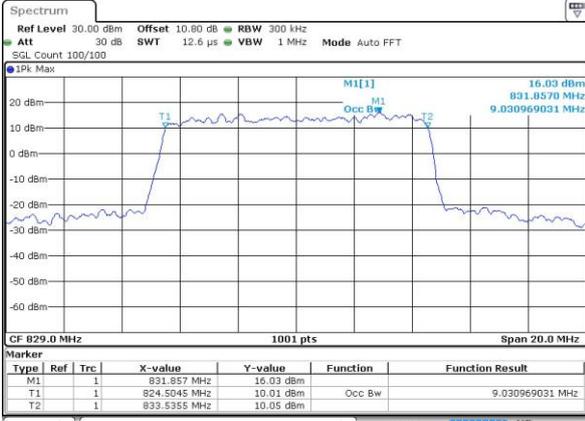


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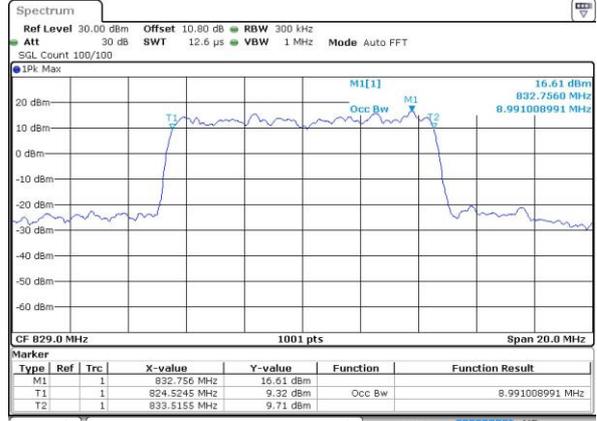
LTE Band 5

Lowest Channel / 10MHz / QPSK



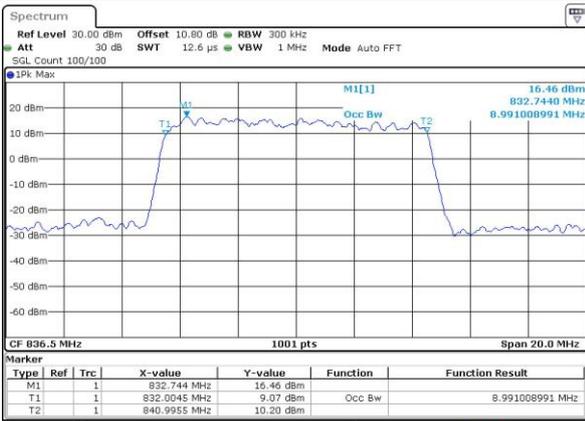
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Lowest Channel / 10MHz / 16QAM



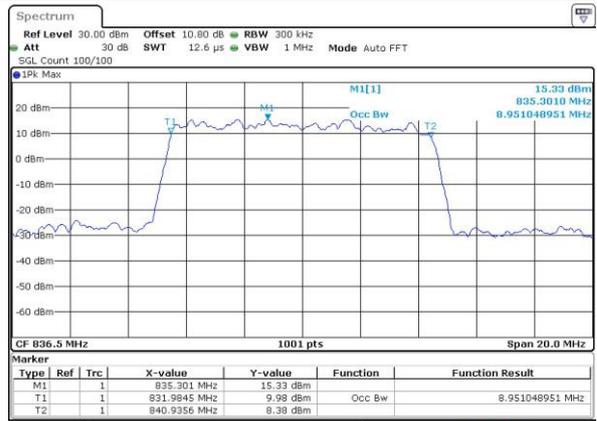
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Middle Channel / 10MHz / QPSK



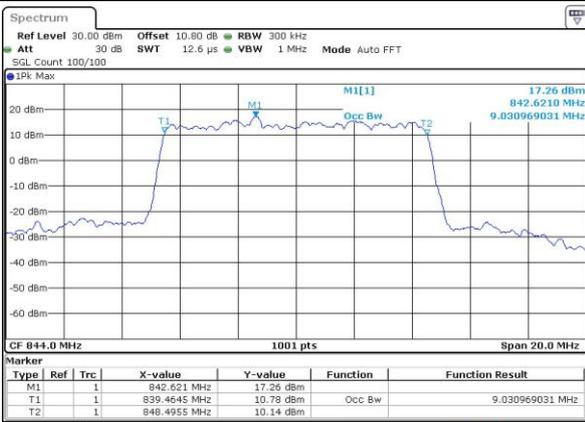
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Middle Channel / 10MHz / 16QAM



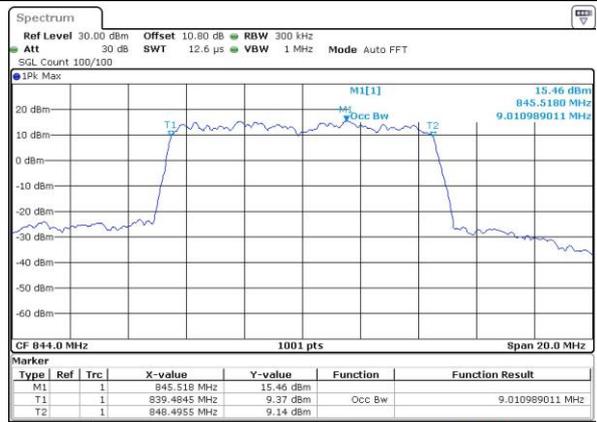
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Highest Channel / 10MHz / QPSK



Date: 12 JUN 2017 17:13:36

Highest Channel / 10MHz / 16QAM

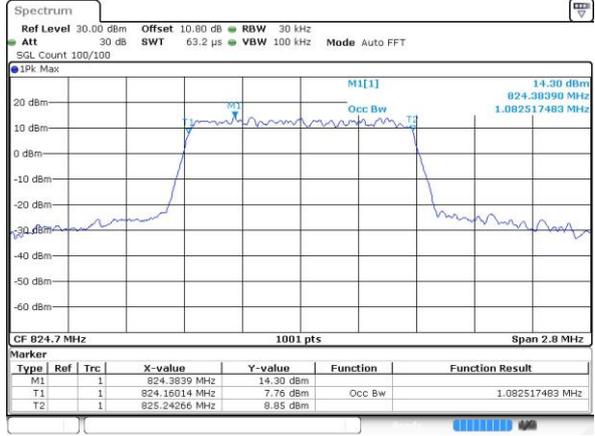


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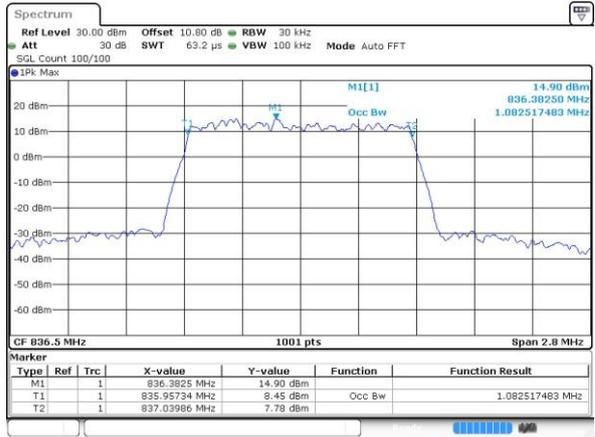


LTE Band 5

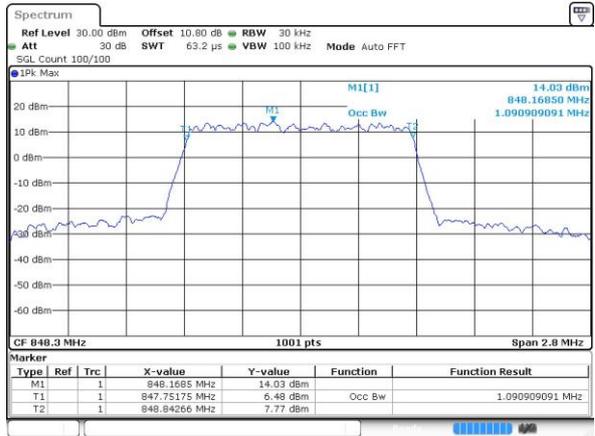
Lowest Channel / 1.4MHz / 64QAM



Middle Channel / 1.4MHz / 64QAM



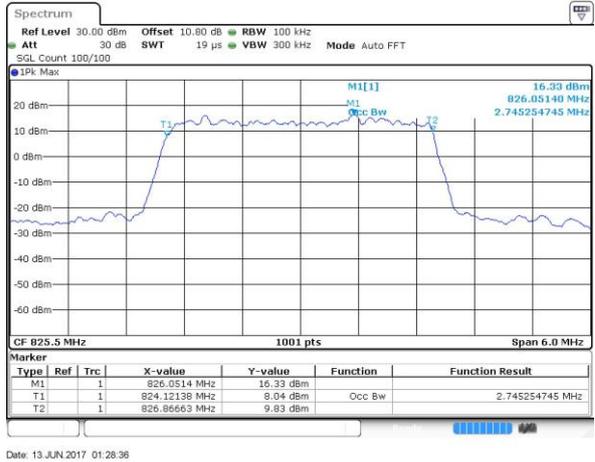
Highest Channel / 1.4MHz / 64QAM



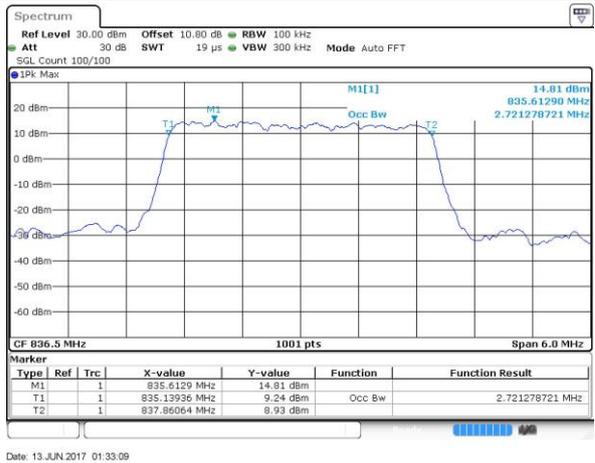


LTE Band 5

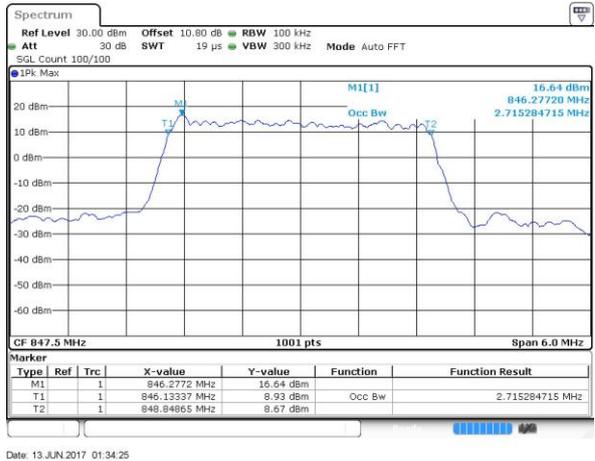
Lowest Channel / 3MHz / 64QAM



Middle Channel / 3MHz / 64QAM



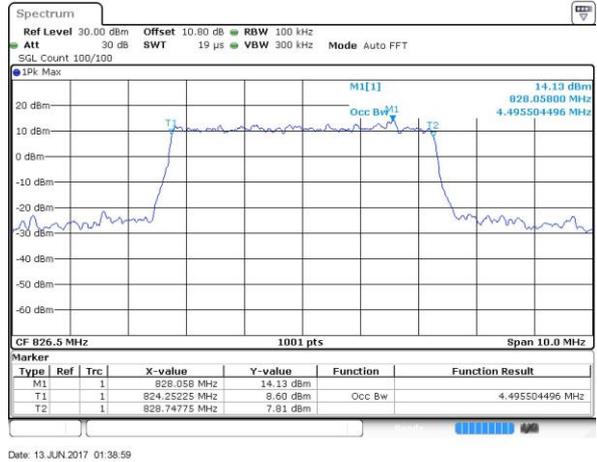
Highest Channel / 3MHz / 64QAM



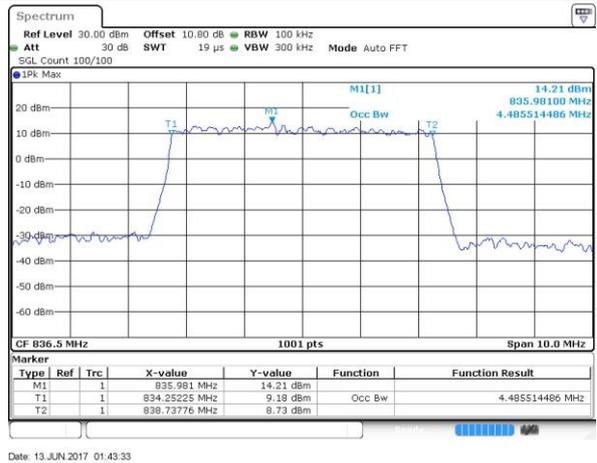


LTE Band 5

Lowest Channel / 5MHz / 64QAM



Middle Channel / 5MHz / 64QAM



Highest Channel / 5MHz / 64QAM

