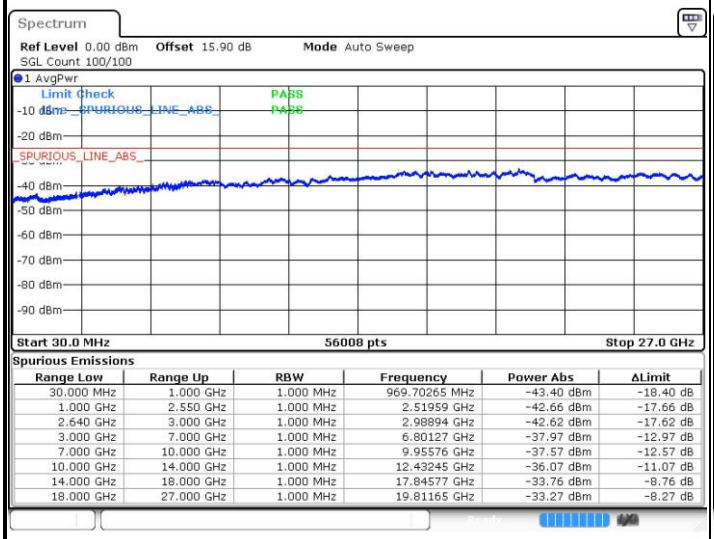
LTE Band 38 / 15MHz

Lowest Channel / 64QAM

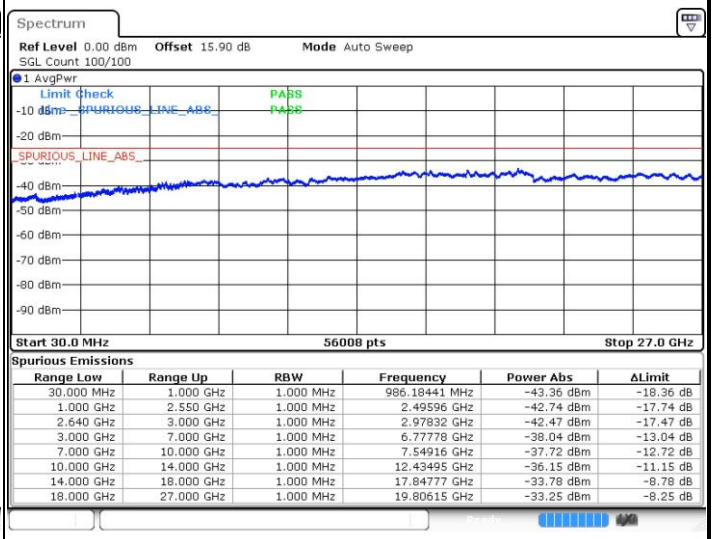


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	969.70265 MHz	-43.40 dBm	-18.40 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.51959 GHz	-42.66 dBm	-17.66 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.98894 GHz	-42.62 dBm	-17.62 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.80127 GHz	-37.97 dBm	-12.97 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.95576 GHz	-37.57 dBm	-12.57 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.43245 GHz	-36.07 dBm	-11.07 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84577 GHz	-33.76 dBm	-8.76 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81165 GHz	-33.27 dBm	-8.27 dB

Date: 23.OCT.2018 00:48:17

Middle Channel / 64QAM

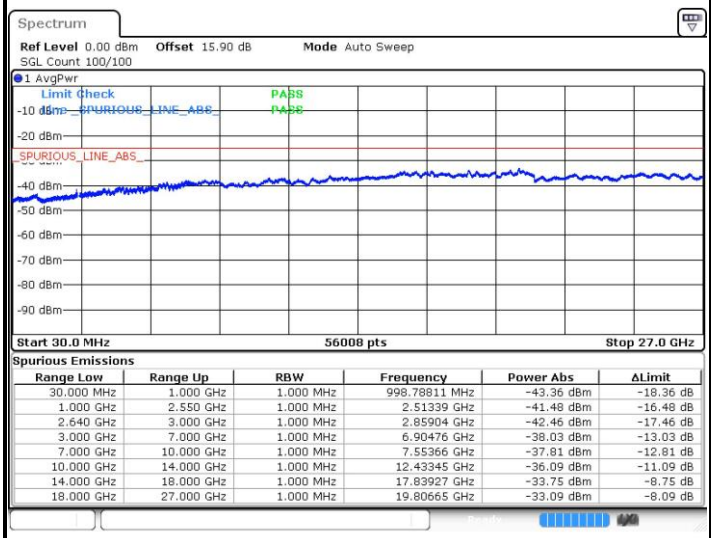


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	986.18441 MHz	-43.36 dBm	-18.36 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.49596 GHz	-42.74 dBm	-17.74 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.97832 GHz	-42.47 dBm	-17.47 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.77778 GHz	-38.04 dBm	-13.04 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.54916 GHz	-37.72 dBm	-12.72 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.43495 GHz	-36.15 dBm	-11.15 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84777 GHz	-33.78 dBm	-8.78 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.80615 GHz	-33.25 dBm	-8.25 dB

Date: 23.OCT.2018 00:49:02

Highest Channel / 64QAM



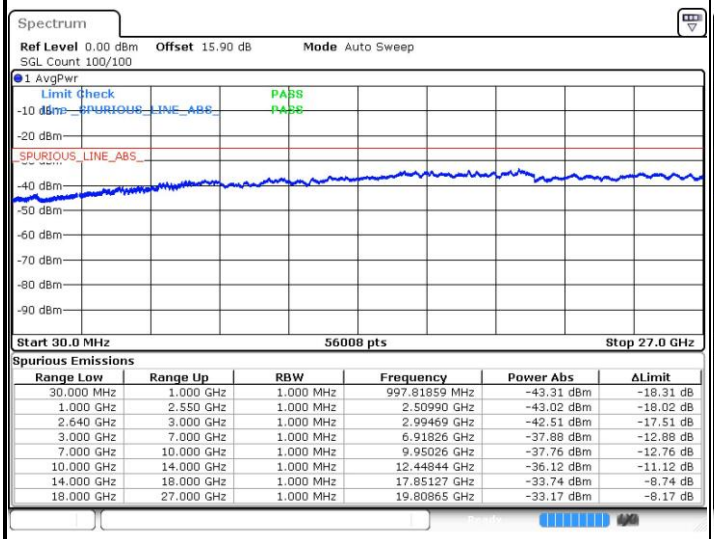
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	998.78811 MHz	-43.36 dBm	-18.36 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.51339 GHz	-41.48 dBm	-16.48 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.85904 GHz	-42.46 dBm	-17.46 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.90476 GHz	-38.03 dBm	-13.03 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.55366 GHz	-37.81 dBm	-12.81 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.43345 GHz	-36.09 dBm	-11.09 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.83927 GHz	-33.75 dBm	-8.75 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.80665 GHz	-33.09 dBm	-8.09 dB

Date: 23.OCT.2018 00:49:47

LTE Band 38 / 20MHz

Lowest Channel / 64QAM

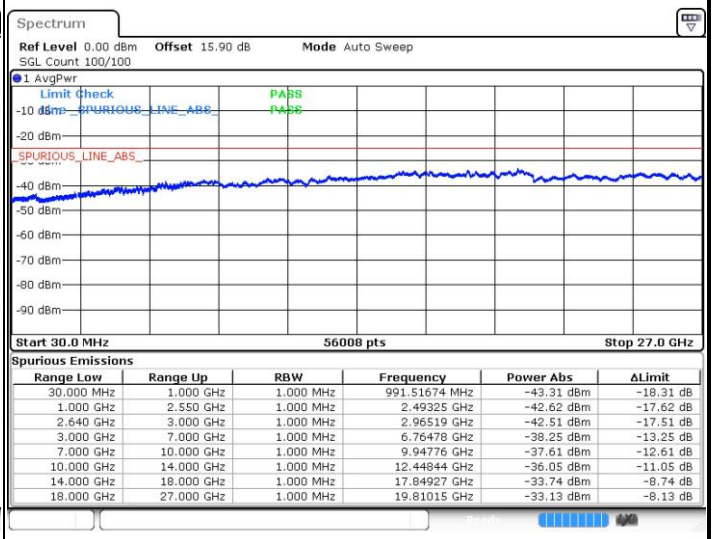


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	997.81859 MHz	-43.31 dBm	-18.31 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.50990 GHz	-43.02 dBm	-18.02 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.99469 GHz	-42.51 dBm	-17.51 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91826 GHz	-37.88 dBm	-12.88 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.95026 GHz	-37.76 dBm	-12.76 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.44844 GHz	-36.12 dBm	-11.12 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.85127 GHz	-33.74 dBm	-8.74 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.80865 GHz	-33.17 dBm	-8.17 dB

Date: 23.OCT.2018 00:50:33

Middle Channel / 64QAM

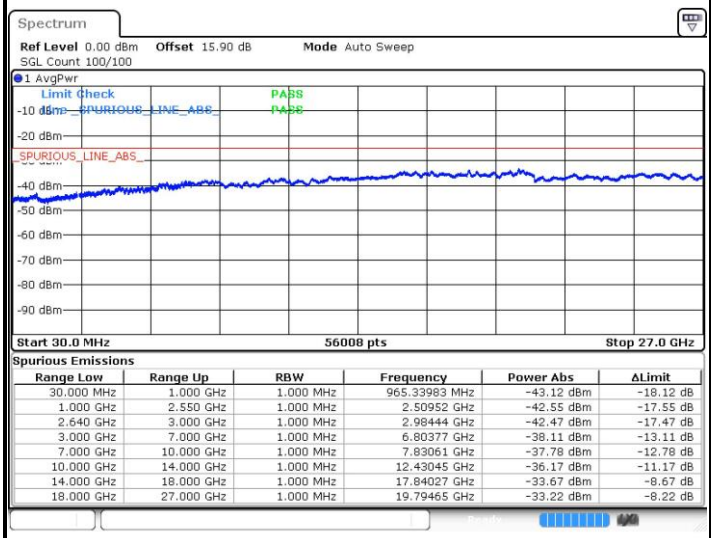


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	991.51674 MHz	-43.31 dBm	-18.31 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.49325 GHz	-42.62 dBm	-17.62 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.96519 GHz	-42.51 dBm	-17.51 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.76478 GHz	-38.25 dBm	-13.25 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.94776 GHz	-37.61 dBm	-12.61 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.44844 GHz	-36.05 dBm	-11.05 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84927 GHz	-33.74 dBm	-8.74 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.81015 GHz	-33.13 dBm	-8.13 dB

Date: 23.OCT.2018 00:51:18

Highest Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	965.33983 MHz	-43.12 dBm	-18.12 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.50952 GHz	-42.55 dBm	-17.55 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.98444 GHz	-42.47 dBm	-17.47 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.80377 GHz	-38.11 dBm	-13.11 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.83061 GHz	-37.78 dBm	-12.78 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.43045 GHz	-36.17 dBm	-11.17 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.84027 GHz	-33.67 dBm	-8.67 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.79465 GHz	-33.22 dBm	-8.22 dB

Date: 23.OCT.2018 00:52:03

Frequency Stability

Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0000	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =3.8 V.；Battery End Point (BEP) =3.6 V.；Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

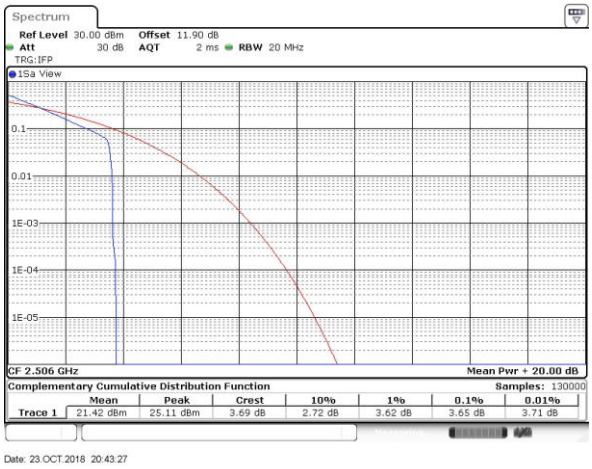
LTE Band 41

Peak-to-Average Ratio

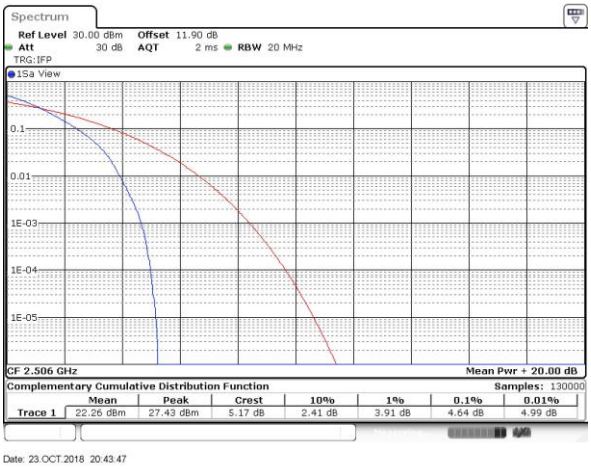
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.65	4.64	5.42	6.03	PASS
Middle CH	3.57	4.64	5.28	5.94	
Highest CH	3.71	4.61	5.42	6	
Mode	LTE Band 41 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.52	6.52	-	-	PASS
Middle CH	6.23	6.43	-	-	
Highest CH	6.55	6.55	-	-	

LTE Band 41 / 20MHz / QPSK

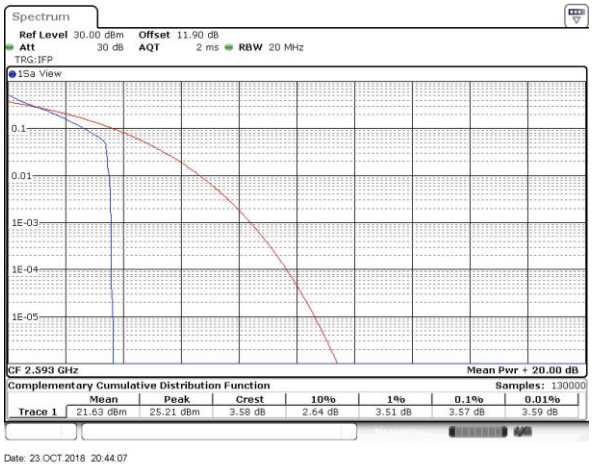
Lowest Channel / 1RB



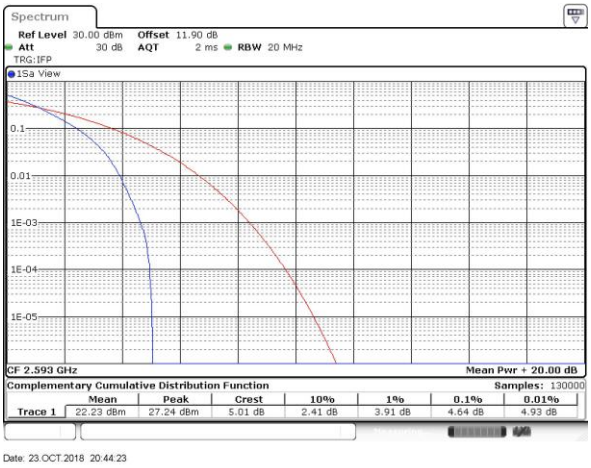
Lowest Channel / Full RB



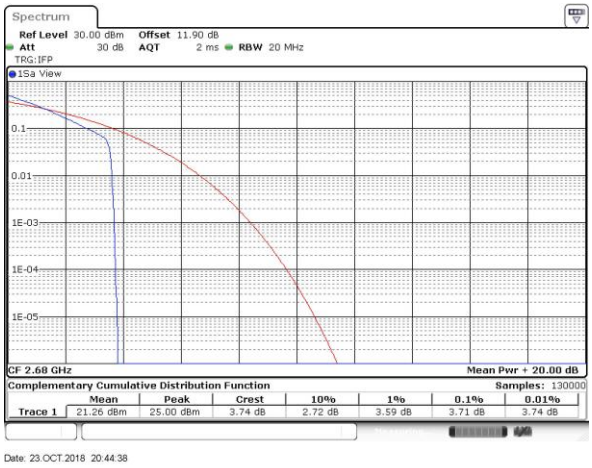
Middle Channel / 1RB



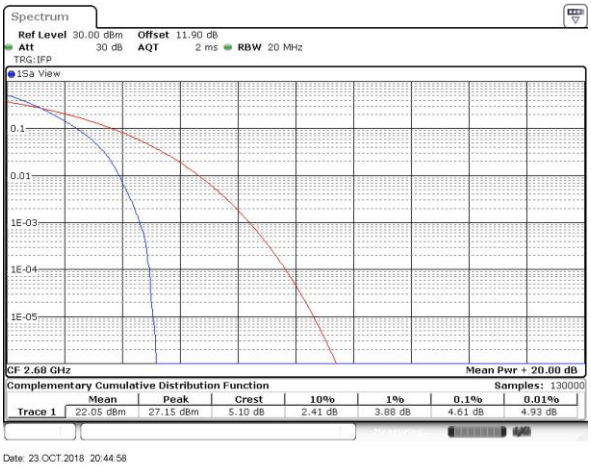
Middle Channel / Full RB



Highest Channel / 1RB

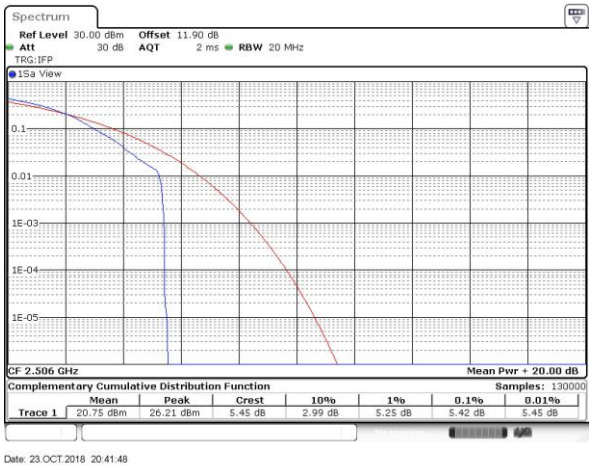


Highest Channel / Full RB

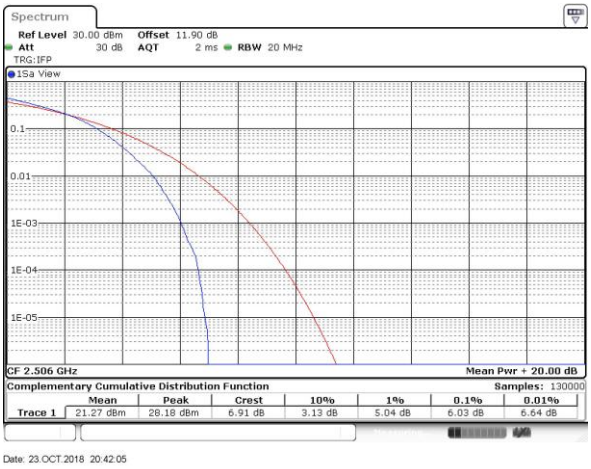


LTE Band 41 / 20MHz / 16QAM

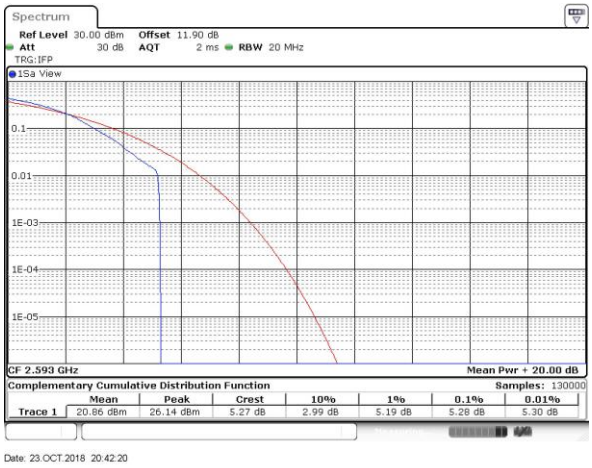
Lowest Channel / 1RB



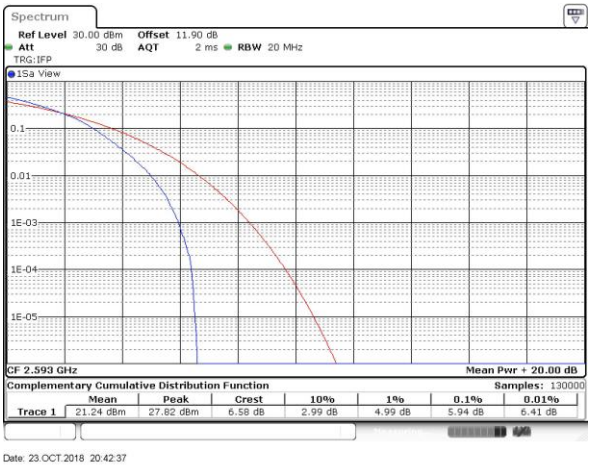
Lowest Channel / Full RB



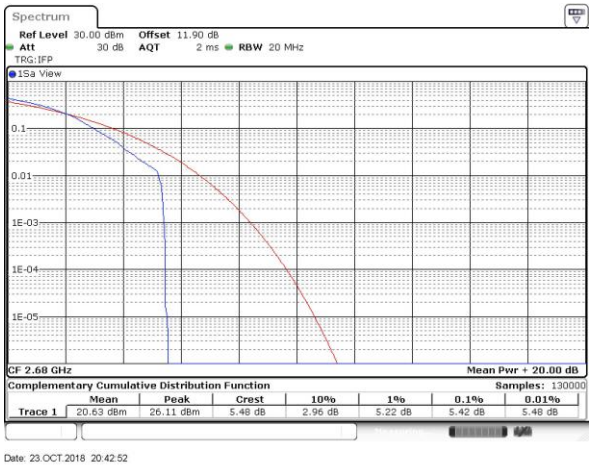
Middle Channel / 1RB



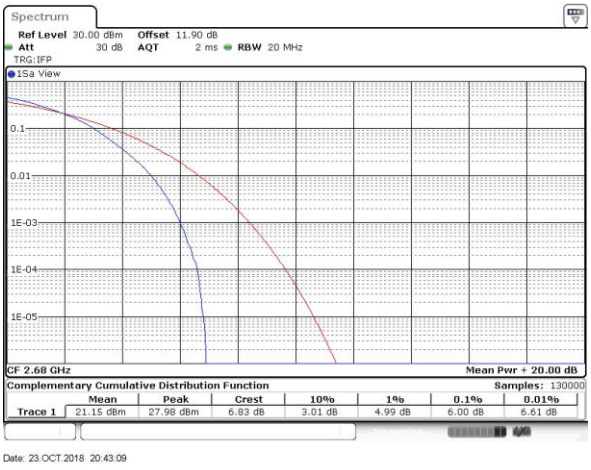
Middle Channel / Full RB



Highest Channel / 1RB

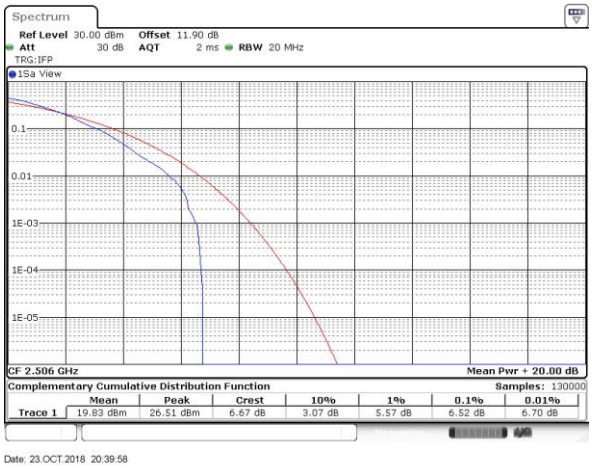


Highest Channel / Full RB

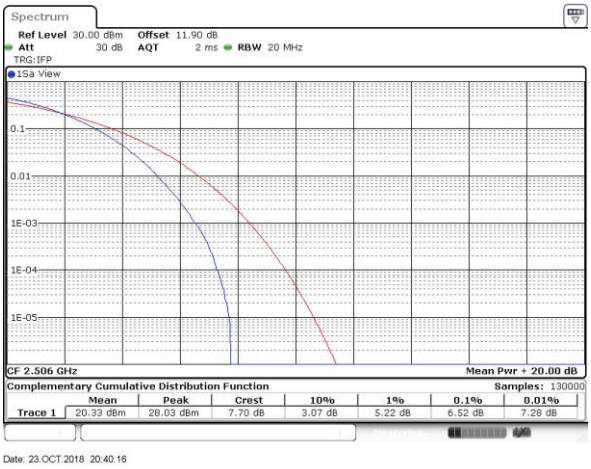


LTE Band 41 / 20MHz / 64QAM

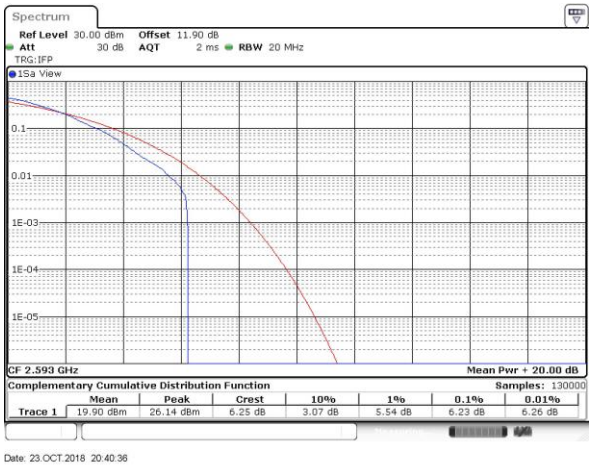
Lowest Channel / 1RB



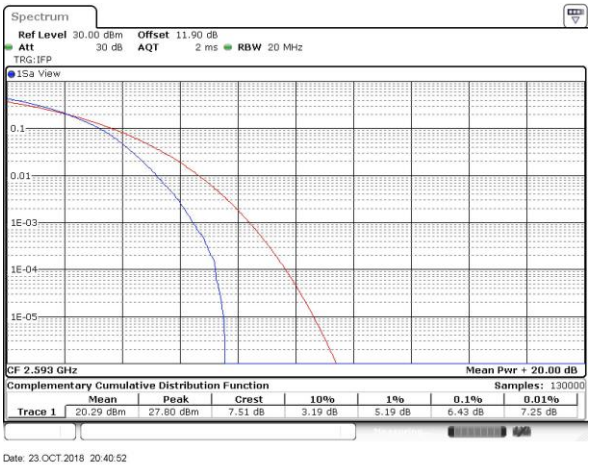
Lowest Channel / Full RB



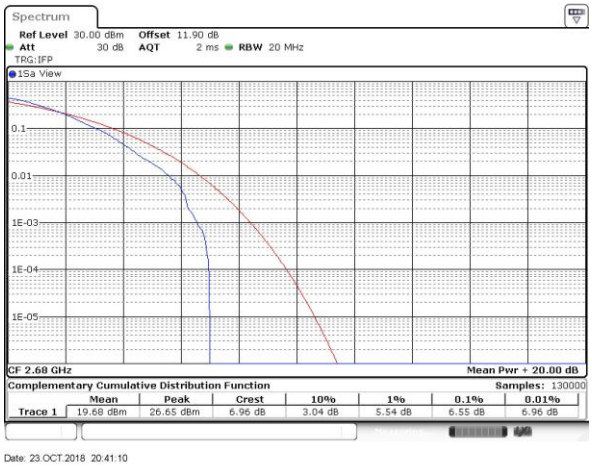
Middle Channel / 1RB



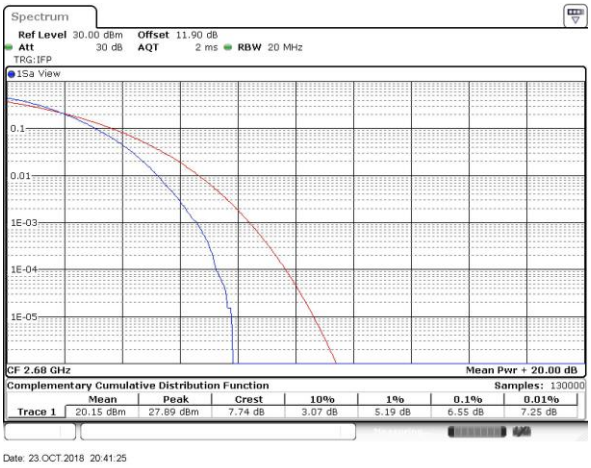
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB

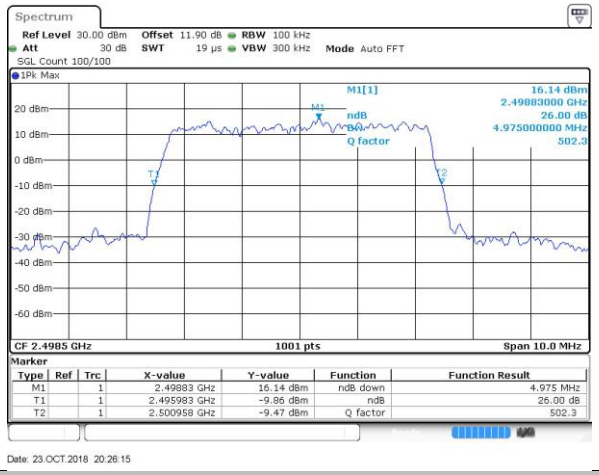


26dB Bandwidth

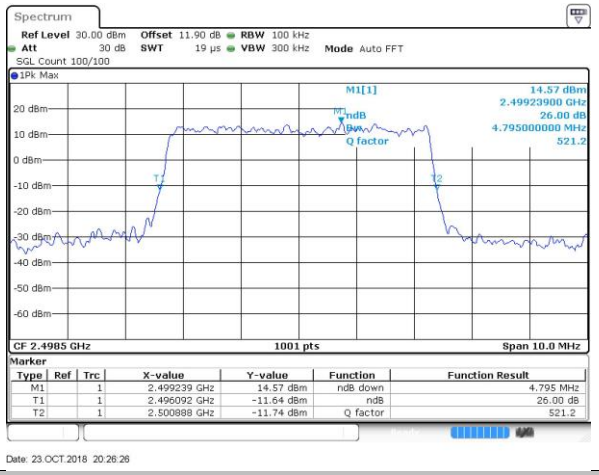
Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.98	4.80	9.71	9.69	14.09	14.15	20.06	20.10
Middle CH	-	-	-	-	4.90	4.90	9.67	9.71	14.18	14.12	20.10	20.02
Highest CH	-	-	-	-	4.92	4.91	9.69	9.69	14.66	14.12	20.14	20.02
Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.82	-	9.89	-	14.15	-	20.02	-
Middle CH	-	-	-	-	4.79	-	9.75	-	14.30	-	20.06	-
Highest CH	-	-	-	-	4.86	-	9.77	-	14.27	-	19.98	-

LTE Band 41

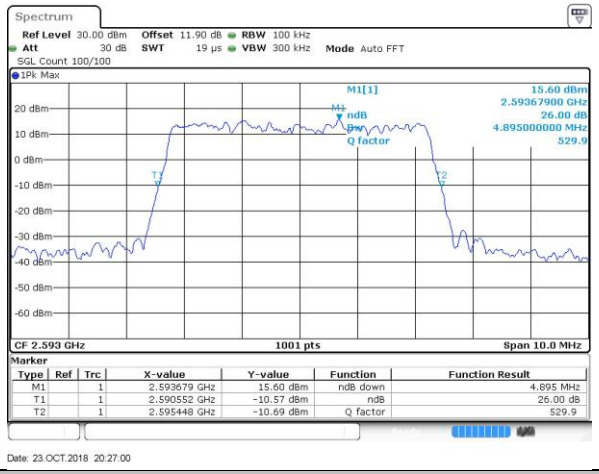
Lowest Channel / 5MHz / QPSK



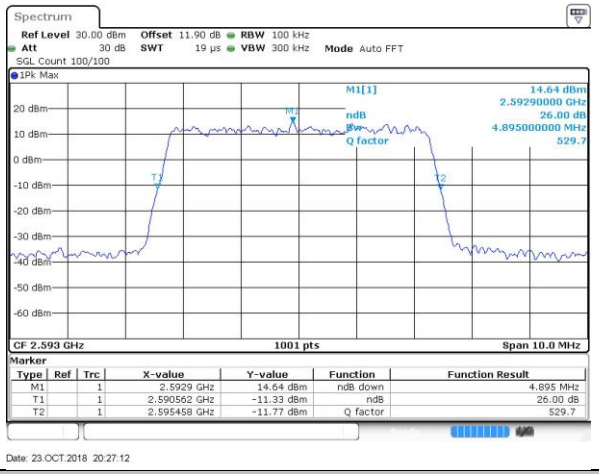
Lowest Channel / 5MHz / 16QAM



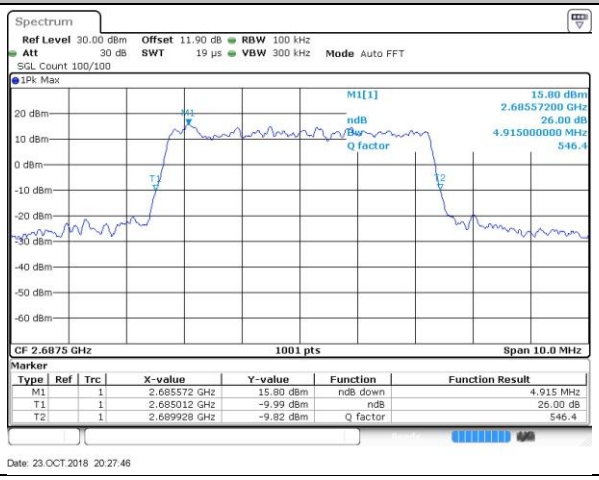
Middle Channel / 5MHz / QPSK



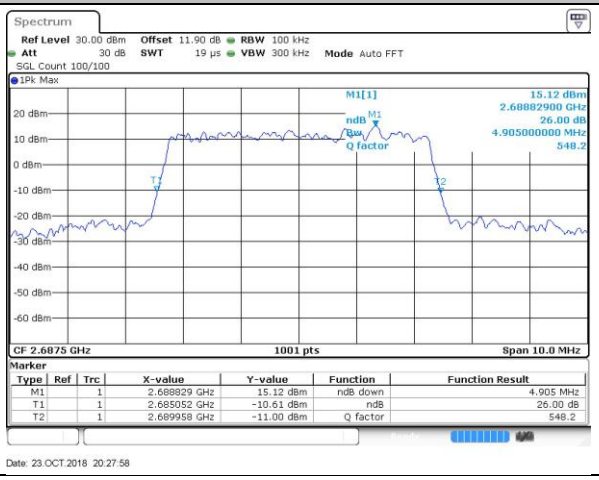
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

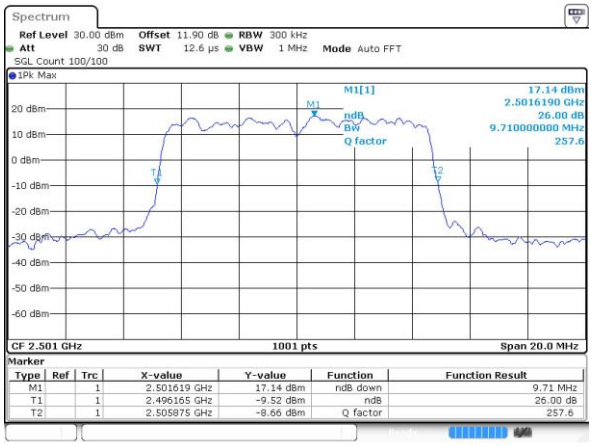


Highest Channel / 5MHz / 16QAM

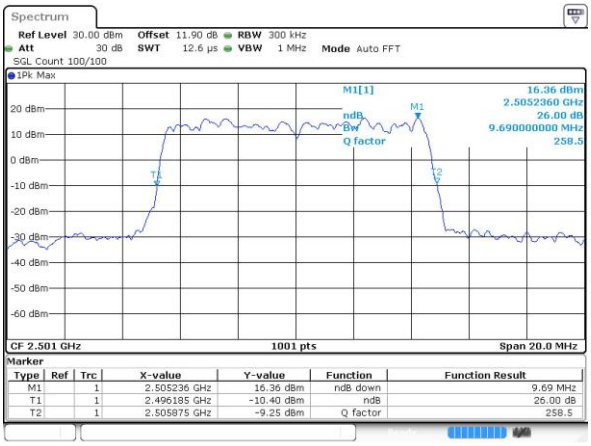


LTE Band 41

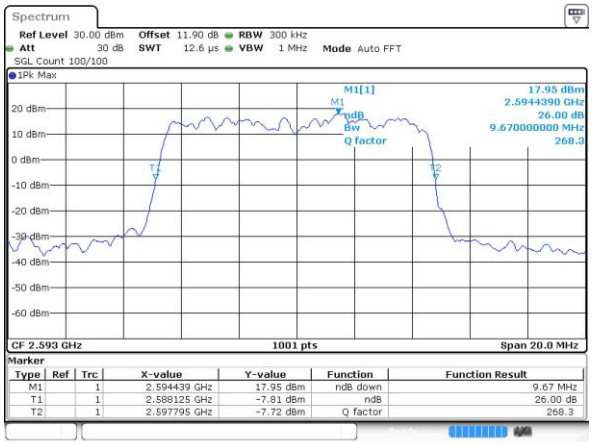
Lowest Channel / 10MHz / QPSK



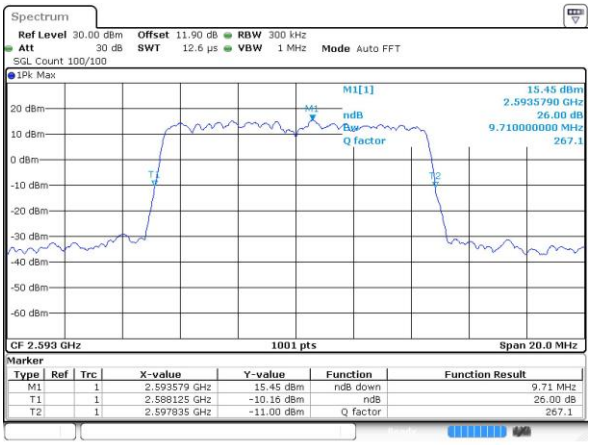
Lowest Channel / 10MHz / 16QAM



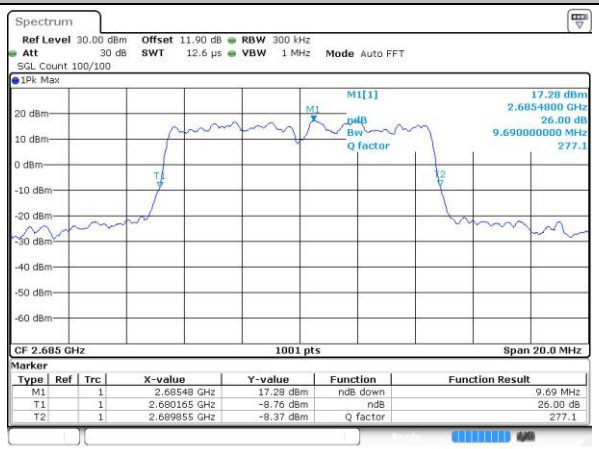
Middle Channel / 10MHz / QPSK



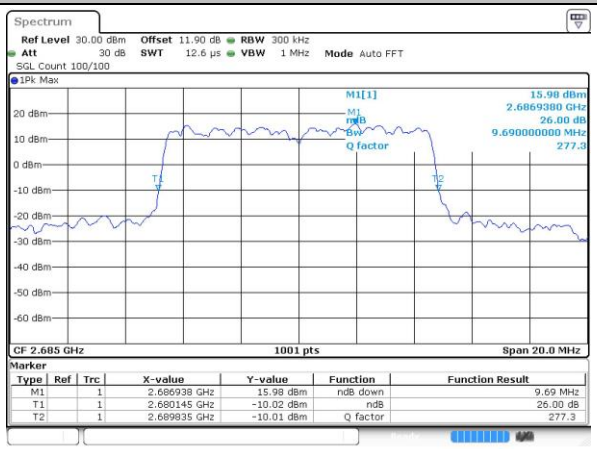
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

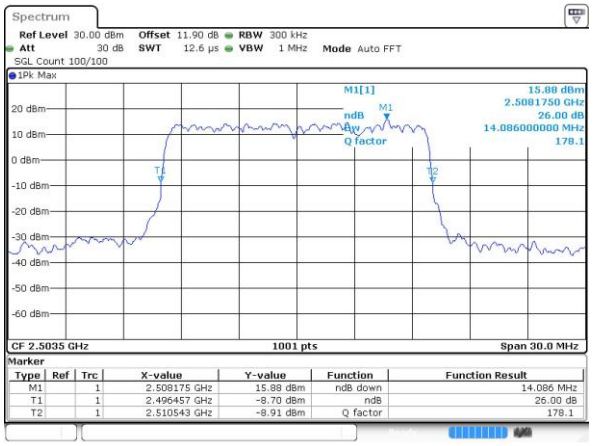


Highest Channel / 10MHz / 16QAM

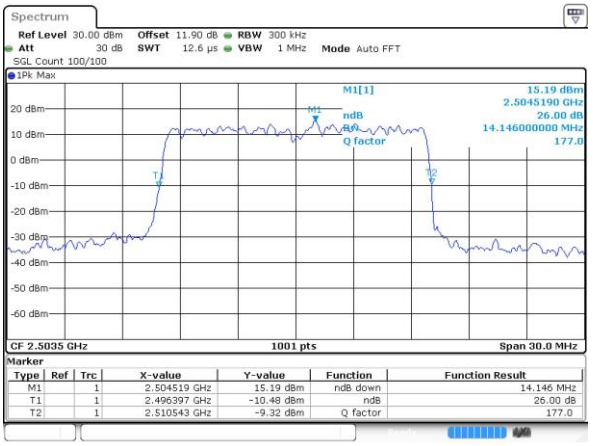


LTE Band 41

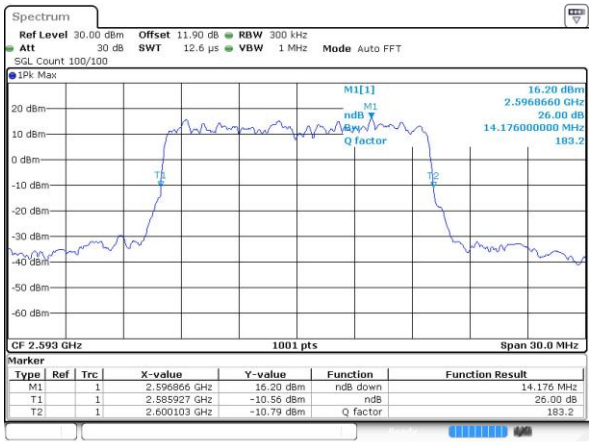
Lowest Channel / 15MHz / QPSK



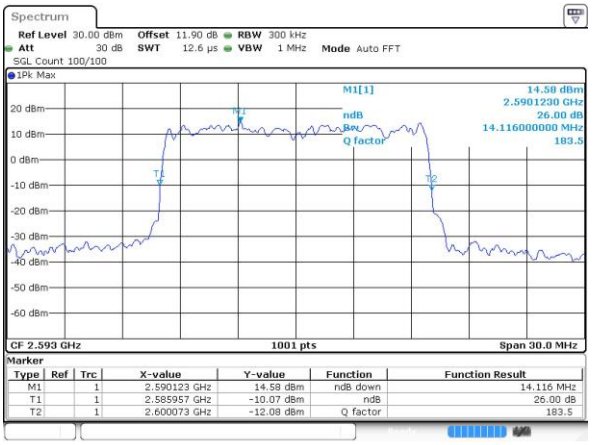
Lowest Channel / 15MHz / 16QAM



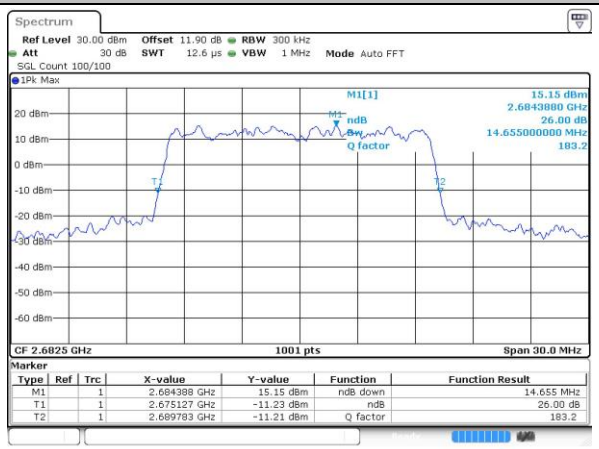
Middle Channel / 15MHz / QPSK



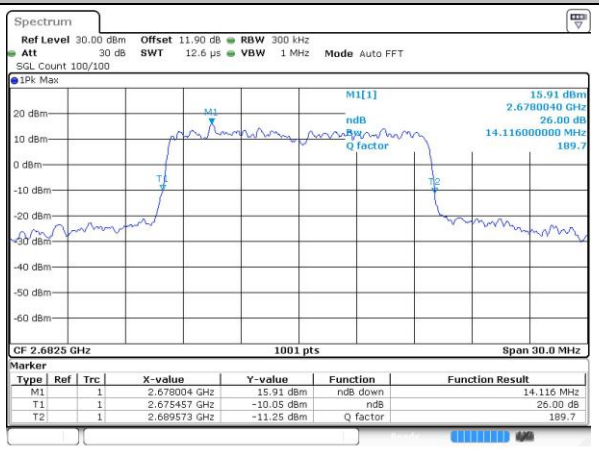
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

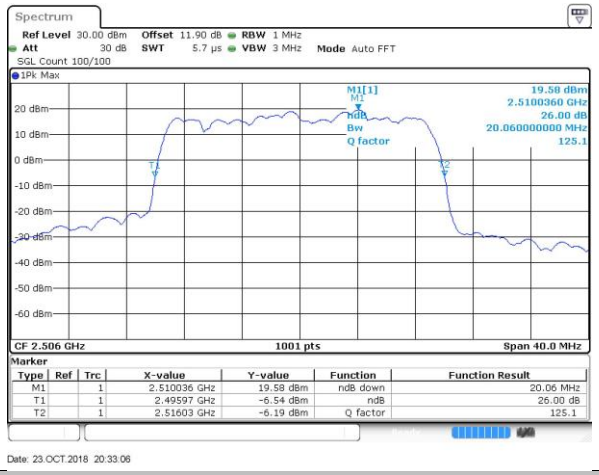


Highest Channel / 15MHz / 16QAM

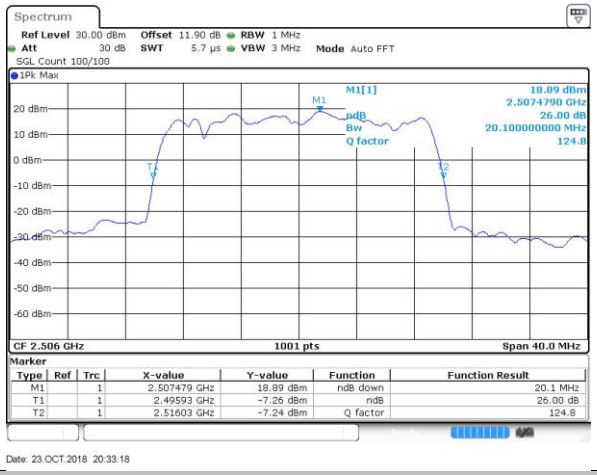


LTE Band 41

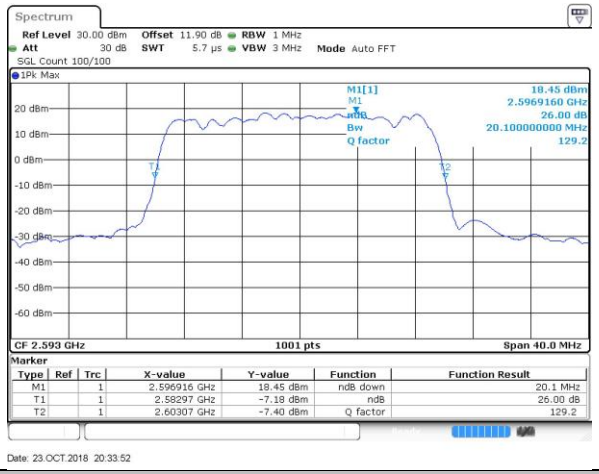
Lowest Channel / 20MHz / QPSK



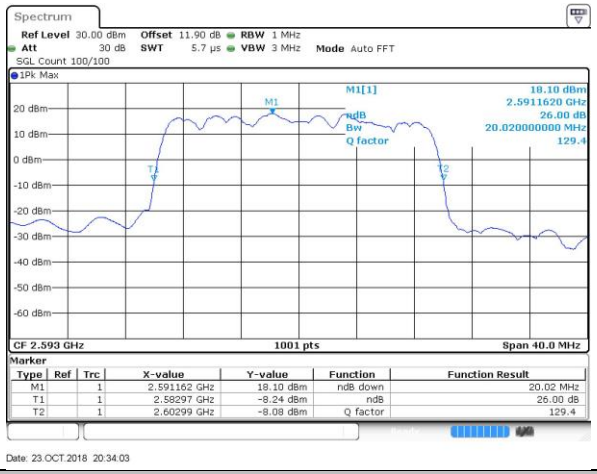
Lowest Channel / 20MHz / 16QAM



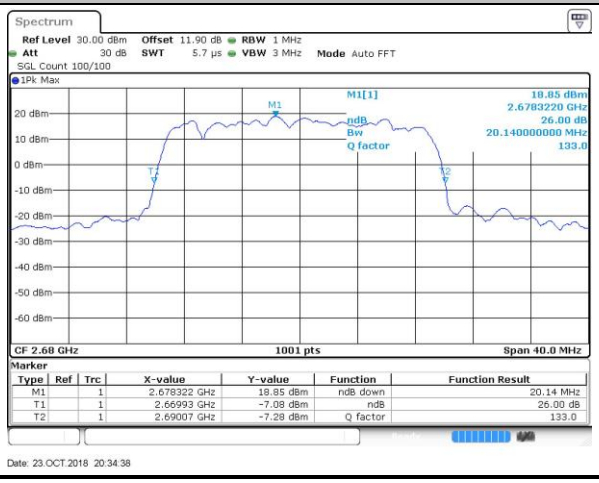
Middle Channel / 20MHz / QPSK



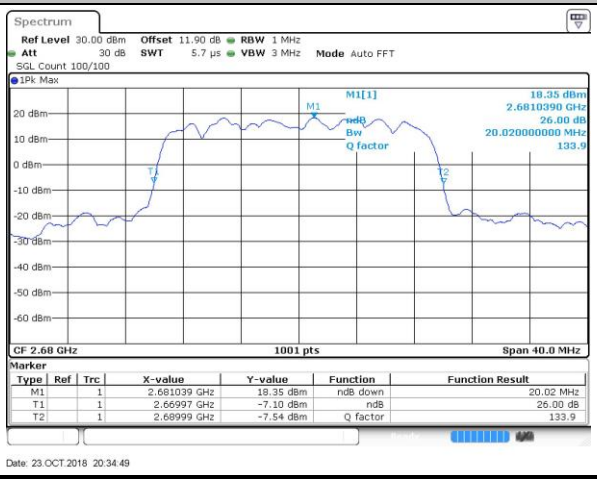
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

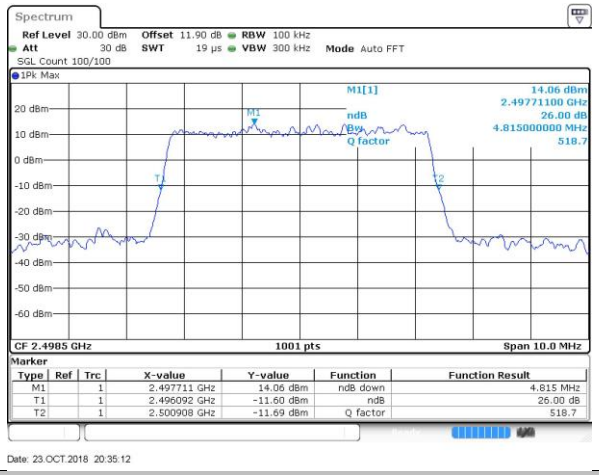


Highest Channel / 20MHz / 16QAM

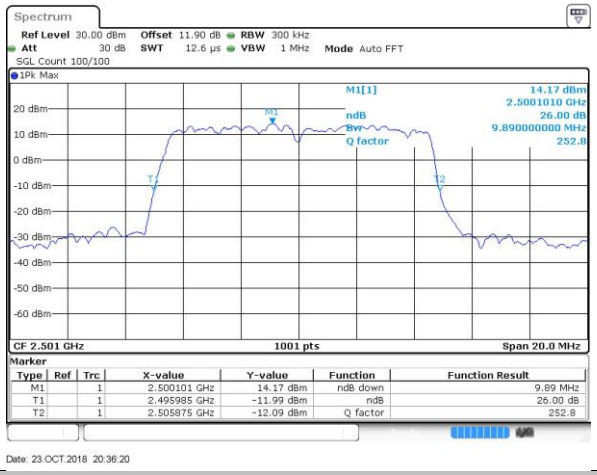


LTE Band 41

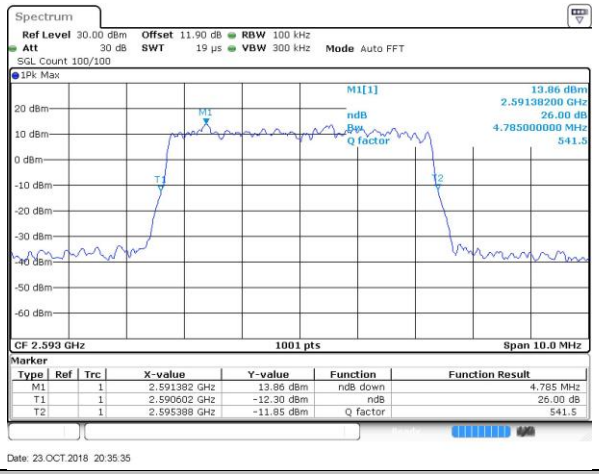
Lowest Channel / 5MHz / QPSK



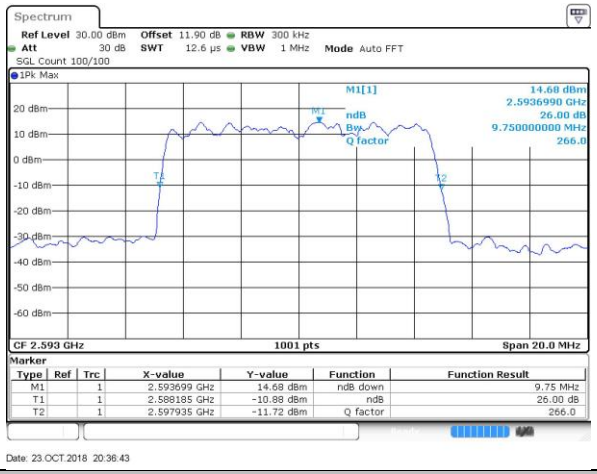
Lowest Channel / 10MHz / 16QAM



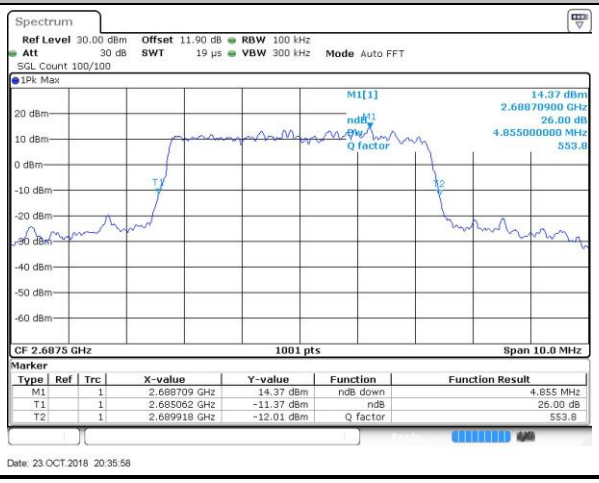
Middle Channel / 5MHz / QPSK



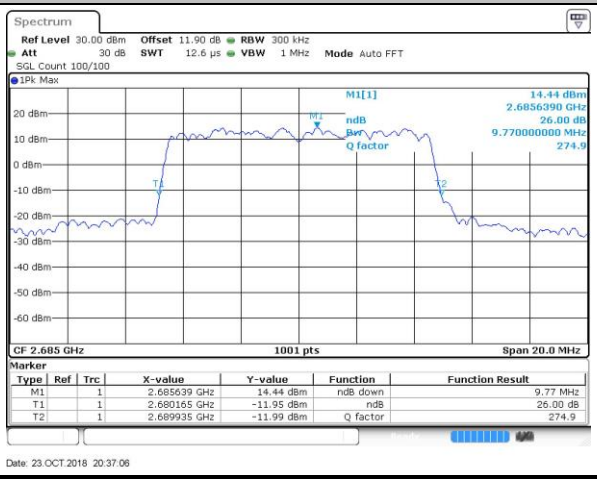
Middle Channel / 10MHz / 16QAM



Highest Channel / 5MHz / QPSK

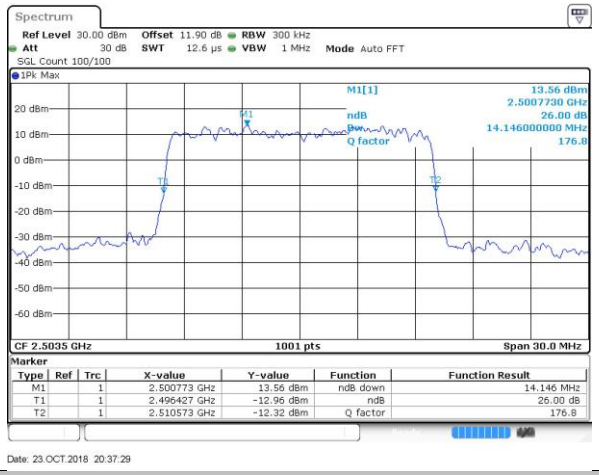


Highest Channel / 10MHz / 16QAM

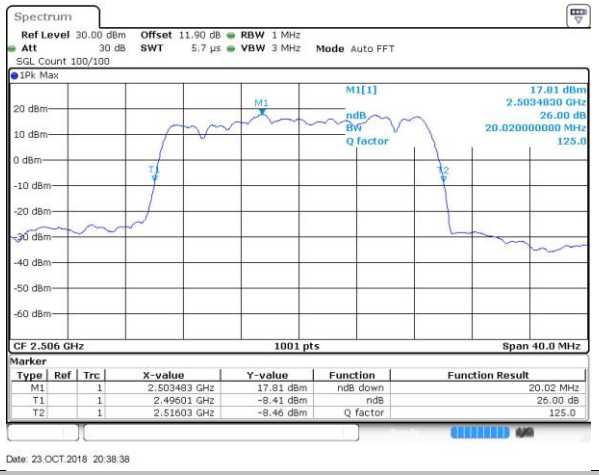


LTE Band 41

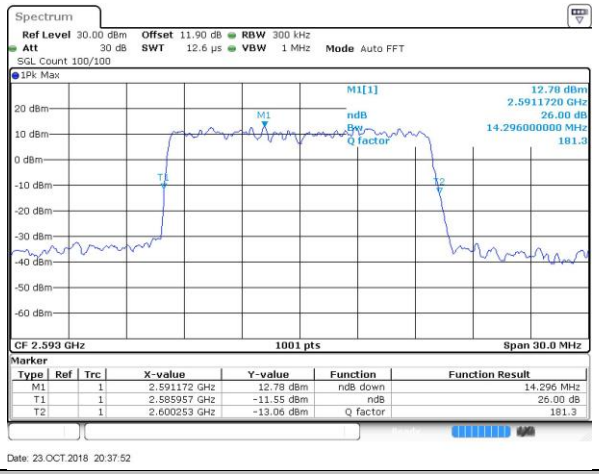
Lowest Channel / 15MHz / QPSK



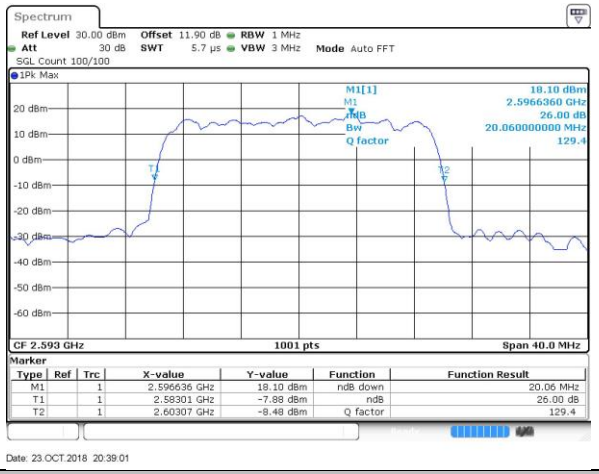
Lowest Channel / 20MHz / 16QAM



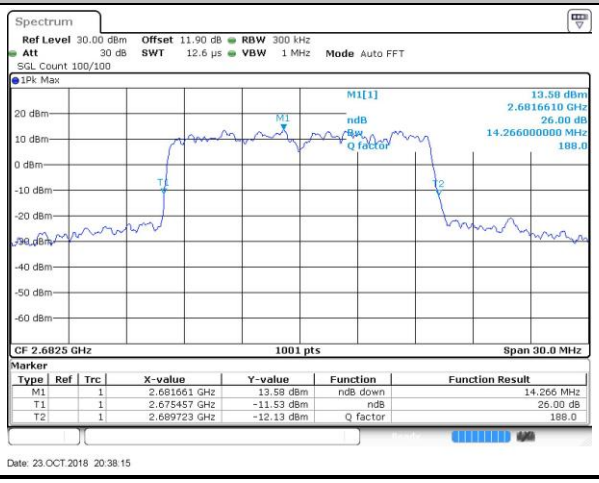
Middle Channel / 15MHz / QPSK



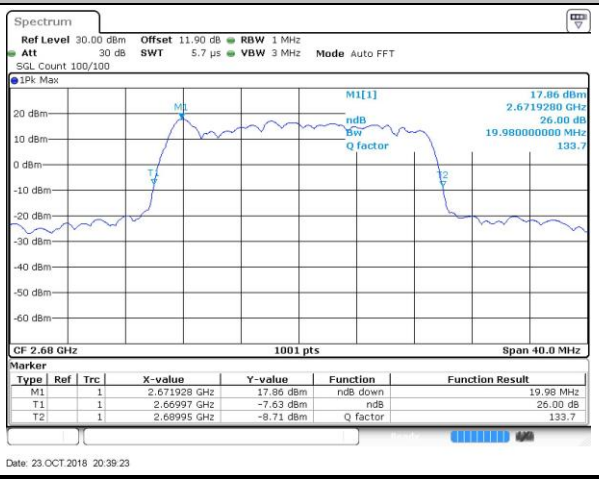
Middle Channel / 20MHz / 16QAM



Highest Channel / 15MHz / QPSK



Highest Channel / 20MHz / 16QAM

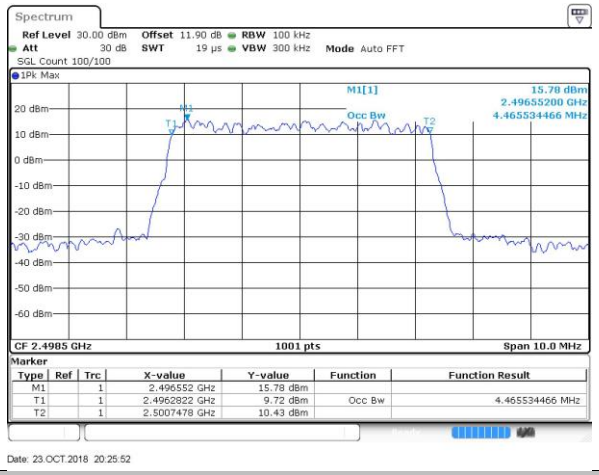


Occupied Bandwidth

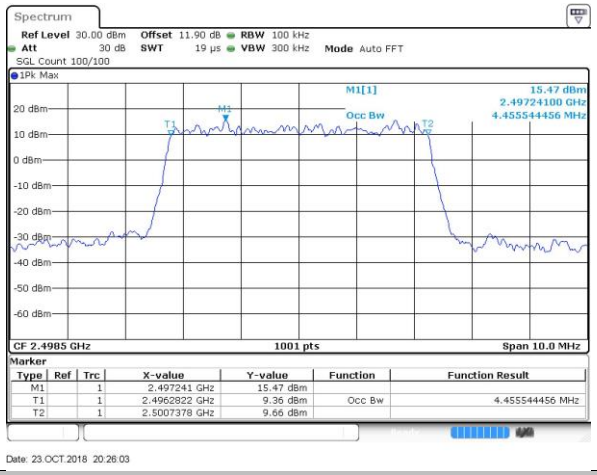
Mode	LTE Band 41 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.47	4.46	8.97	8.99	13.37	13.43	18.38	18.46
Middle CH	-	-	-	-	4.48	4.51	8.99	9.01	13.46	13.49	18.14	18.26
Highest CH	-	-	-	-	4.52	4.5	9.05	9.03	13.37	13.46	18.26	18.22
Mode	LTE Band 41 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.48	-	9.05	-	13.49	-	18.38	-
Middle CH	-	-	-	-	4.51	-	9.05	-	13.43	-	18.22	-
Highest CH	-	-	-	-	4.50	-	9.03	-	13.46	-	18.34	-

LTE Band 41

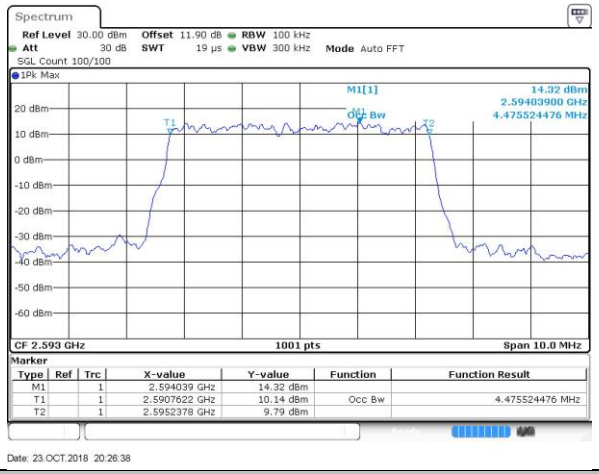
Lowest Channel / 5MHz / QPSK



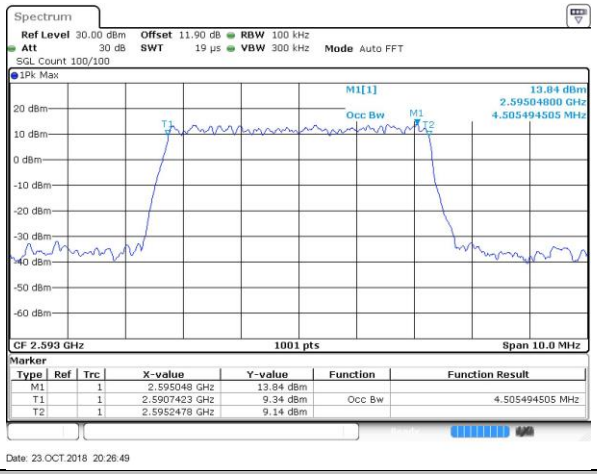
Lowest Channel / 5MHz / 16QAM



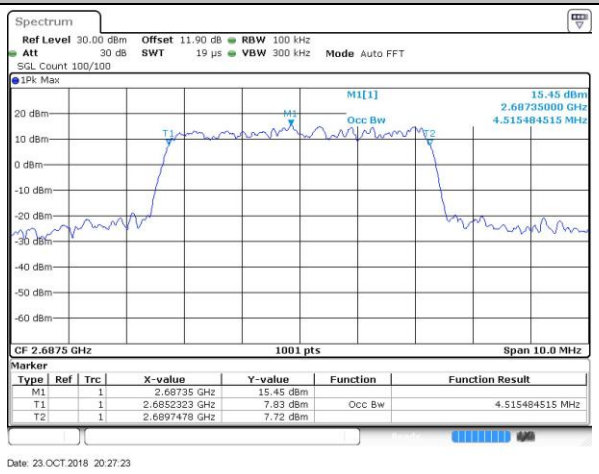
Middle Channel / 5MHz / QPSK



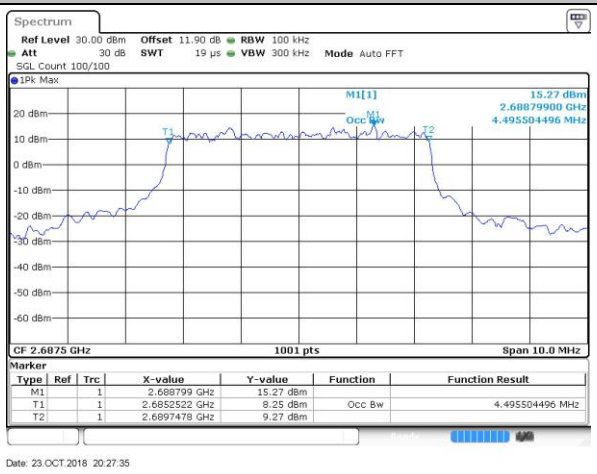
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

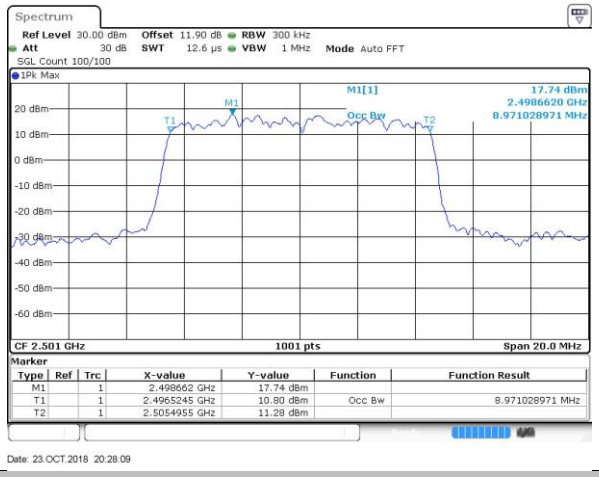


Highest Channel / 5MHz / 16QAM

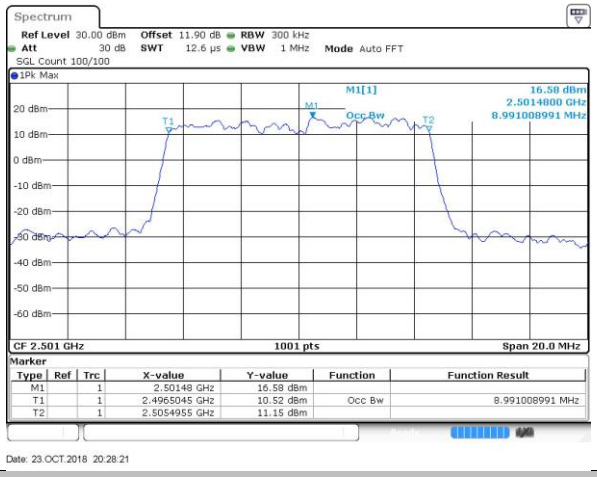


LTE Band 41

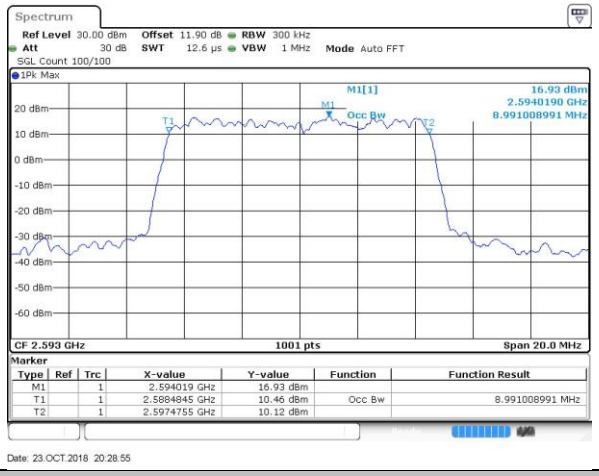
Lowest Channel / 10MHz / QPSK



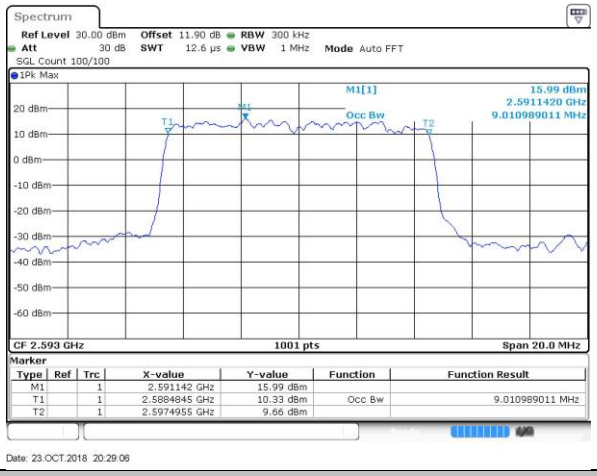
Lowest Channel / 10MHz / 16QAM



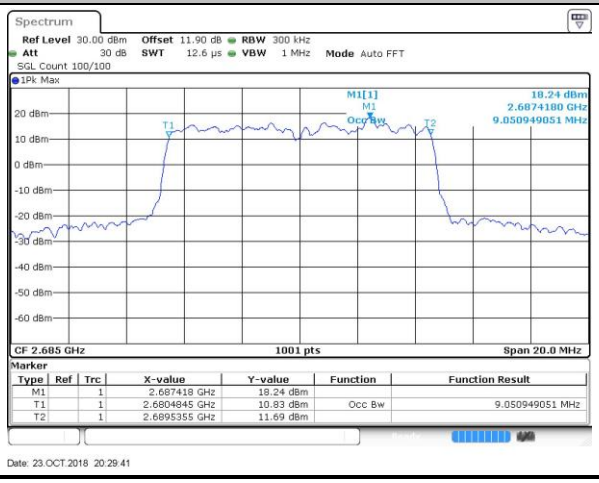
Middle Channel / 10MHz / QPSK



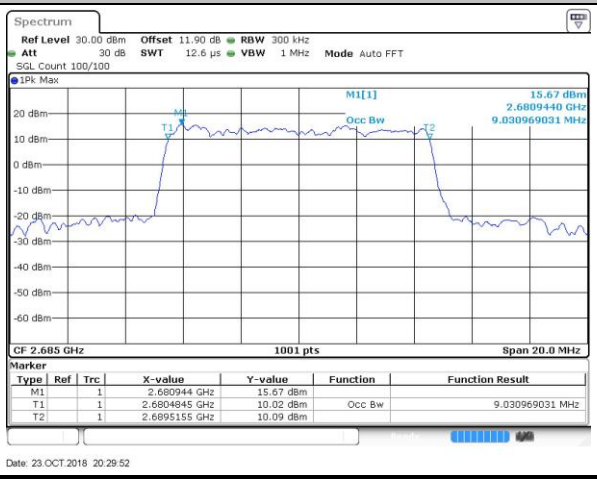
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

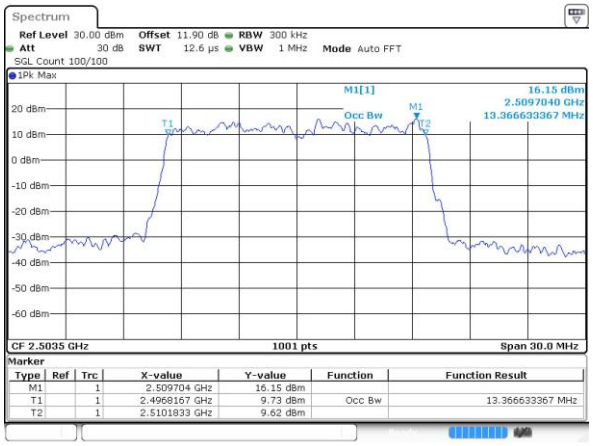


Highest Channel / 10MHz / 16QAM



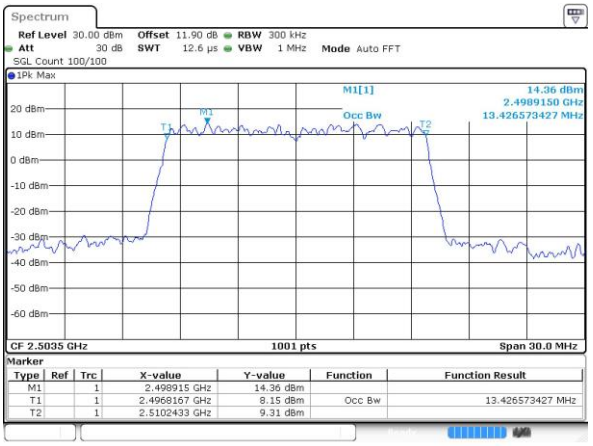
LTE Band 41

Lowest Channel / 15MHz / QPSK



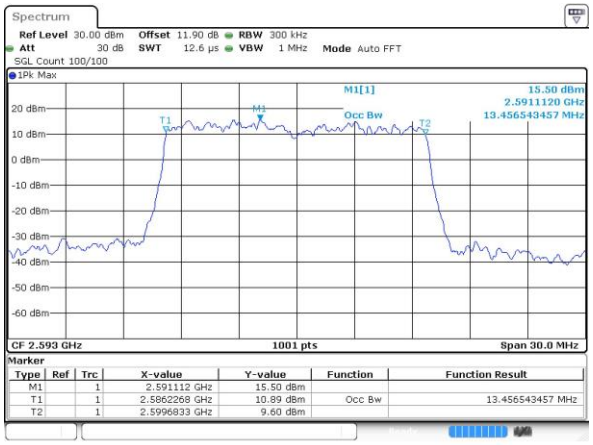
Date: 23.OCT.2018 20:30:26

Lowest Channel / 15MHz / 16QAM



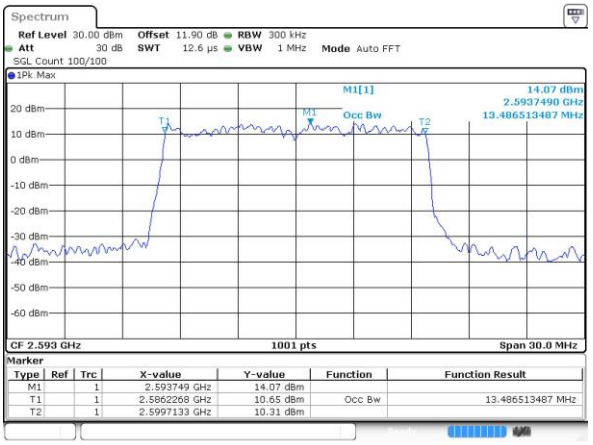
Date: 23.OCT.2018 20:30:38

Middle Channel / 15MHz / QPSK



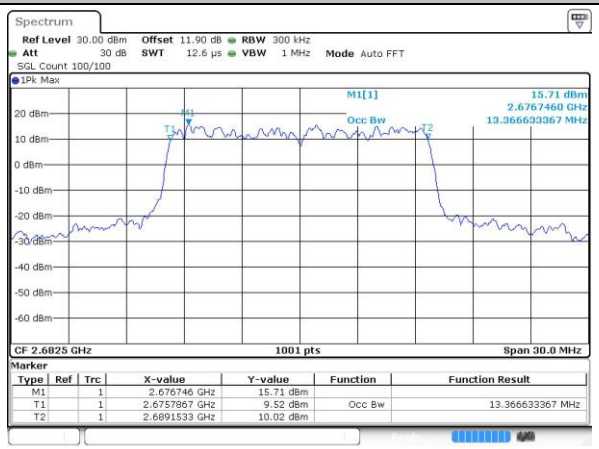
Date: 23.OCT.2018 20:31:12

Middle Channel / 15MHz / 16QAM



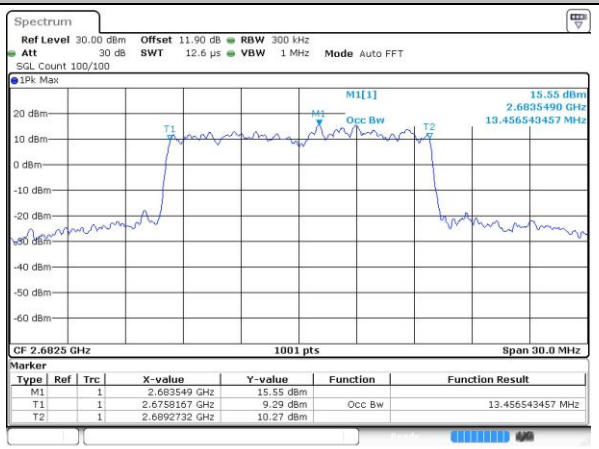
Date: 23.OCT.2018 20:31:23

Highest Channel / 15MHz / QPSK



Date: 23.OCT.2018 20:31:58

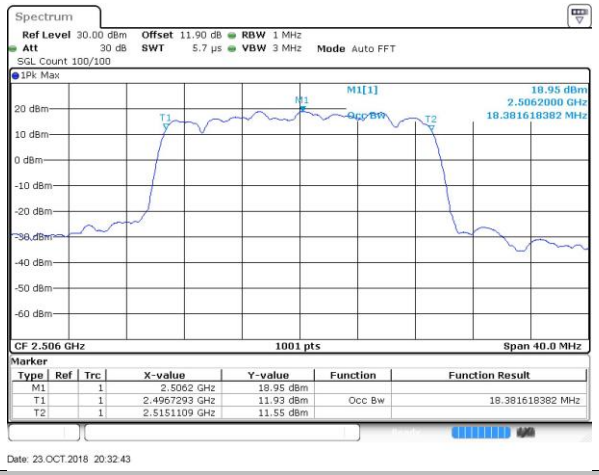
Highest Channel / 15MHz / 16QAM



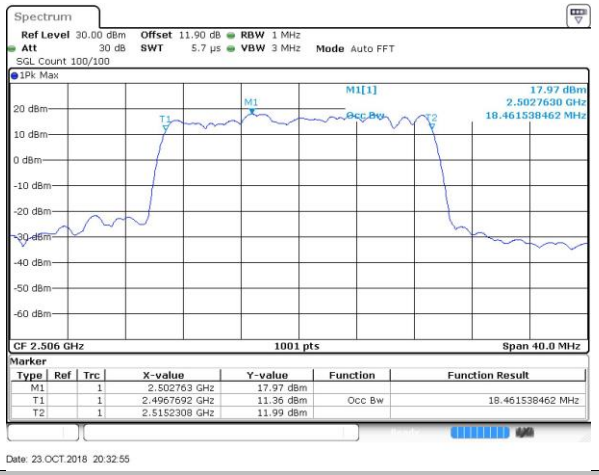
Date: 23.OCT.2018 20:32:09

LTE Band 41

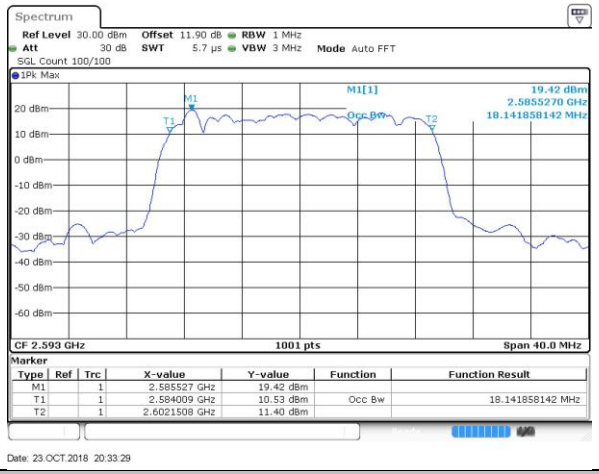
Lowest Channel / 20MHz / QPSK



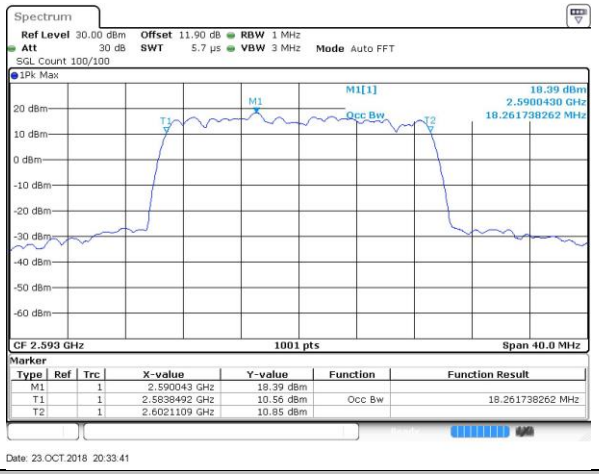
Lowest Channel / 20MHz / 16QAM



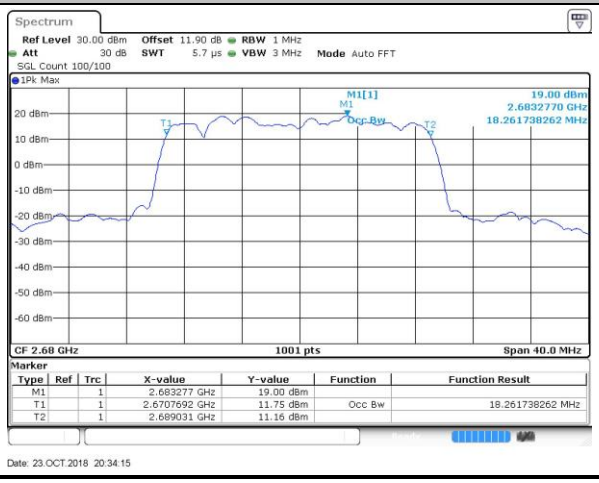
Middle Channel / 20MHz / QPSK



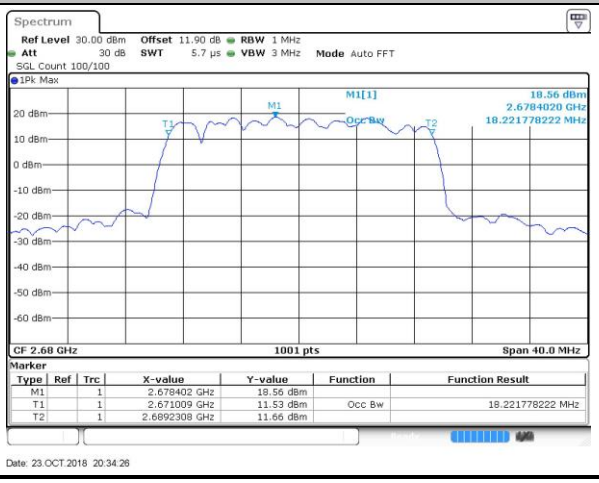
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

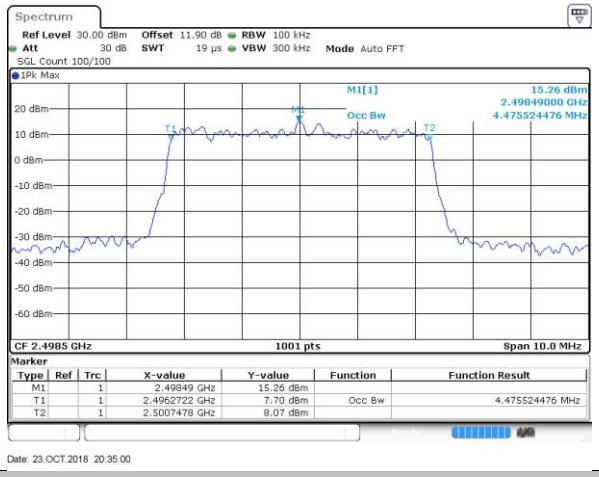


Highest Channel / 20MHz / 16QAM



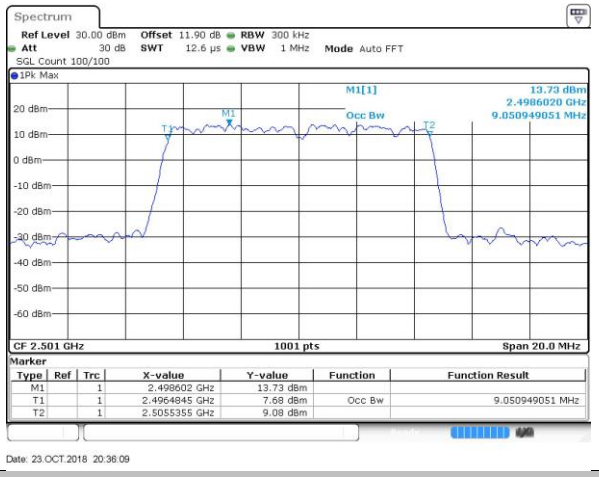
LTE Band 41

Lowest Channel / 5MHz / 64QAM



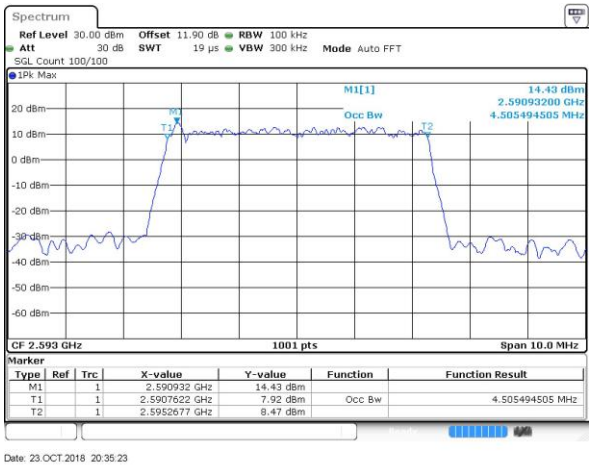
Date: 23.OCT.2018 20:35:00

Lowest Channel / 10MHz / 64QAM



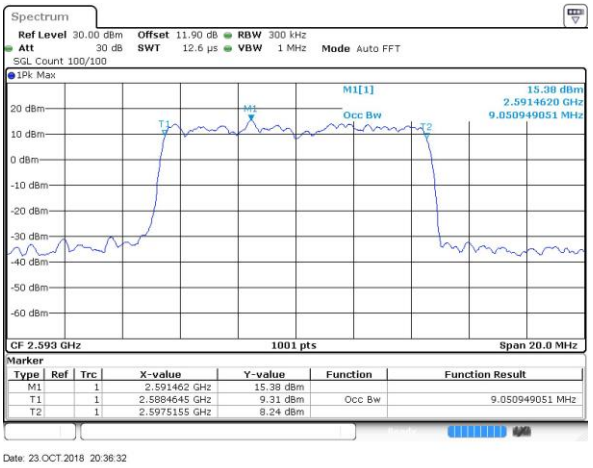
Date: 23.OCT.2018 20:36:09

Middle Channel / 5MHz / 64QAM



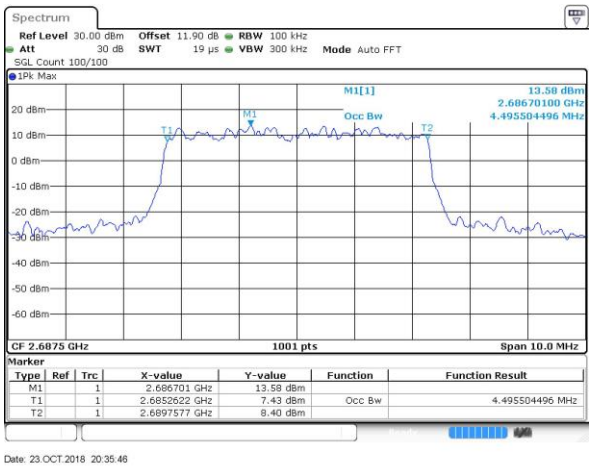
Date: 23.OCT.2018 20:35:23

Middle Channel / 10MHz / 64QAM



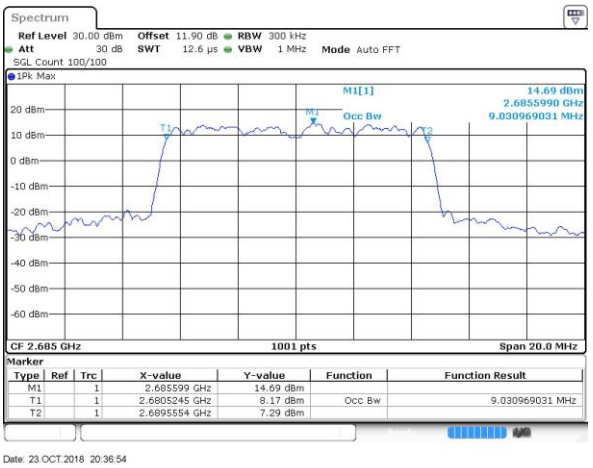
Date: 23.OCT.2018 20:36:32

Highest Channel / 5MHz / 64QAM



Date: 23.OCT.2018 20:35:46

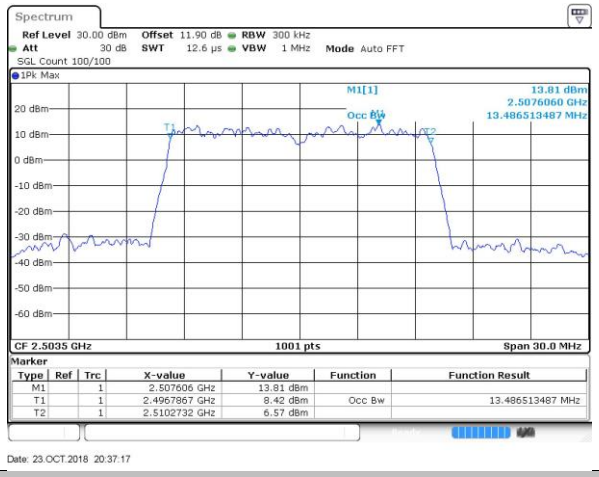
Highest Channel / 10MHz / 64QAM



Date: 23.OCT.2018 20:36:54

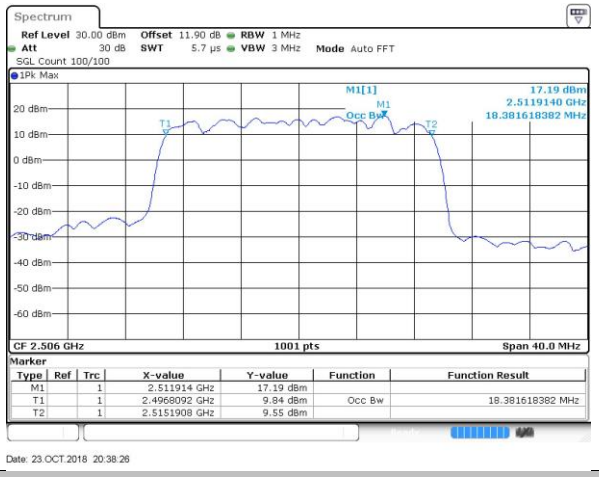
LTE Band 41

Lowest Channel / 15MHz / 64QAM



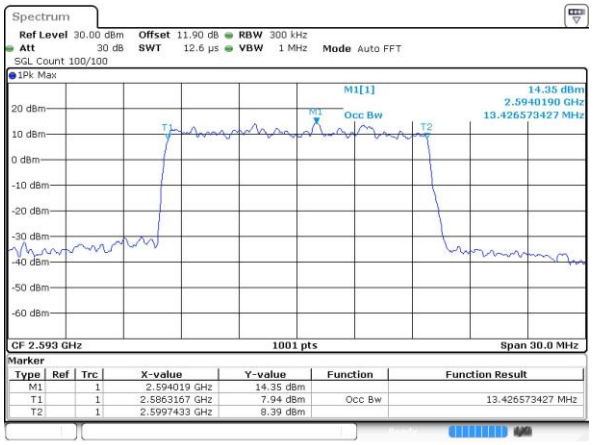
Date: 23.OCT.2018 20:37:17

Lowest Channel / 20MHz / 64QAM



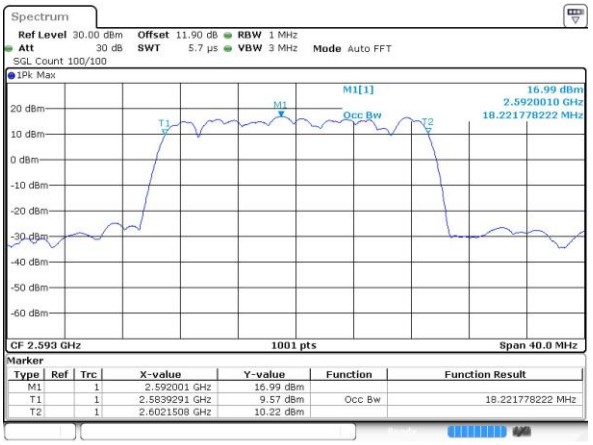
Date: 23.OCT.2018 20:38:26

Middle Channel / 15MHz / 64QAM



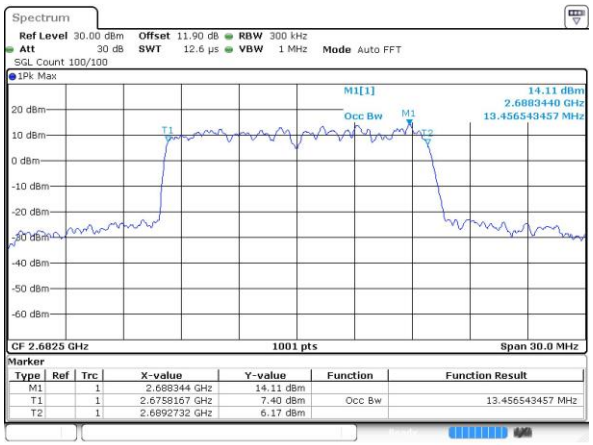
Date: 23.OCT.2018 20:37:40

Middle Channel / 20MHz / 64QAM



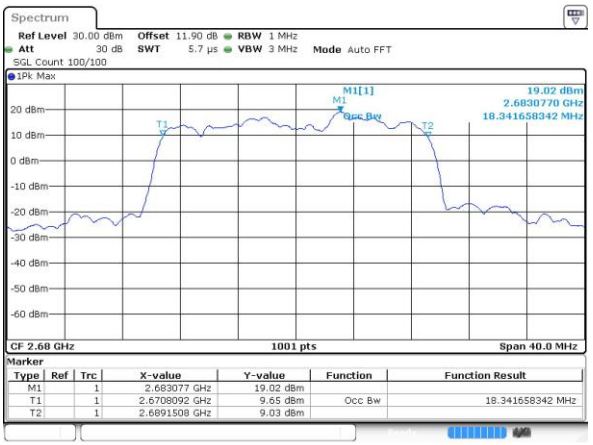
Date: 23.OCT.2018 20:38:49

Highest Channel / 15MHz / 64QAM



Date: 23.OCT.2018 20:38:03

Highest Channel / 20MHz / 64QAM



Date: 23.OCT.2018 20:39:12