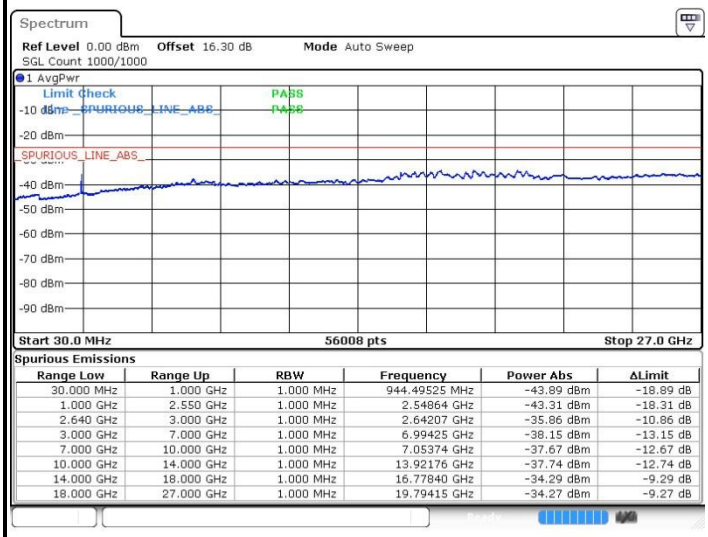
LTE Band 38 / 15MHz

Highest Channel / QPSK

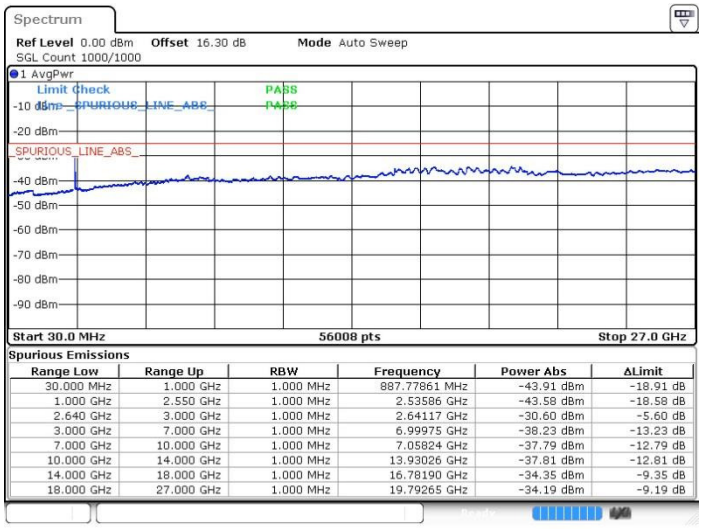


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	944.49525 MHz	-43.89 dBm	-18.89 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.54864 GHz	-43.31 dBm	-18.31 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.64207 GHz	-35.86 dBm	-10.86 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99425 GHz	-38.15 dBm	-13.15 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.05374 GHz	-37.67 dBm	-12.67 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.92176 GHz	-37.74 dBm	-12.74 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.77840 GHz	-34.29 dBm	-9.29 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.79415 GHz	-34.27 dBm	-9.27 dB

Date: 20.JUN.2016 21:44:01

Highest Channel / 16QAM



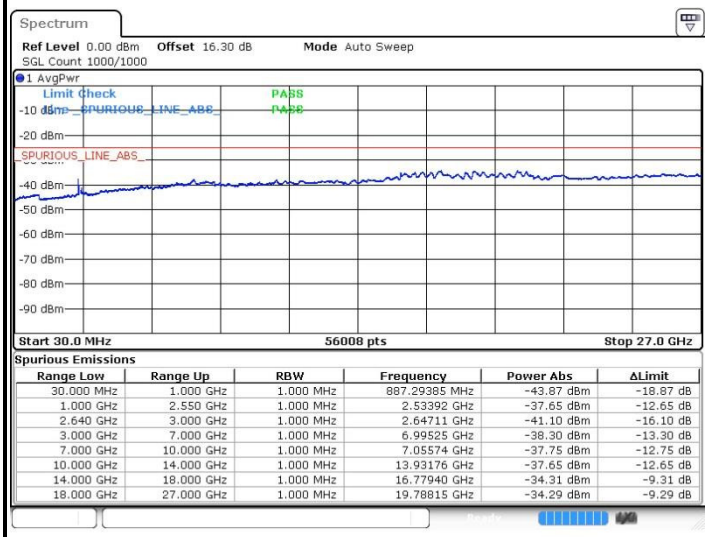
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	887.77861 MHz	-43.91 dBm	-18.91 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.53586 GHz	-43.58 dBm	-18.58 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.64117 GHz	-30.60 dBm	-5.60 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99975 GHz	-38.23 dBm	-13.23 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.05824 GHz	-37.79 dBm	-12.79 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.93026 GHz	-37.81 dBm	-12.81 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.78190 GHz	-34.35 dBm	-9.35 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.79265 GHz	-34.19 dBm	-9.19 dB

Date: 20.JUN.2016 21:50:29

LTE Band 38 / 20MHz

Lowest Channel / QPSK

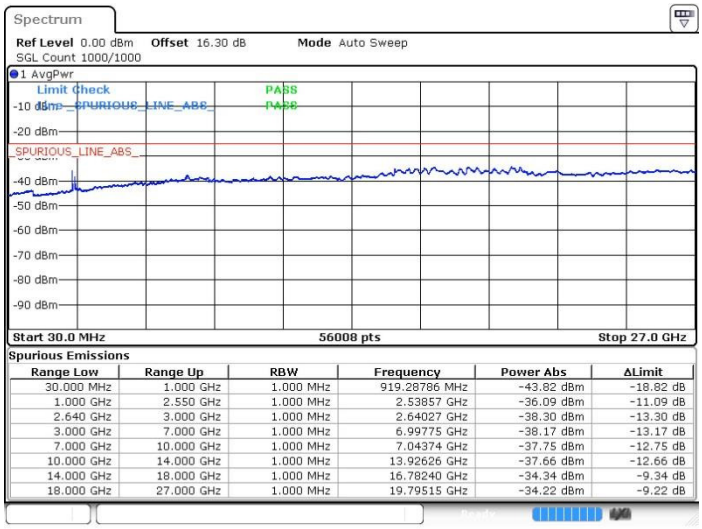


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	887.29385 MHz	-43.87 dBm	-18.87 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.53392 GHz	-37.65 dBm	-12.65 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.64711 GHz	-41.10 dBm	-16.10 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99525 GHz	-38.30 dBm	-13.30 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.05574 GHz	-37.75 dBm	-12.75 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.93176 GHz	-37.65 dBm	-12.65 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.77940 GHz	-34.31 dBm	-9.31 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.78815 GHz	-34.29 dBm	-9.29 dB

Date: 20.JUN.2016 22:34:11

Lowest Channel / 16QAM



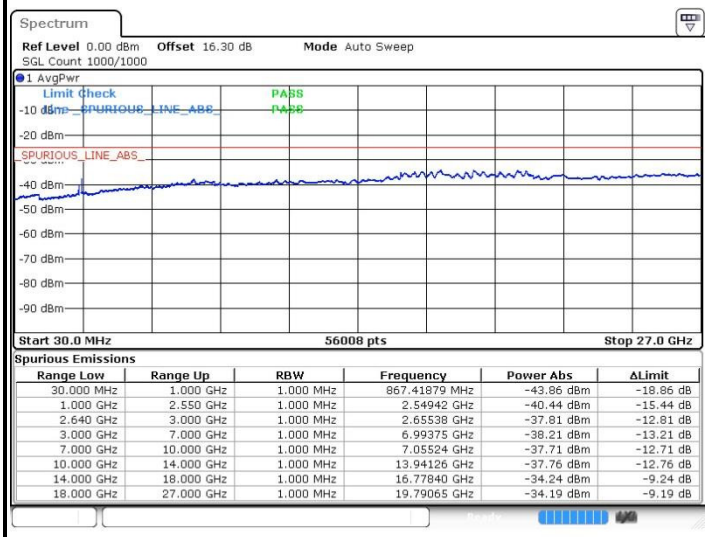
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	919.28786 MHz	-43.82 dBm	-18.82 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.53857 GHz	-36.09 dBm	-11.09 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.64027 GHz	-38.30 dBm	-13.30 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99775 GHz	-38.17 dBm	-13.17 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.04374 GHz	-37.75 dBm	-12.75 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.92626 GHz	-37.66 dBm	-12.66 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.78240 GHz	-34.34 dBm	-9.34 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.79515 GHz	-34.22 dBm	-9.22 dB

Date: 20.JUN.2016 22:08:06

LTE Band 38 / 20MHz

Middle Channel / QPSK

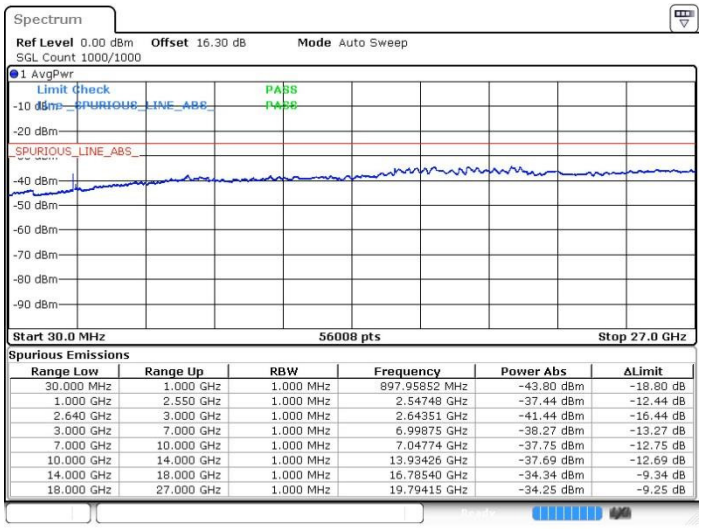


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	867.41879 MHz	-43.86 dBm	-18.86 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.54942 GHz	-40.44 dBm	-15.44 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.65538 GHz	-37.81 dBm	-12.81 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99375 GHz	-38.21 dBm	-13.21 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.05524 GHz	-37.71 dBm	-12.71 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.94126 GHz	-37.76 dBm	-12.76 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.77840 GHz	-34.24 dBm	-9.24 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.79065 GHz	-34.19 dBm	-9.19 dB

Date: 20.JUN.2016 22:41:35

Middle Channel / 16QAM

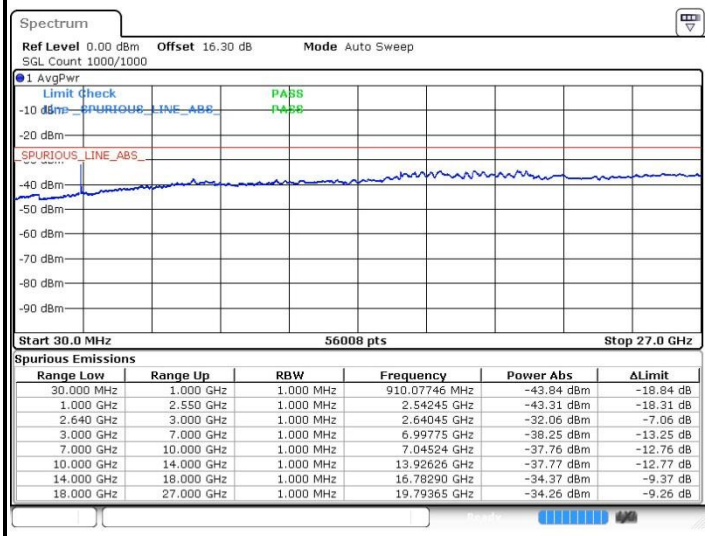


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	897.95852 MHz	-43.80 dBm	-18.80 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.54748 GHz	-37.44 dBm	-12.44 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.64351 GHz	-41.44 dBm	-16.44 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99875 GHz	-38.27 dBm	-13.27 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.04774 GHz	-37.75 dBm	-12.75 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.93426 GHz	-37.69 dBm	-12.69 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.78540 GHz	-34.34 dBm	-9.34 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.79415 GHz	-34.25 dBm	-9.25 dB

Date: 20.JUN.2016 22:51:56

Highest Channel / QPSK

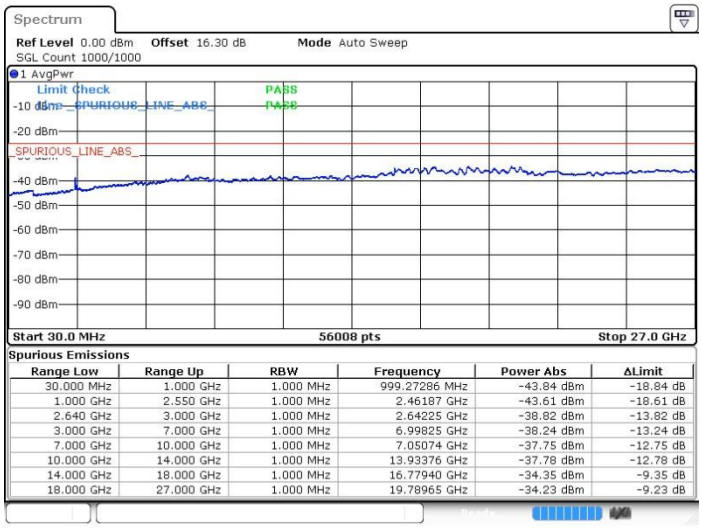


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	910.07746 MHz	-43.84 dBm	-18.84 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.54245 GHz	-43.31 dBm	-18.31 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.64045 GHz	-32.06 dBm	-7.06 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99775 GHz	-38.25 dBm	-13.25 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.04524 GHz	-37.76 dBm	-12.76 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.92626 GHz	-37.77 dBm	-12.77 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.78290 GHz	-34.37 dBm	-9.37 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.79365 GHz	-34.26 dBm	-9.26 dB

Date: 20.JUN.2016 23:05:41

Highest Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.27286 MHz	-43.84 dBm	-18.84 dB
1.000 GHz	2.550 GHz	1.000 MHz	2.46187 GHz	-43.61 dBm	-18.61 dB
2.640 GHz	3.000 GHz	1.000 MHz	2.64225 GHz	-38.82 dBm	-13.82 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99825 GHz	-38.24 dBm	-13.24 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.05074 GHz	-37.75 dBm	-12.75 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.93376 GHz	-37.78 dBm	-12.78 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.77940 GHz	-34.35 dBm	-9.35 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.78965 GHz	-34.23 dBm	-9.23 dB

Date: 20.JUN.2016 22:59:04

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	0.0116	PASS
40	Normal Voltage	0.0114	
30	Normal Voltage	0.0107	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0109	
-10	Normal Voltage	0.0106	
-20	Normal Voltage	0.0115	
-30	Normal Voltage	0.0111	
20	Maximum Voltage	0.0115	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0109	

Note:

1. Normal Voltage = 3.9 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 based on the frequency deviation measured is small.

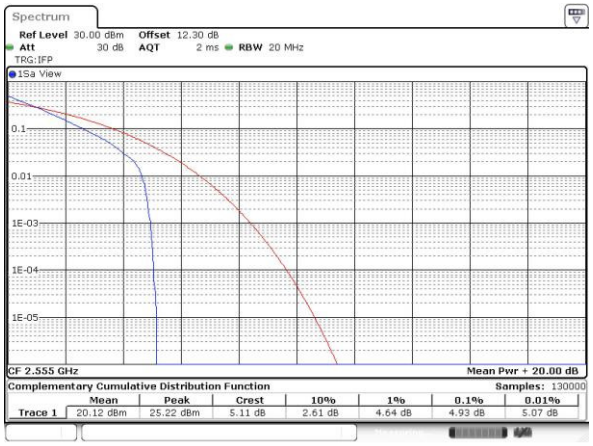
LTE Band 41

Peak-to-Average Ratio

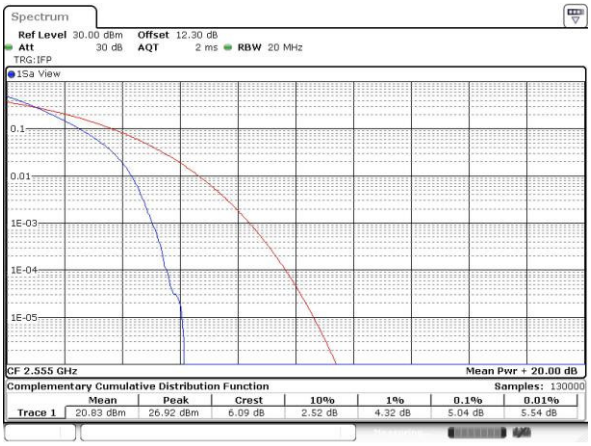
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.93	5.04	5.83	6.03	PASS
Middle CH	5.22	5.48	6.29	6.43	
Highest CH	5.19	5.22	6.29	6.26	

LTE Band 41 / 20MHz / QPSK

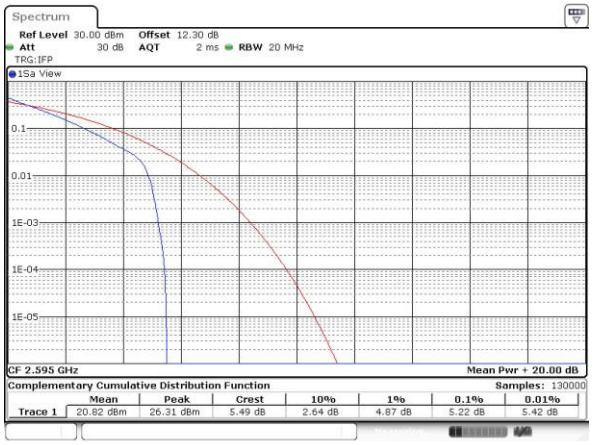
Lowest Channel / 1RB



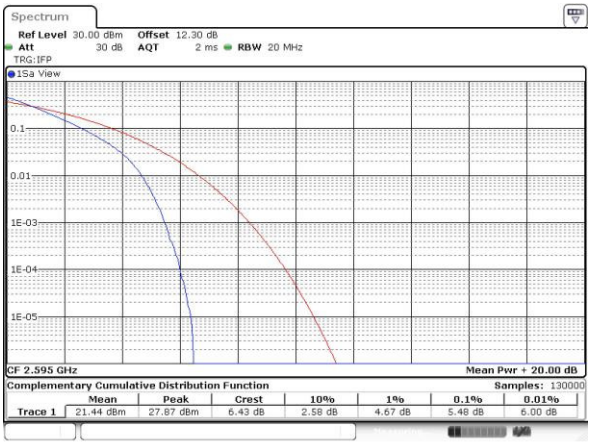
Lowest Channel / Full RB



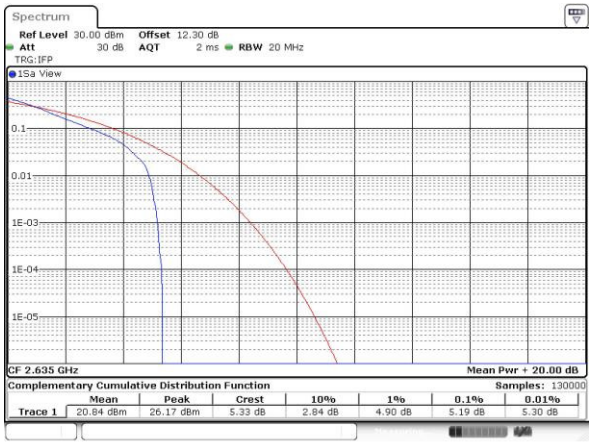
Middle Channel / 1RB



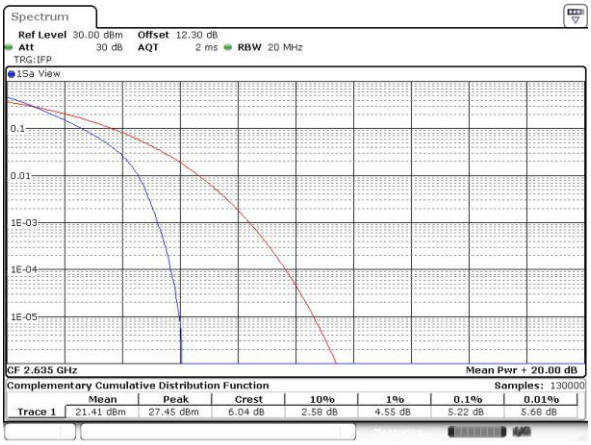
Middle Channel / Full RB



Highest Channel / 1RB

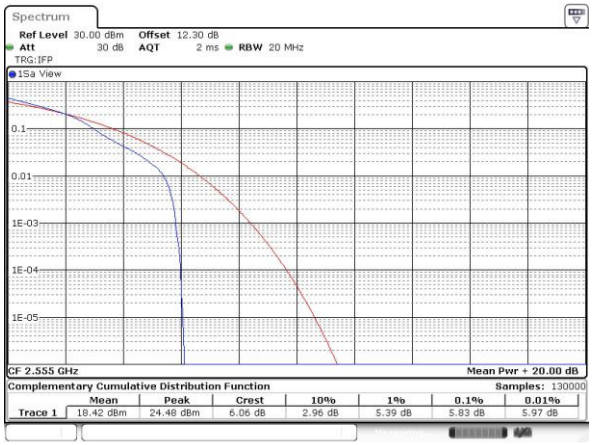


Highest Channel / Full RB

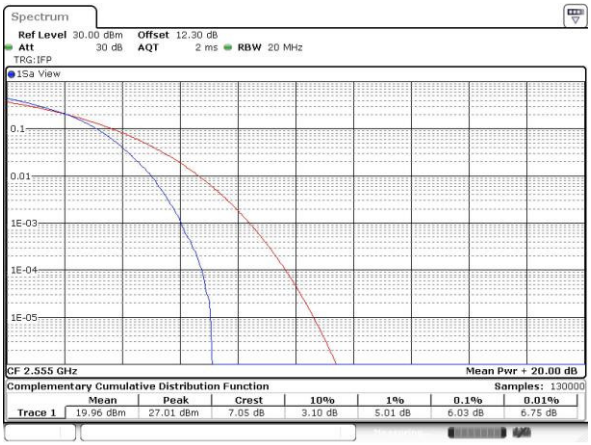


LTE Band 41 / 20MHz / 16QAM

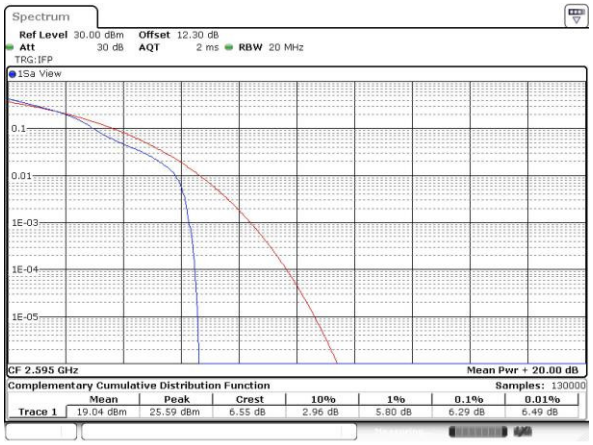
Lowest Channel / 1RB



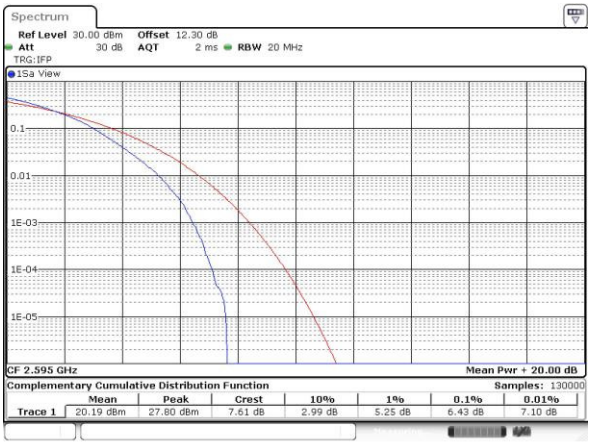
Lowest Channel / Full RB



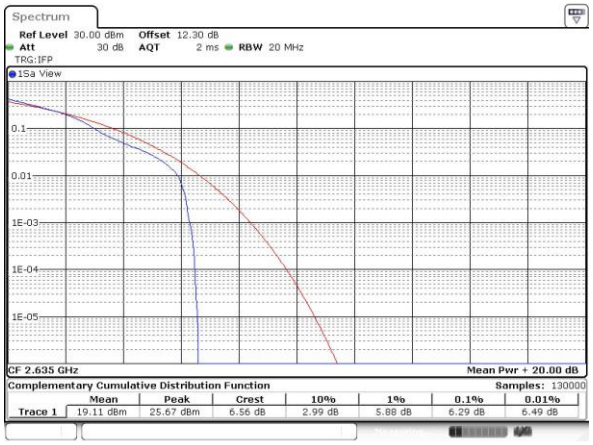
Middle Channel / 1RB



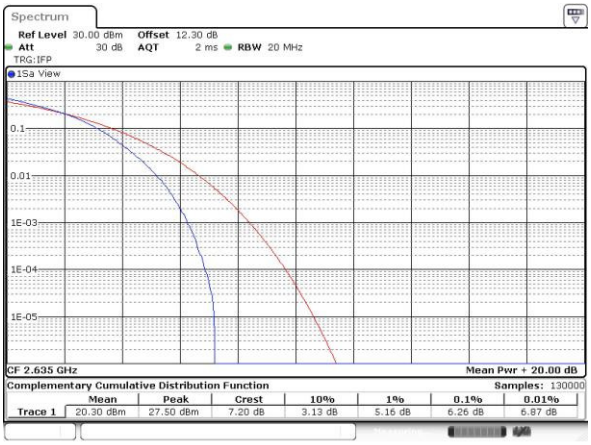
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB

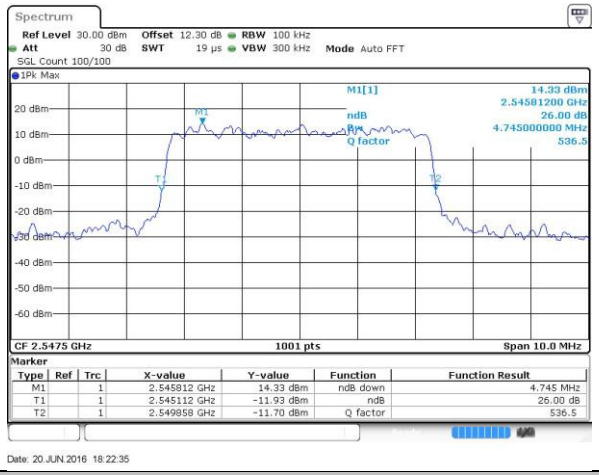


26dB Bandwidth

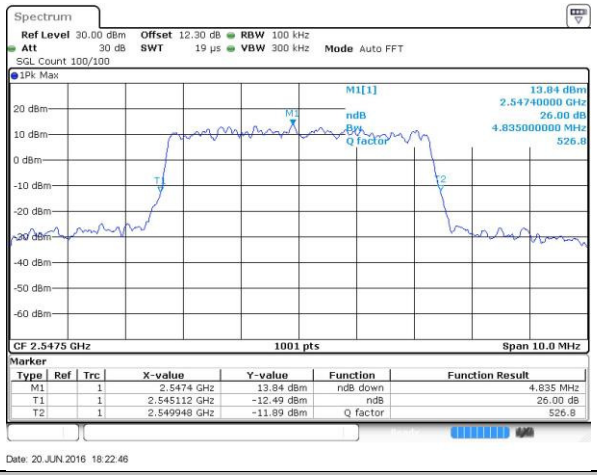
Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.75	4.84	9.91	9.75	14.18	14.27	20.10	20.18
Middle CH	-	-	-	-	4.82	4.98	9.73	9.73	14.09	14.15	20.18	20.02
Highest CH	-	-	-	-	4.74	4.79	9.57	9.81	14.18	14.21	19.94	20.10

LTE Band 41

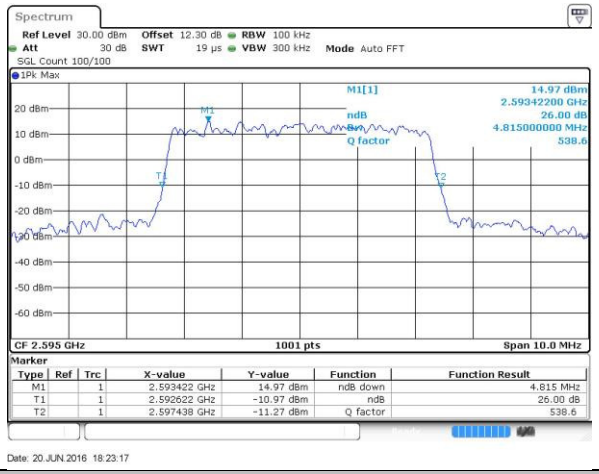
Lowest Channel / 5MHz / QPSK



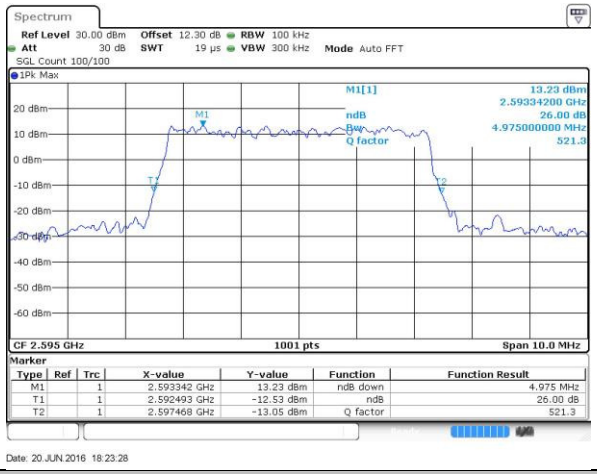
Lowest Channel / 5MHz / 16QAM



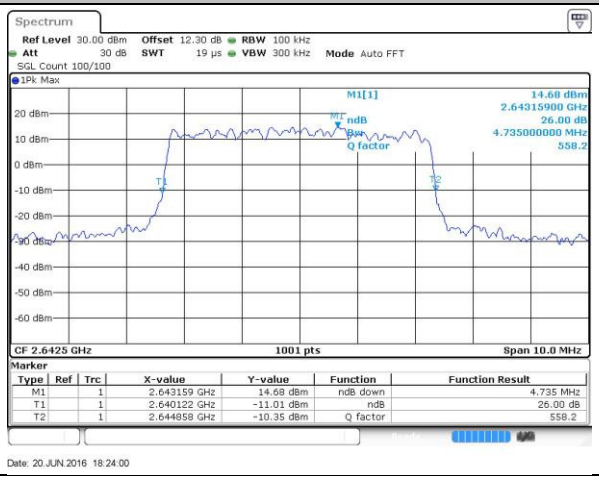
Middle Channel / 5MHz / QPSK



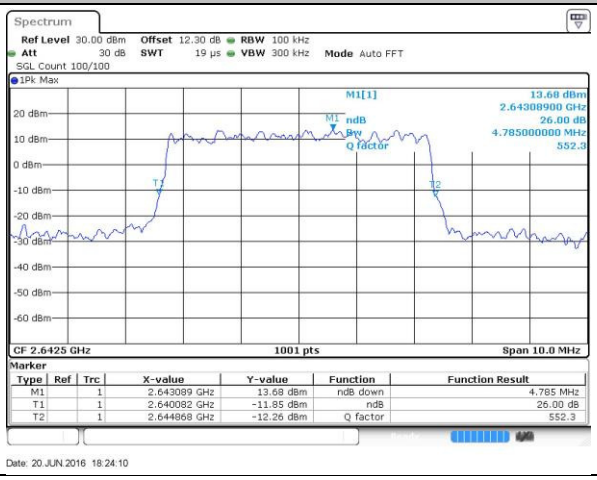
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

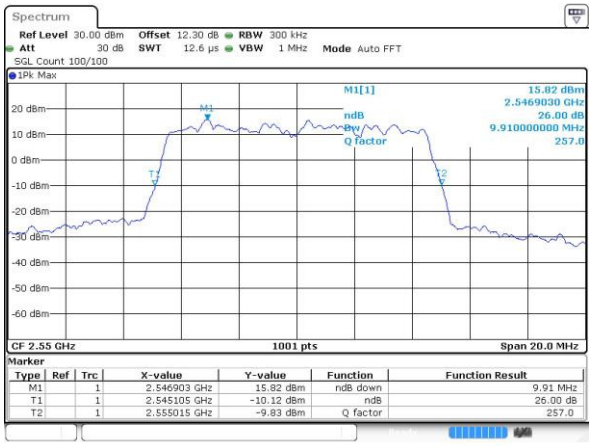


Highest Channel / 5MHz / 16QAM

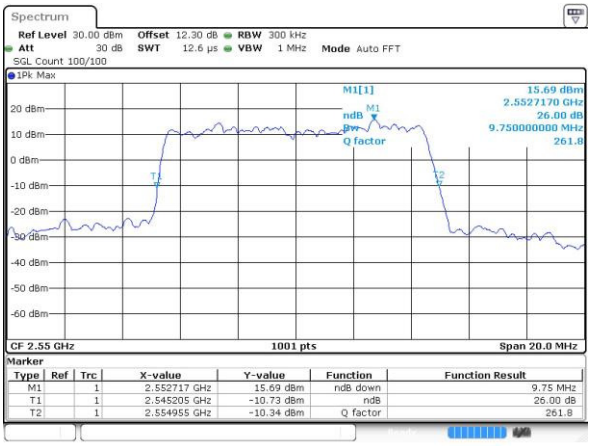


LTE Band 41

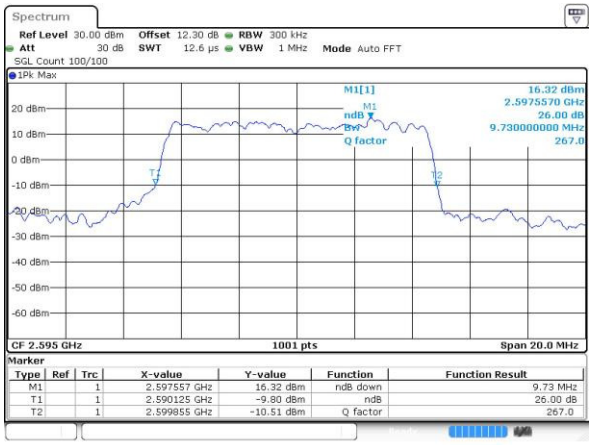
Lowest Channel / 10MHz / QPSK



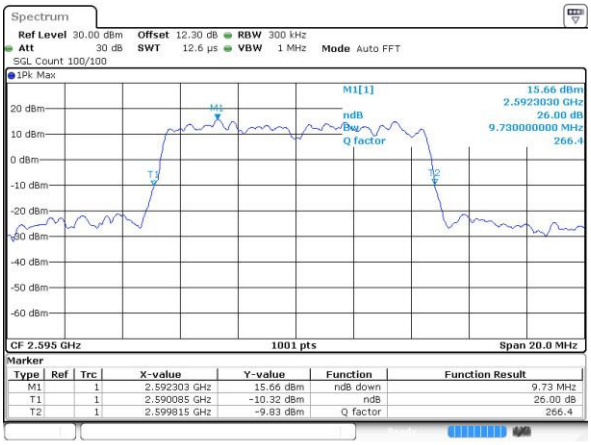
Lowest Channel / 10MHz / 16QAM



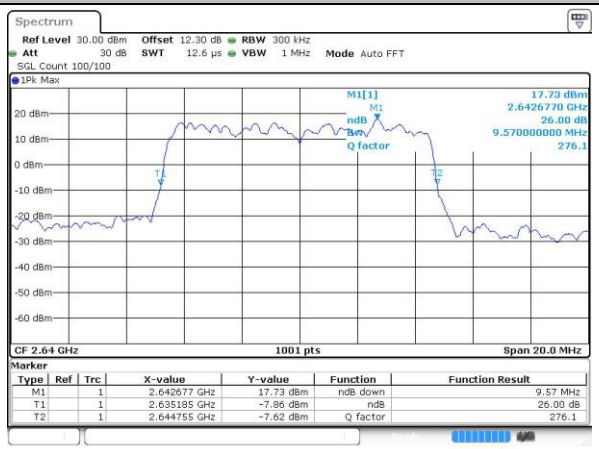
Middle Channel / 10MHz / QPSK



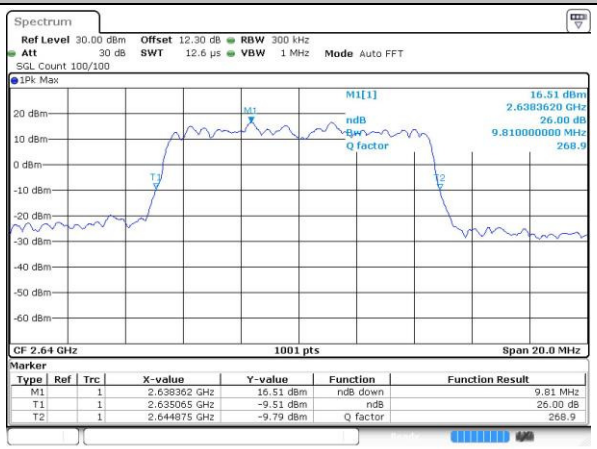
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

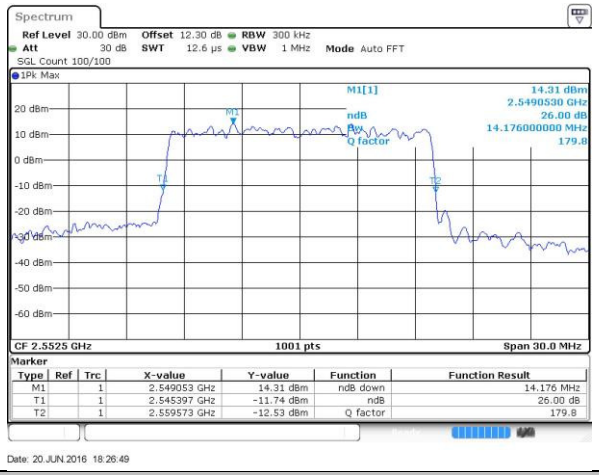


Highest Channel / 10MHz / 16QAM

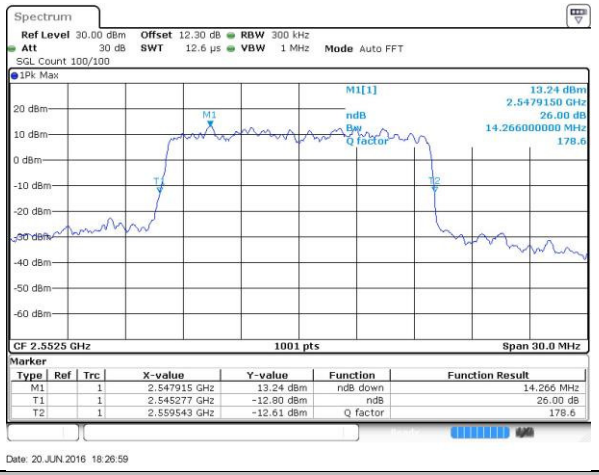


LTE Band 41

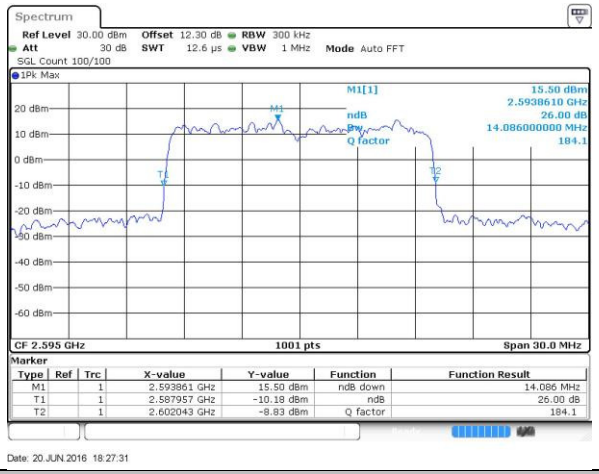
Lowest Channel / 15MHz / QPSK



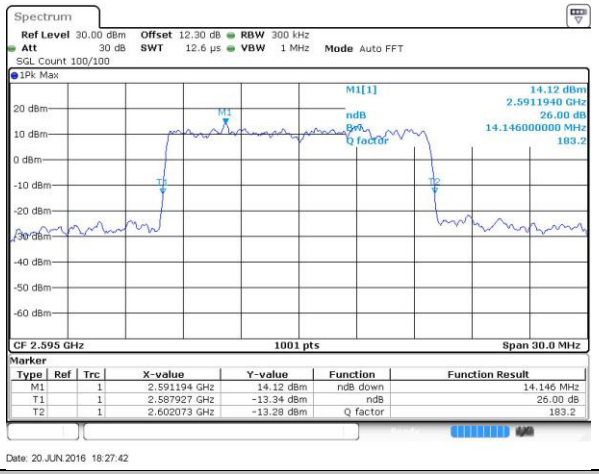
Lowest Channel / 15MHz / 16QAM



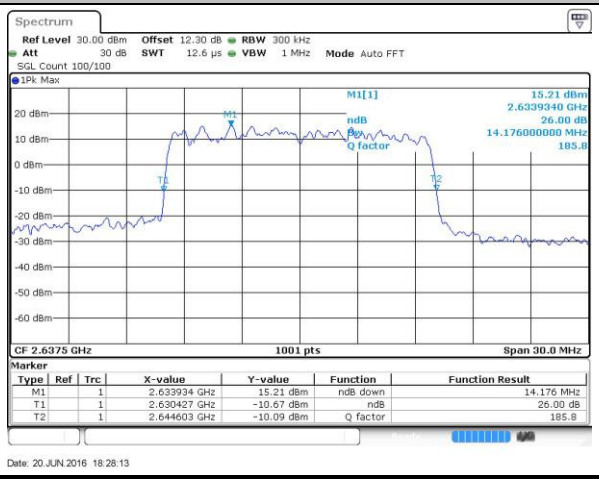
Middle Channel / 15MHz / QPSK



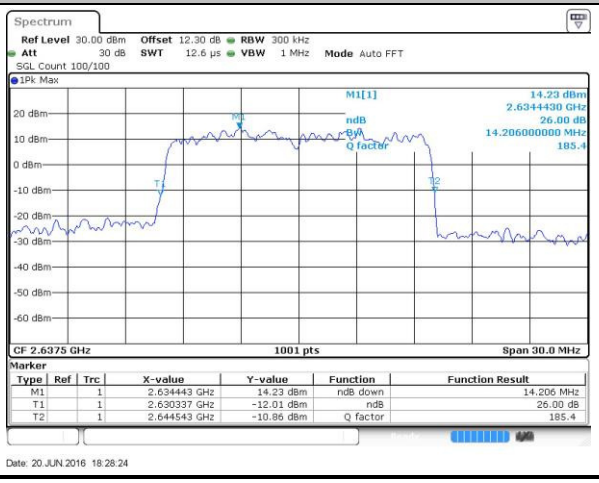
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

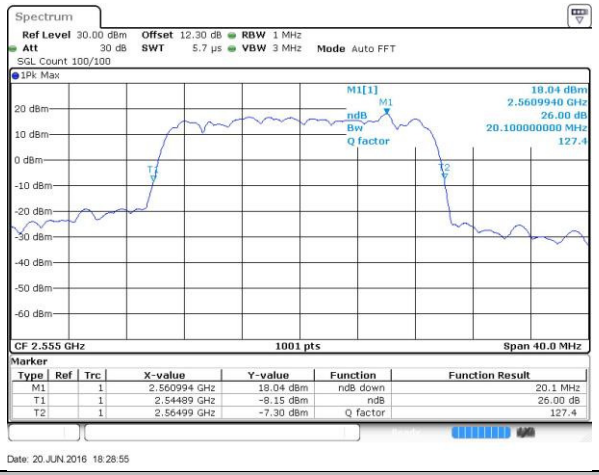


Highest Channel / 15MHz / 16QAM

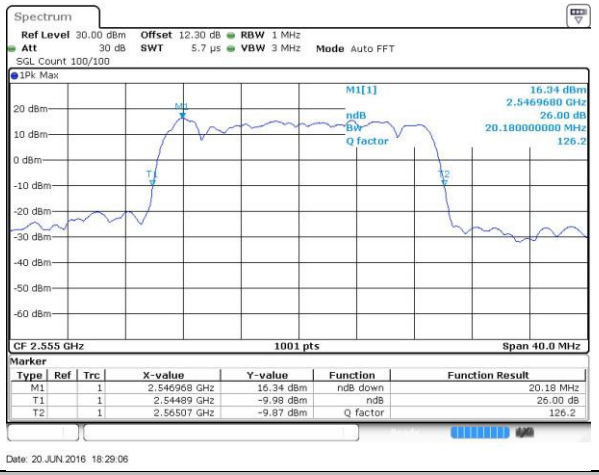


LTE Band 41

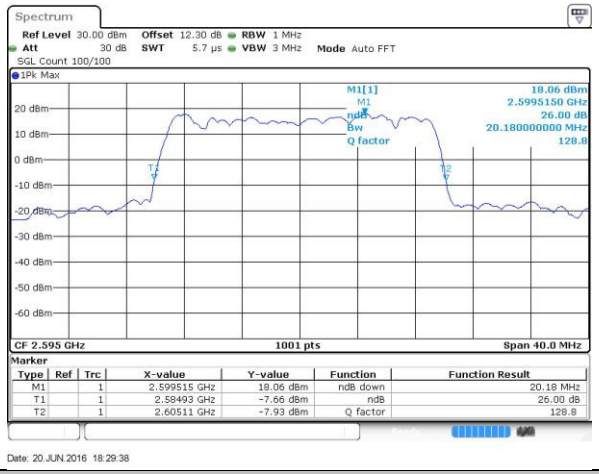
Lowest Channel / 20MHz / QPSK



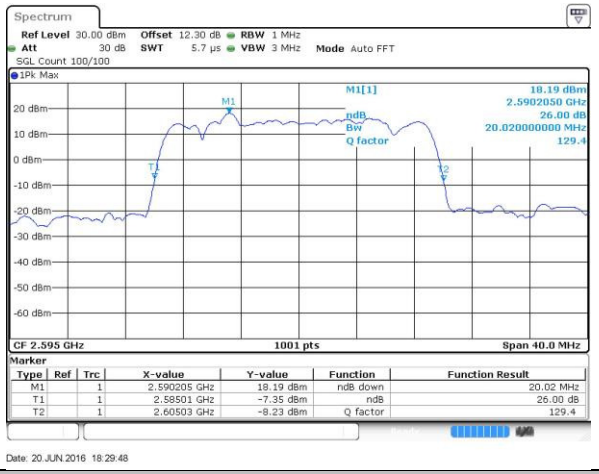
Lowest Channel / 20MHz / 16QAM



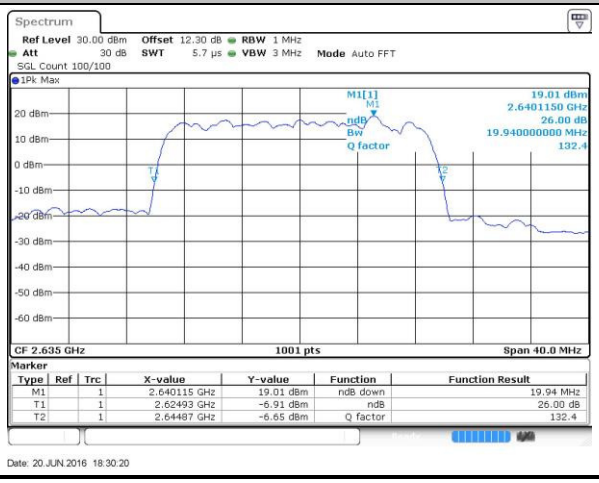
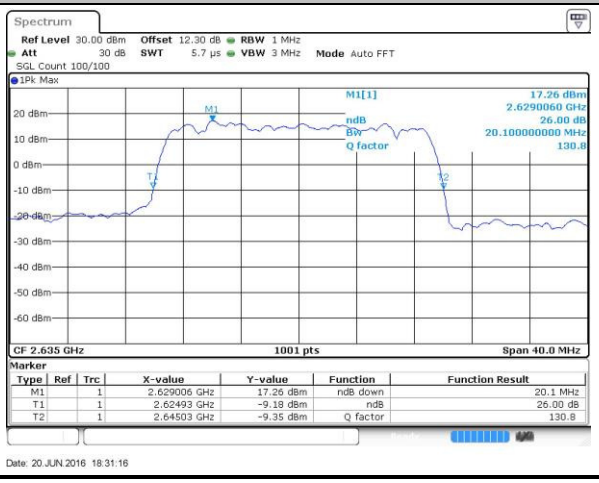
Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM