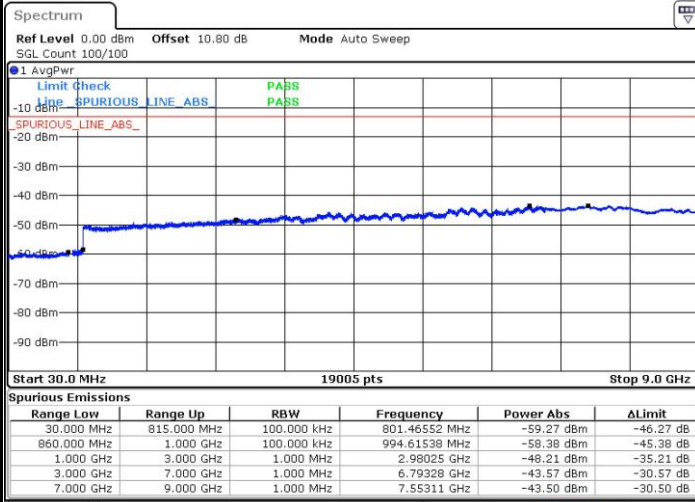




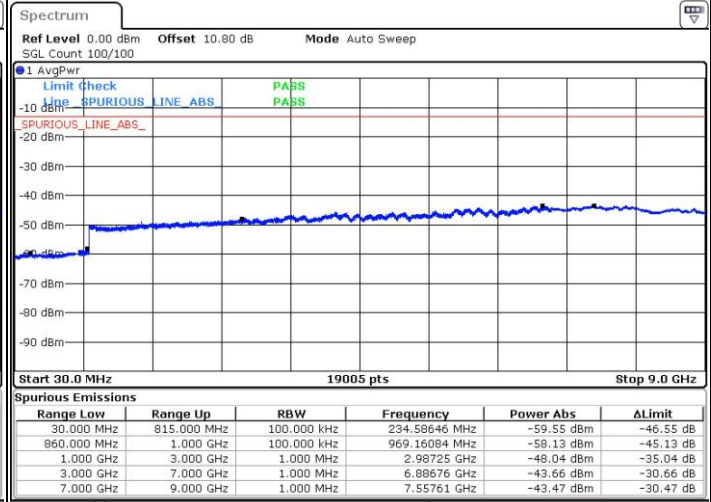
LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

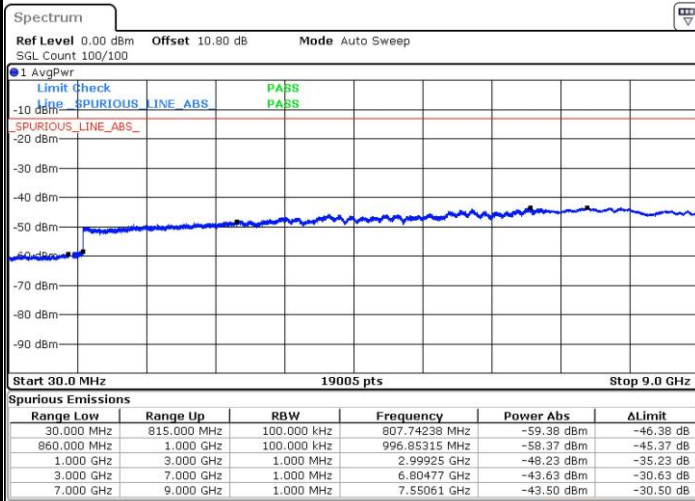


Date: 10.SEP.2018 23:17:32



Date: 10.SEP.2018 23:18:45

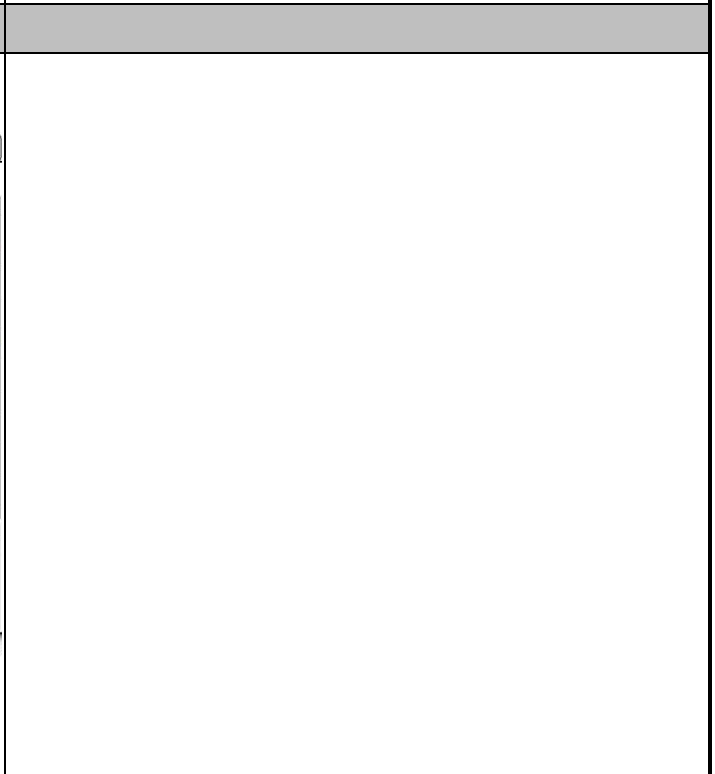
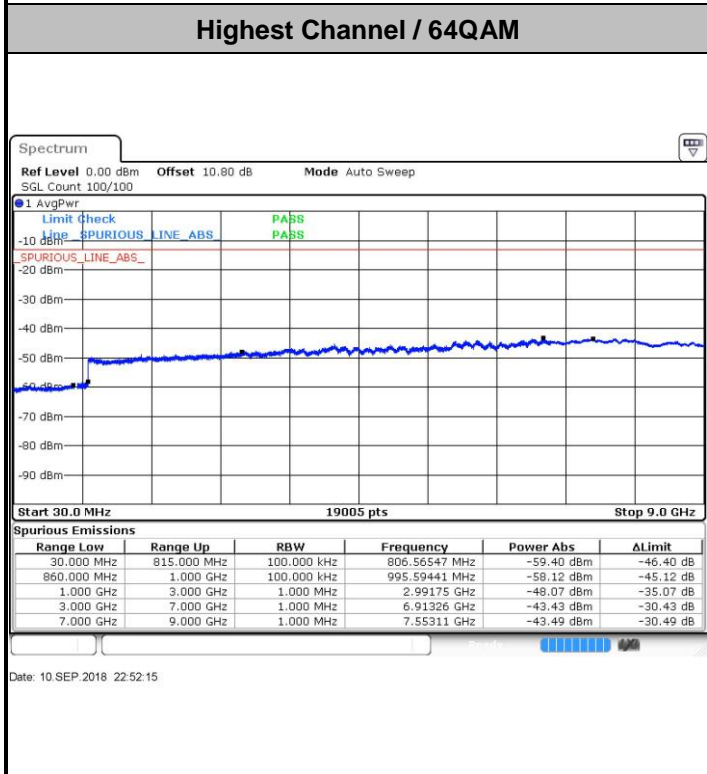
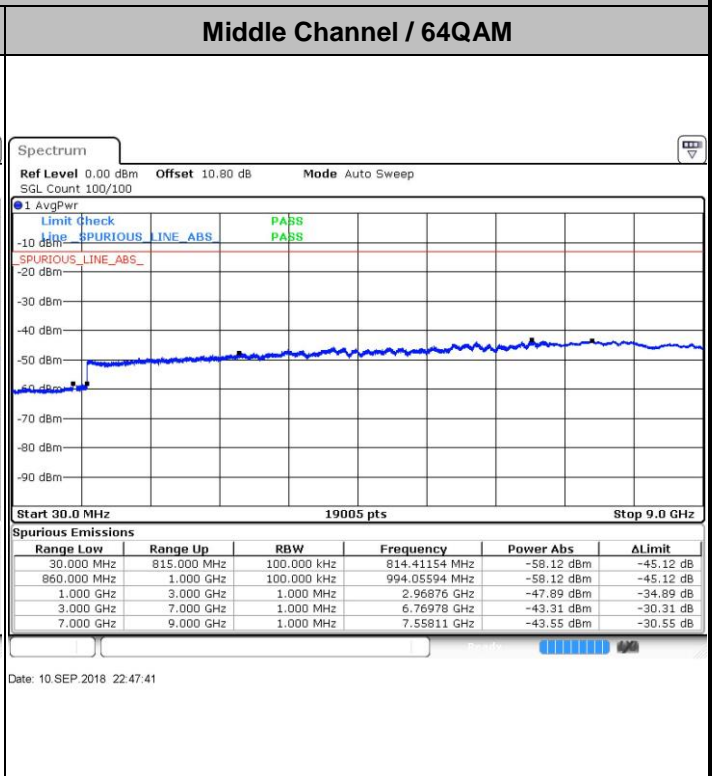
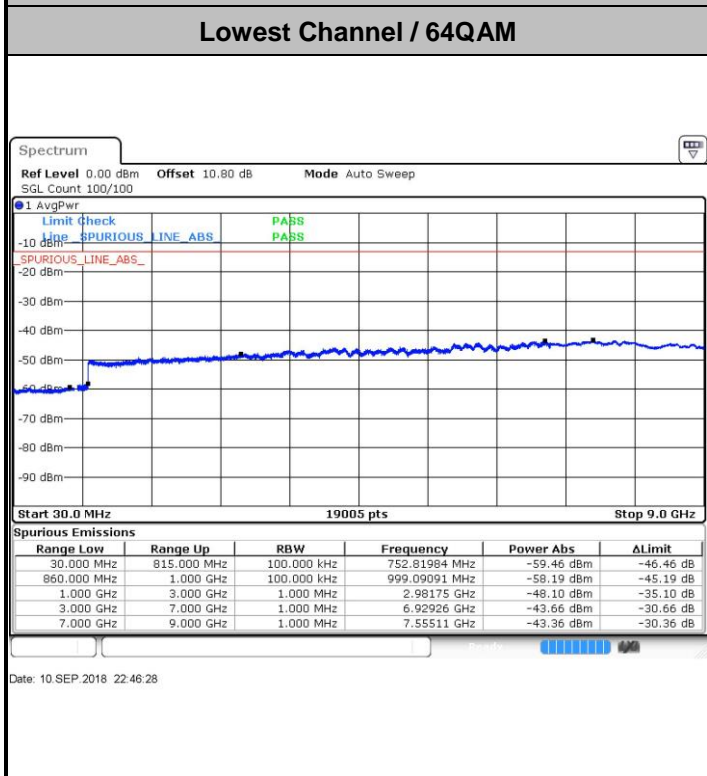
Highest Channel / 64QAM



Date: 10.SEP.2018 23:23:19

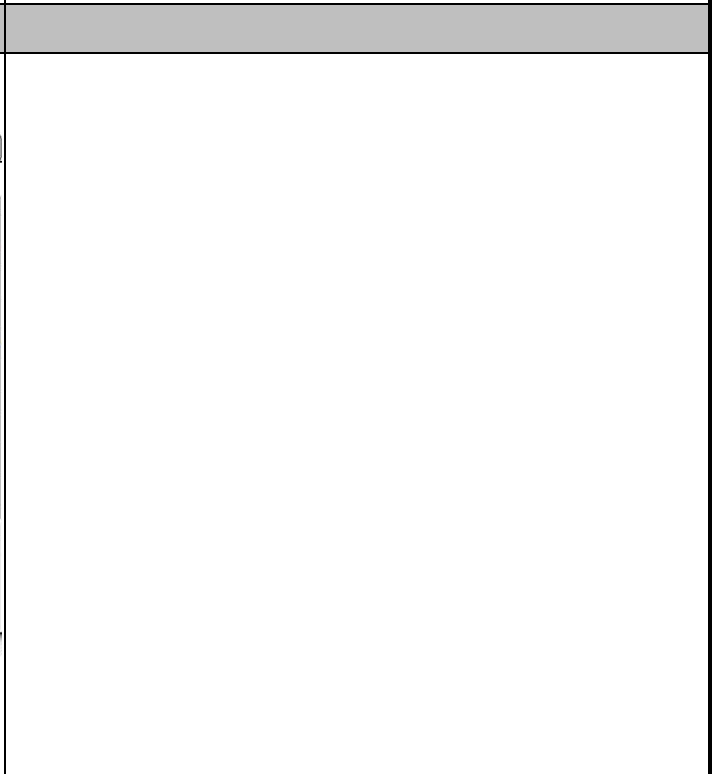
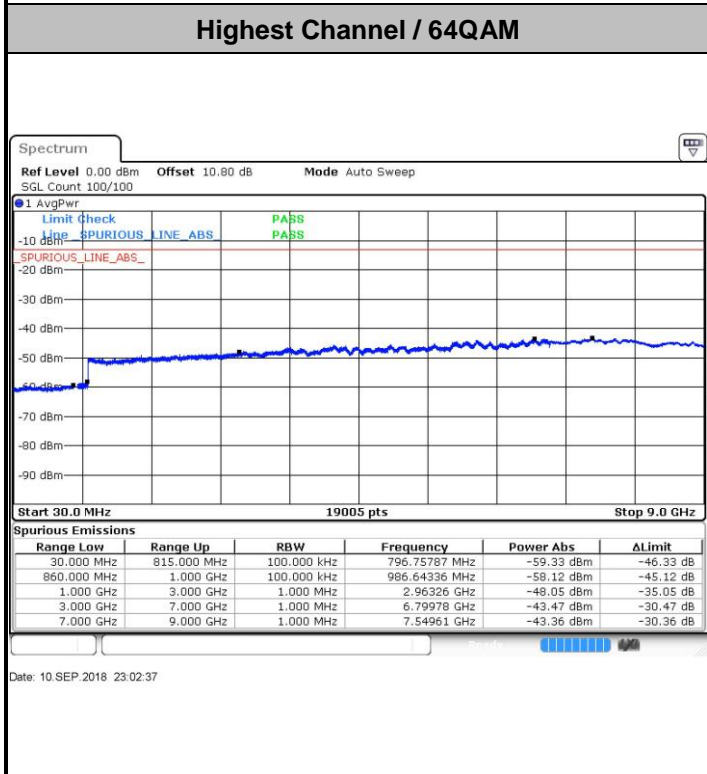
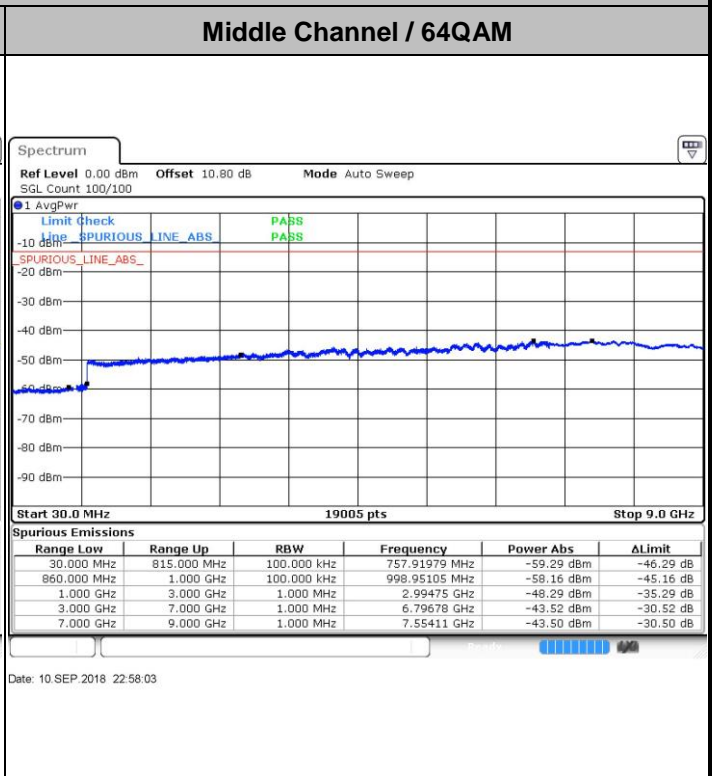
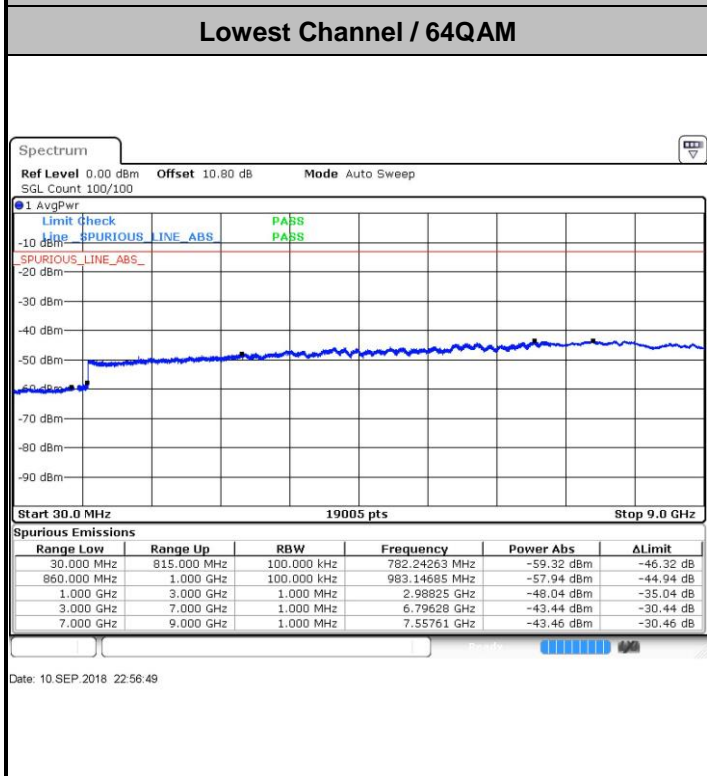


**LTE Band 5 / 3MHz**





**LTE Band 5 / 5MHz**

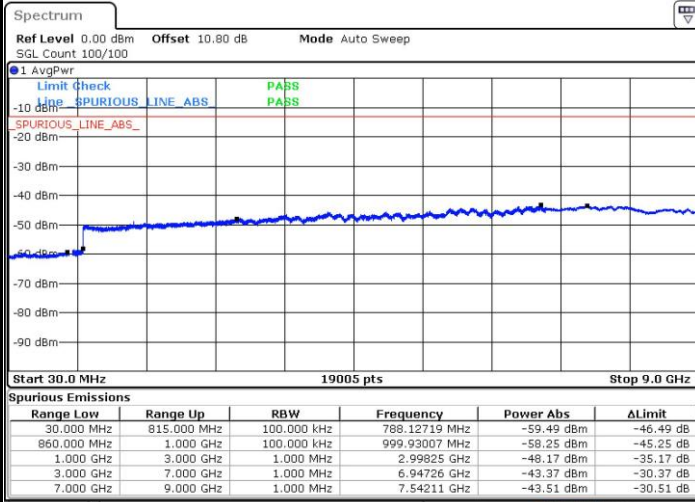




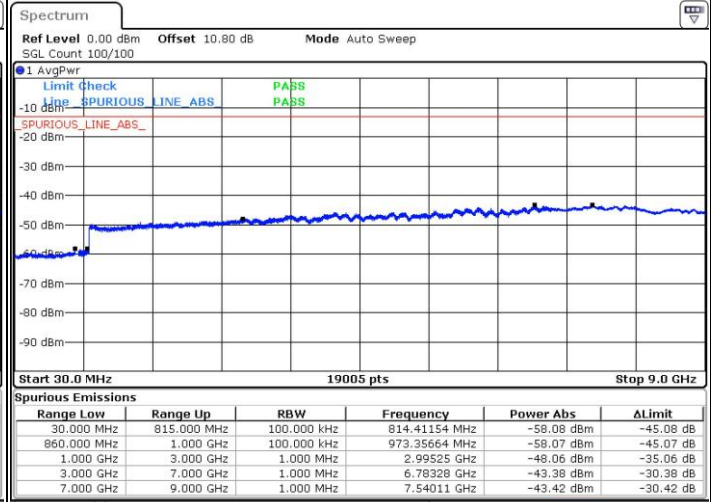
LTE Band 5 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

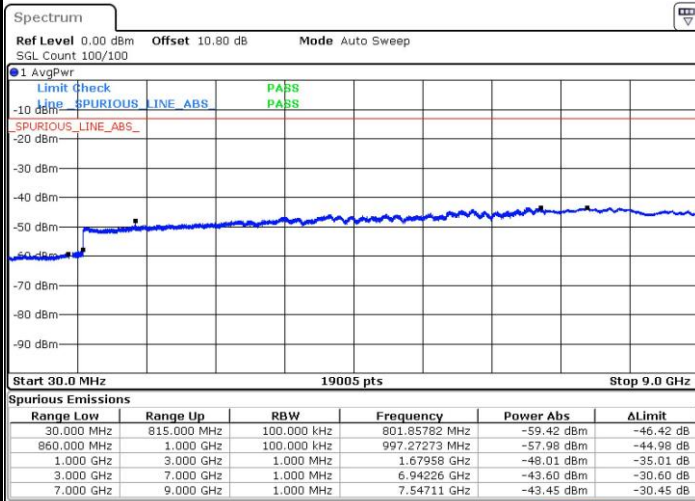


Date: 10 SEP 2018 23:07:10



Date: 10 SEP 2018 23:08:24

Highest Channel / 64QAM



Date: 10 SEP 2018 23:12:58



### Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0027	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0080	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0069	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0093	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0007	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 7

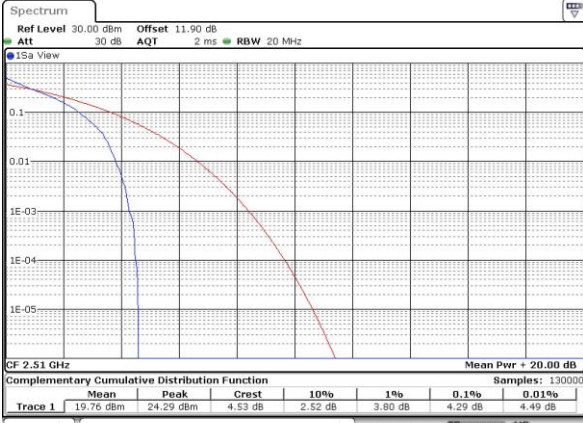
### Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.29	5.16	5.36	6.12	<b>PASS</b>
Middle CH	5.16	5.33	6.12	6.29	
Highest CH	4.32	5.1	5.57	6.2	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.86	6.43	-	-	<b>PASS</b>
Middle CH	6.81	6.67	-	-	
Highest CH	6.20	6.43	-	-	



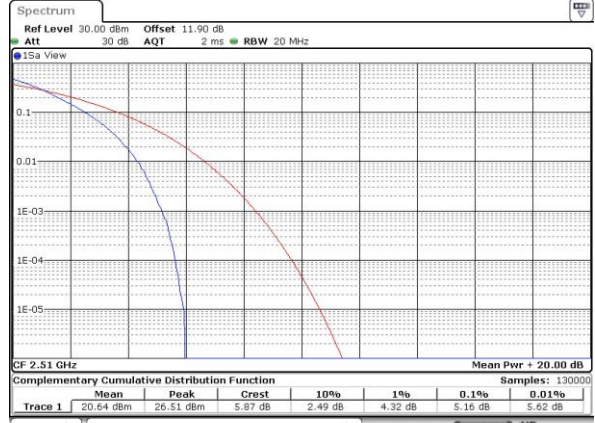
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



Date: 4 SEP.2018 23:11:45

Lowest Channel / Full RB



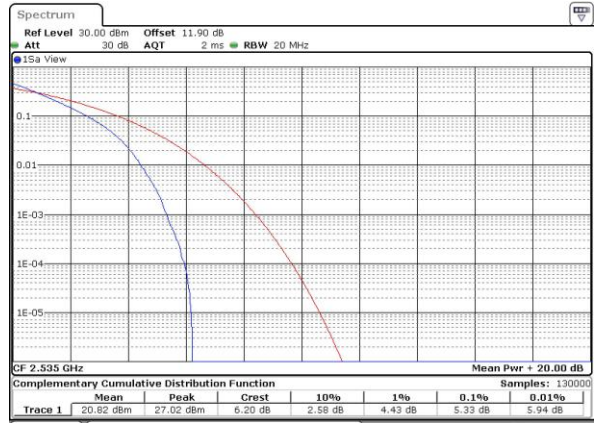
Date: 4 SEP.2018 23:11:55

Middle Channel / 1RB



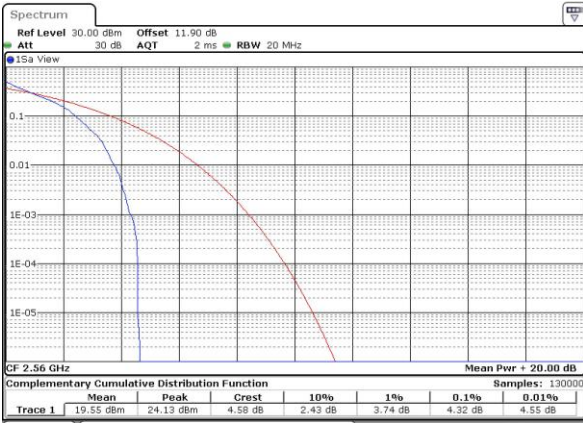
Date: 4 SEP.2018 23:12:05

Middle Channel / Full RB



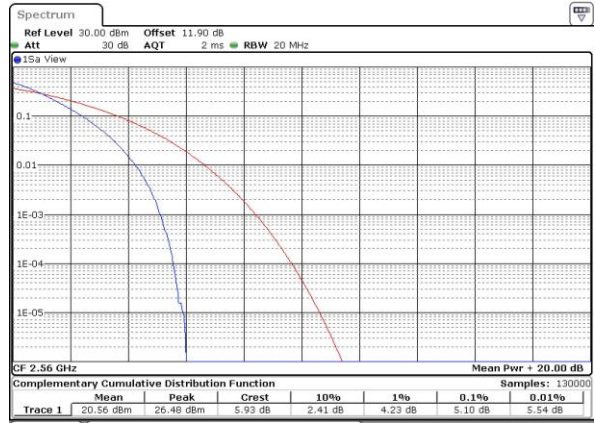
Date: 4 SEP.2018 23:12:15

Highest Channel / 1RB



Date: 4 SEP.2018 23:12:25

Highest Channel / Full RB



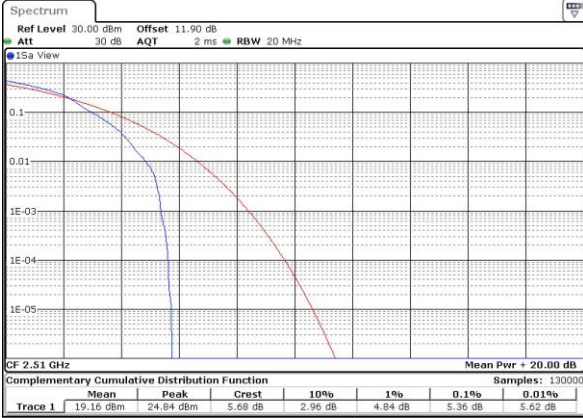
Date: 4 SEP.2018 23:12:35





LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



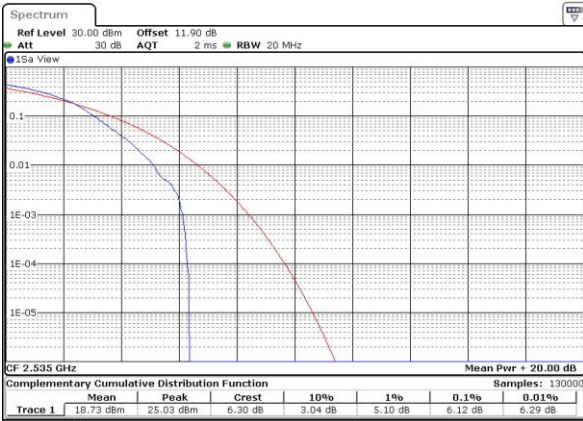
Date: 4 SEP 2018 23:10:34

Lowest Channel / Full RB



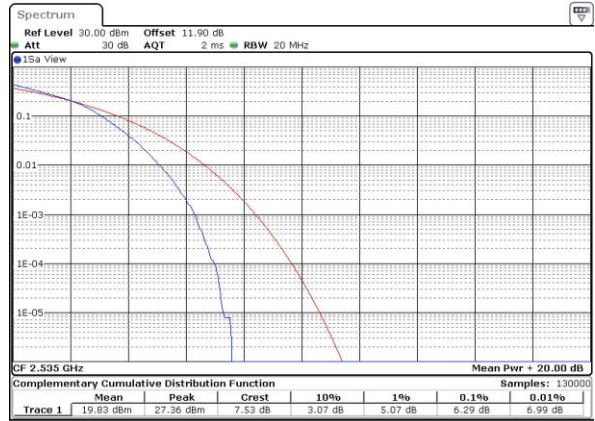
Date: 4 SEP 2018 23:10:52

Middle Channel / 1RB



Date: 4 SEP 2018 23:11:05

Middle Channel / Full RB



Date: 4 SEP 2018 23:11:15

Highest Channel / 1RB



Date: 4 SEP 2018 23:11:25

Highest Channel / Full RB



Date: 4 SEP 2018 23:11:35





LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



Date: 4 SEP 2018 23:12:45

Lowest Channel / Full RB



Date: 4 SEP 2018 23:12:55

Middle Channel / 1RB



Date: 4 SEP 2018 23:13:05

Middle Channel / Full RB



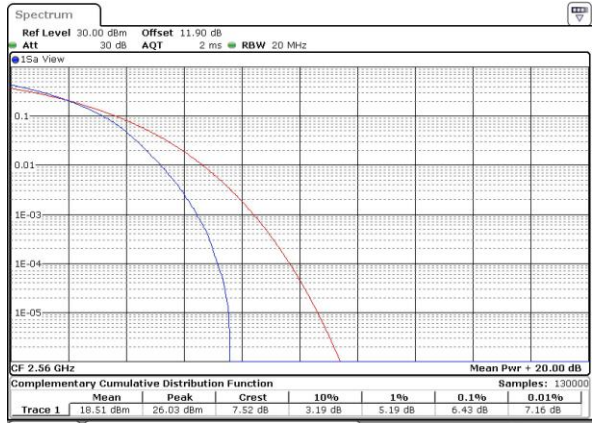
Date: 4 SEP 2018 23:13:15

Highest Channel / 1RB



Date: 4 SEP 2018 23:13:24

Highest Channel / Full RB



Date: 4 SEP 2018 23:13:34



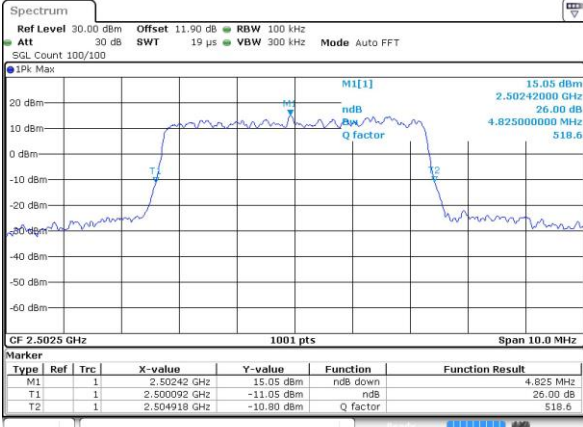
**26dB Bandwidth**

Mode	LTE Band 7 : 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	-	-	-	-	4.83	4.93	9.71	9.73	14.24	14.51	20.14	20.06
Middle CH	-	-	-	-	4.88	4.90	9.77	9.65	14.39	14.48	20.18	20.18
Highest CH	-	-	-	-	4.89	4.83	9.73	9.85	14.24	14.51	20.02	20.06
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.88	-	9.73	-	14.18	-	20.10	-
Middle CH	-	-	-	-	4.94	-	9.97	-	14.36	-	20.18	-
Highest CH	-	-	-	-	4.87	-	9.75	-	14.36	-	20.14	-



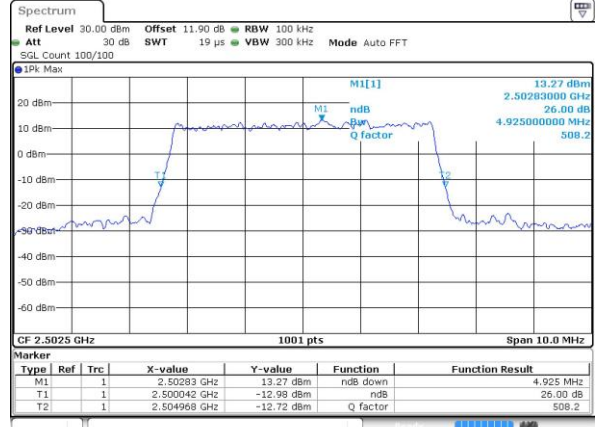
LTE Band 7

Lowest Channel / 5MHz / QPSK



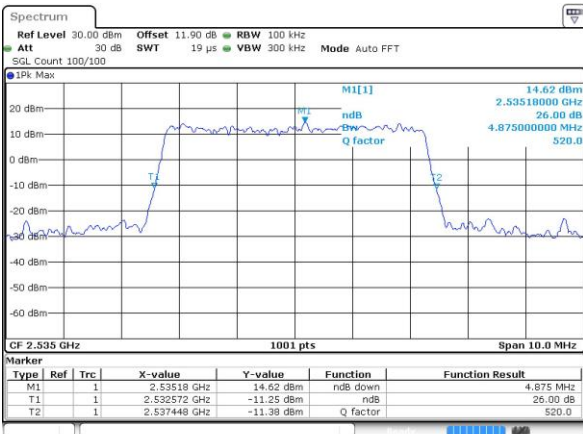
Date: 4 SEP 2018 21:27:25

Lowest Channel / 5MHz / 16QAM



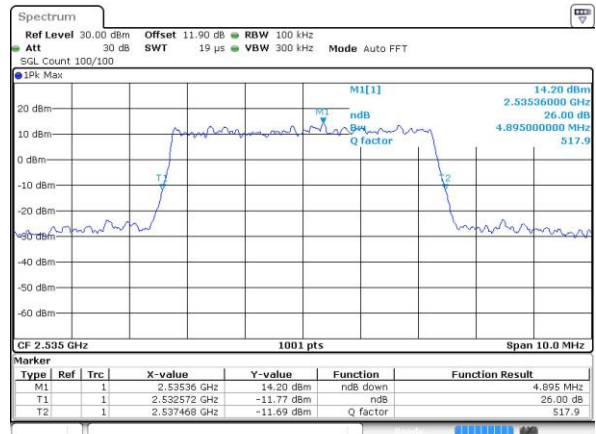
Date: 4 SEP 2018 21:27:36

Middle Channel / 5MHz / QPSK



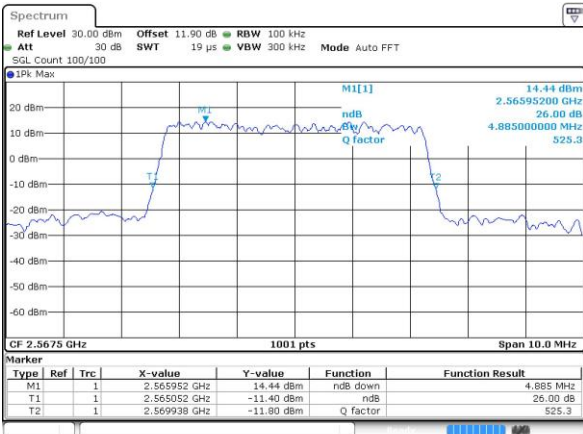
Date: 4 SEP 2018 21:34:32

Middle Channel / 5MHz / 16QAM



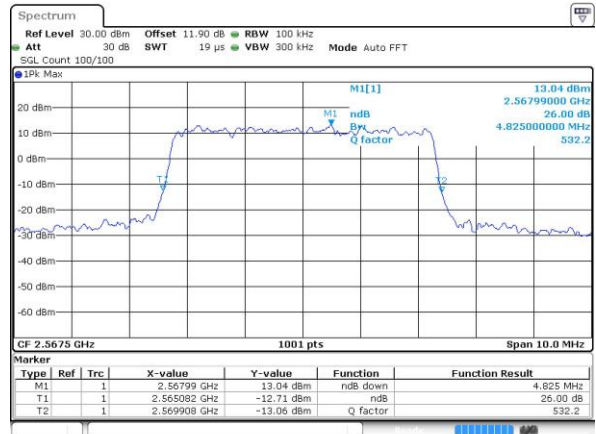
Date: 4 SEP 2018 21:34:44

Highest Channel / 5MHz / QPSK



Date: 4 SEP 2018 21:36:57

Highest Channel / 5MHz / 16QAM

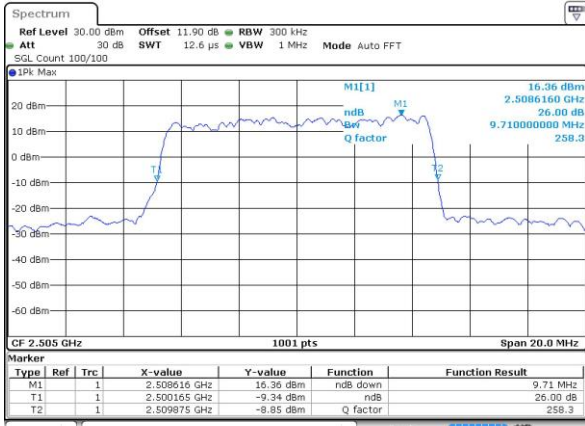


Date: 4 SEP 2018 21:37:08



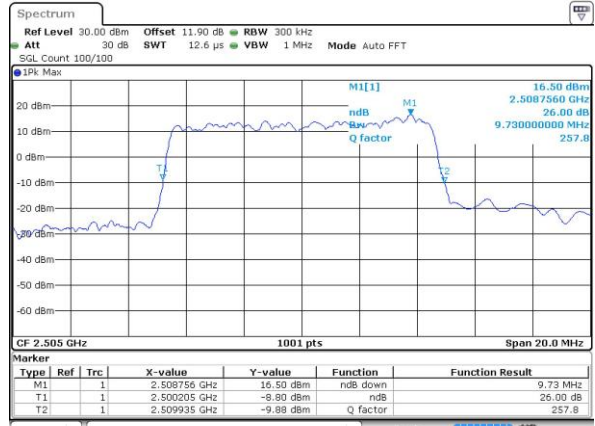
LTE Band 7

Lowest Channel / 10MHz / QPSK



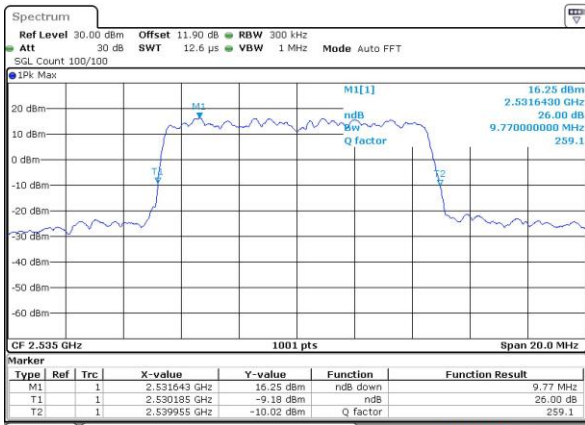
Date: 4 SEP 2018 21:52:25

Lowest Channel / 10MHz / 16QAM



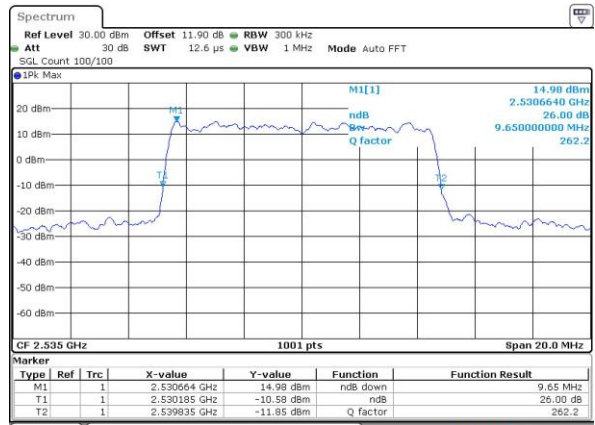
Date: 4 SEP 2018 21:52:36

Middle Channel / 10MHz / QPSK



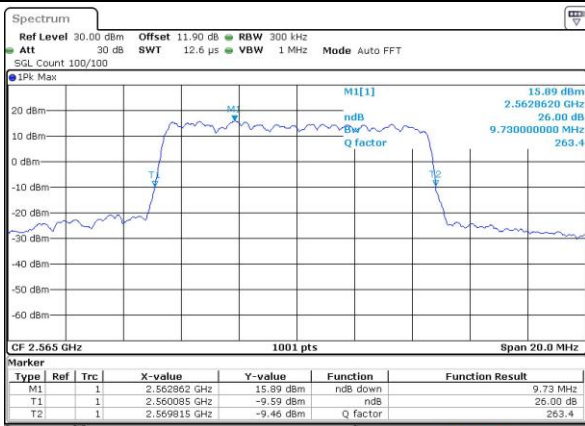
Date: 4 SEP 2018 21:59:32

Middle Channel / 10MHz / 16QAM



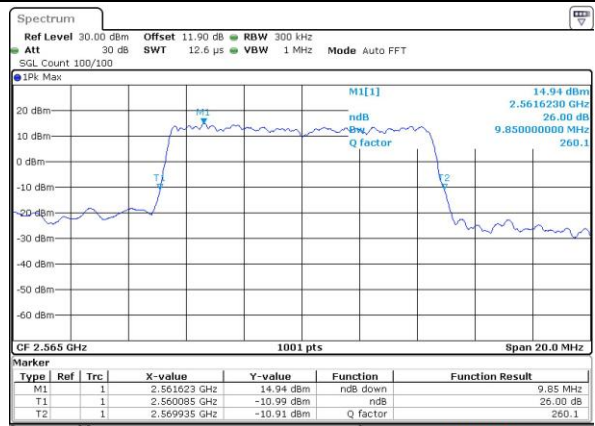
Date: 4 SEP 2018 21:59:44

Highest Channel / 10MHz / QPSK



Date: 4 SEP 2018 22:01:57

Highest Channel / 10MHz / 16QAM

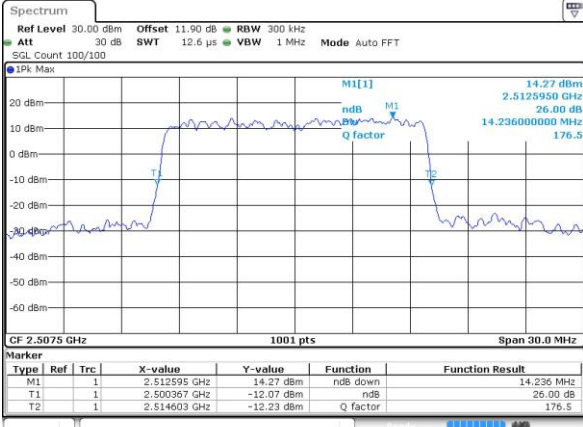


Date: 4 SEP 2018 22:02:09



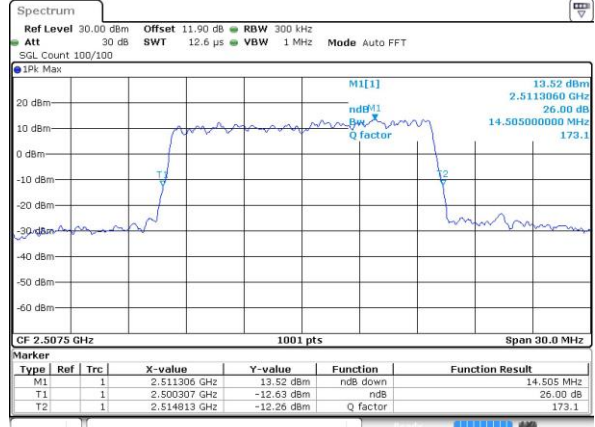
LTE Band 7

Lowest Channel / 15MHz / QPSK



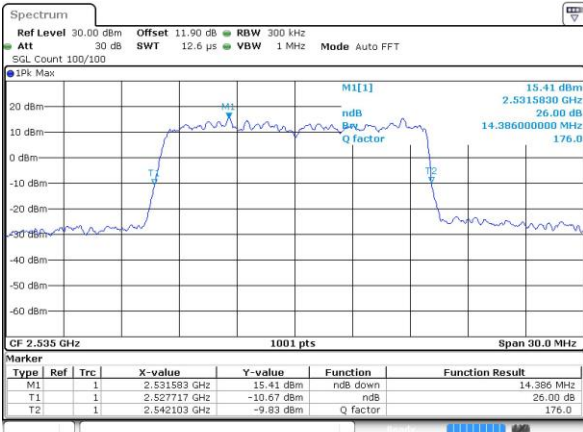
Date: 4 SEP. 2018 22:17:25

Lowest Channel / 15MHz / 16QAM



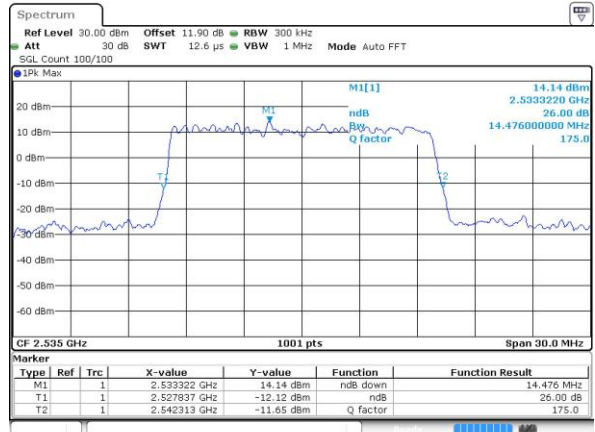
Date: 4 SEP. 2018 22:17:37

Middle Channel / 15MHz / QPSK



Date: 4 SEP. 2018 22:24:33

Middle Channel / 15MHz / 16QAM



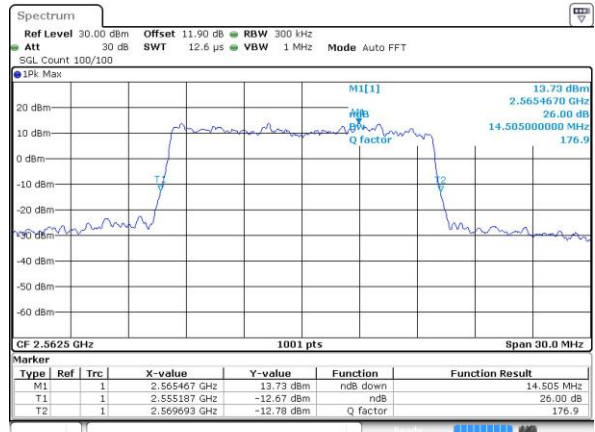
Date: 4 SEP. 2018 22:24:44

Highest Channel / 15MHz / QPSK



Date: 4 SEP. 2018 22:26:57

Highest Channel / 15MHz / 16QAM



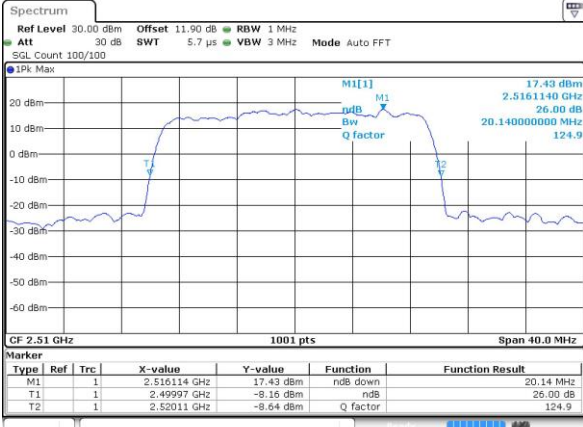
Date: 4 SEP. 2018 22:27:09





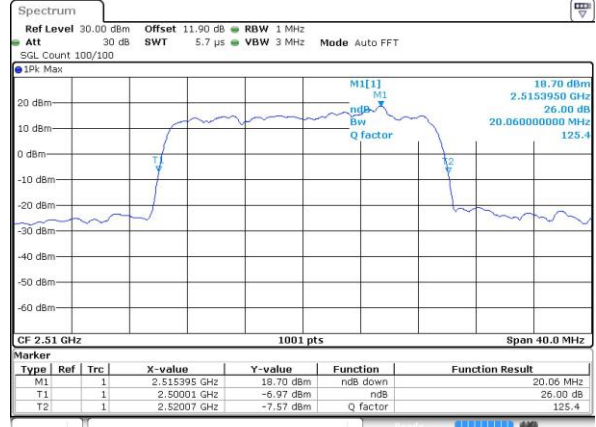
LTE Band 7

Lowest Channel / 20MHz / QPSK



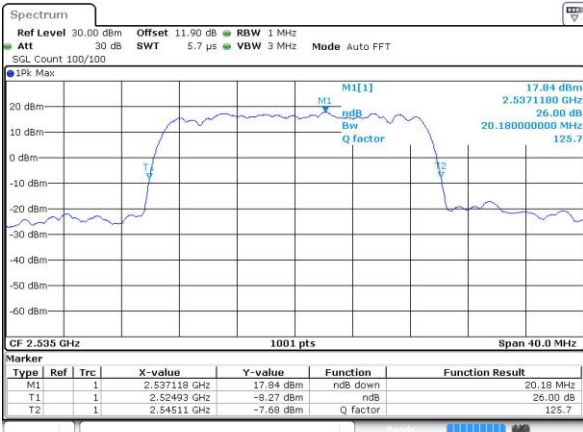
Date: 4 SEP 2018 22:42:25

Lowest Channel / 20MHz / 16QAM



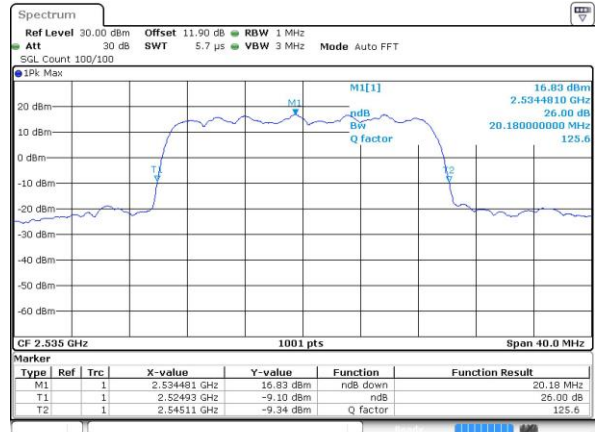
Date: 4 SEP 2018 22:42:37

Middle Channel / 20MHz / QPSK



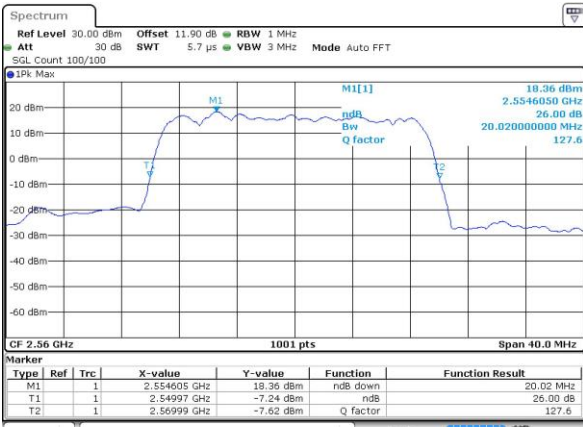
Date: 4 SEP 2018 22:49:33

Middle Channel / 20MHz / 16QAM



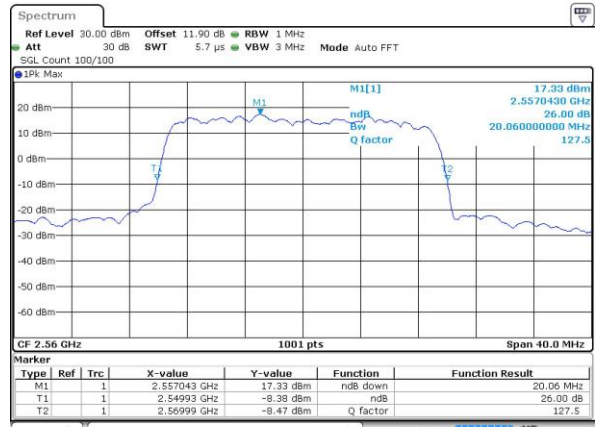
Date: 4 SEP 2018 22:49:44

Highest Channel / 20MHz / QPSK



Date: 4 SEP 2018 22:51:58

Highest Channel / 20MHz / 16QAM



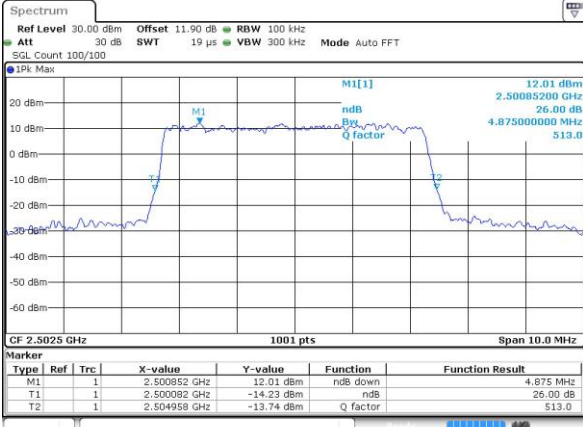
Date: 4 SEP 2018 22:52:09





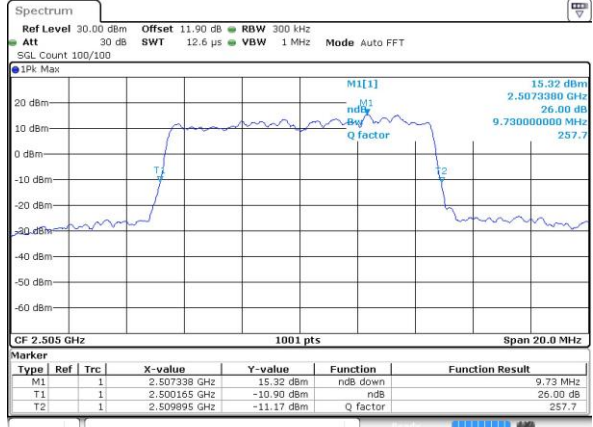
LTE Band 7

Lowest Channel / 5MHz / 64QAM



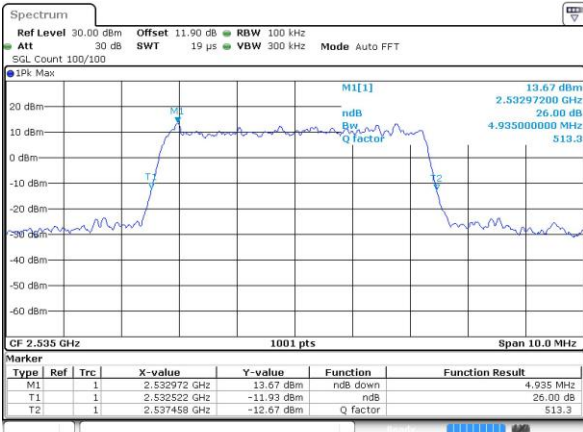
Date: 4 SEP 2018 21:43:53

Lowest Channel / 10MHz / 64QAM



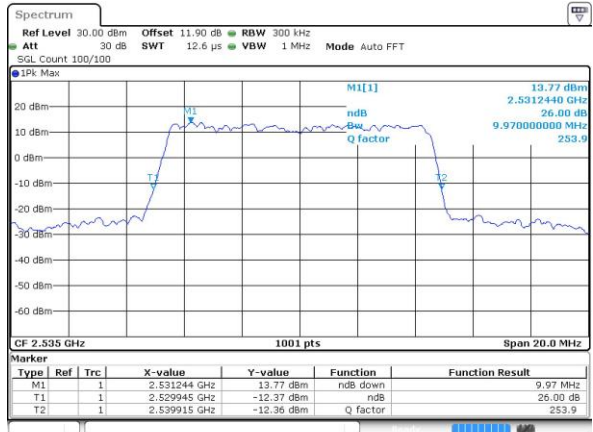
Date: 4 SEP 2018 22:08:54

Middle Channel / 5MHz / 64QAM



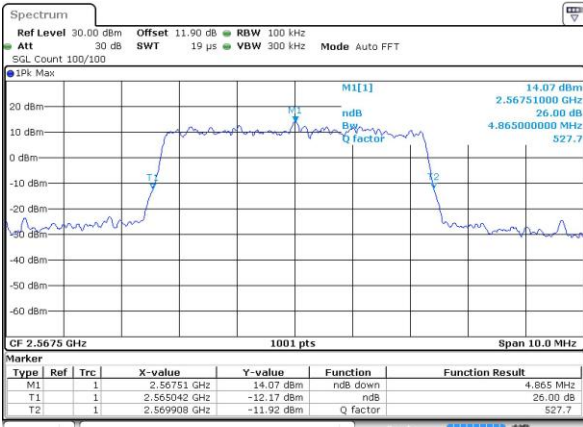
Date: 4 SEP 2018 21:47:27

Middle Channel / 10MHz / 64QAM



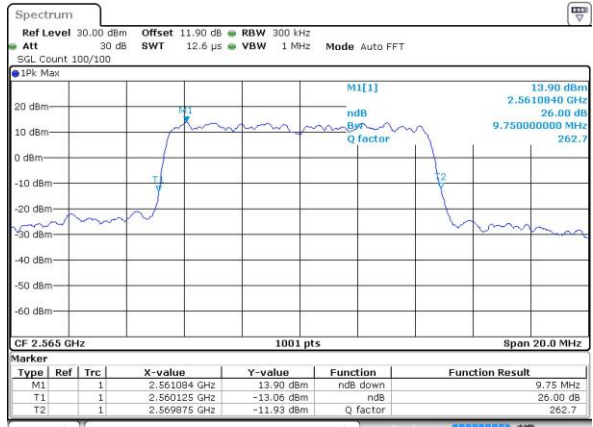
Date: 4 SEP 2018 22:12:27

Highest Channel / 5MHz / 64QAM



Date: 4 SEP 2018 21:48:39

Highest Channel / 10MHz / 64QAM

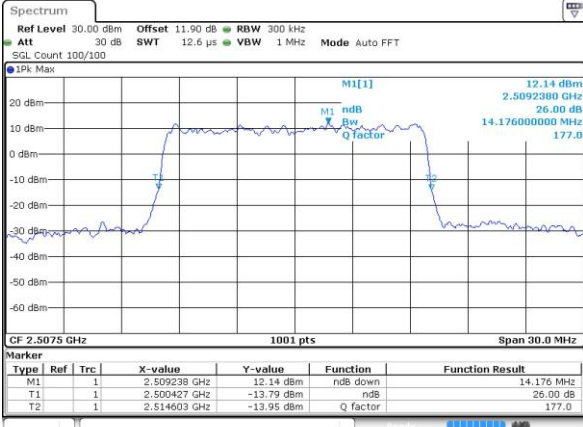


Date: 4 SEP 2018 22:13:40



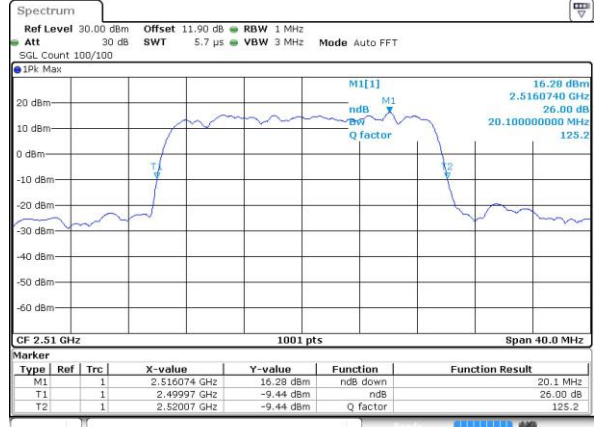
LTE Band 7

Lowest Channel / 15MHz / 64QAM



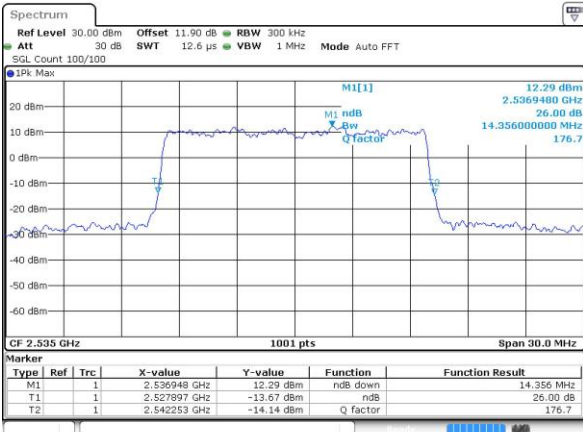
Date: 4 SEP 2018 22:33:54

Lowest Channel / 20MHz / 64QAM



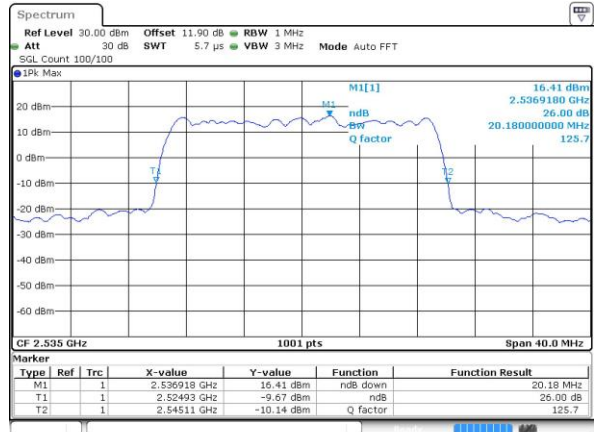
Date: 4 SEP 2018 22:58:54

Middle Channel / 15MHz / 64QAM



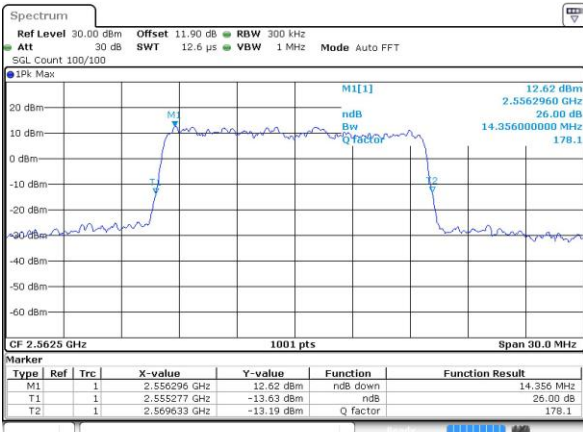
Date: 4 SEP 2018 22:37:27

Middle Channel / 20MHz / 64QAM



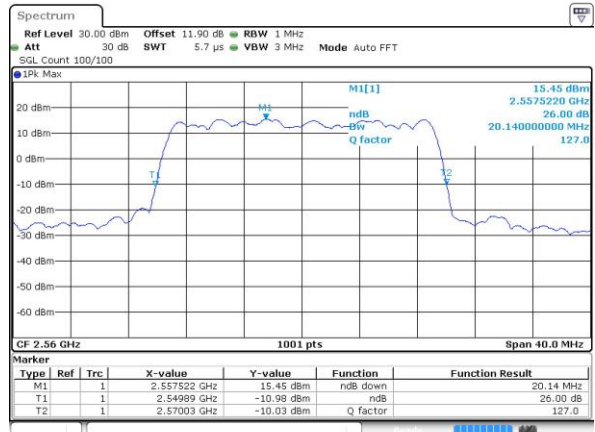
Date: 4 SEP 2018 23:02:28

Highest Channel / 15MHz / 64QAM



Date: 4 SEP 2018 22:38:40

Highest Channel / 20MHz / 64QAM



Date: 4 SEP 2018 23:03:40



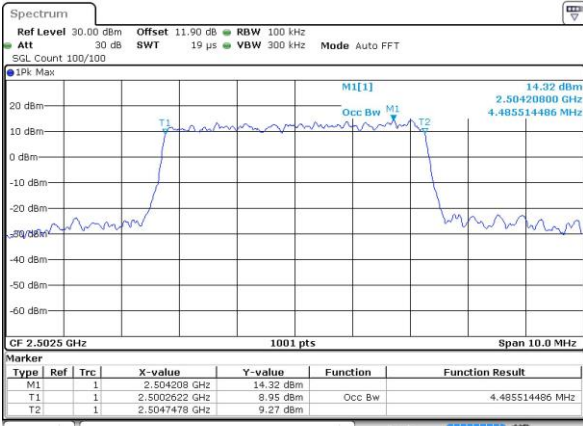
**Occupied Bandwidth**

Mode	LTE Band 7 : 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	-	-	-	-	4.49	4.5	9.03	9.05	13.43	13.43	18.34	18.42
Middle CH	-	-	-	-	4.48	4.51	9.03	9.05	13.49	13.43	18.38	18.5
Highest CH	-	-	-	-	4.5	4.49	9.03	9.05	13.4	13.4	18.26	18.26
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.51	-	9.03	-	13.37	-	18.26	-
Middle CH	-	-	-	-	4.49	-	9.03	-	13.43	-	18.34	-
Highest CH	-	-	-	-	4.51	-	9.05	-	13.43	-	18.38	-



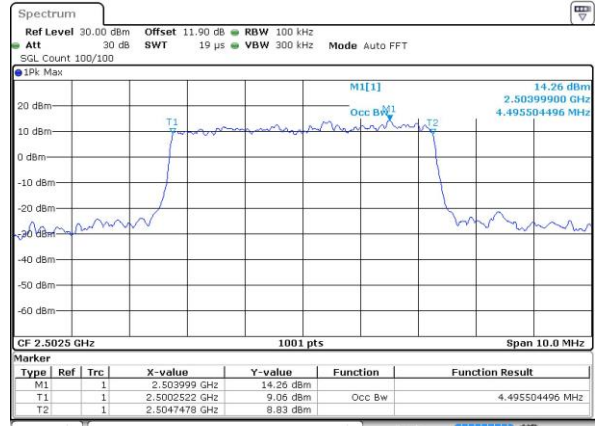
LTE Band 7

Lowest Channel / 5MHz / QPSK



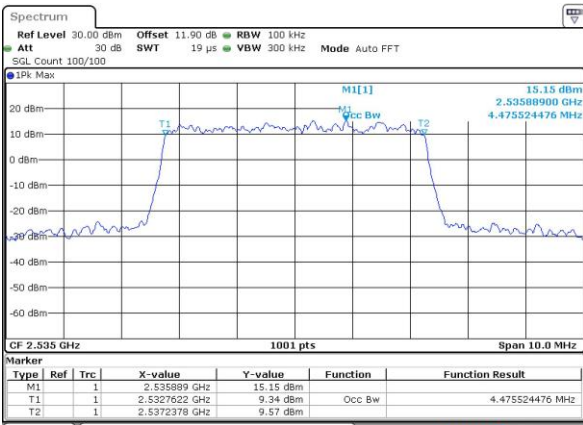
Date: 4 SEP.2018 21:27:02

Lowest Channel / 5MHz / 16QAM



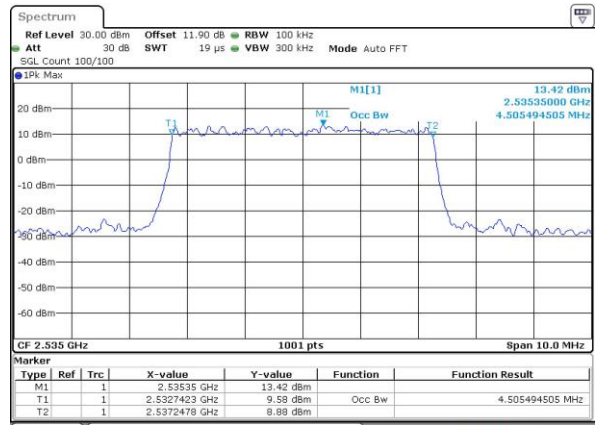
Date: 4 SEP.2018 21:27:13

Middle Channel / 5MHz / QPSK



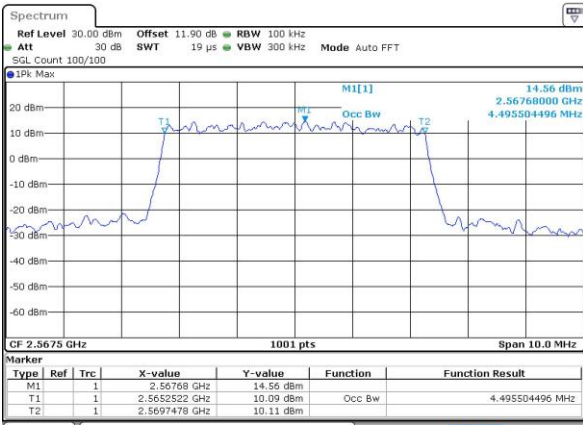
Date: 4 SEP.2018 21:34:09

Middle Channel / 5MHz / 16QAM



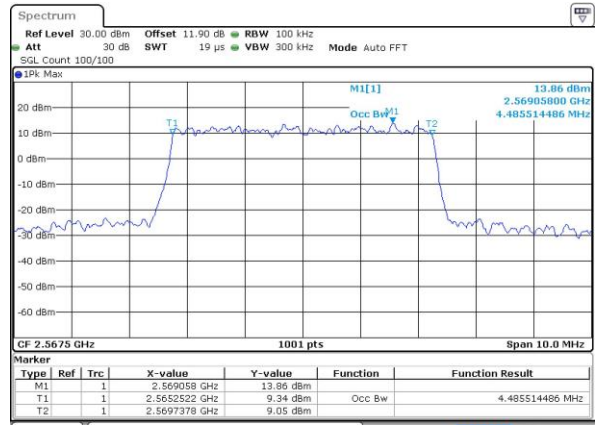
Date: 4 SEP.2018 21:34:21

Highest Channel / 5MHz / QPSK



Date: 4 SEP.2018 21:36:34

Highest Channel / 5MHz / 16QAM

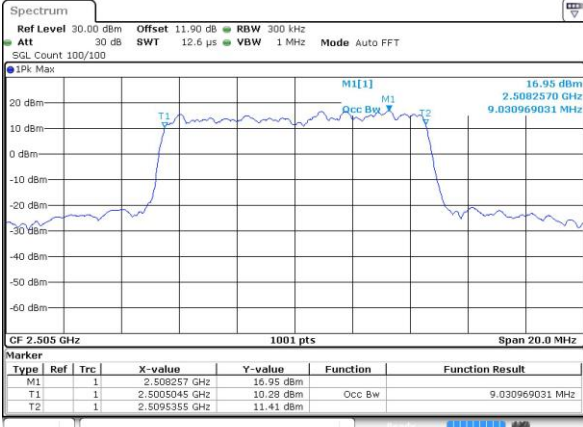


Date: 4 SEP.2018 21:36:46



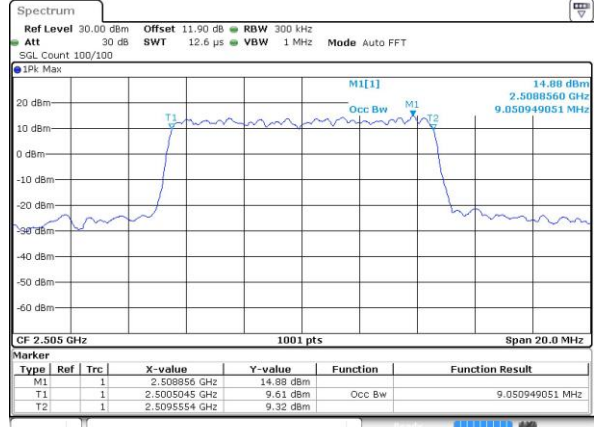
LTE Band 7

Lowest Channel / 10MHz / QPSK



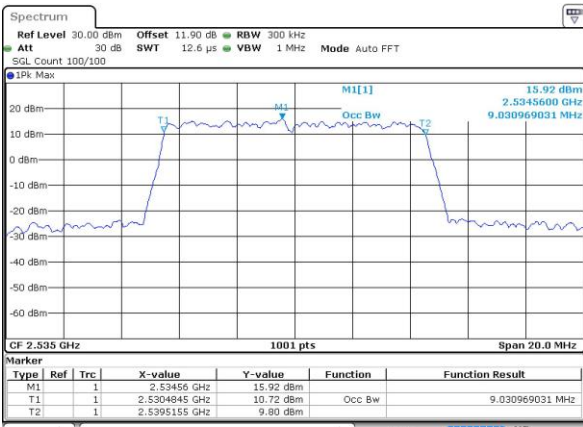
Date: 4 SEP 2018 21:52:02

Lowest Channel / 10MHz / 16QAM



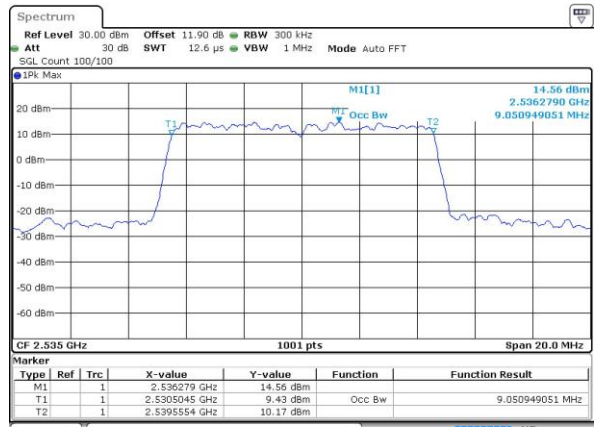
Date: 4 SEP 2018 21:52:14

Middle Channel / 10MHz / QPSK



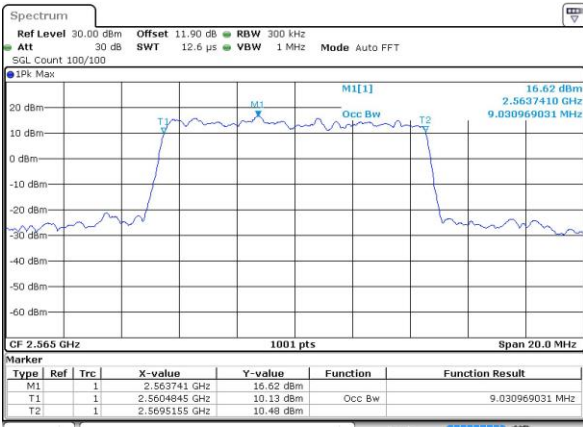
Date: 4 SEP 2018 21:59:10

Middle Channel / 10MHz / 16QAM



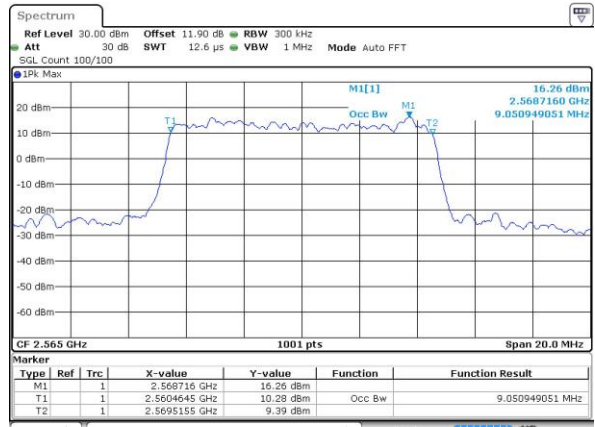
Date: 4 SEP 2018 21:59:21

Highest Channel / 10MHz / QPSK



Date: 4 SEP 2018 22:01:34

Highest Channel / 10MHz / 16QAM

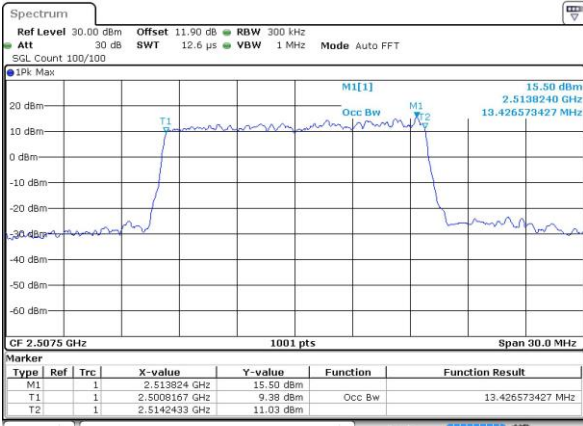


Date: 4 SEP 2018 22:01:46



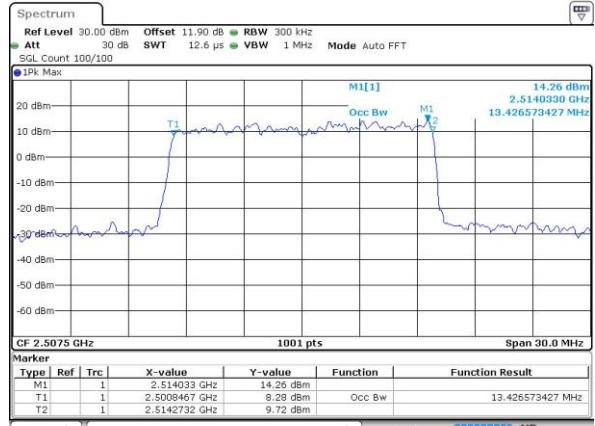
LTE Band 7

Lowest Channel / 15MHz / QPSK



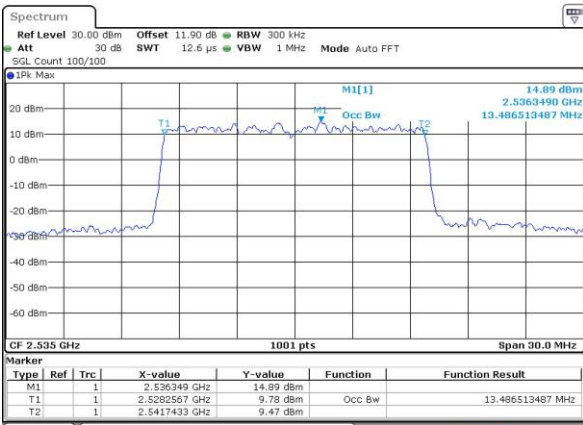
Date: 4 SEP.2018 22:17:02

Lowest Channel / 15MHz / 16QAM



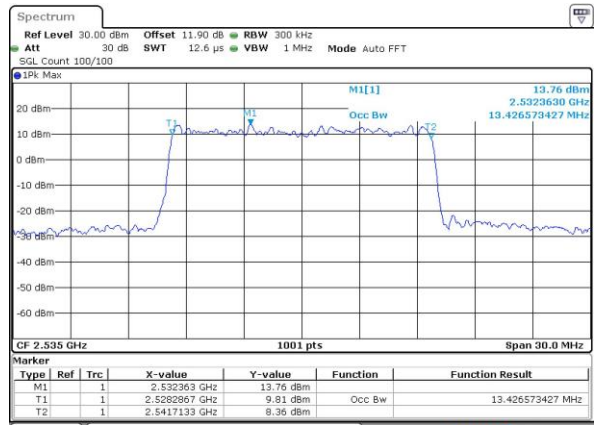
Date: 4 SEP.2018 22:17:14

Middle Channel / 15MHz / QPSK



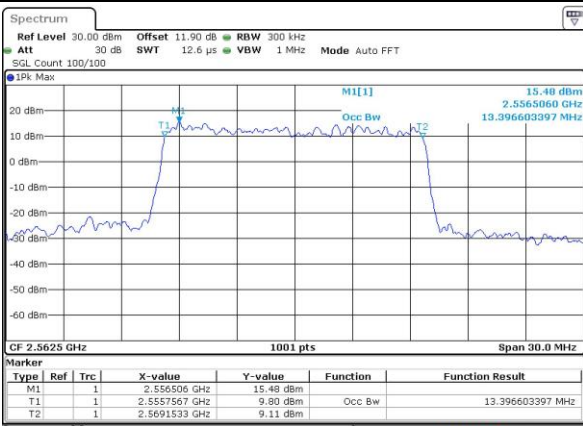
Date: 4 SEP.2018 22:24:10

Middle Channel / 15MHz / 16QAM



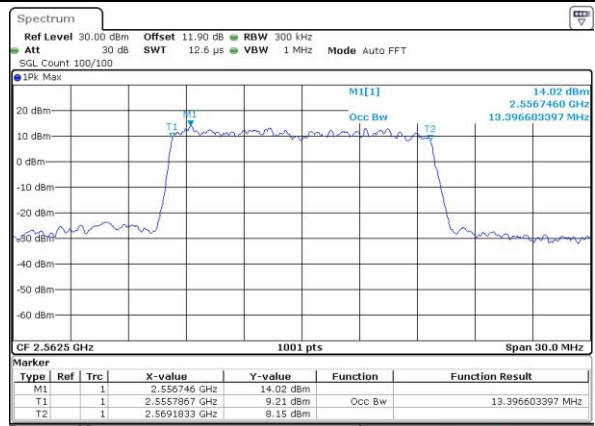
Date: 4 SEP.2018 22:24:21

Highest Channel / 15MHz / QPSK



Date: 4 SEP.2018 22:26:35

Highest Channel / 15MHz / 16QAM



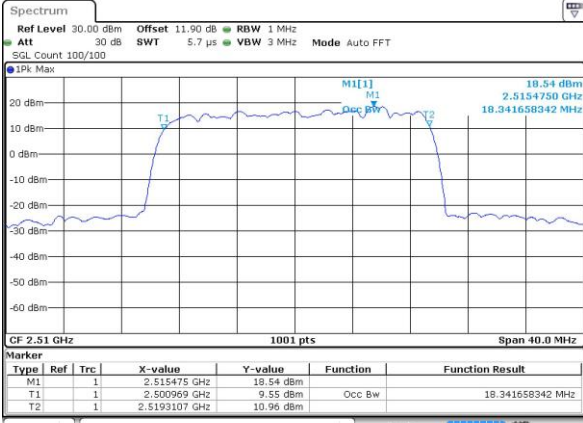
Date: 4 SEP.2018 22:26:46





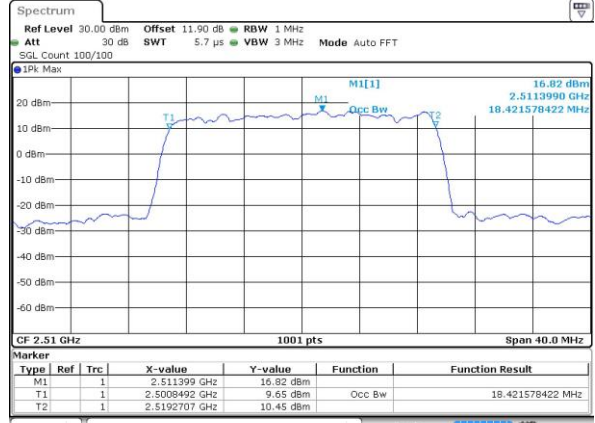
LTE Band 7

Lowest Channel / 20MHz / QPSK



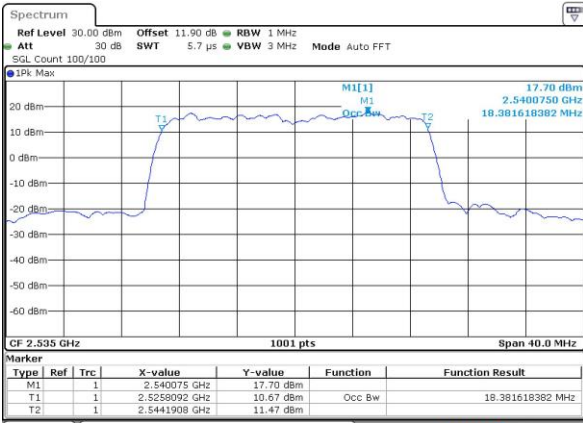
Date: 4 SEP 2018 22:42:02

Lowest Channel / 20MHz / 16QAM



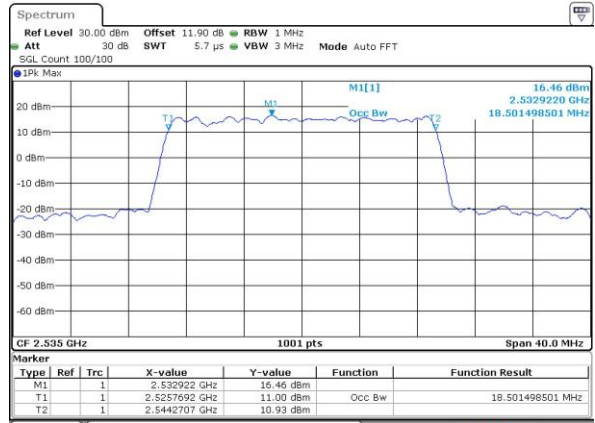
Date: 4 SEP 2018 22:42:14

Middle Channel / 20MHz / QPSK



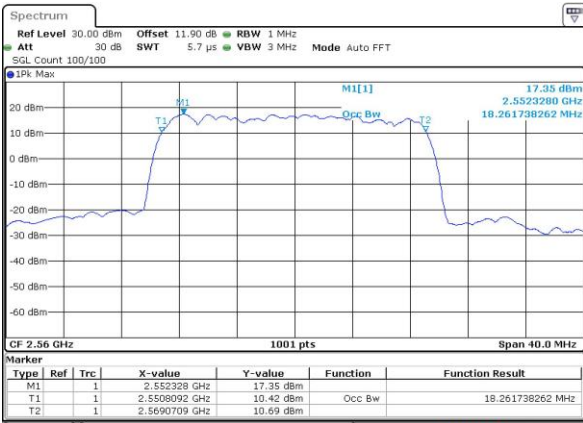
Date: 4 SEP 2018 22:49:10

Middle Channel / 20MHz / 16QAM



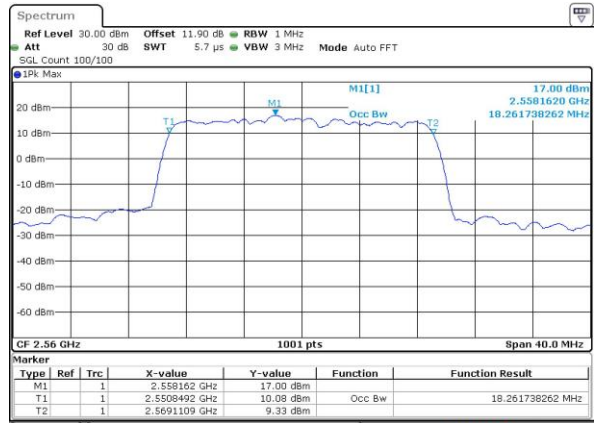
Date: 4 SEP 2018 22:49:21

Highest Channel / 20MHz / QPSK



Date: 4 SEP 2018 22:51:35

Highest Channel / 20MHz / 16QAM



Date: 4 SEP 2018 22:51:46