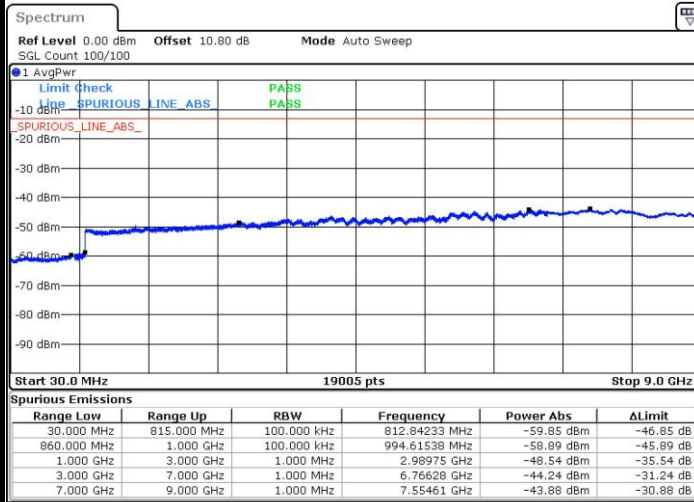




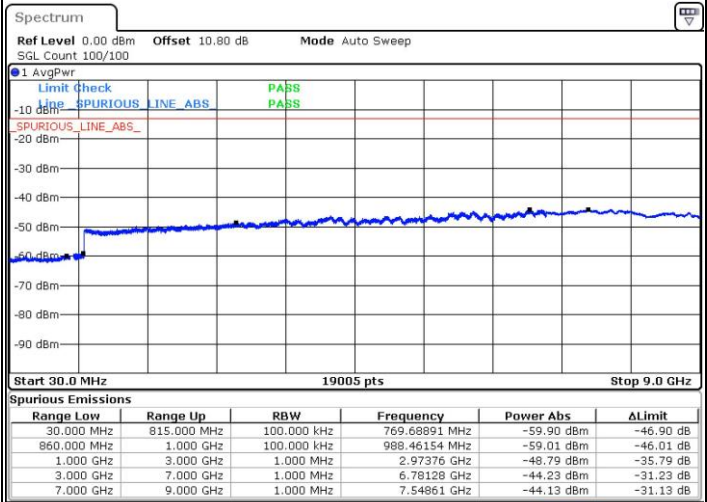
LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM



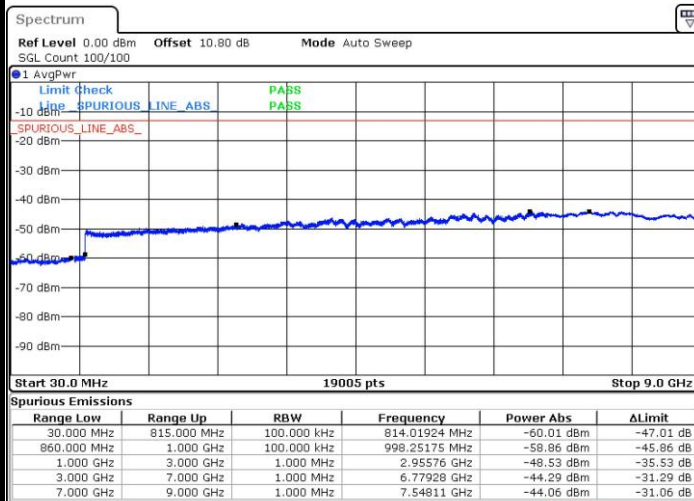
Date: 25 MAR 2019 09:39:18

Middle Channel / 64QAM



Date: 25 MAR 2019 09:40:33

Highest Channel / 64QAM

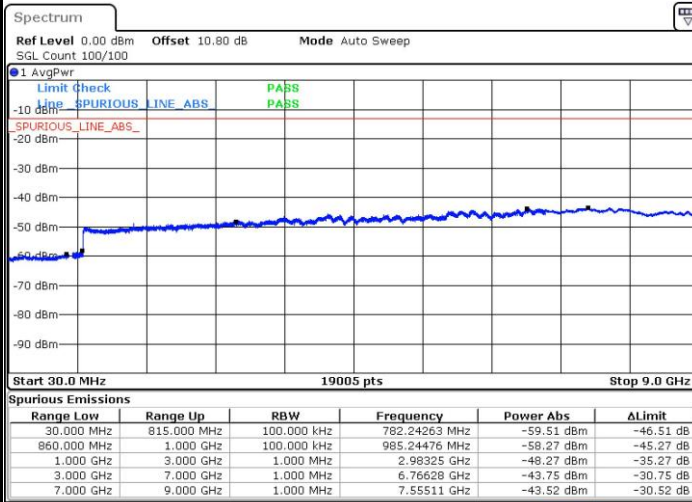


Date: 25 MAR 2019 09:45:11



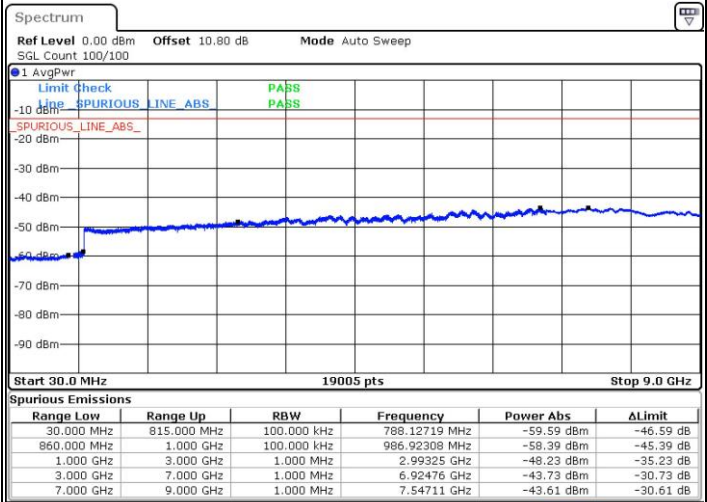
LTE Band 5 / 3MHz

Lowest Channel / 64QAM



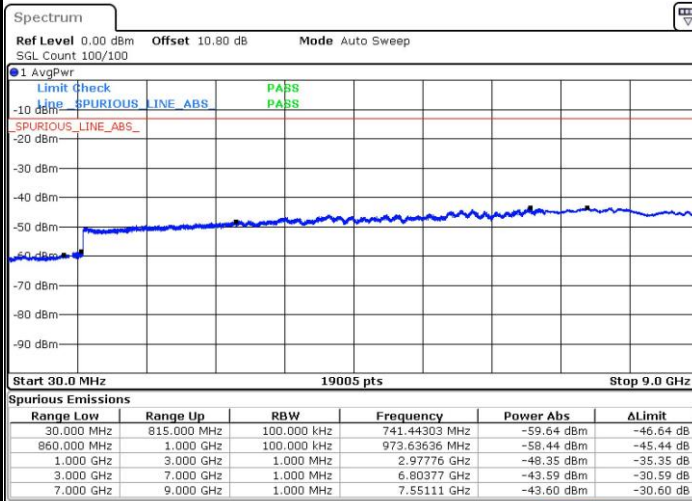
Date: 23 MAR 2019 20:18:06

Middle Channel / 64QAM



Date: 23 MAR 2019 20:19:20

Highest Channel / 64QAM

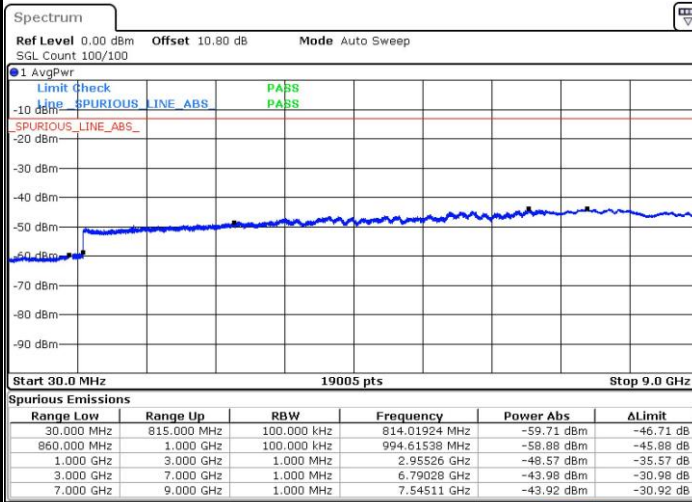


Date: 23 MAR 2019 20:23:58



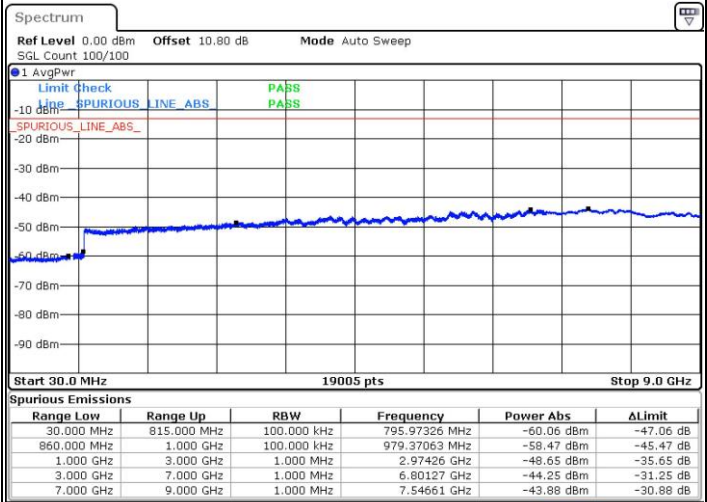
LTE Band 5 / 5MHz

Lowest Channel / 64QAM



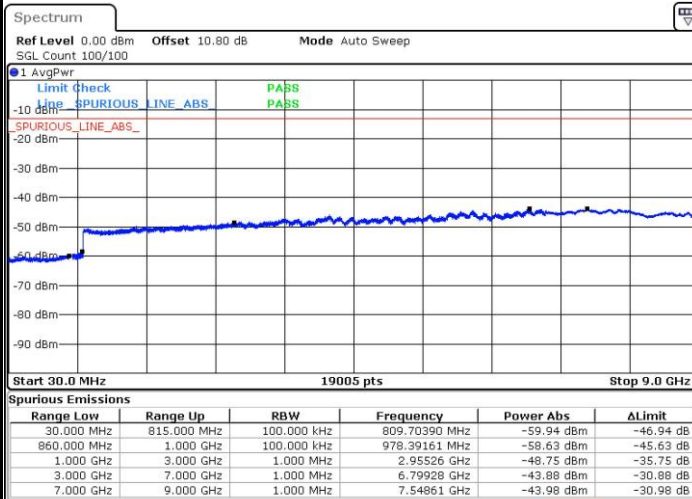
Date: 25 MAR 2019 09:10:36

Middle Channel / 64QAM



Date: 25 MAR 2019 09:11:50

Highest Channel / 64QAM

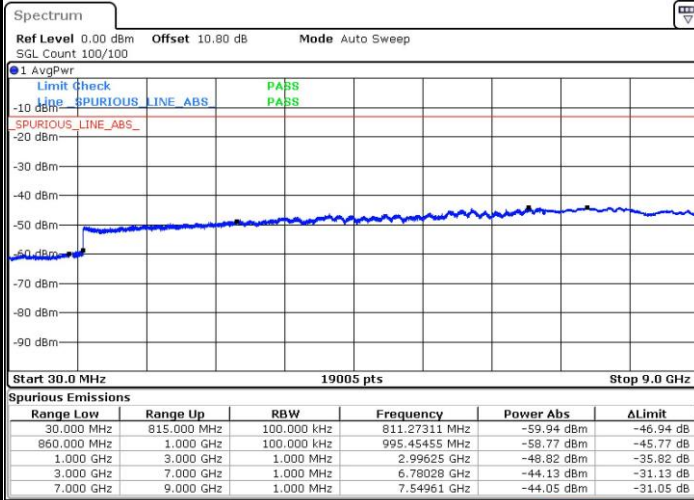


Date: 25 MAR 2019 09:16:28



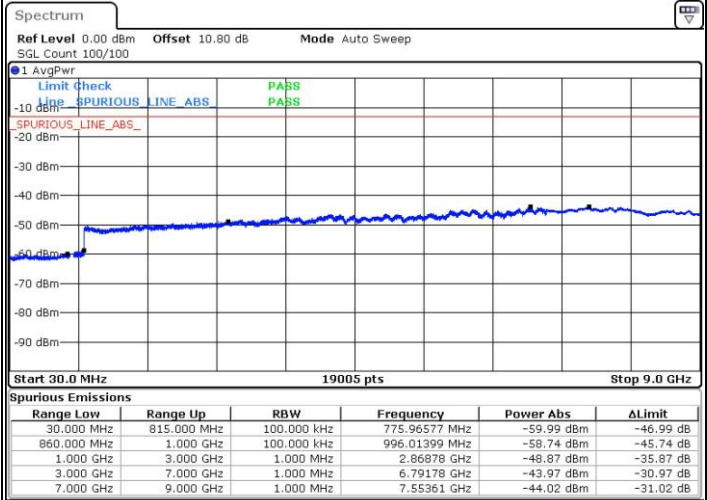
LTE Band 5 / 10MHz

Lowest Channel / 64QAM



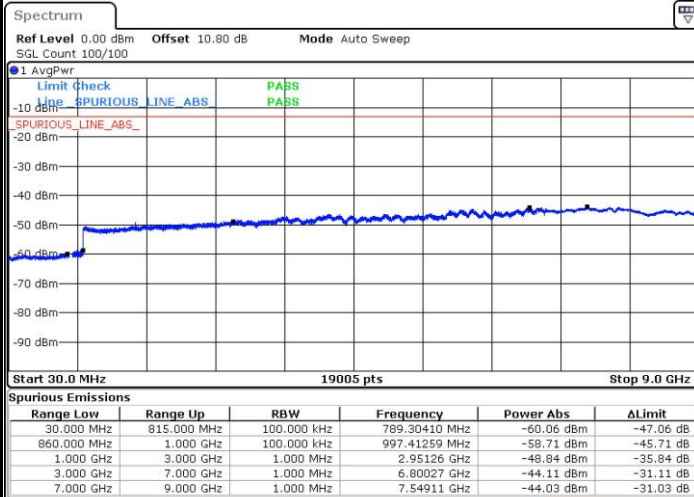
Date: 25 MAR 2019 09:21:07

Middle Channel / 64QAM



Date: 25 MAR 2019 09:22:22

Highest Channel / 64QAM



Date: 25 MAR 2019 09:27:00

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	0.0068	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0075	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0075	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0017	

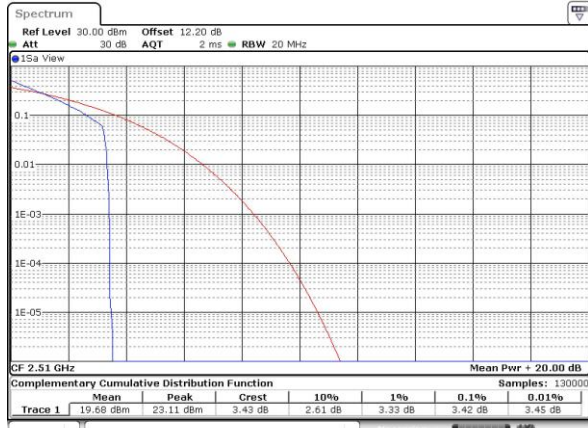
Note:

1. Normal Voltage =4.0 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

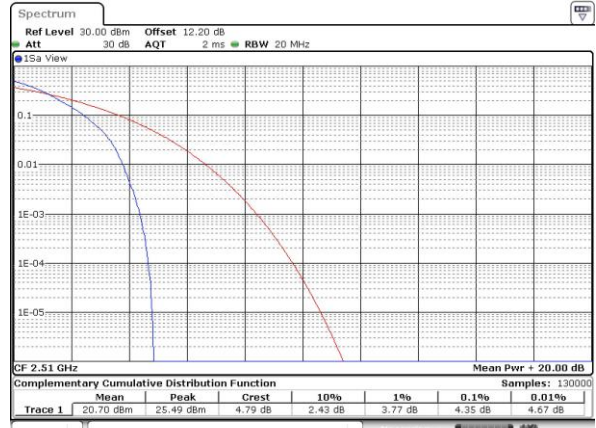
LTE Band 7

Peak-to-Average Ratio

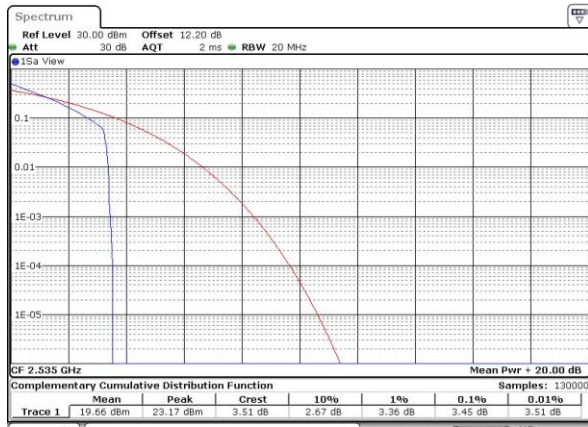
Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.42	4.35	5.22	5.77	PASS
Middle CH	3.45	4.41	5.28	5.8	
Highest CH	3.13	4	4.49	5.22	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.04	5.68	-	-	PASS
Middle CH	4.96	5.74	-	-	
Highest CH	4.52	5.19	-	-	

LTE Band 7 / 20MHz / QPSK
Lowest Channel / 1RB


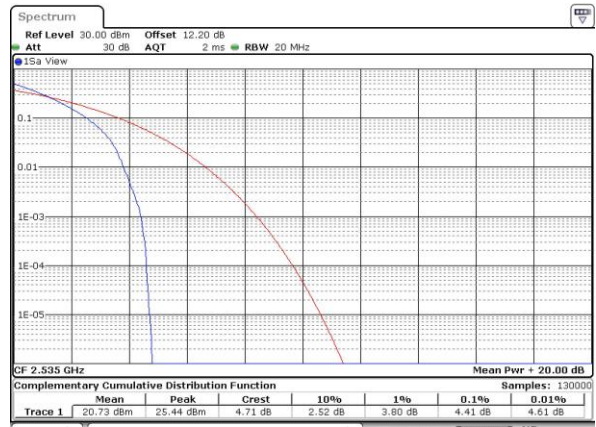
Date: 23 MAR 2019 12:55:23

Lowest Channel / Full RB


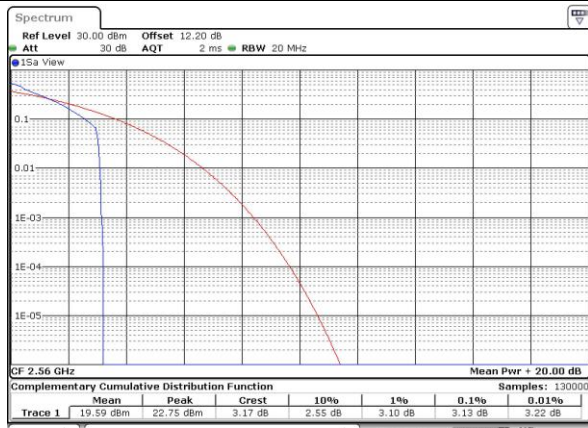
Date: 23 MAR 2019 12:55:39

Middle Channel / 1RB


Date: 23 MAR 2019 12:55:51

Middle Channel / Full RB


Date: 23 MAR 2019 12:56:03

Highest Channel / 1RB


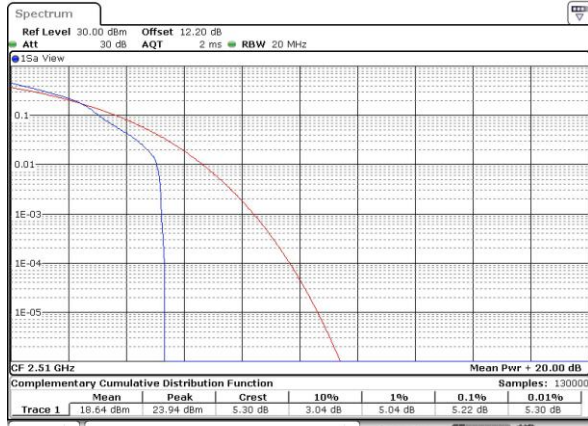
Date: 23 MAR 2019 12:56:16

Highest Channel / Full RB


Date: 23 MAR 2019 12:56:28

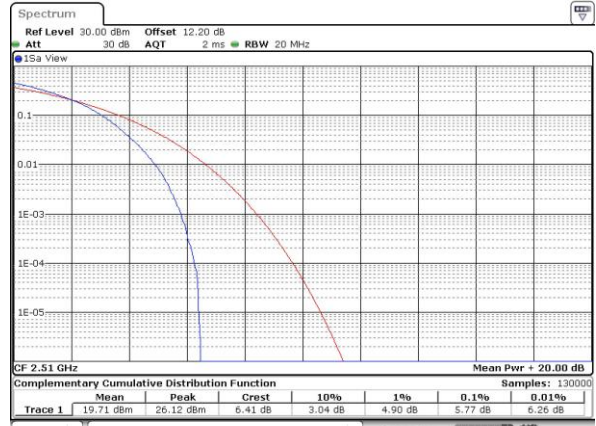
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



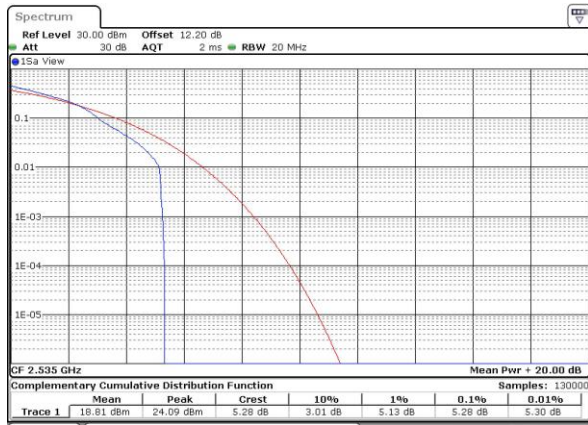
Date: 23 MAR 2019 12:54:09

Lowest Channel / Full RB



Date: 23 MAR 2019 12:54:22

Middle Channel / 1RB



Date: 23 MAR 2019 12:54:34

Middle Channel / Full RB



Date: 23 MAR 2019 12:54:46

Highest Channel / 1RB



Date: 23 MAR 2019 12:54:58

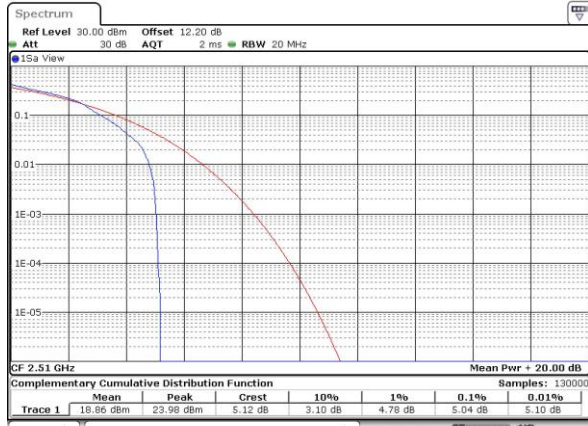
Highest Channel / Full RB



Date: 23 MAR 2019 12:55:09

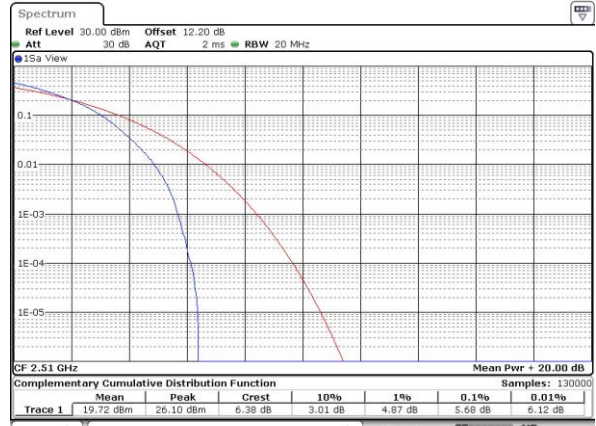
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



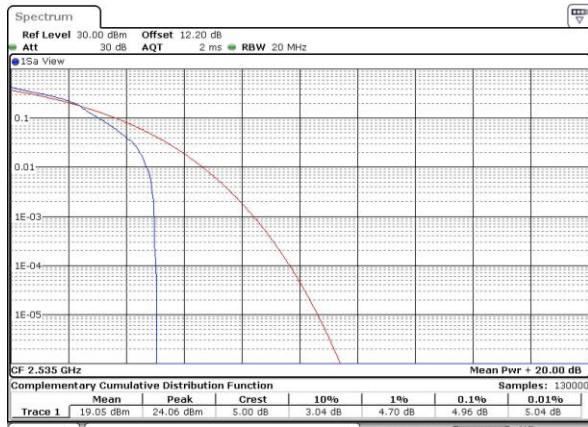
Date: 23 MAR 2019 12:56:44

Lowest Channel / Full RB



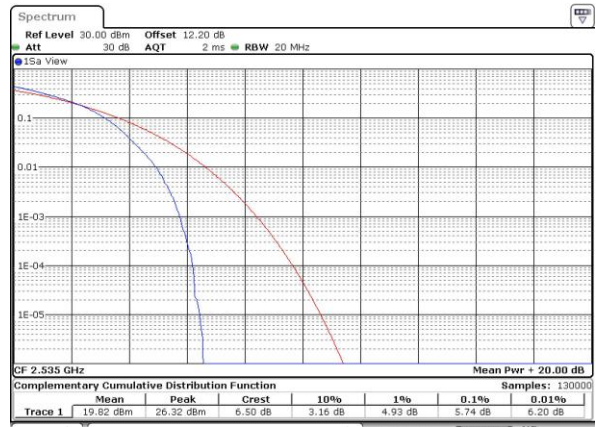
Date: 23 MAR 2019 12:57:08

Middle Channel / 1RB



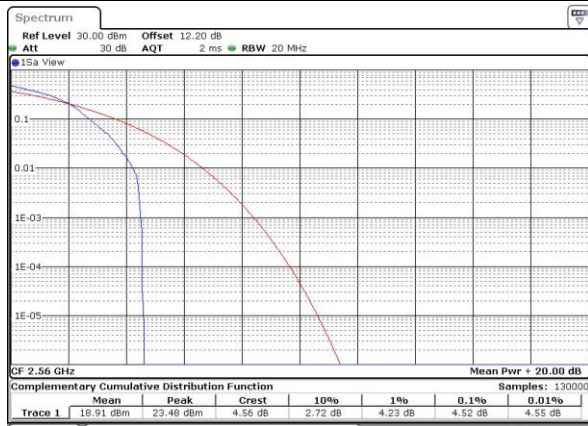
Date: 23 MAR 2019 12:57:19

Middle Channel / Full RB



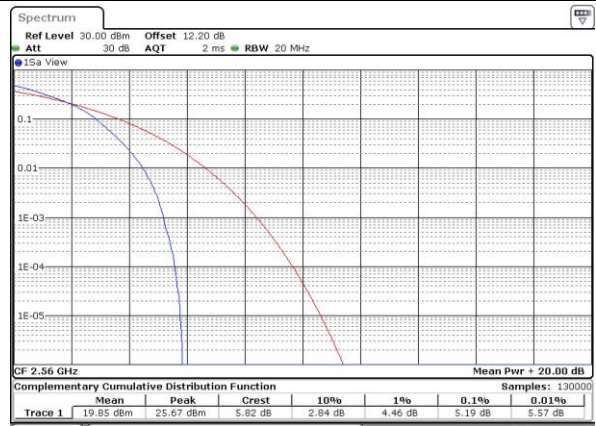
Date: 23 MAR 2019 12:57:30

Highest Channel / 1RB



Date: 23 MAR 2019 12:57:42

Highest Channel / Full RB



Date: 23 MAR 2019 12:57:55

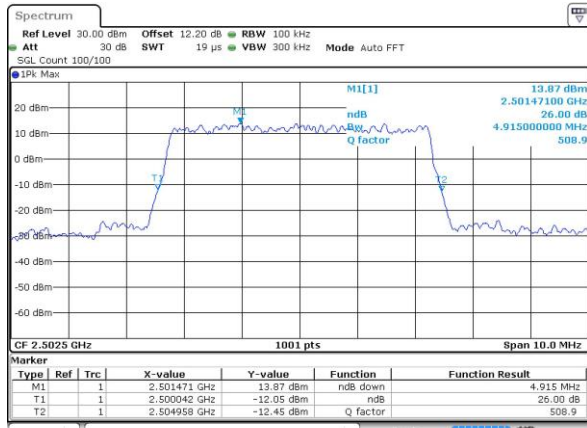
**26dB Bandwidth**

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	-	-	-	-	4.92	4.83	9.67	9.71	14.42	14.30	19.06	18.70
Middle CH	-	-	-	-	4.86	4.92	9.85	9.71	14.36	14.63	19.14	18.82
Highest CH	-	-	-	-	4.92	4.95	9.89	9.83	14.48	14.51	19.02	18.86
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.92	-	9.67	-	14.33	-	19.06	-
Middle CH	-	-	-	-	4.84	-	9.79	-	14.15	-	18.86	-
Highest CH	-	-	-	-	4.92	-	9.81	-	14.60	-	19.02	-



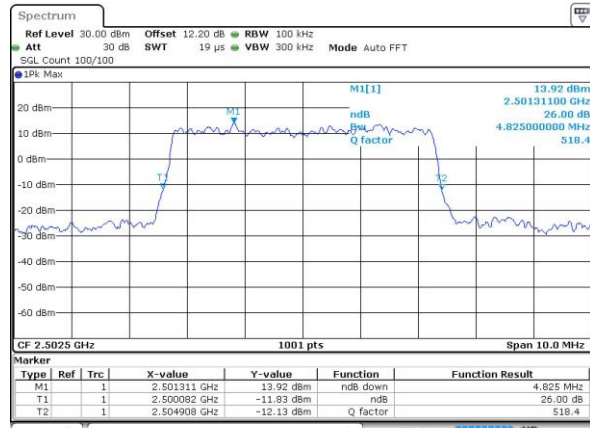
LTE Band 7

Lowest Channel / 5MHz / QPSK



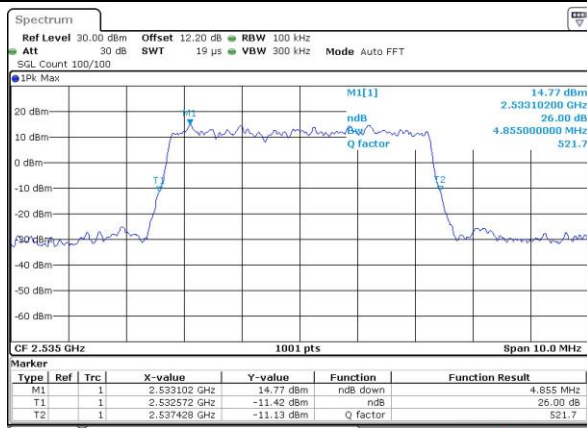
Date: 23 MAR 2019 11:17:45

Lowest Channel / 5MHz / 16QAM



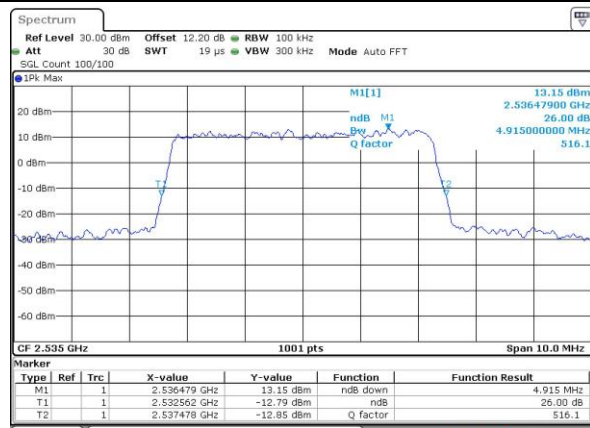
Date: 23 MAR 2019 11:17:57

Middle Channel / 5MHz / QPSK



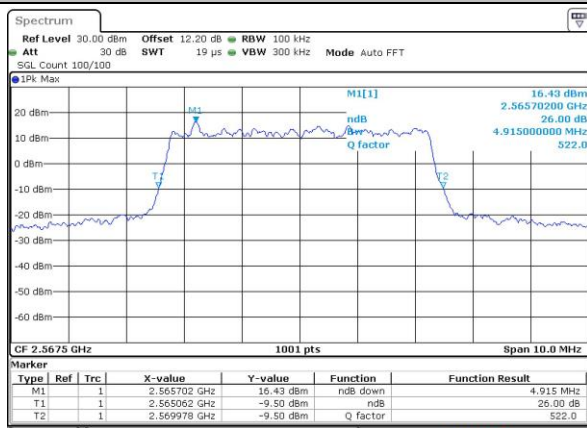
Date: 23 MAR 2019 11:23:02

Middle Channel / 5MHz / 16QAM



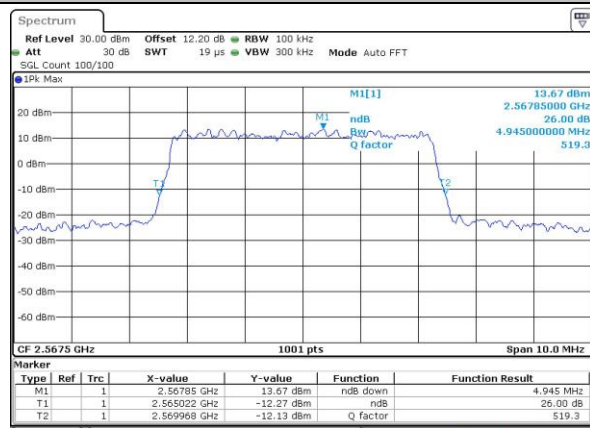
Date: 23 MAR 2019 11:23:14

Highest Channel / 5MHz / QPSK



Date: 23 MAR 2019 11:25:31

Highest Channel / 5MHz / 16QAM

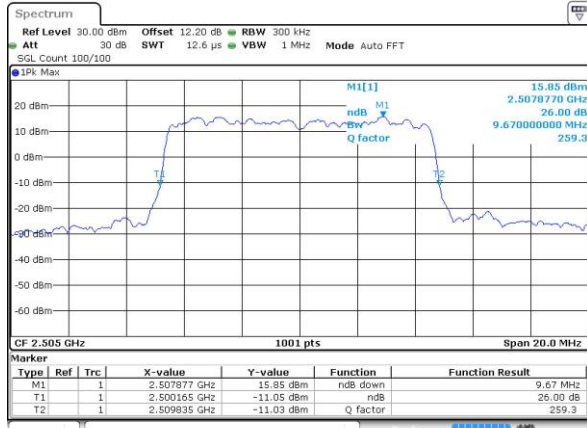


Date: 23 MAR 2019 11:25:43



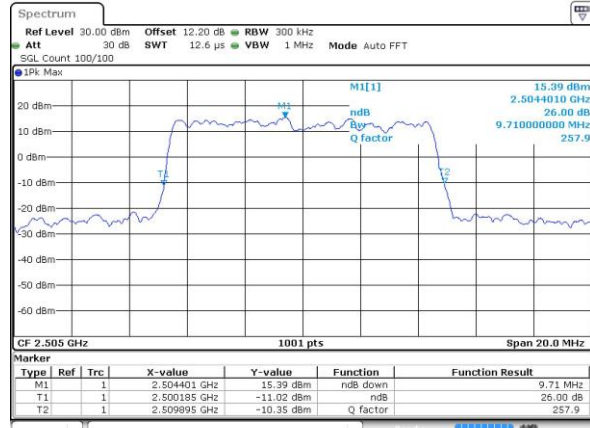
LTE Band 7

Lowest Channel / 10MHz / QPSK



Date: 23 MAR 2019 11:37:21

Lowest Channel / 10MHz / 16QAM



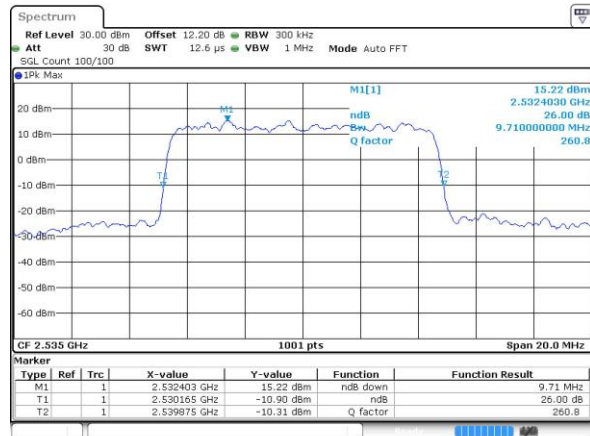
Date: 23 MAR 2019 11:37:34

Middle Channel / 10MHz / QPSK



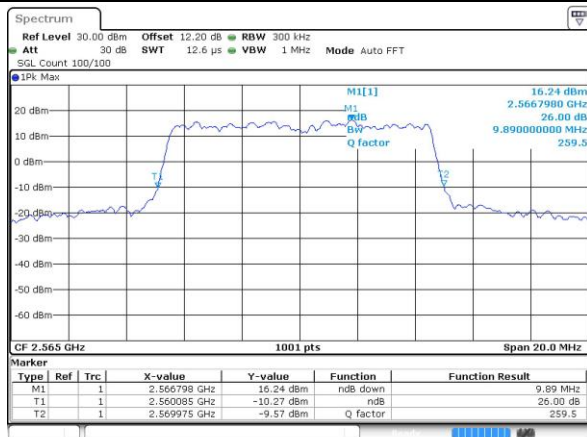
Date: 23 MAR 2019 11:42:38

Middle Channel / 10MHz / 16QAM



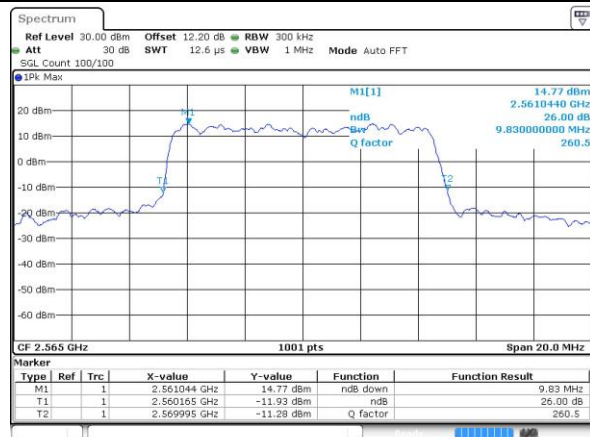
Date: 23 MAR 2019 11:42:50

Highest Channel / 10MHz / QPSK



Date: 23 MAR 2019 11:45:07

Highest Channel / 10MHz / 16QAM

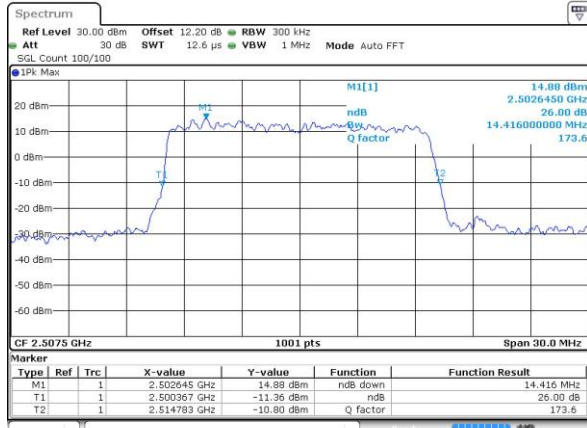


Date: 23 MAR 2019 11:45:19



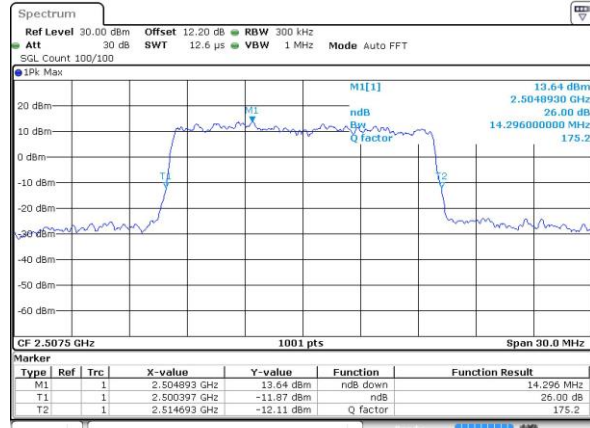
LTE Band 7

Lowest Channel / 15MHz / QPSK



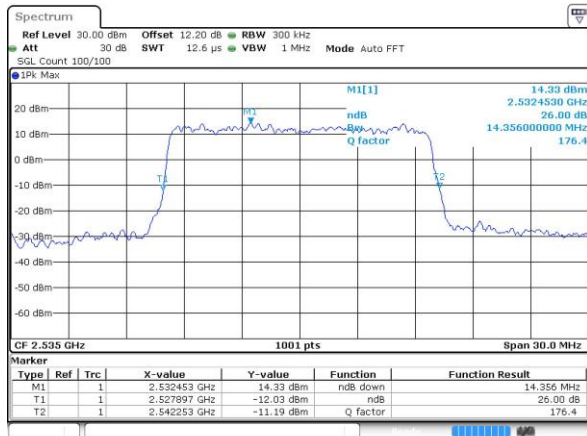
Date: 23 MAR 2019 11:56:58

Lowest Channel / 15MHz / 16QAM



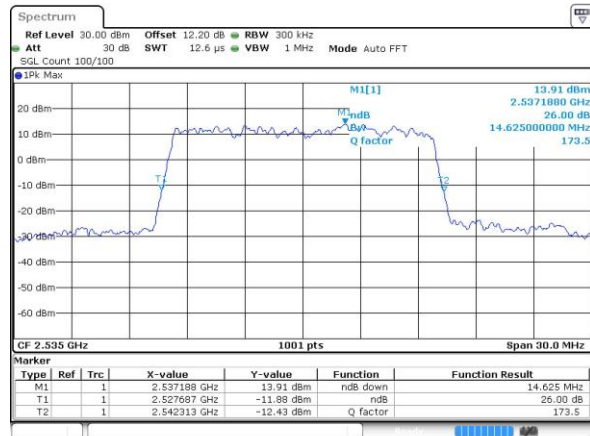
Date: 23 MAR 2019 11:57:10

Middle Channel / 15MHz / QPSK



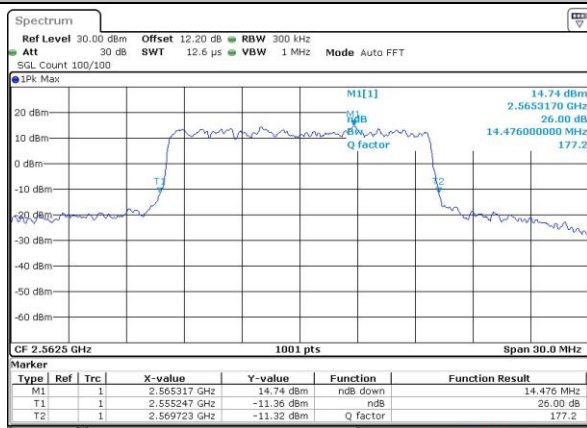
Date: 23 MAR 2019 12:02:15

Middle Channel / 15MHz / 16QAM



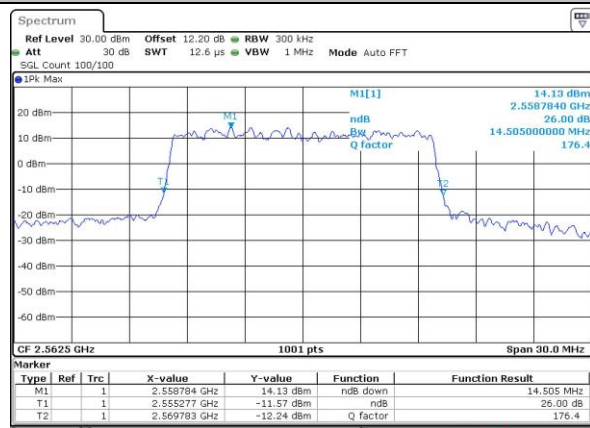
Date: 23 MAR 2019 12:02:27

Highest Channel / 15MHz / QPSK



Date: 23 MAR 2019 12:04:44

Highest Channel / 15MHz / 16QAM

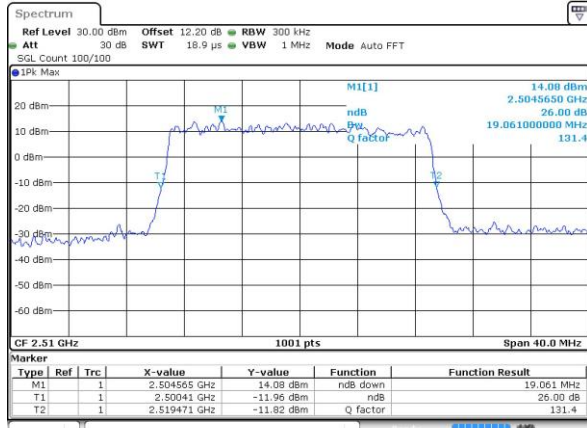


Date: 23 MAR 2019 12:04:56

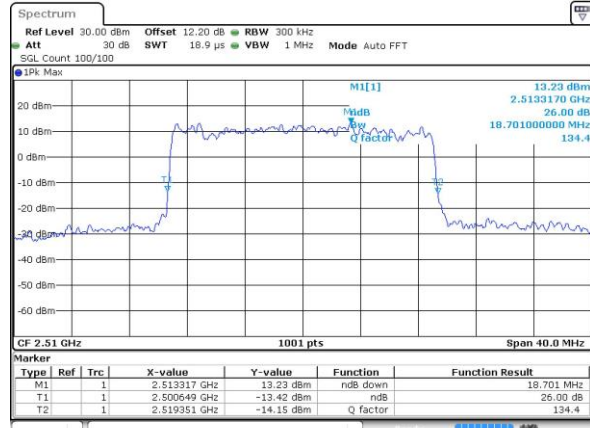


LTE Band 7

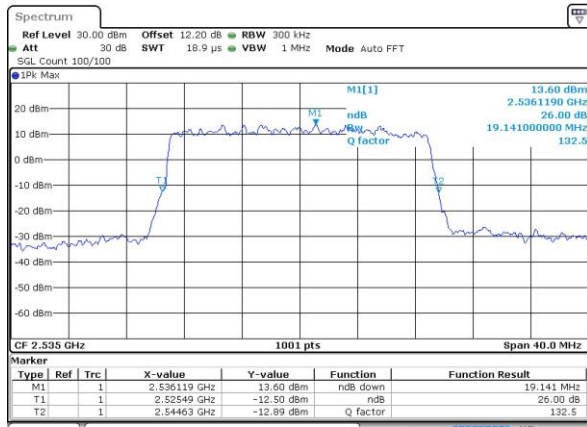
Lowest Channel / 20MHz / QPSK



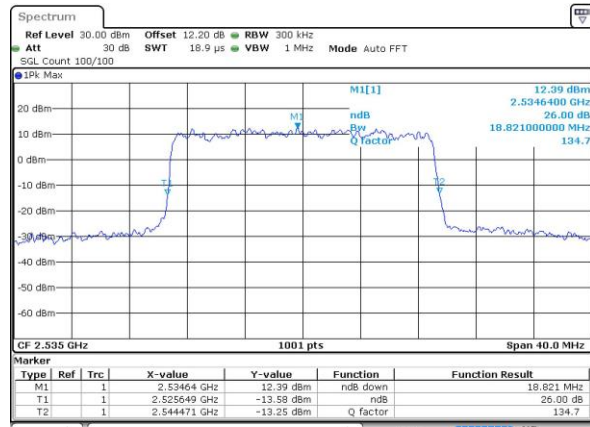
Lowest Channel / 20MHz / 16QAM



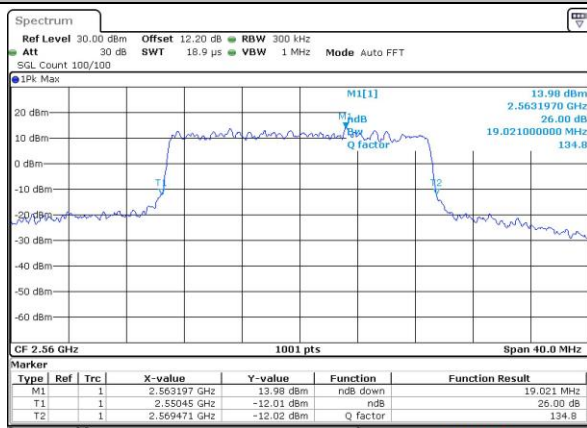
Middle Channel / 20MHz / QPSK



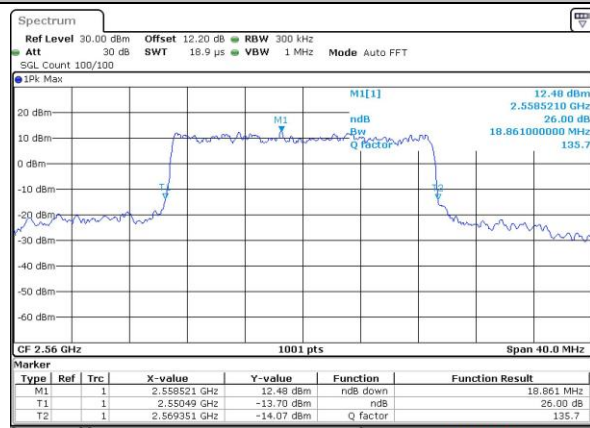
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



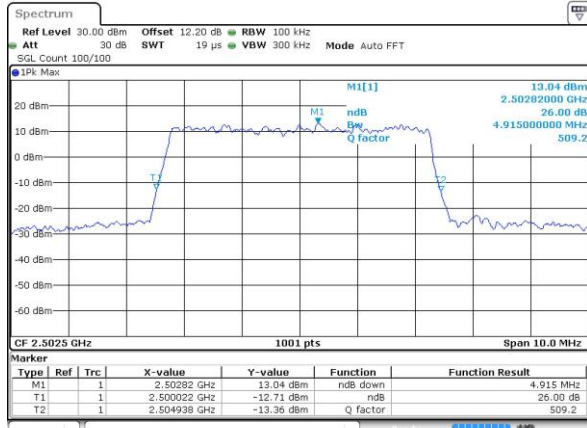
Highest Channel / 20MHz / 16QAM



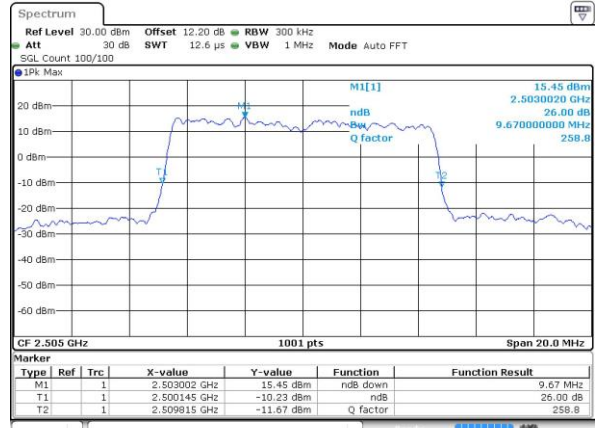


LTE Band 7

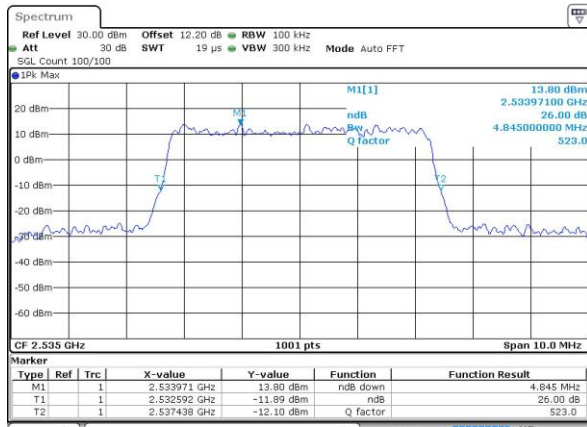
Lowest Channel / 5MHz / 64QAM



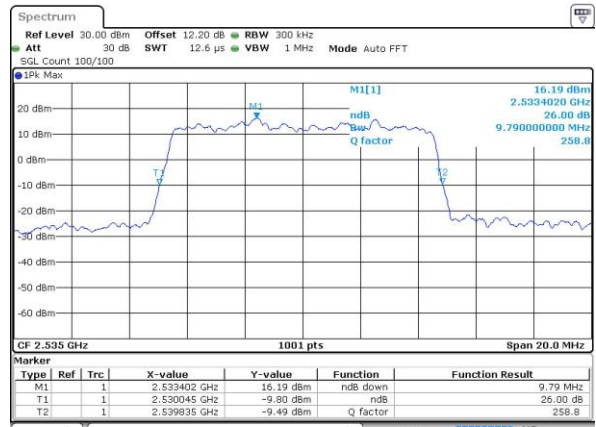
Lowest Channel / 10MHz / 64QAM



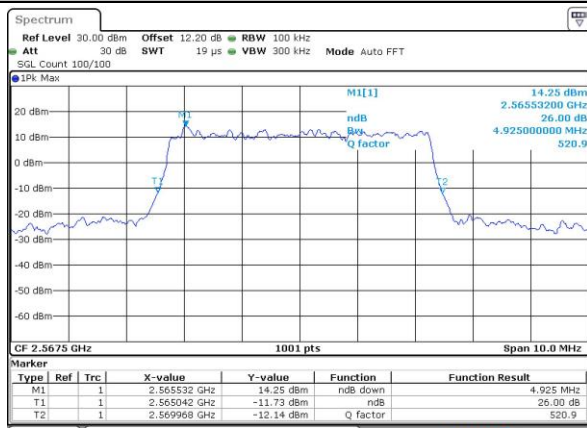
Middle Channel / 5MHz / 64QAM



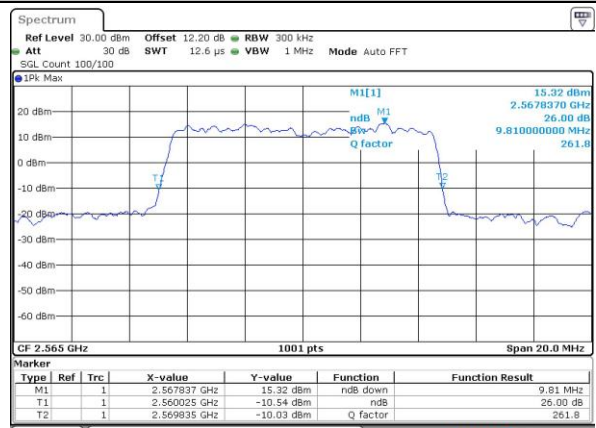
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



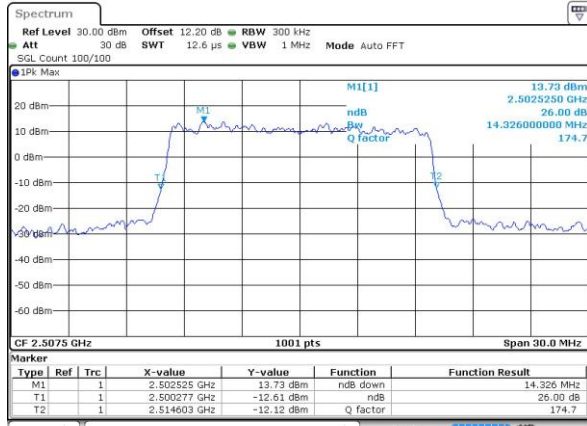
Highest Channel / 10MHz / 64QAM





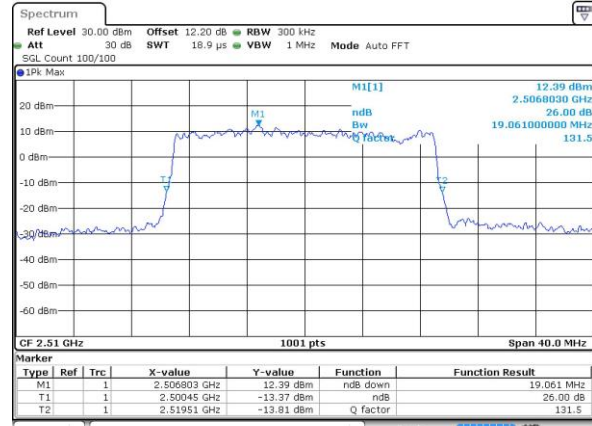
LTE Band 7

Lowest Channel / 15MHz / 64QAM



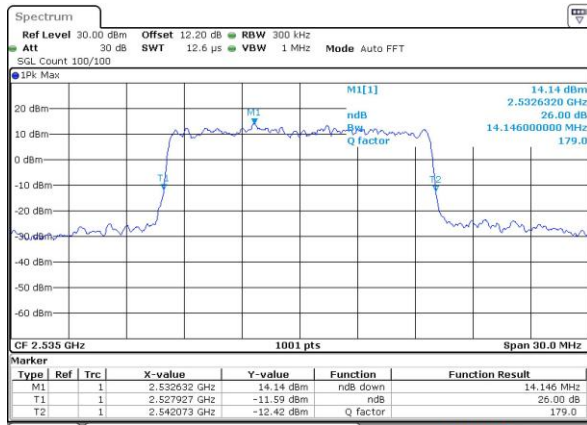
Date: 23 MAR 2019 12:09:50

Lowest Channel / 20MHz / 64QAM



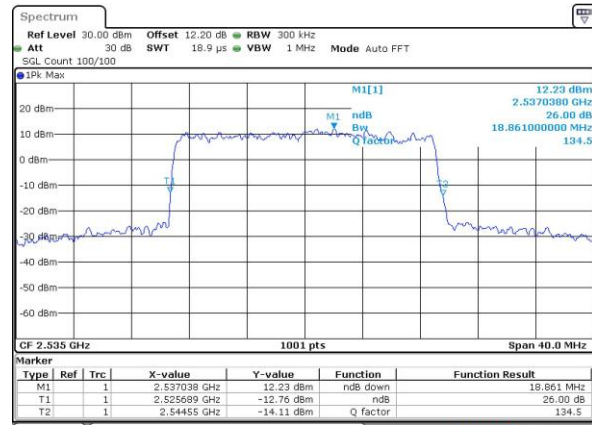
Date: 3 APR 2019 18:12:42

Middle Channel / 15MHz / 64QAM



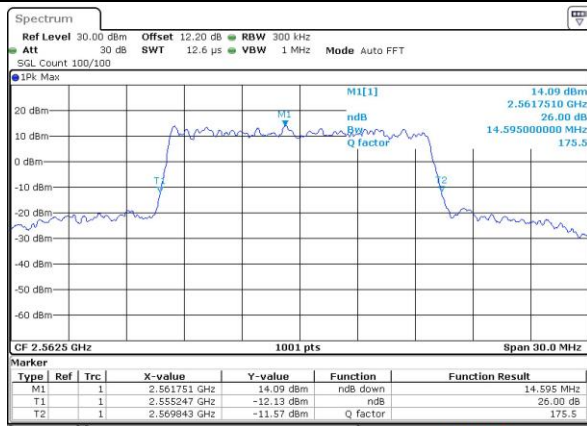
Date: 23 MAR 2019 12:12:28

Middle Channel / 20MHz / 64QAM



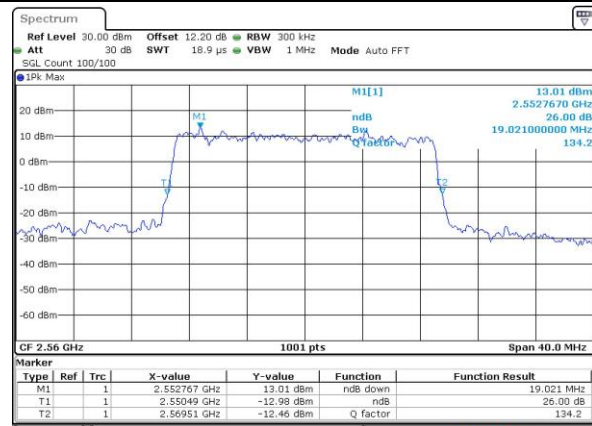
Date: 3 APR 2019 18:12:54

Highest Channel / 15MHz / 64QAM



Date: 23 MAR 2019 12:13:43

Highest Channel / 20MHz / 64QAM



Date: 3 APR 2019 18:13:06

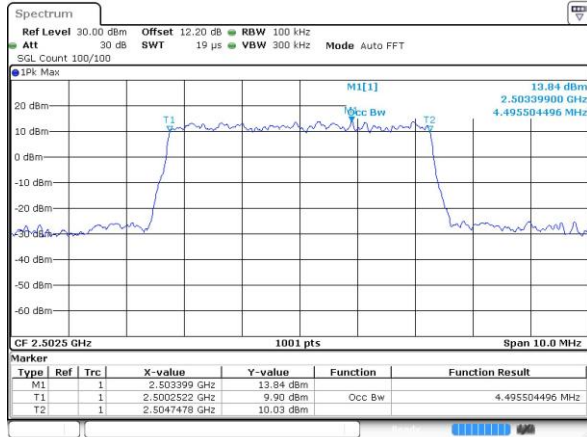
**Occupied Bandwidth**

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	-	-	-	-	4.5	4.51	9.07	9.07	13.43	13.43	17.9	17.82
Middle CH	-	-	-	-	4.49	4.49	8.97	8.99	13.37	13.37	17.82	17.9
Highest CH	-	-	-	-	4.52	4.49	9.11	9.03	13.58	13.46	17.94	17.9
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	8.99	-	13.43	-	17.86	-
Middle CH	-	-	-	-	4.49	-	8.99	-	13.40	-	17.82	-
Highest CH	-	-	-	-	4.51	-	9.05	-	13.46	-	17.94	-



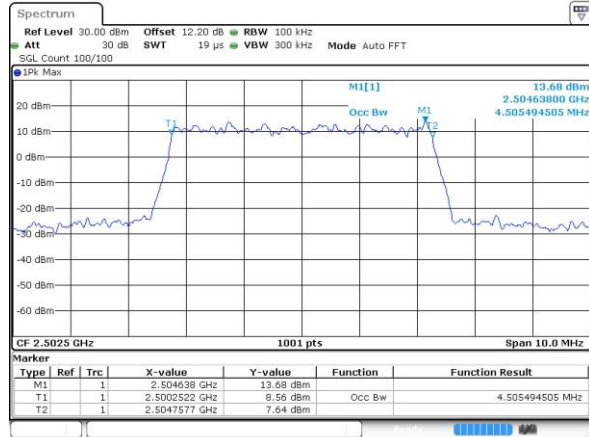
LTE Band 7

Lowest Channel / 5MHz / QPSK



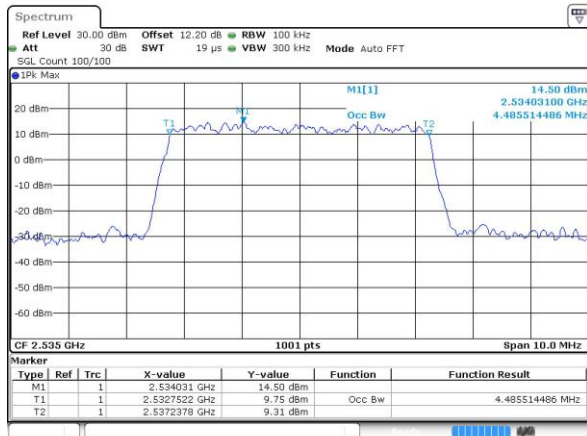
Date: 23 MAR 2019 11:17:20

Lowest Channel / 5MHz / 16QAM



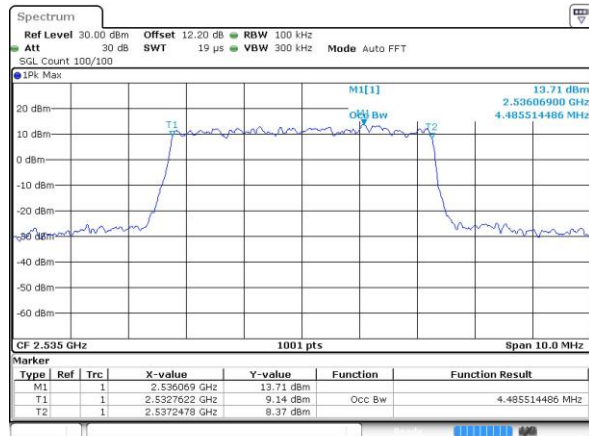
Date: 23 MAR 2019 11:17:33

Middle Channel / 5MHz / QPSK



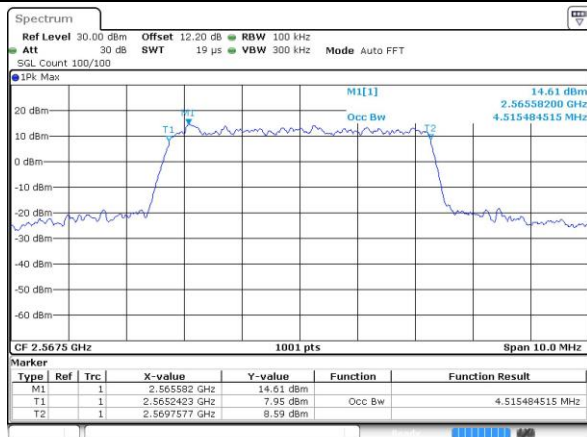
Date: 23 MAR 2019 11:22:39

Middle Channel / 5MHz / 16QAM



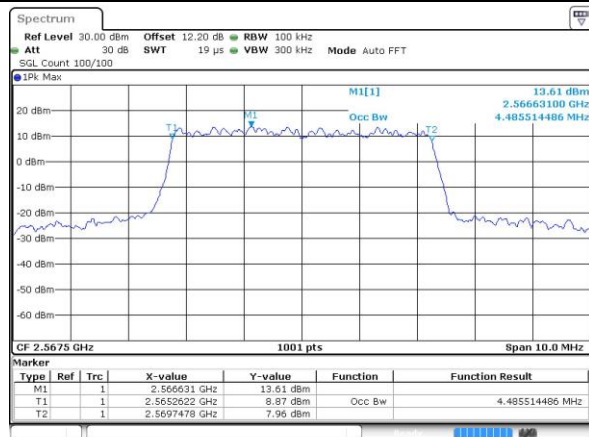
Date: 23 MAR 2019 11:22:51

Highest Channel / 5MHz / QPSK



Date: 23 MAR 2019 11:25:06

Highest Channel / 5MHz / 16QAM

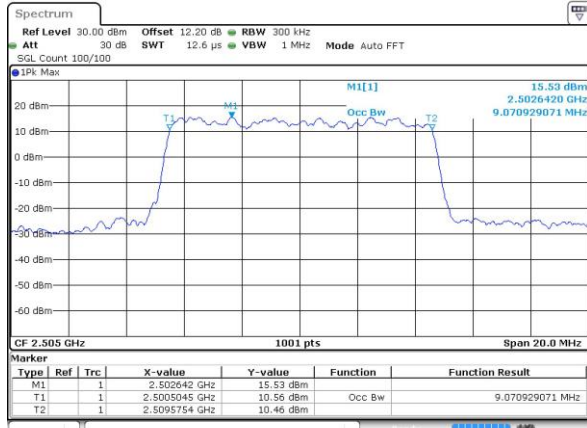


Date: 23 MAR 2019 11:25:18



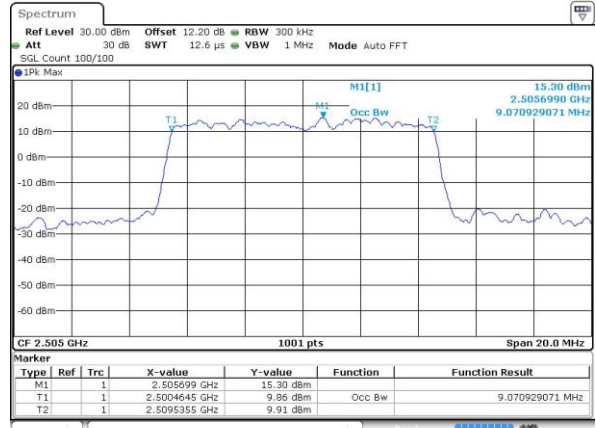
LTE Band 7

Lowest Channel / 10MHz / QPSK



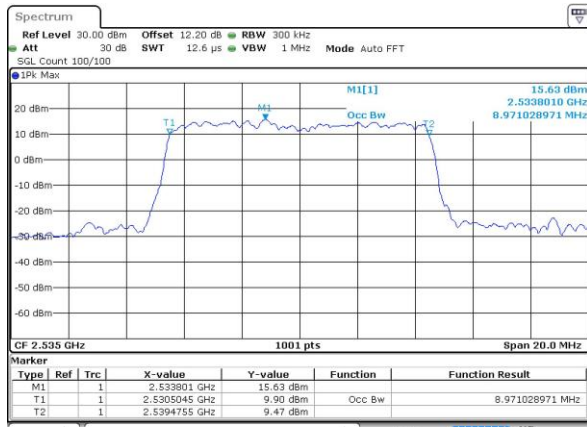
Date: 23 MAR 2019 11:36:56

Lowest Channel / 10MHz / 16QAM



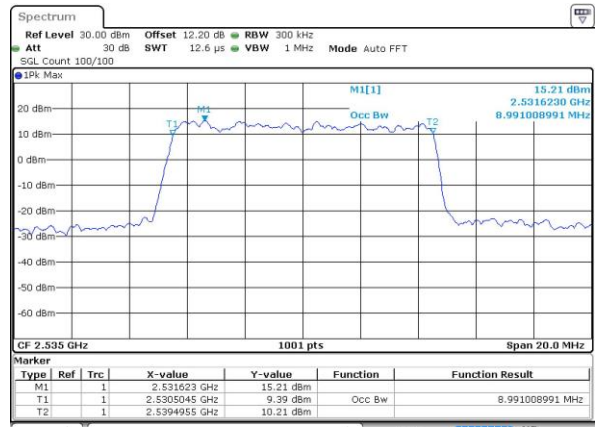
Date: 23 MAR 2019 11:37:08

Middle Channel / 10MHz / QPSK



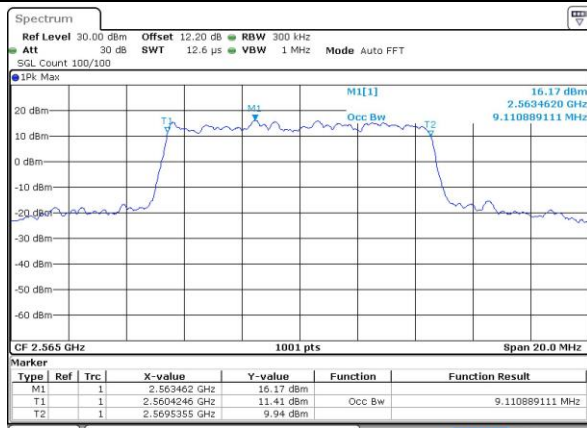
Date: 23 MAR 2019 11:42:14

Middle Channel / 10MHz / 16QAM



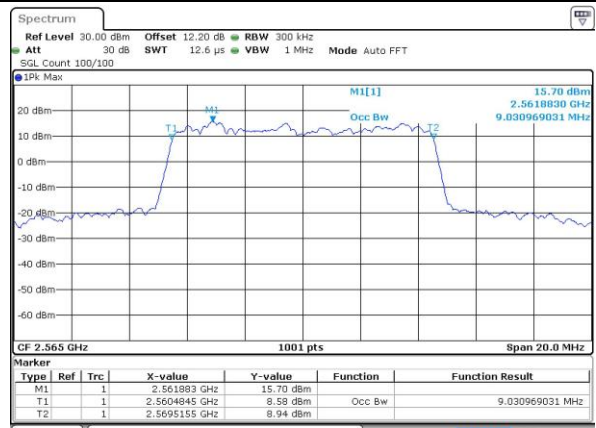
Date: 23 MAR 2019 11:42:26

Highest Channel / 10MHz / QPSK



Date: 23 MAR 2019 11:44:42

Highest Channel / 10MHz / 16QAM

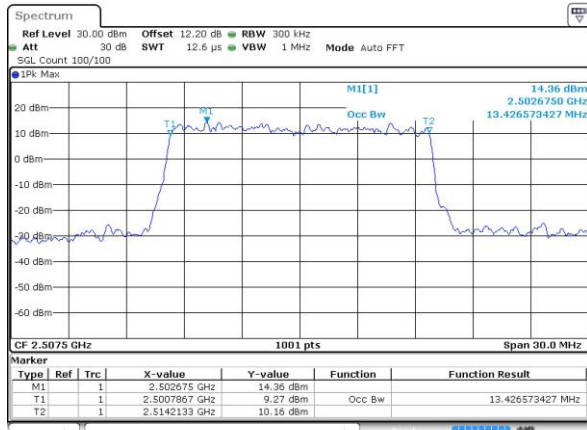


Date: 23 MAR 2019 11:44:54



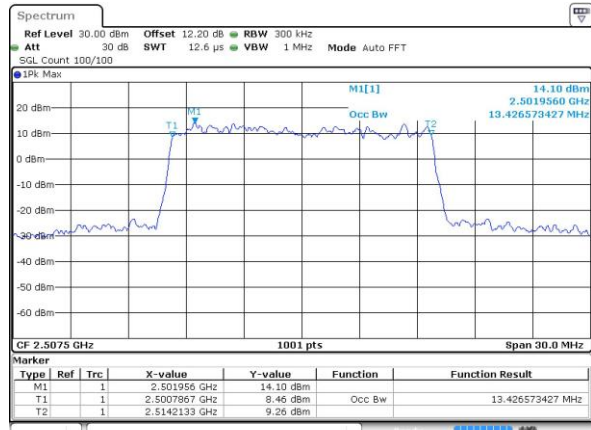
LTE Band 7

Lowest Channel / 15MHz / QPSK



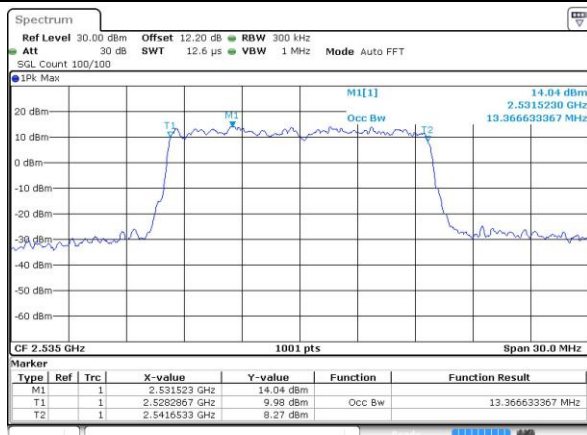
Date: 23 MAR 2019 11:56:33

Lowest Channel / 15MHz / 16QAM



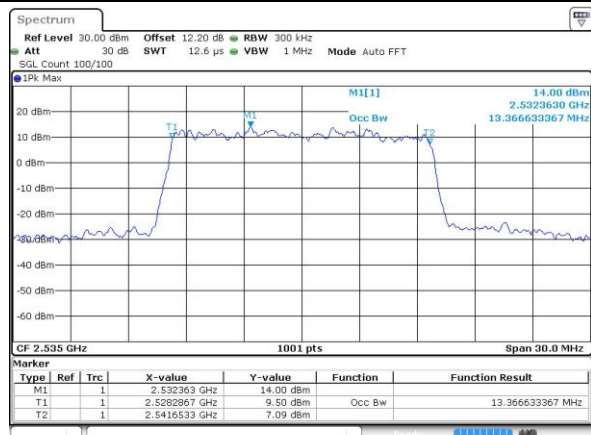
Date: 23 MAR 2019 11:56:45

Middle Channel / 15MHz / QPSK



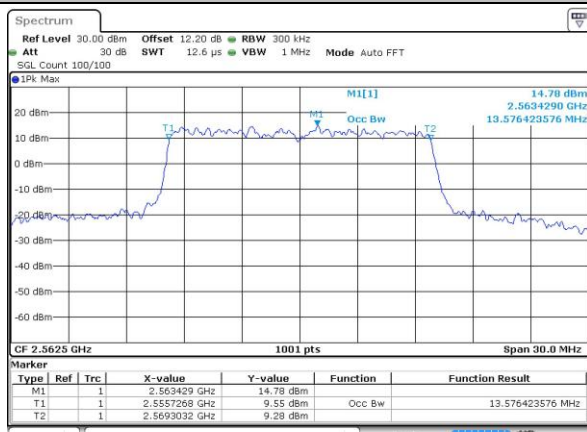
Date: 23 MAR 2019 12:01:51

Middle Channel / 15MHz / 16QAM



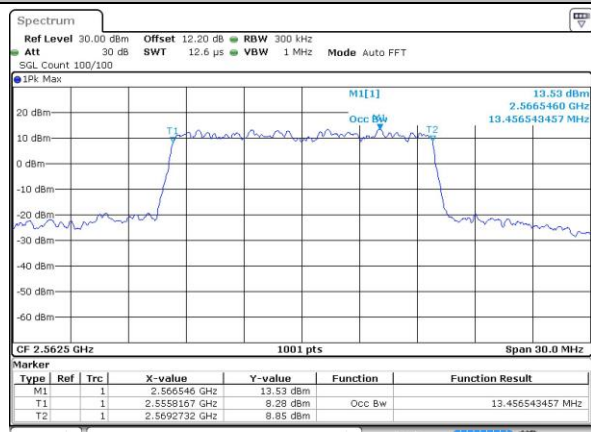
Date: 23 MAR 2019 12:02:03

Highest Channel / 15MHz / QPSK



Date: 23 MAR 2019 12:04:19

Highest Channel / 15MHz / 16QAM

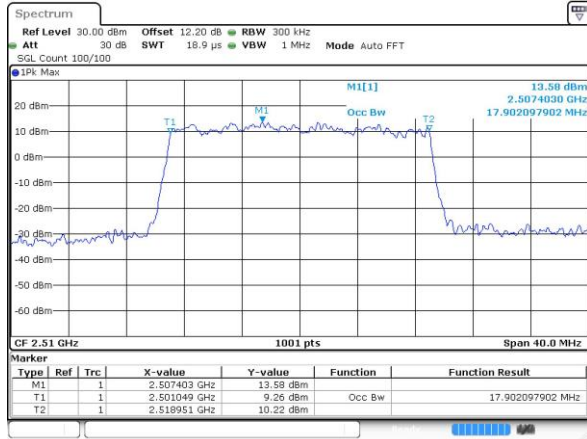


Date: 23 MAR 2019 12:04:31

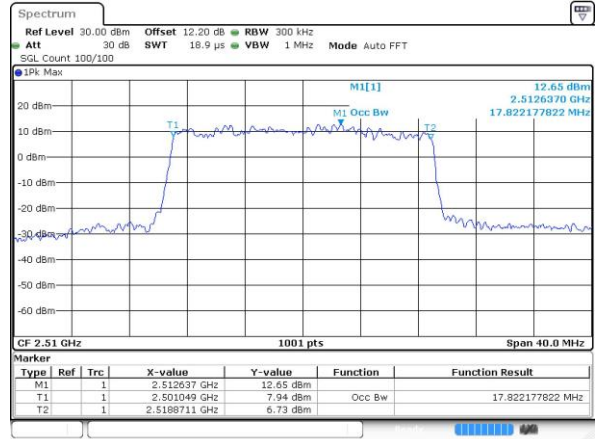


LTE Band 7

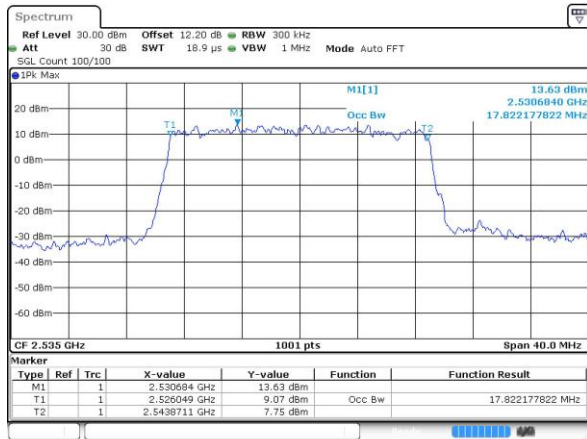
Lowest Channel / 20MHz / QPSK



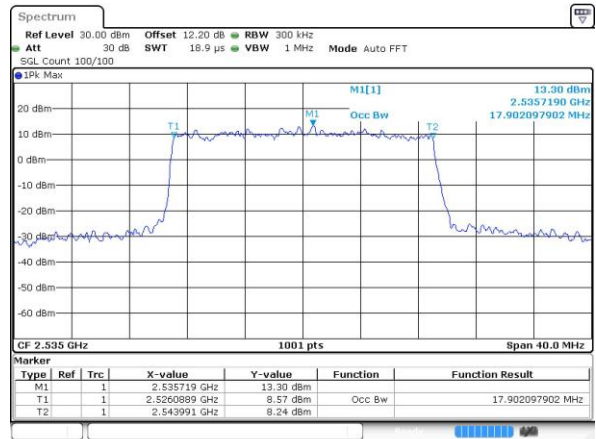
Lowest Channel / 20MHz / 16QAM



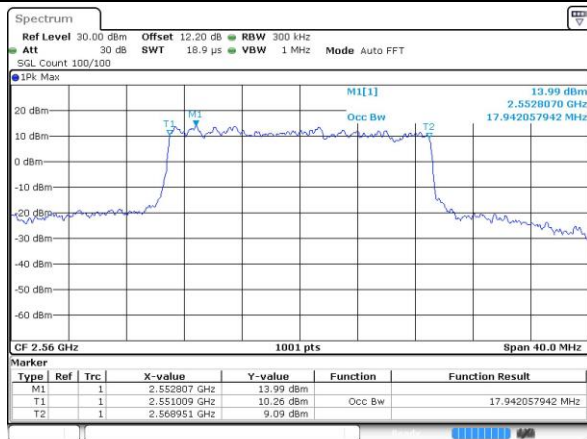
Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM

