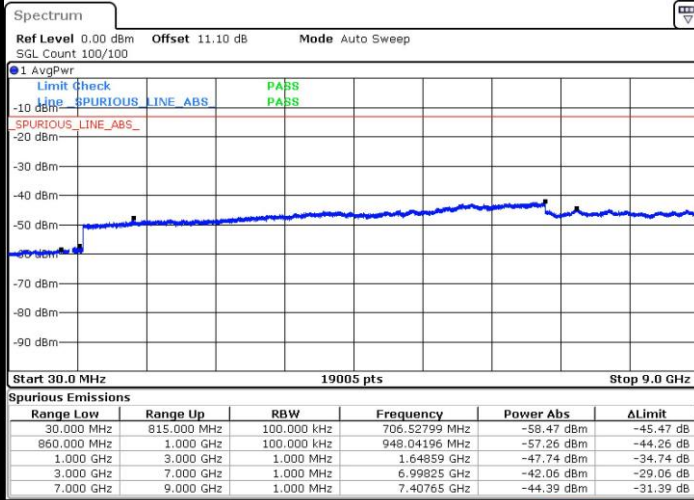




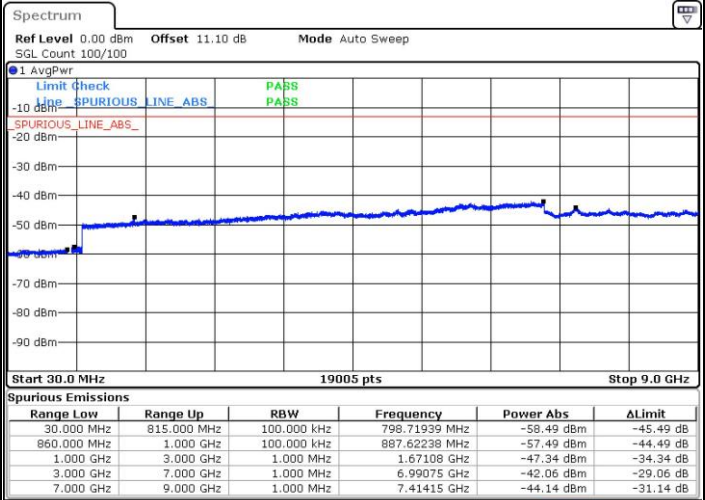
LTE Band 5 / 3MHz

Lowest Channel / 64QAM



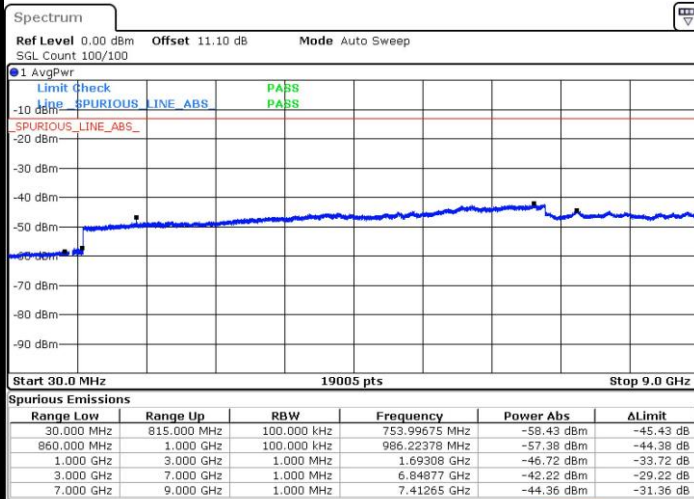
Date: 12 NOV 2018 21:28:00

Middle Channel / 64QAM



Date: 12 NOV 2018 21:29:22

Highest Channel / 64QAM

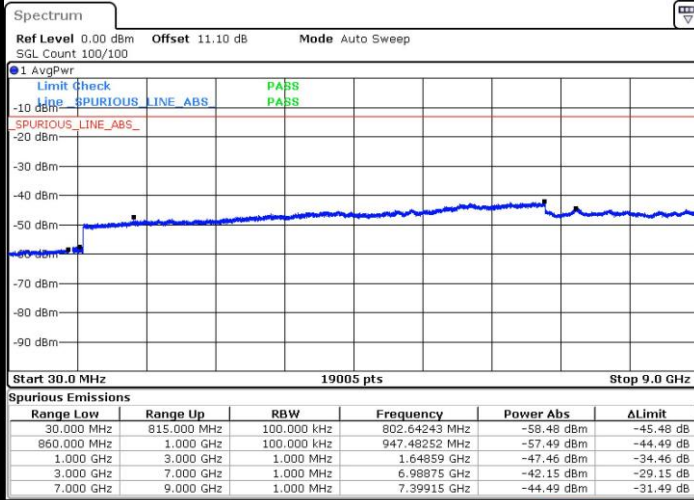


Date: 12 NOV 2018 21:34:01



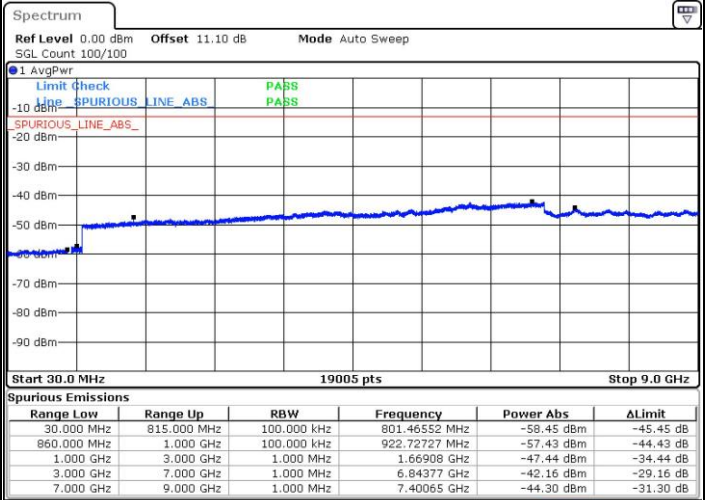
LTE Band 5 / 5MHz

Lowest Channel / 64QAM



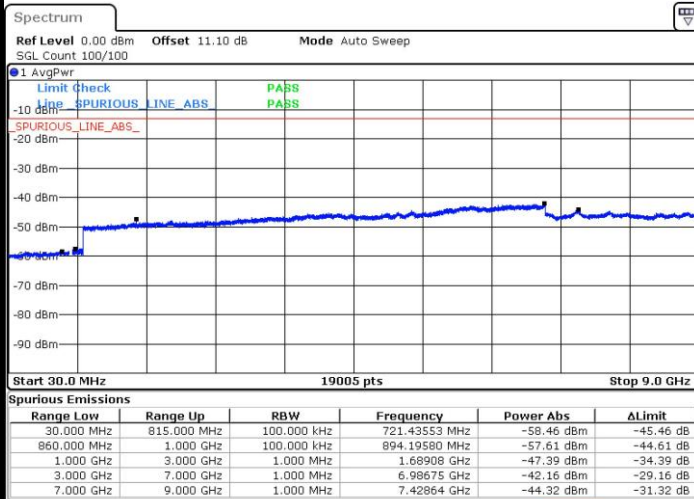
Date: 12 NOV 2018 21:38:40

Middle Channel / 64QAM



Date: 12 NOV 2018 21:40:04

Highest Channel / 64QAM

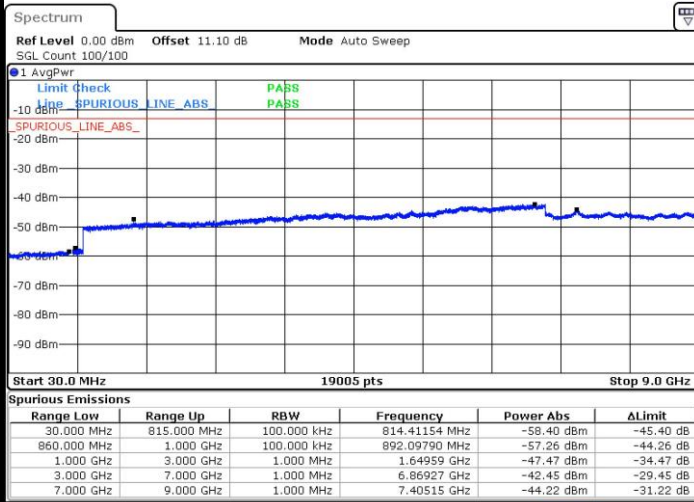


Date: 12 NOV 2018 21:44:43



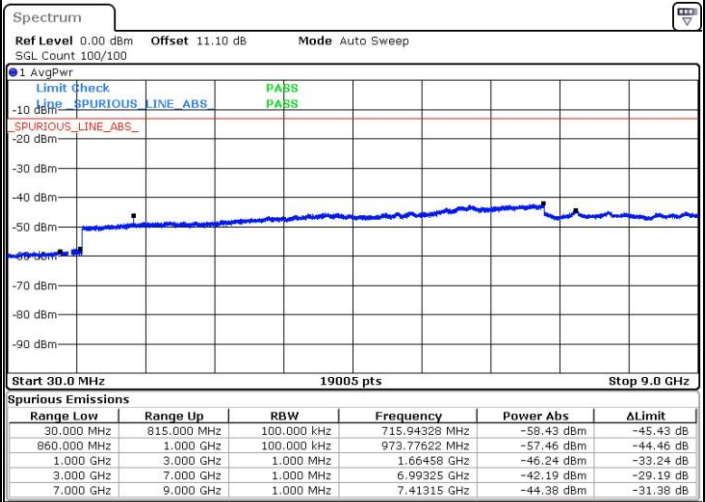
LTE Band 5 / 10MHz

Lowest Channel / 64QAM



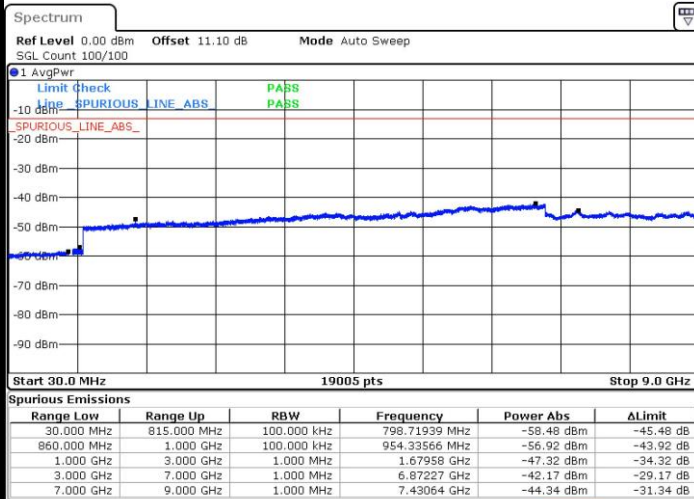
Date: 12 NOV 2018 21:49:22

Middle Channel / 64QAM



Date: 12 NOV 2018 21:50:44

Highest Channel / 64QAM



Date: 12 NOV 2018 21:55:23

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	0.0179	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0176	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0197	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0183	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0016	
20	Battery End Point	0.0032	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7

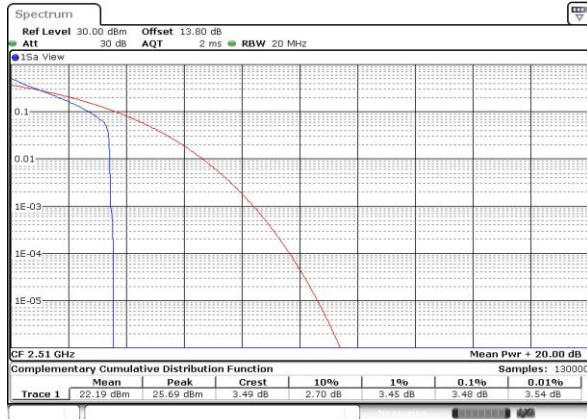
Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.48	4.58	4.78	5.83	PASS
Middle CH	3.59	4.43	5.25	5.94	
Highest CH	3.25	4.46	4.78	5.8	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.38	6.61	-	-	PASS
Middle CH	6.67	6.41	-	-	
Highest CH	6.41	6.46	-	-	

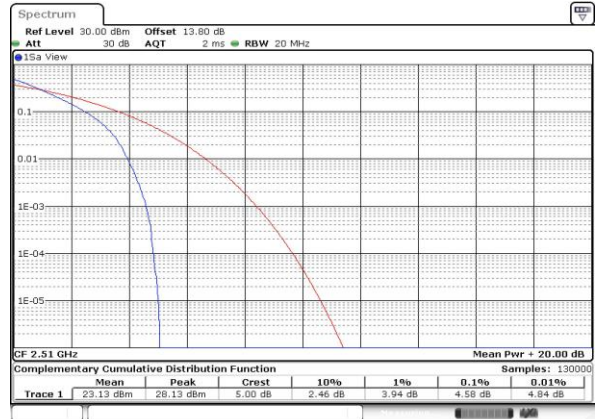


LTE Band 7 / 20MHz / QPSK

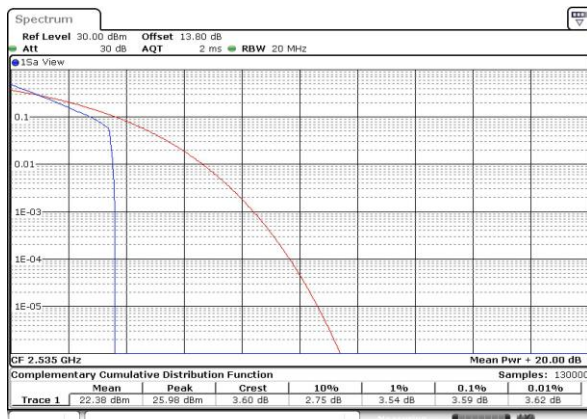
Lowest Channel / 1RB



Lowest Channel / Full RB



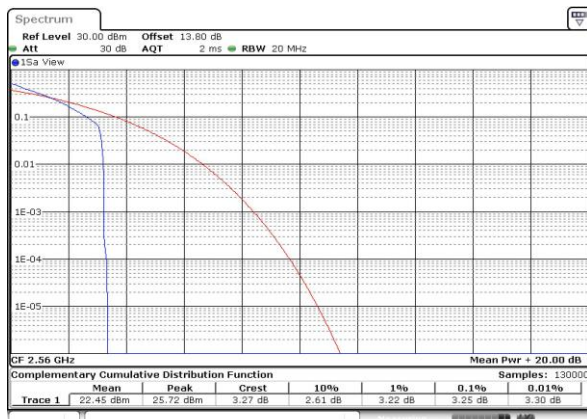
Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



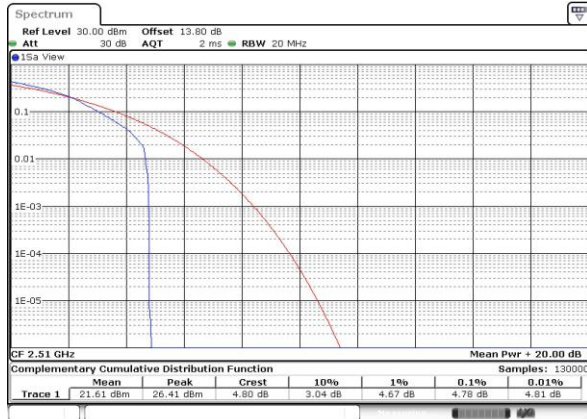
Highest Channel / Full RB



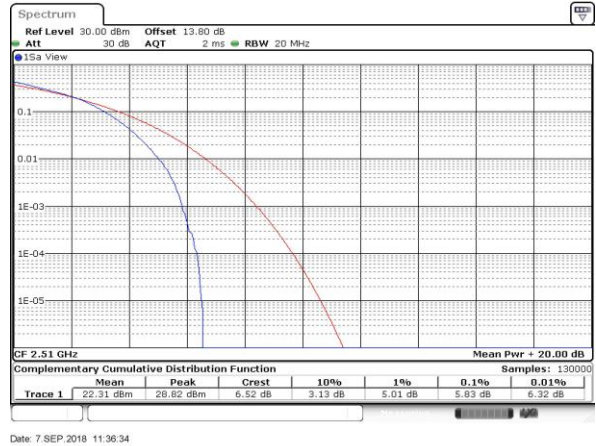


LTE Band 7 / 20MHz / 16QAM

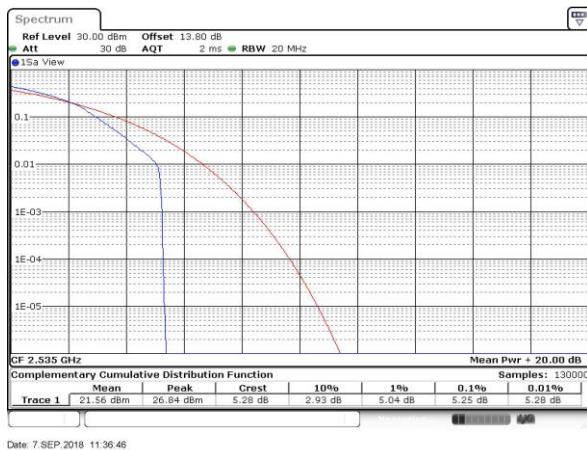
Lowest Channel / 1RB



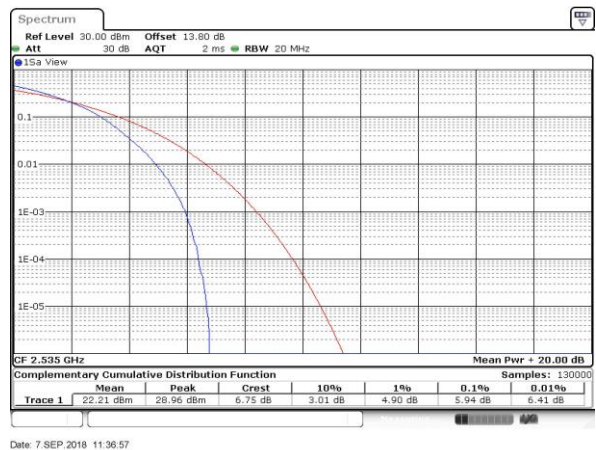
Lowest Channel / Full RB



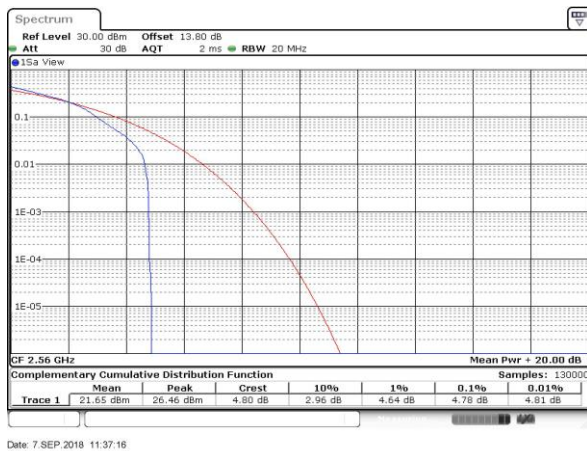
Middle Channel / 1RB



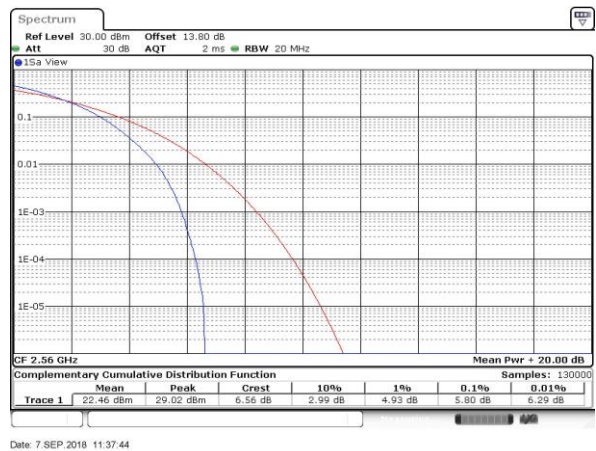
Middle Channel / Full RB

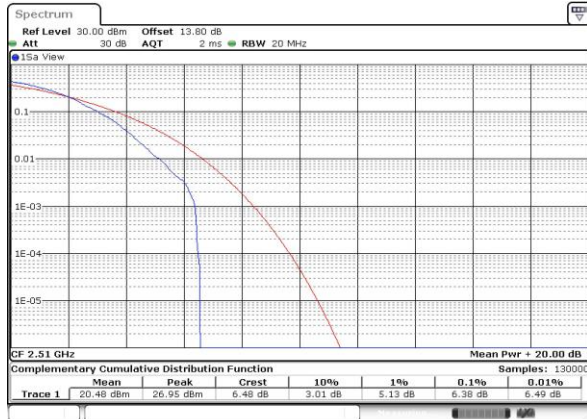


Highest Channel / 1RB

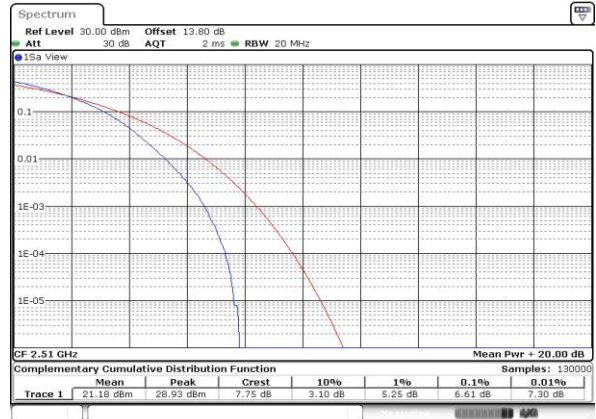


Highest Channel / Full RB

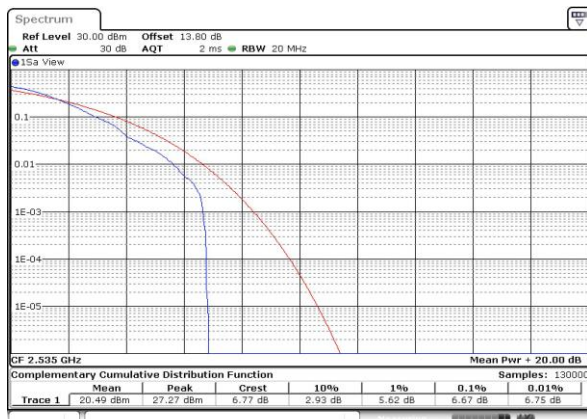


LTE Band 7 / 20MHz / 64QAM
Lowest Channel / 1RB


Date: 12.NOV.2018 23:25:15

Lowest Channel / Full RB


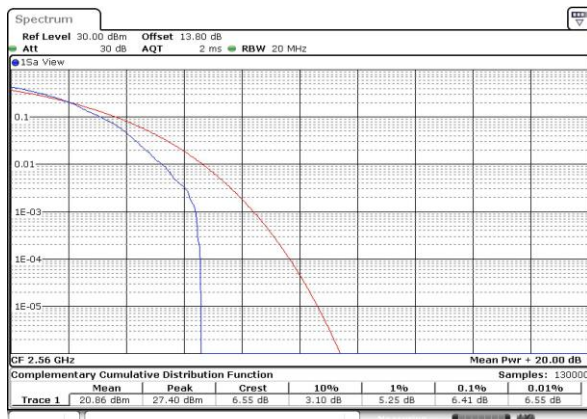
Date: 12.NOV.2018 23:25:36

Middle Channel / 1RB


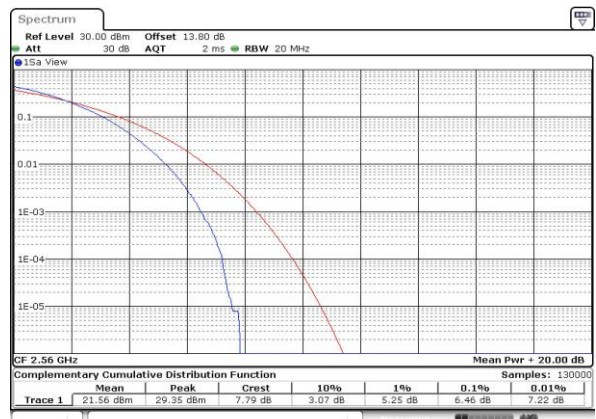
Date: 12.NOV.2018 23:26:23

Middle Channel / Full RB


Date: 12.NOV.2018 23:27:04

Highest Channel / 1RB


Date: 12.NOV.2018 23:27:14

Highest Channel / Full RB


Date: 12.NOV.2018 23:27:26

**26dB Bandwidth**

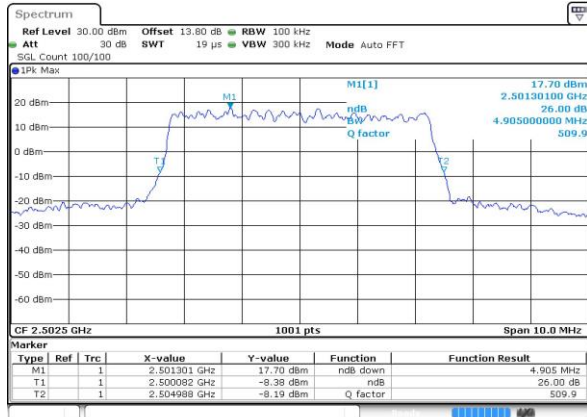
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.91	4.89	9.83	9.85	14.51	14.21	20.02	20.30
Middle CH	-	-	-	-	4.90	4.93	9.73	9.79	14.27	14.45	20.18	20.22
Highest CH	-	-	-	-	4.96	4.91	9.77	9.83	14.27	14.15	20.14	20.26

Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.90	-	9.81	-	14.36	-	20.22	-
Middle CH	-	-	-	-	4.96	-	9.81	-	14.18	-	20.1	-
Highest CH	-	-	-	-	4.93	-	9.73	-	14.36	-	20.14	-



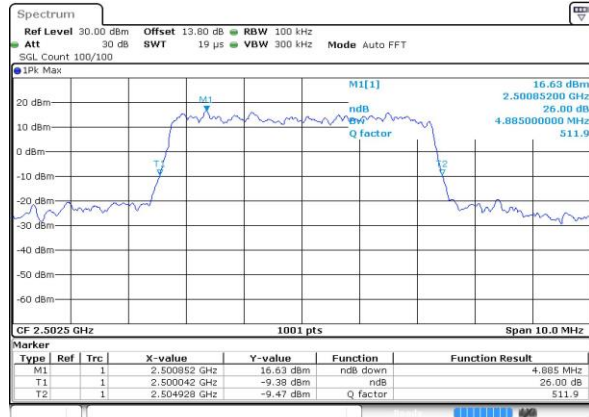
LTE Band 7

Lowest Channel / 5MHz / QPSK



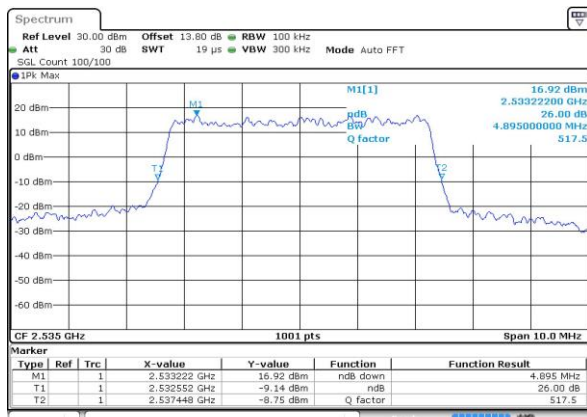
Date: 7 SEP 2018 10:54:56

Lowest Channel / 5MHz / 16QAM



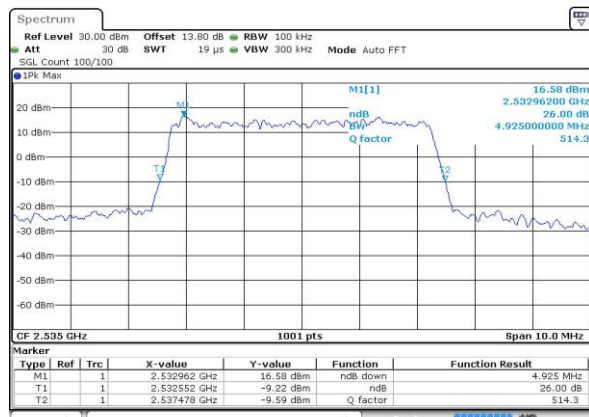
Date: 7 SEP 2018 10:55:07

Middle Channel / 5MHz / QPSK



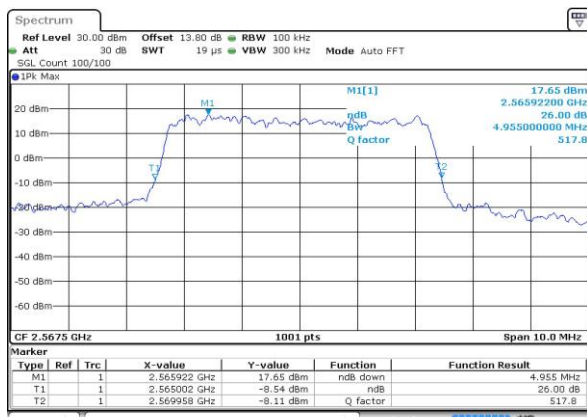
Date: 7 SEP 2018 10:58:56

Middle Channel / 5MHz / 16QAM



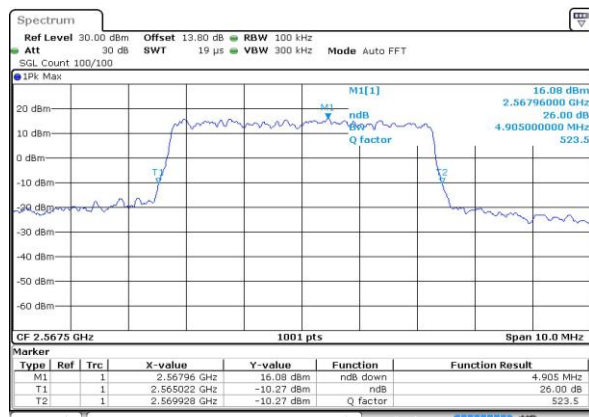
Date: 7 SEP 2018 10:59:08

Highest Channel / 5MHz / QPSK



Date: 7 SEP 2018 11:01:21

Highest Channel / 5MHz / 16QAM

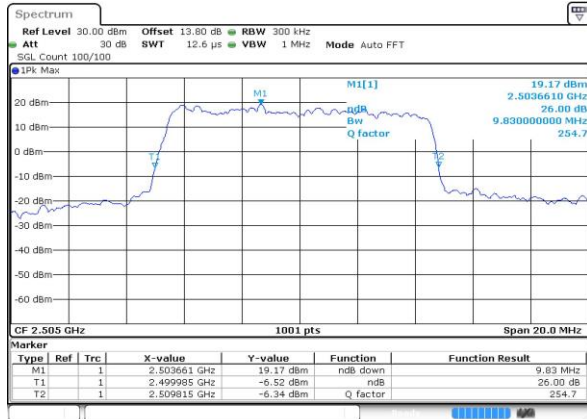


Date: 7 SEP 2018 11:01:33



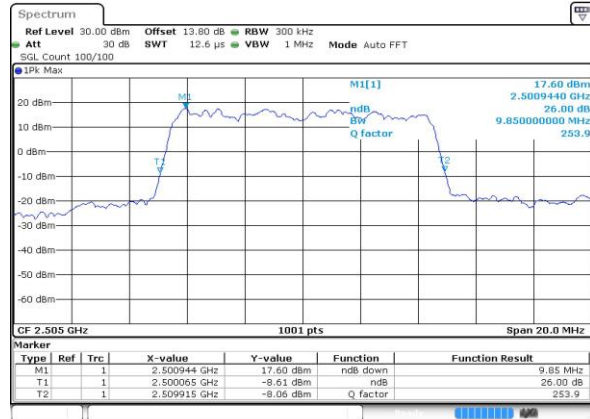
LTE Band 7

Lowest Channel / 10MHz / QPSK



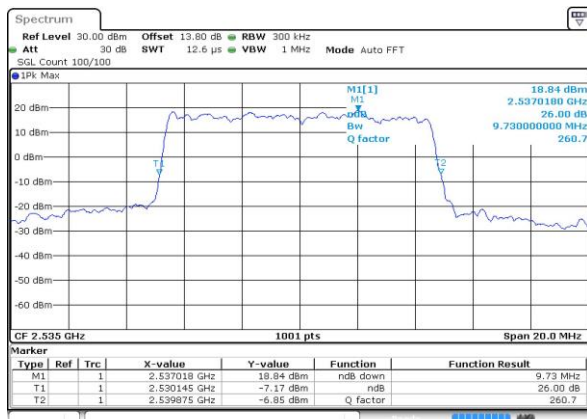
Date: 7 SEP 2018 11:05:22

Lowest Channel / 10MHz / 16QAM



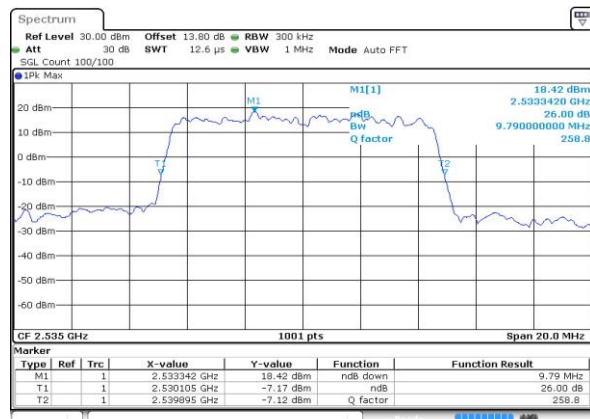
Date: 7 SEP 2018 11:05:34

Middle Channel / 10MHz / QPSK



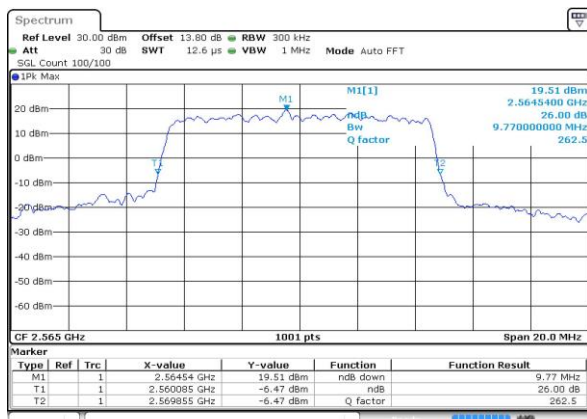
Date: 7 SEP 2018 11:09:23

Middle Channel / 10MHz / 16QAM



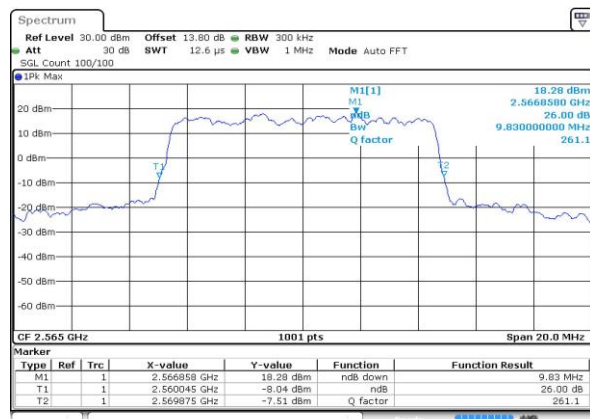
Date: 7 SEP 2018 11:09:35

Highest Channel / 10MHz / QPSK



Date: 7 SEP 2018 11:11:48

Highest Channel / 10MHz / 16QAM

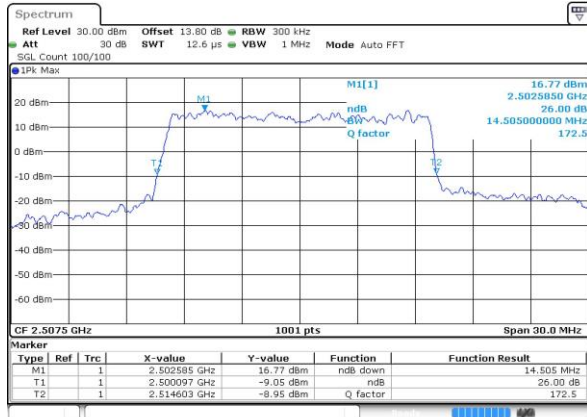


Date: 7 SEP 2018 11:12:00



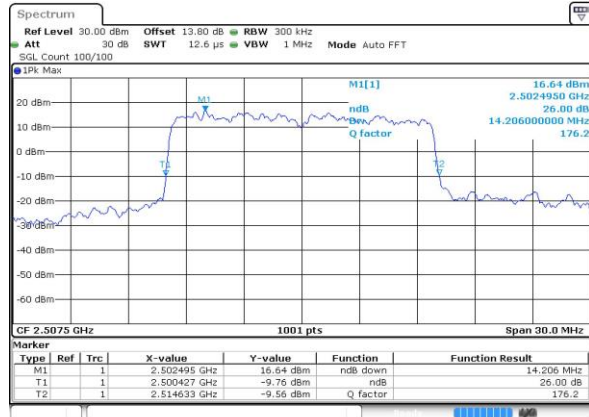
LTE Band 7

Lowest Channel / 15MHz / QPSK



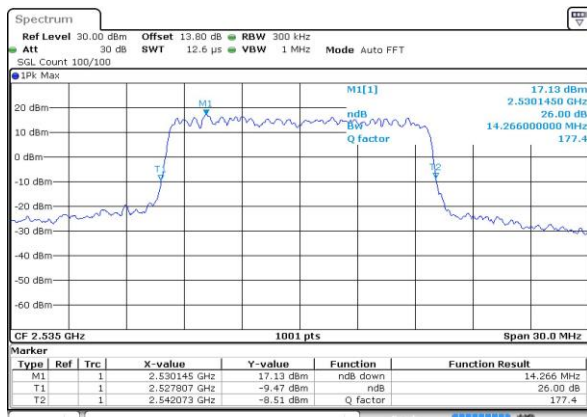
Date: 7 SEP 2018 11:15:49

Lowest Channel / 15MHz / 16QAM



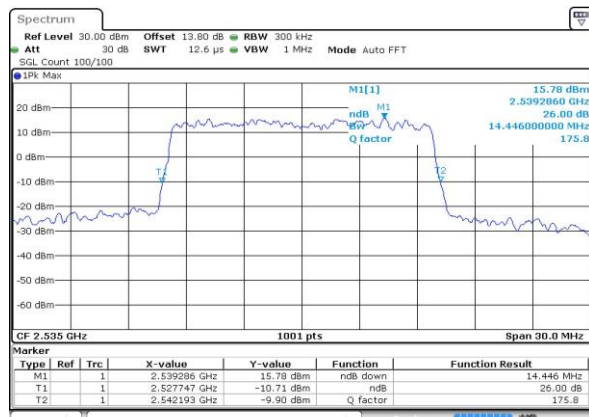
Date: 7 SEP 2018 11:16:00

Middle Channel / 15MHz / QPSK



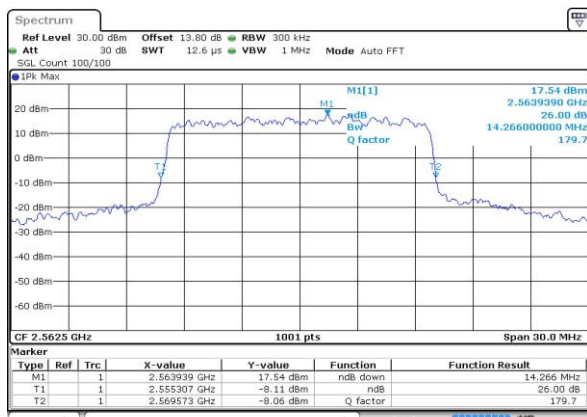
Date: 7 SEP 2018 11:19:50

Middle Channel / 15MHz / 16QAM



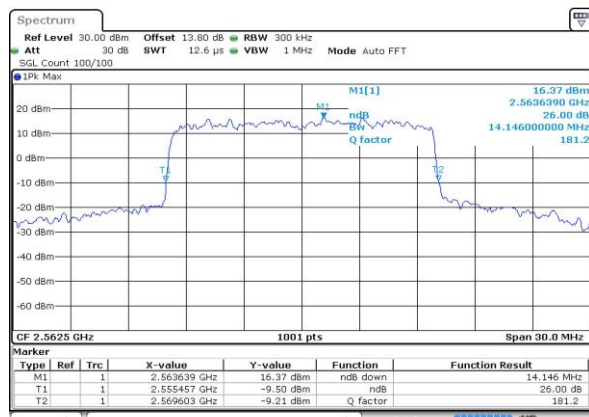
Date: 7 SEP 2018 11:20:01

Highest Channel / 15MHz / QPSK



Date: 7 SEP 2018 11:22:15

Highest Channel / 15MHz / 16QAM

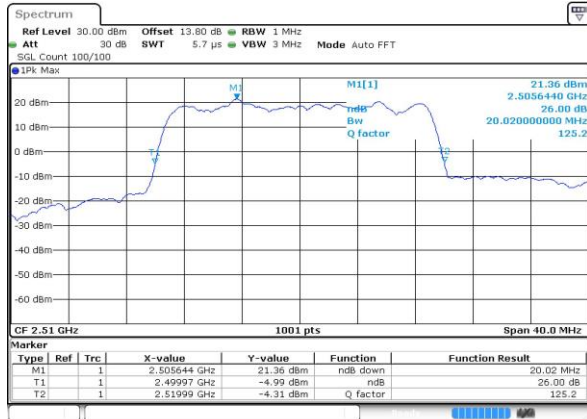


Date: 7 SEP 2018 11:22:26



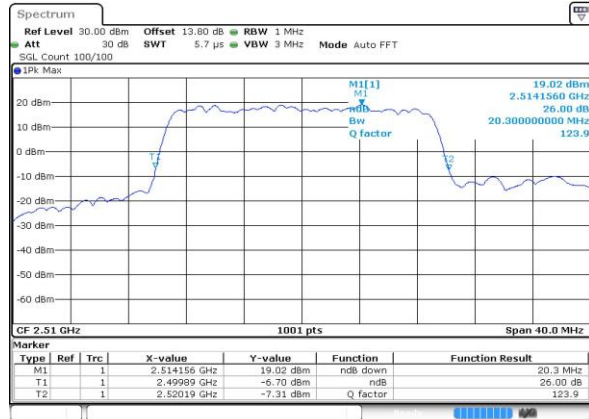
LTE Band 7

Lowest Channel / 20MHz / QPSK



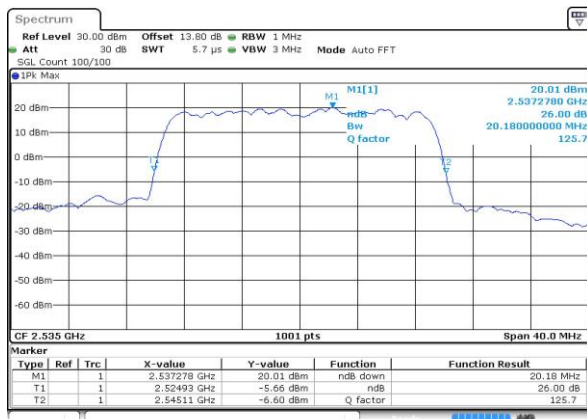
Date: 7 SEP 2018 11:26:16

Lowest Channel / 20MHz / 16QAM



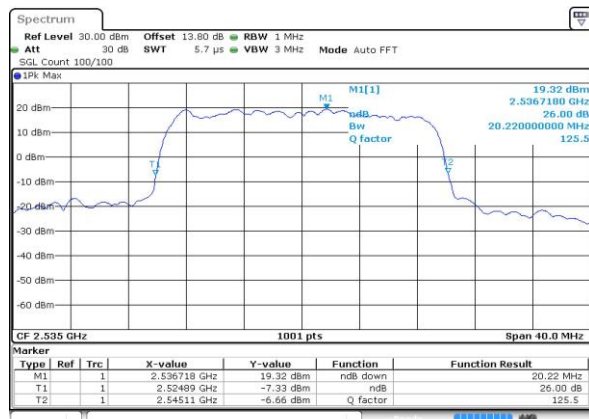
Date: 7 SEP 2018 11:26:27

Middle Channel / 20MHz / QPSK



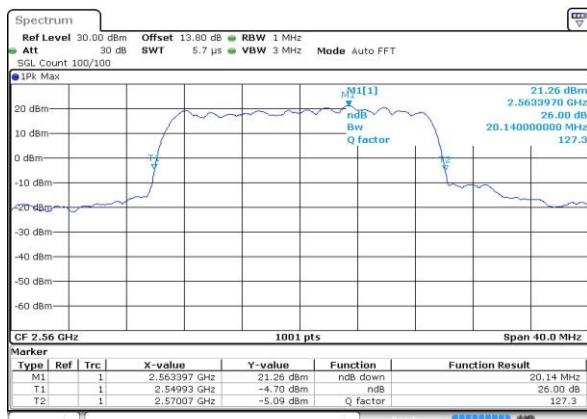
Date: 7 SEP 2018 11:30:16

Middle Channel / 20MHz / 16QAM



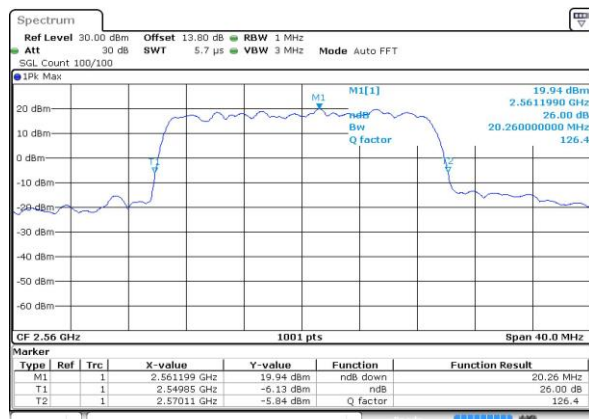
Date: 7 SEP 2018 11:30:27

Highest Channel / 20MHz / QPSK



Date: 7 SEP 2018 11:32:41

Highest Channel / 20MHz / 16QAM

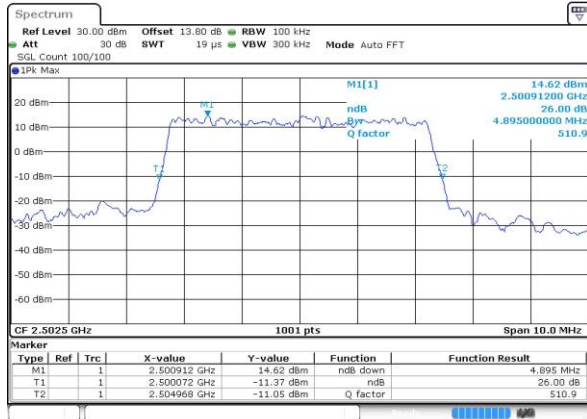


Date: 7 SEP 2018 11:32:52

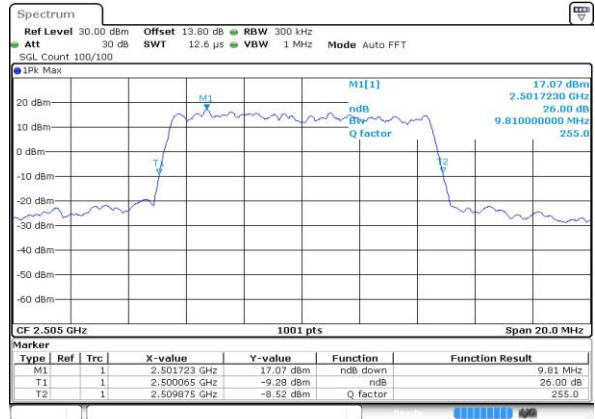


LTE Band 7

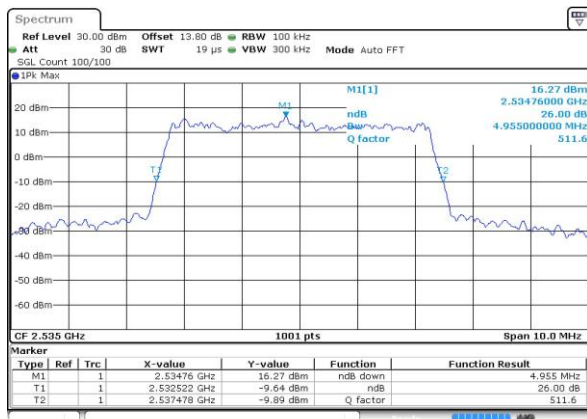
Lowest Channel / 5MHz / 64QAM



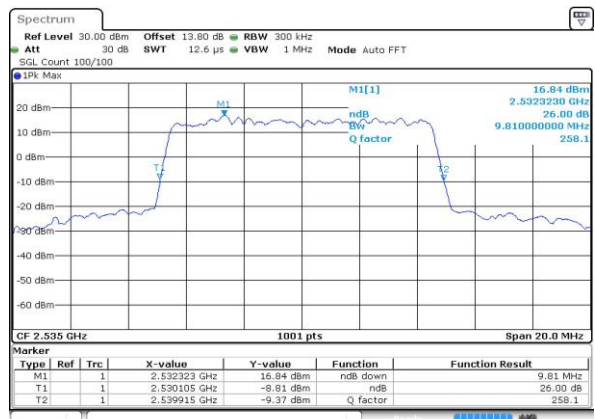
Lowest Channel / 10MHz / 64QAM



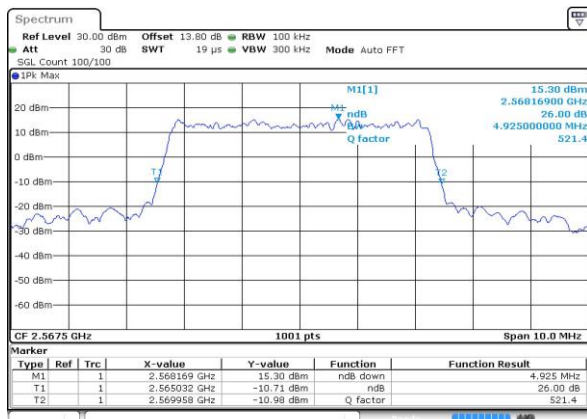
Middle Channel / 5MHz / 64QAM



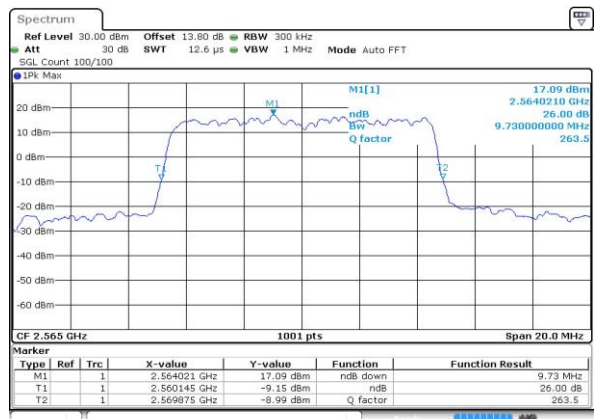
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



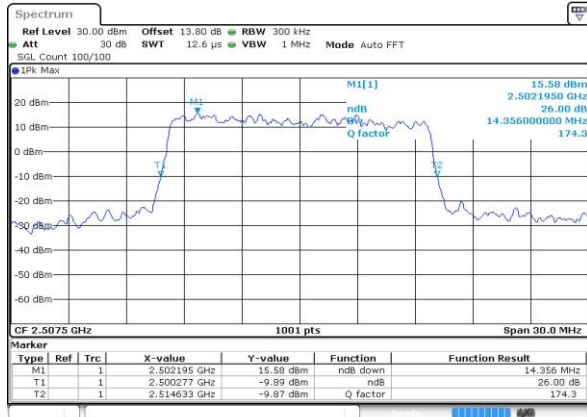
Highest Channel / 10MHz / 64QAM





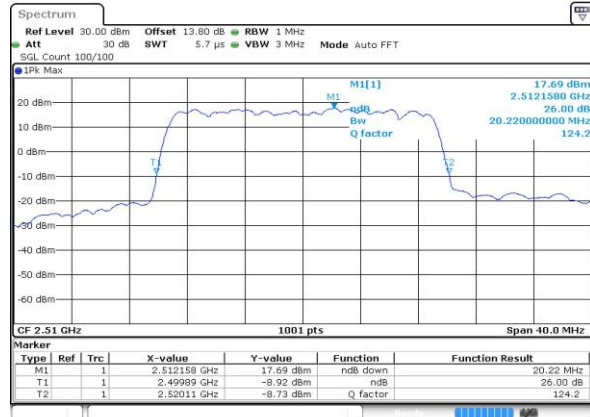
LTE Band 7

Lowest Channel / 15MHz / 64QAM



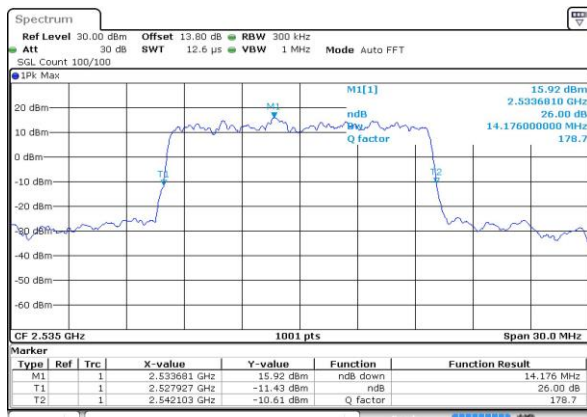
Date: 12 NOV 2018 23:09:23

Lowest Channel / 20MHz / 64QAM



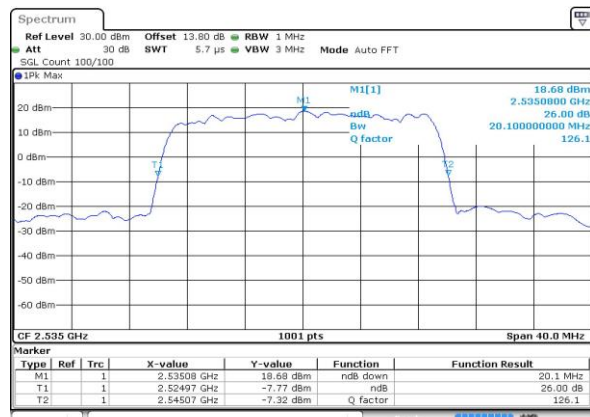
Date: 12 NOV 2018 23:17:23

Middle Channel / 15MHz / 64QAM



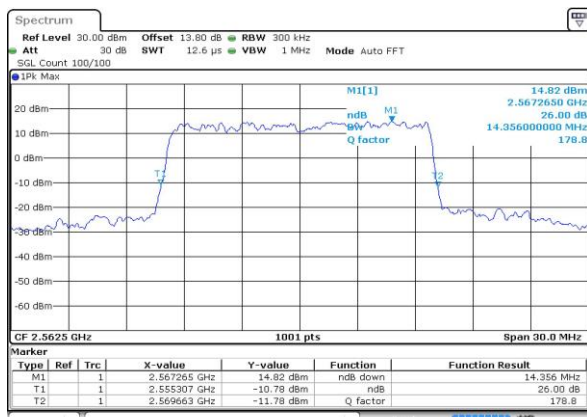
Date: 12 NOV 2018 23:12:42

Middle Channel / 20MHz / 64QAM



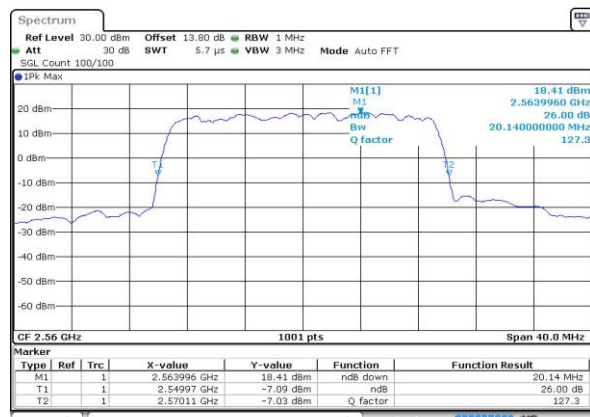
Date: 12 NOV 2018 23:20:42

Highest Channel / 15MHz / 64QAM



Date: 12 NOV 2018 23:14:04

Highest Channel / 20MHz / 64QAM



Date: 12 NOV 2018 23:22:04

**Occupied Bandwidth**

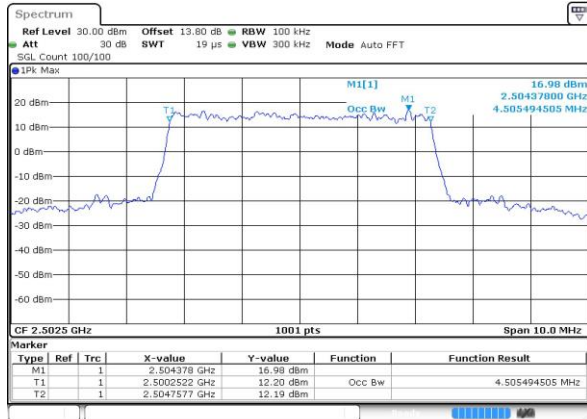
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.51	4.49	9.05	9.01	13.55	13.46	18.42	18.7
Middle CH	-	-	-	-	4.49	4.51	8.99	8.97	13.49	13.4	18.18	18.3
Highest CH	-	-	-	-	4.51	4.51	8.99	8.93	13.4	13.43	18.26	18.38

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	-	9.03	-	13.43	-	18.51	-
Middle CH	-	-	-	-	4.46	-	9.07	-	13.43	-	18.18	-
Highest CH	-	-	-	-	4.49	-	8.99	-	13.46	-	18.38	-

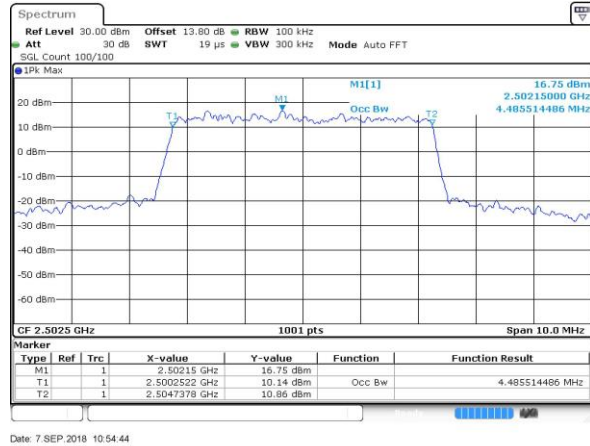


LTE Band 7

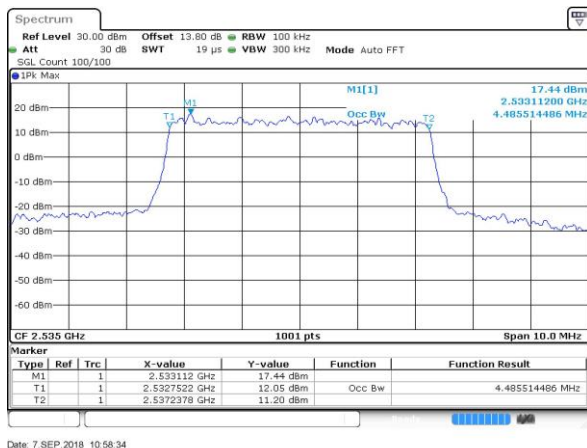
Lowest Channel / 5MHz / QPSK



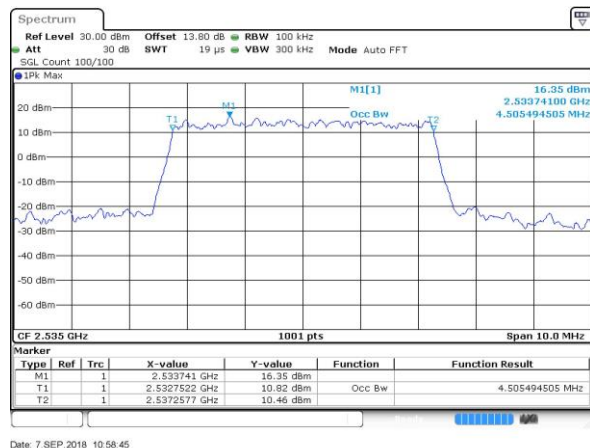
Lowest Channel / 5MHz / 16QAM



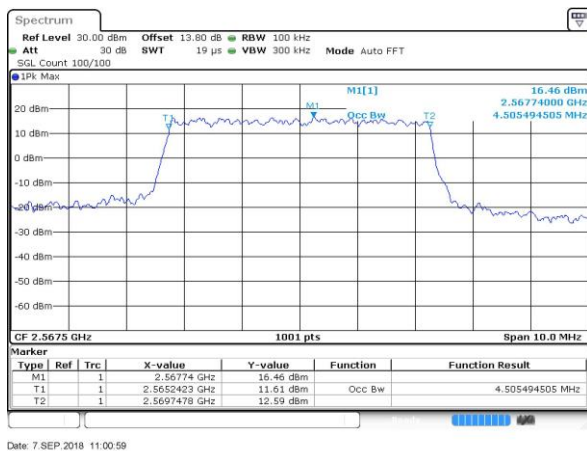
Middle Channel / 5MHz / QPSK



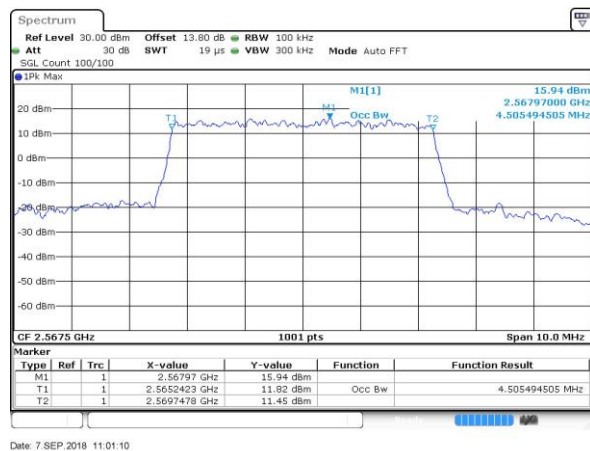
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



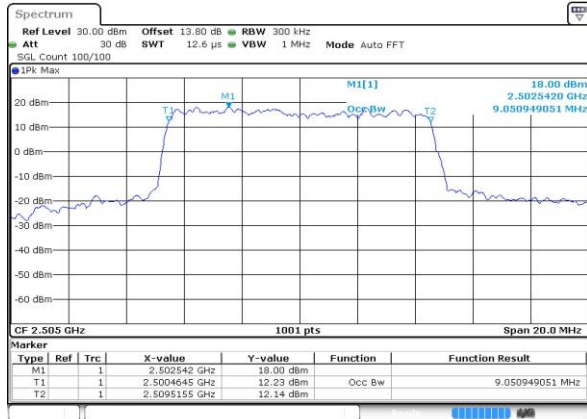
Highest Channel / 5MHz / 16QAM



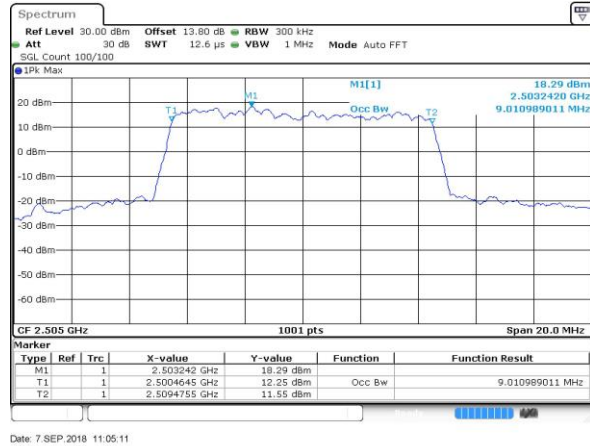


LTE Band 7

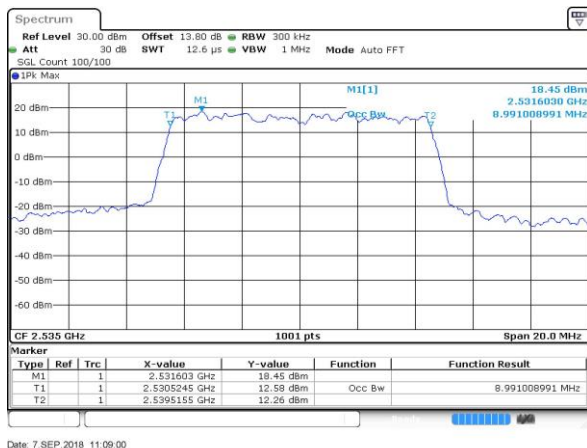
Lowest Channel / 10MHz / QPSK



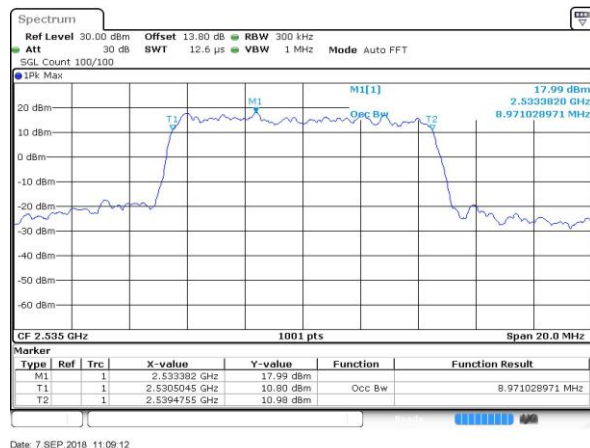
Lowest Channel / 10MHz / 16QAM



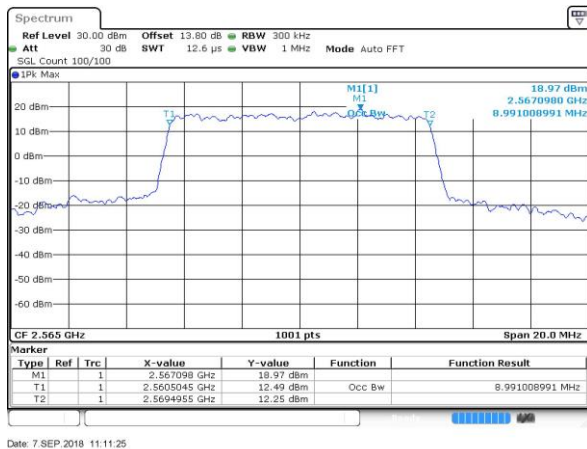
Middle Channel / 10MHz / QPSK



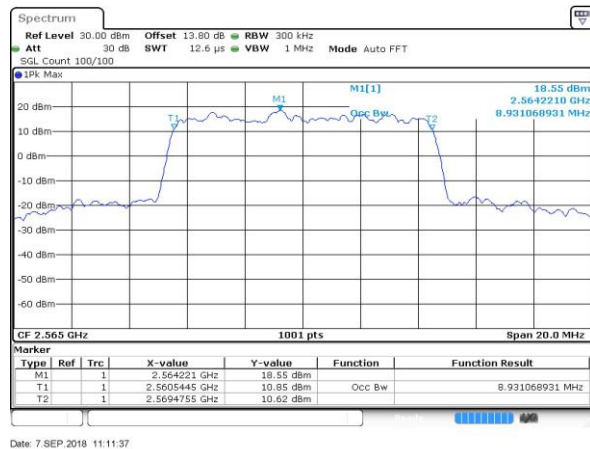
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



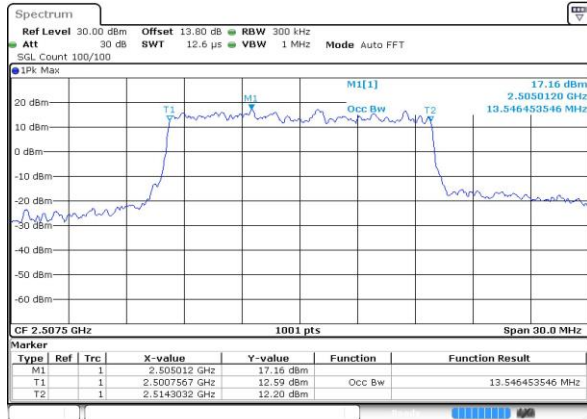
Highest Channel / 10MHz / 16QAM



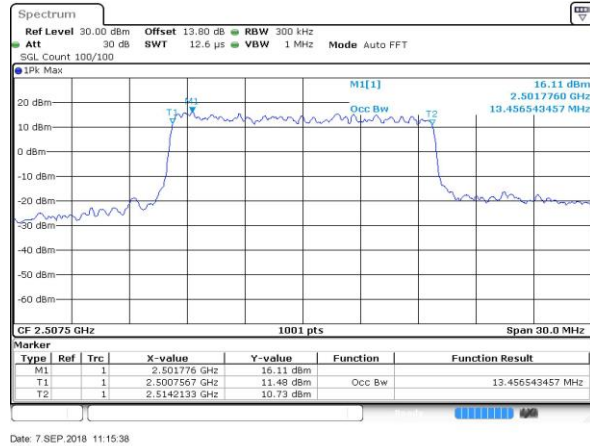


LTE Band 7

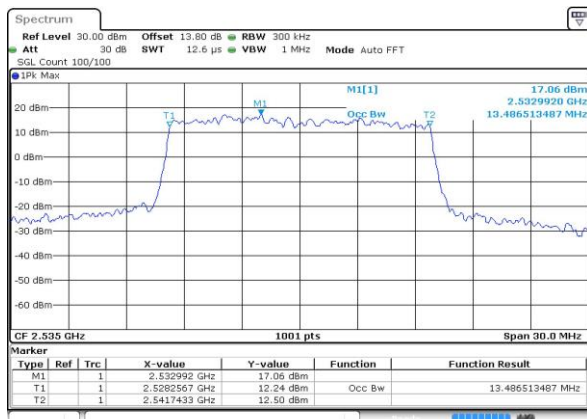
Lowest Channel / 15MHz / QPSK



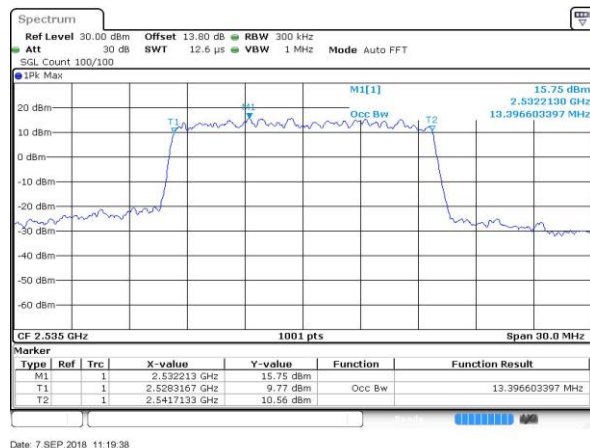
Lowest Channel / 15MHz / 16QAM



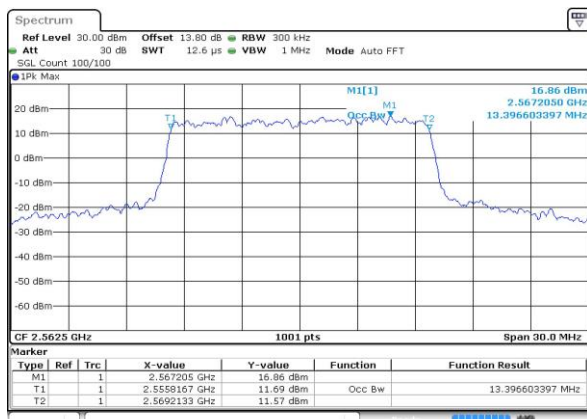
Middle Channel / 15MHz / QPSK



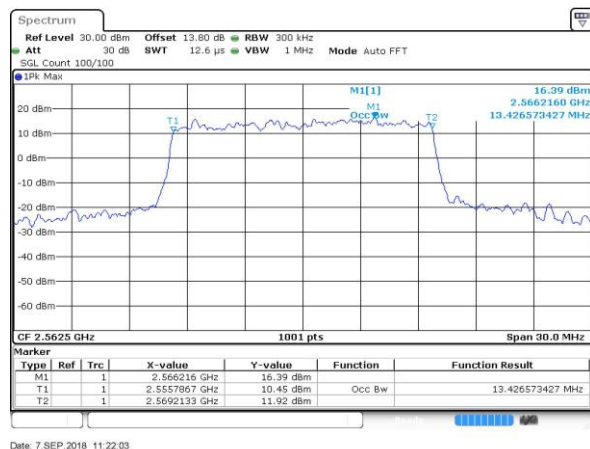
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



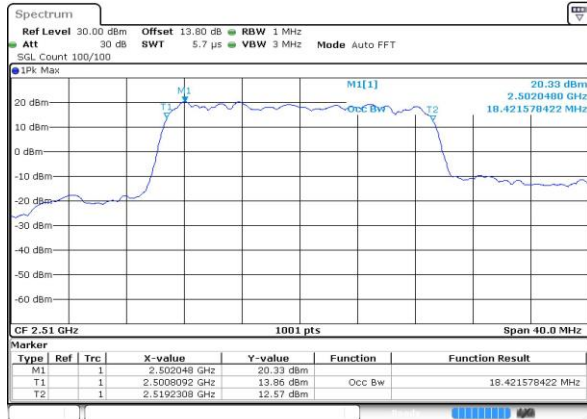
Highest Channel / 15MHz / 16QAM



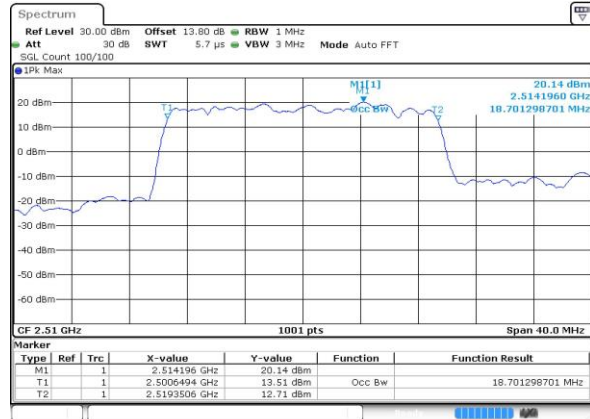


LTE Band 7

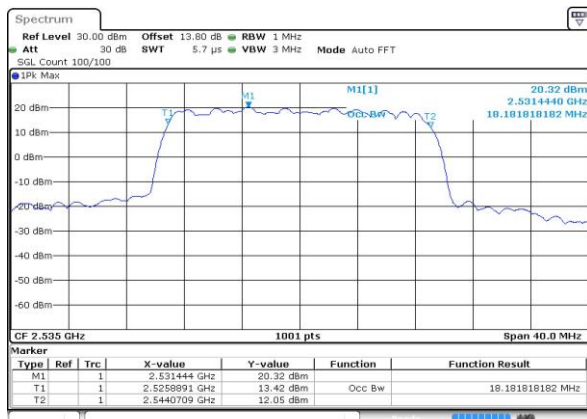
Lowest Channel / 20MHz / QPSK



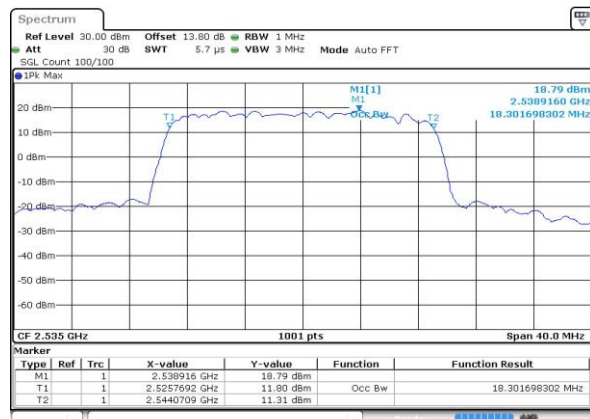
Lowest Channel / 20MHz / 16QAM



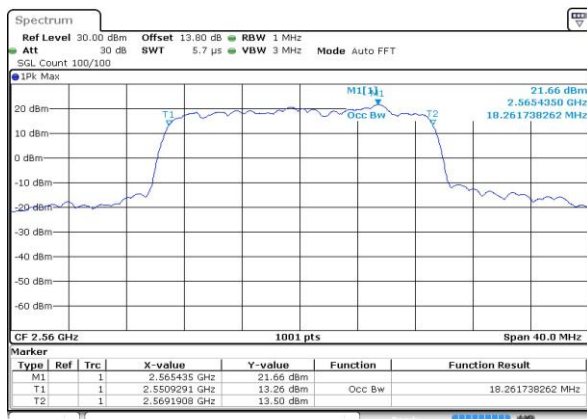
Middle Channel / 20MHz / QPSK



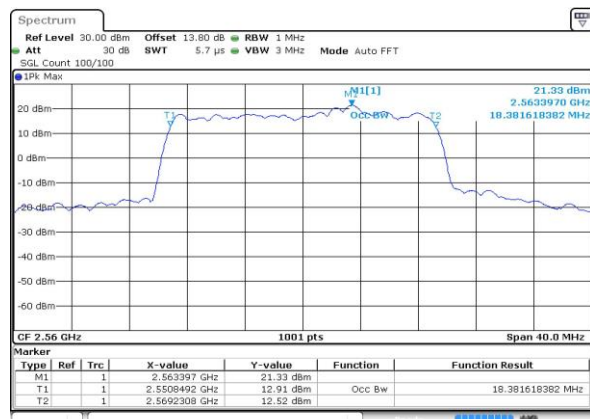
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



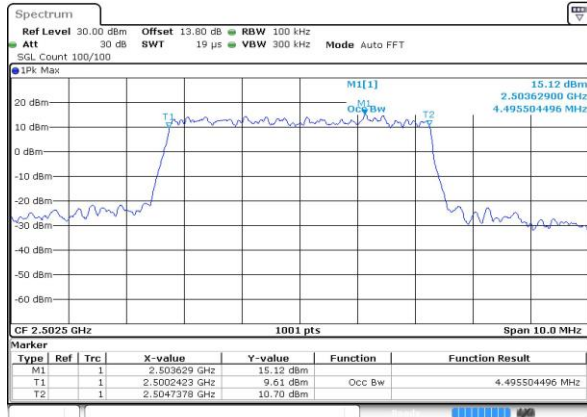
Highest Channel / 20MHz / 16QAM



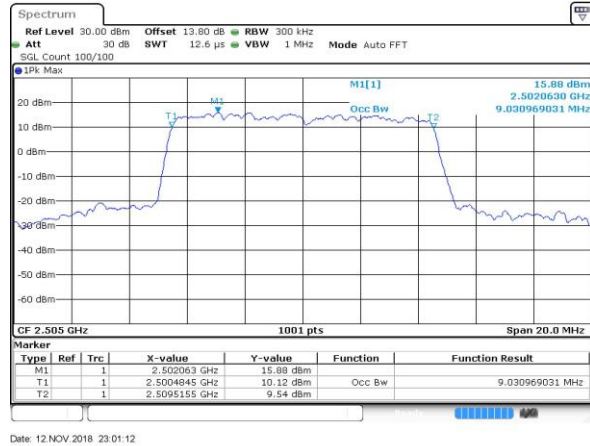


LTE Band 7

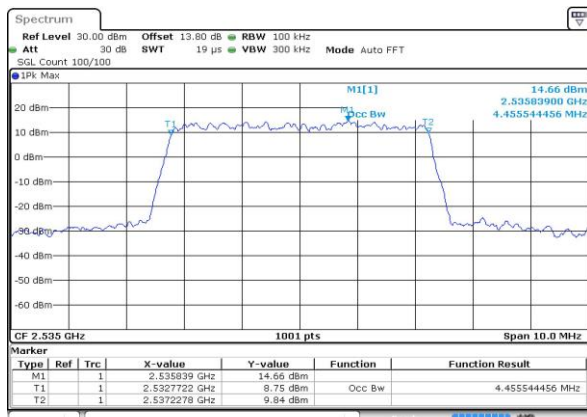
Lowest Channel / 5MHz / 64QAM



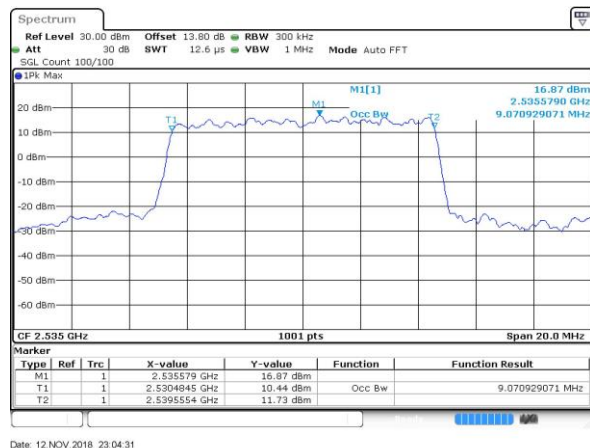
Lowest Channel / 10MHz / 64QAM



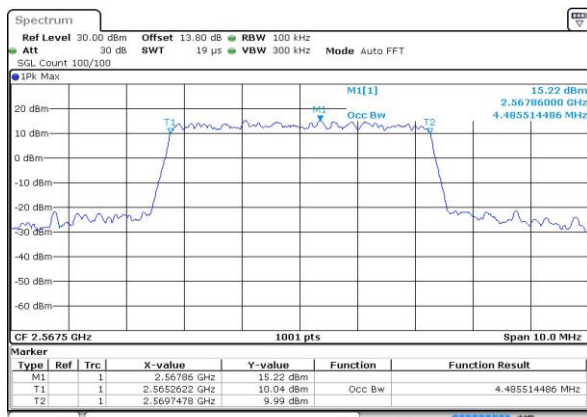
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM

