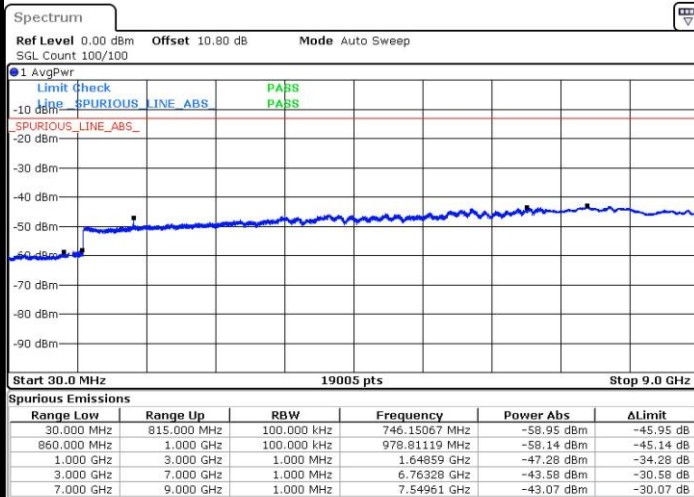




Conducted Spurious Emission

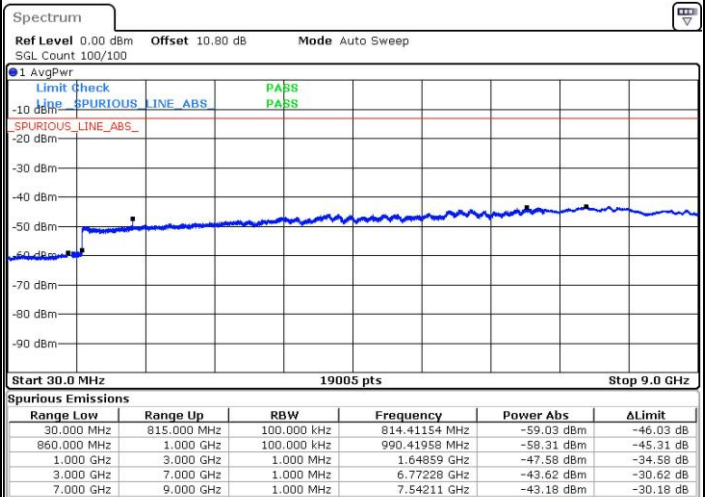
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



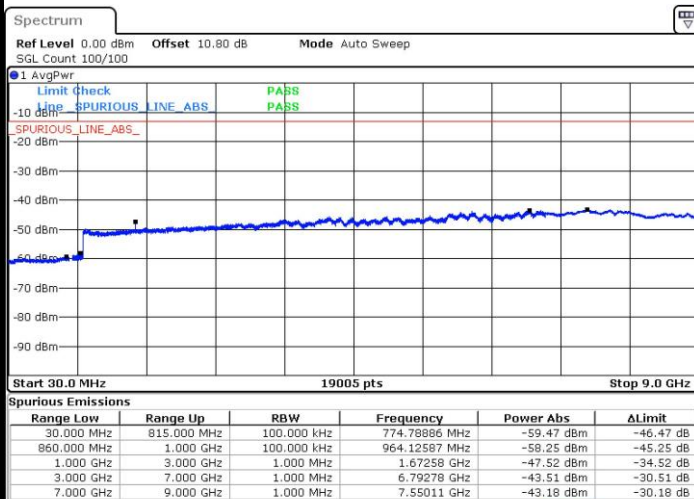
Date: 7.JAN.2019 00:37:02

Lowest Channel / 16QAM



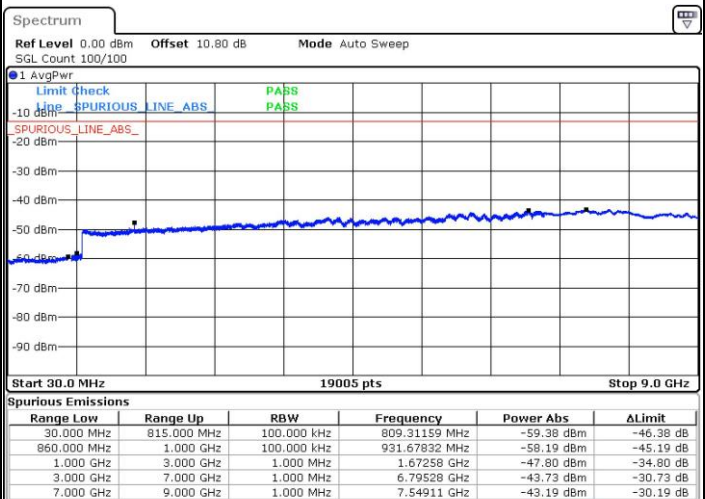
Date: 7.JAN.2019 00:38:02

Middle Channel / QPSK



Date: 7.JAN.2019 00:39:48

Middle Channel / 16QAM

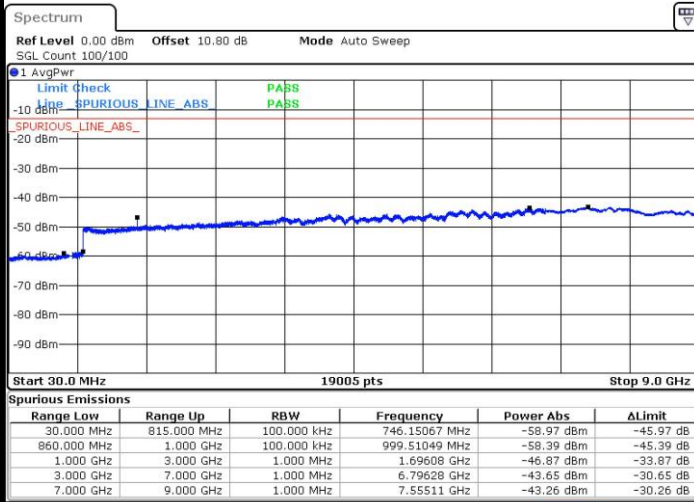


Date: 7.JAN.2019 00:40:48



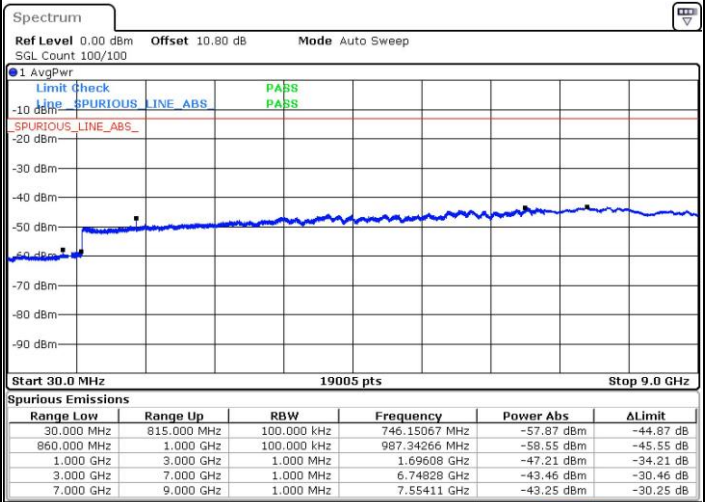
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 7 JAN 2019 00:49:15

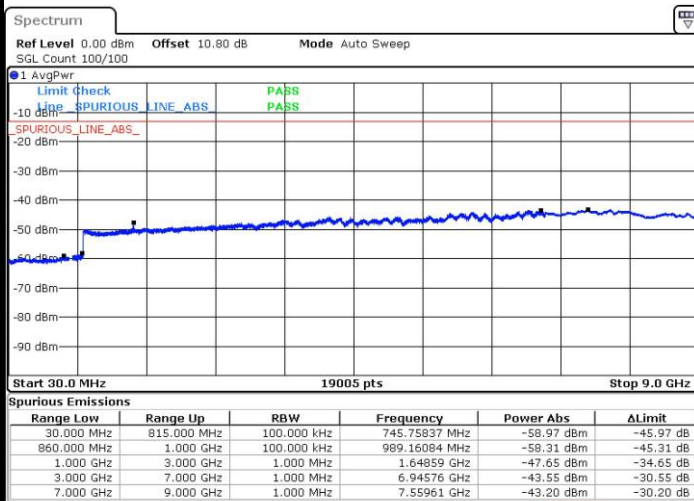
Highest Channel / 16QAM



Date: 7 JAN 2019 00:50:15

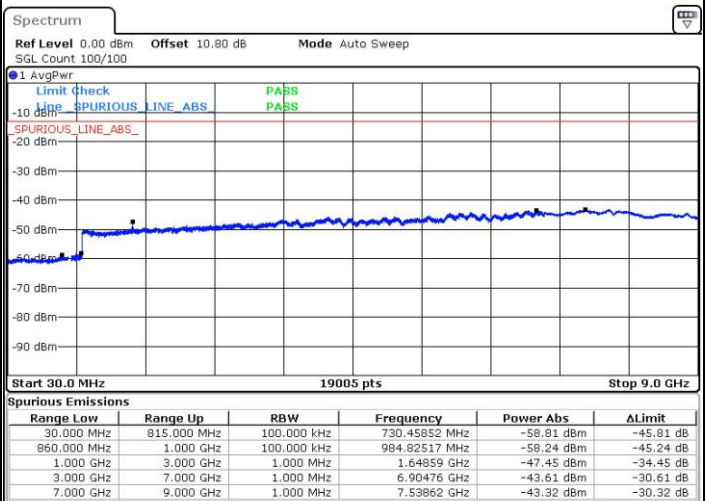
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 6 JAN 2019 22:48:43

Lowest Channel / 16QAM

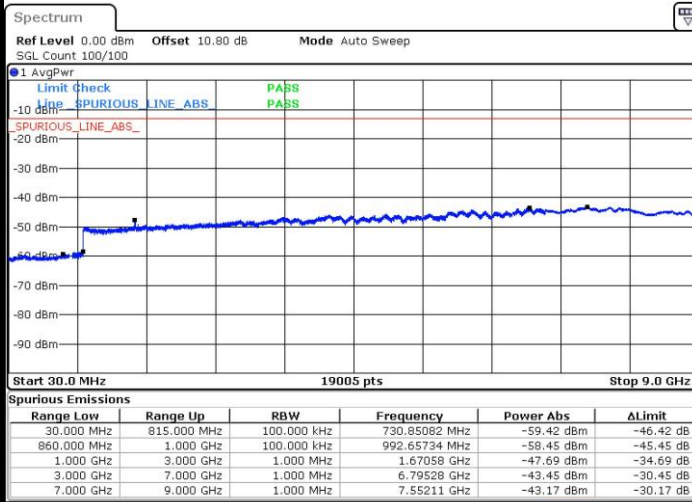


Date: 6 JAN 2019 22:49:43



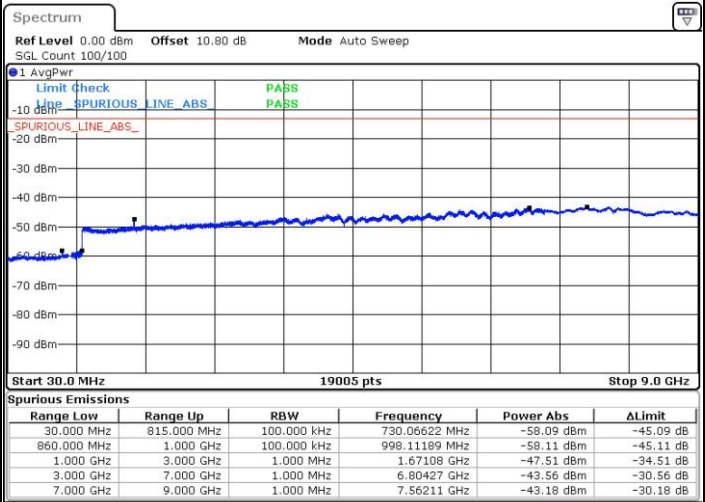
LTE Band 5 / 3MHz

Middle Channel / QPSK



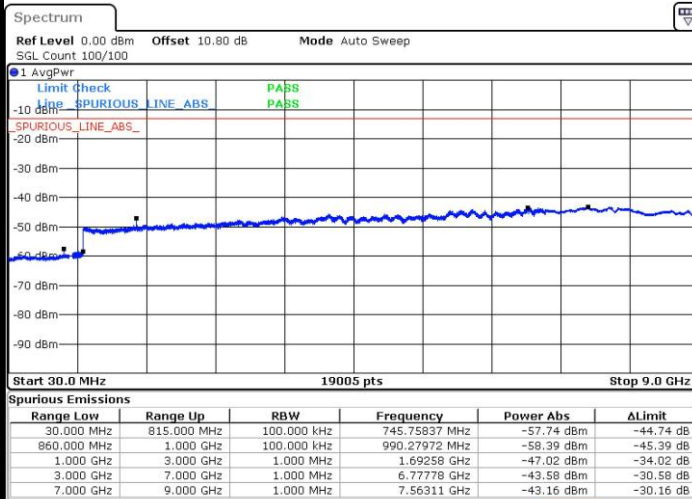
Date: 6 JAN 2019 22:51:29

Middle Channel / 16QAM



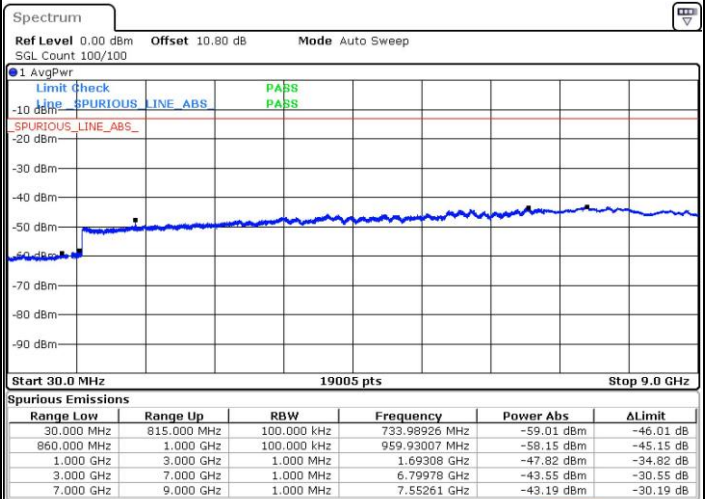
Date: 6 JAN 2019 22:52:29

Highest Channel / QPSK



Date: 6 JAN 2019 23:00:55

Highest Channel / 16QAM

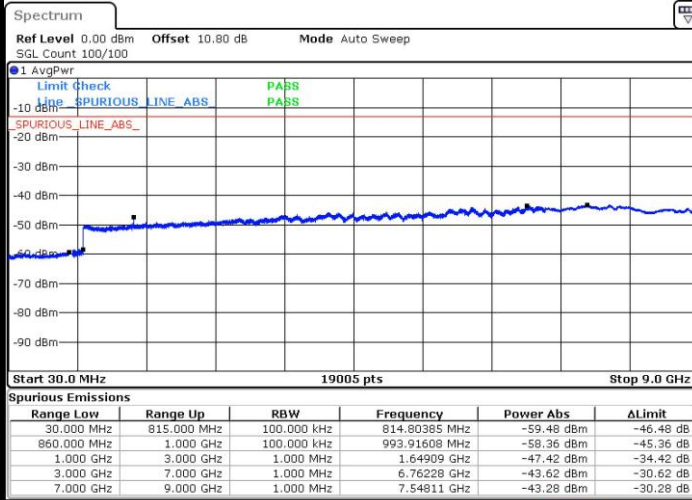


Date: 6 JAN 2019 23:01:56



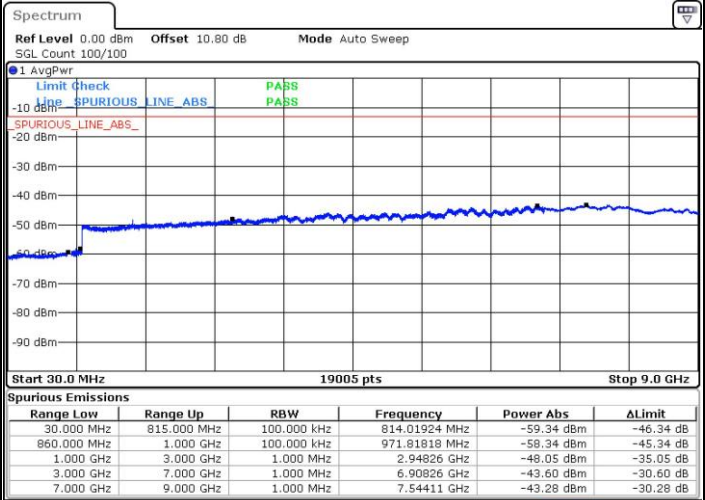
LTE Band 5 / 5MHz

Lowest Channel / QPSK



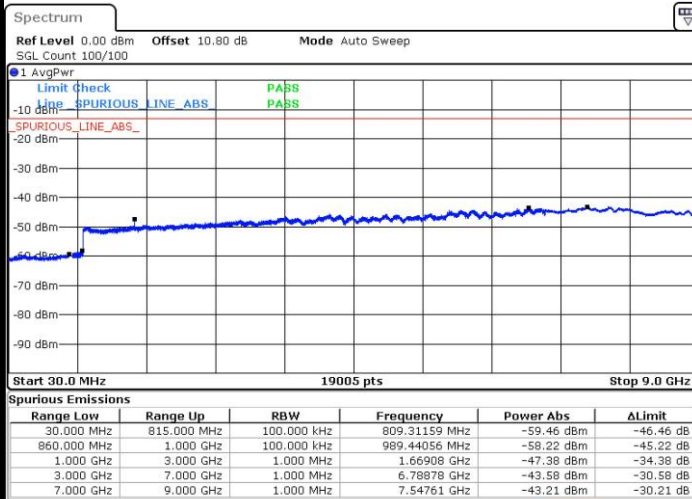
Date: 6 JAN 2019 23:10:22

Lowest Channel / 16QAM



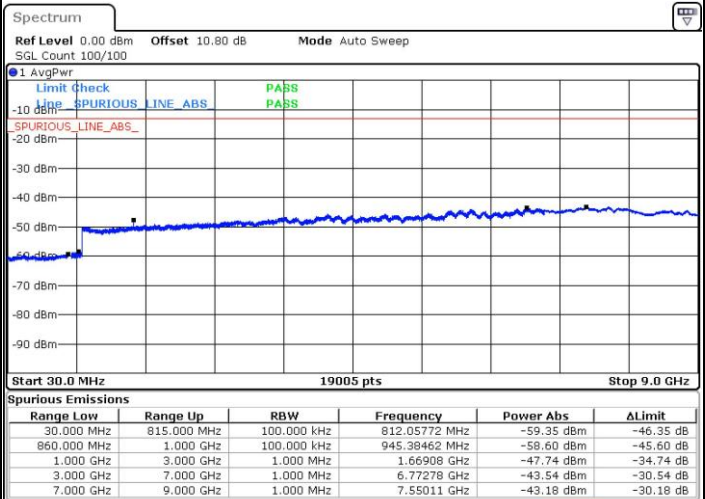
Date: 6 JAN 2019 23:11:22

Middle Channel / QPSK



Date: 6 JAN 2019 23:13:09

Middle Channel / 16QAM

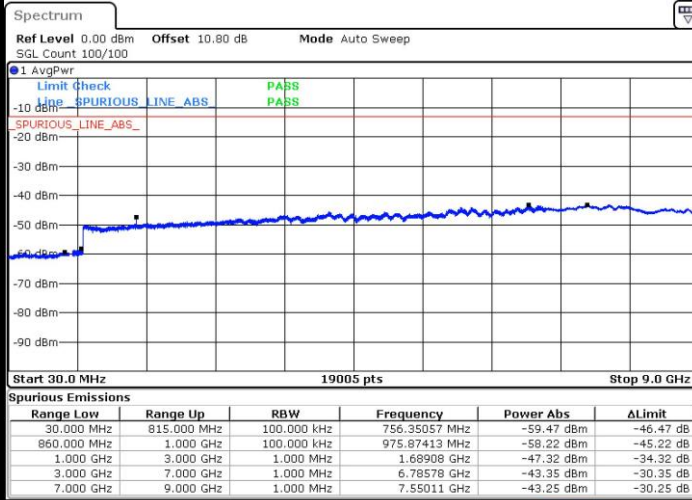


Date: 6 JAN 2019 23:14:09



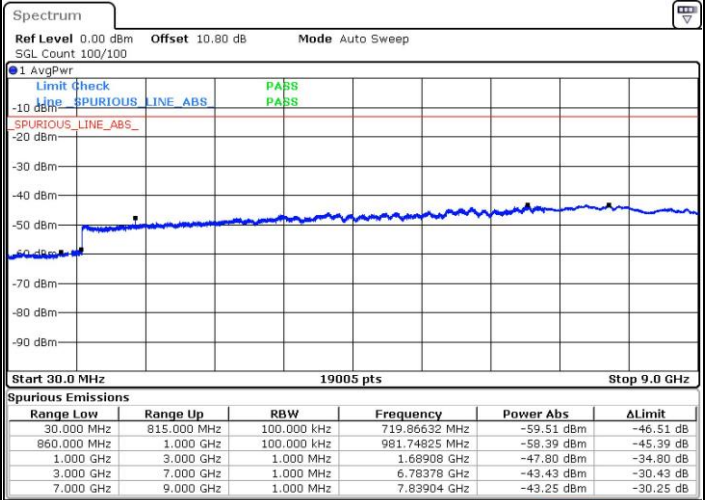
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 6 JAN 2019 23:22:35

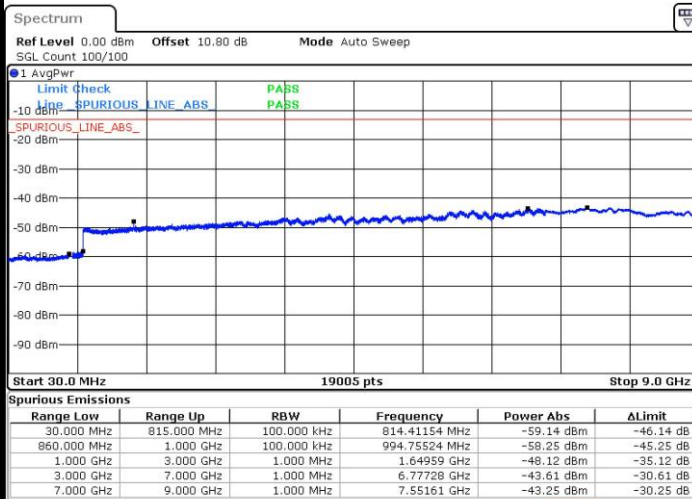
Highest Channel / 16QAM



Date: 6 JAN 2019 23:23:36

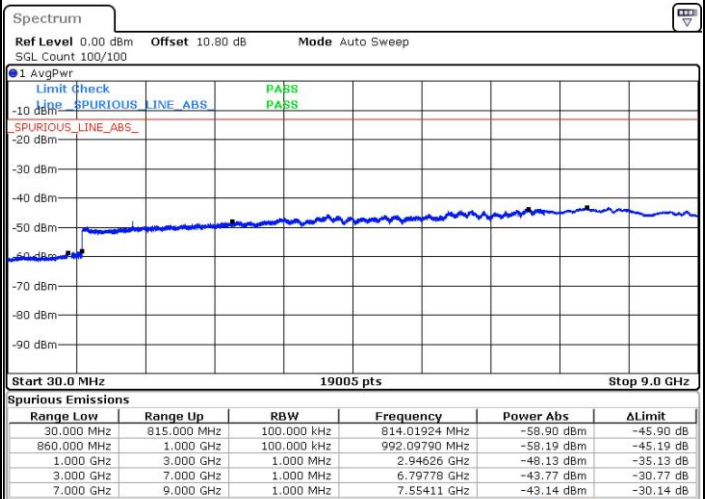
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 6 JAN 2019 23:32:02

Lowest Channel / 16QAM

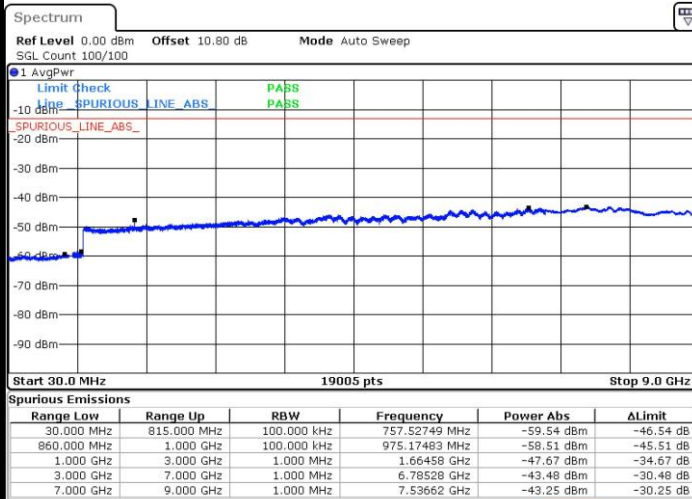


Date: 6 JAN 2019 23:33:02



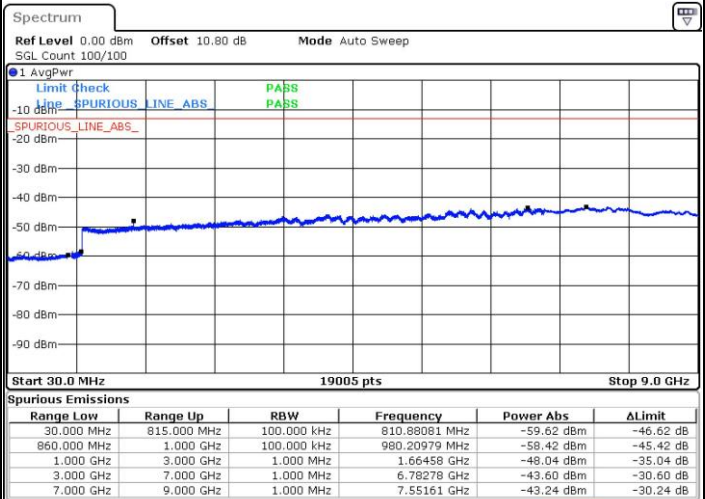
LTE Band 5 / 10MHz

Middle Channel / QPSK



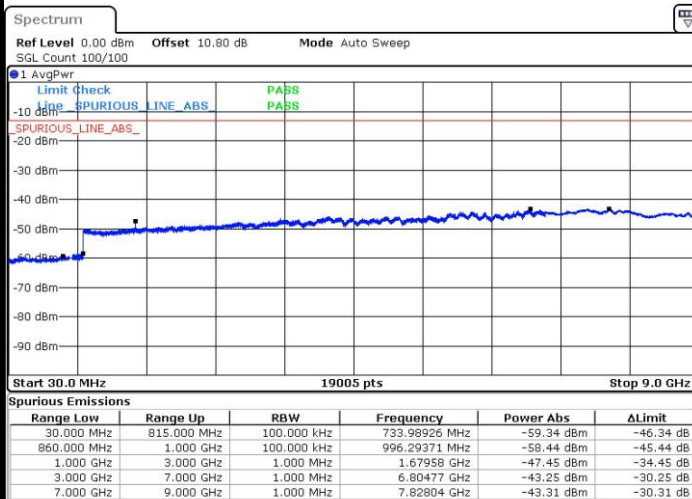
Date: 6 JAN 2019 23:34:48

Middle Channel / 16QAM



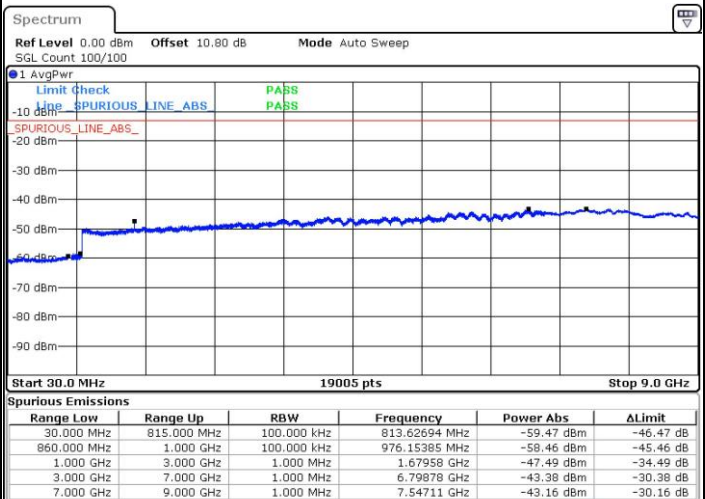
Date: 6 JAN 2019 23:35:48

Highest Channel / QPSK



Date: 6 JAN 2019 23:44:15

Highest Channel / 16QAM

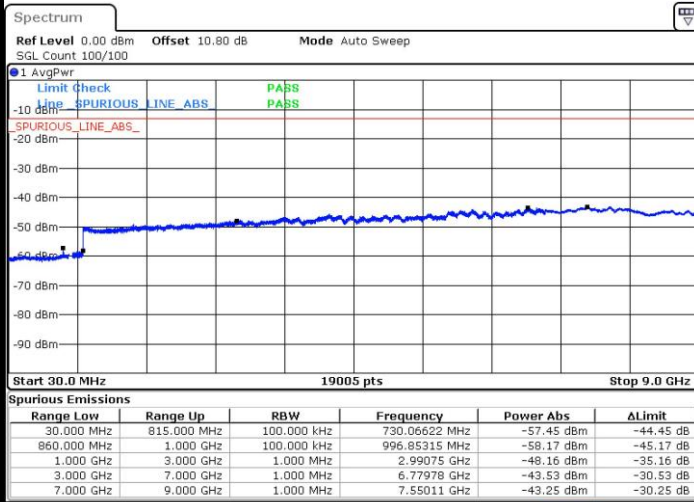


Date: 6 JAN 2019 23:45:15



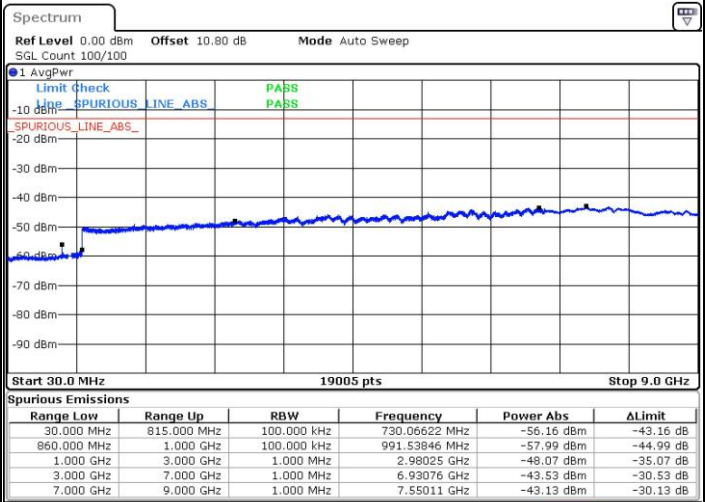
LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM



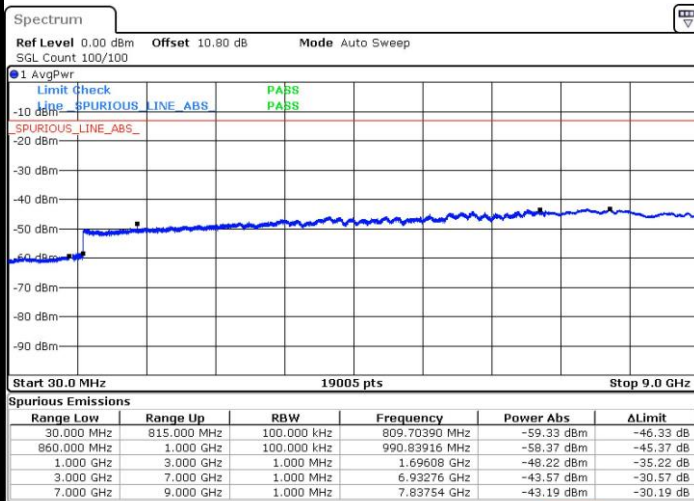
Date: 7.JAN.2019 00:22:28

Middle Channel / 64QAM



Date: 7.JAN.2019 00:23:51

Highest Channel / 64QAM

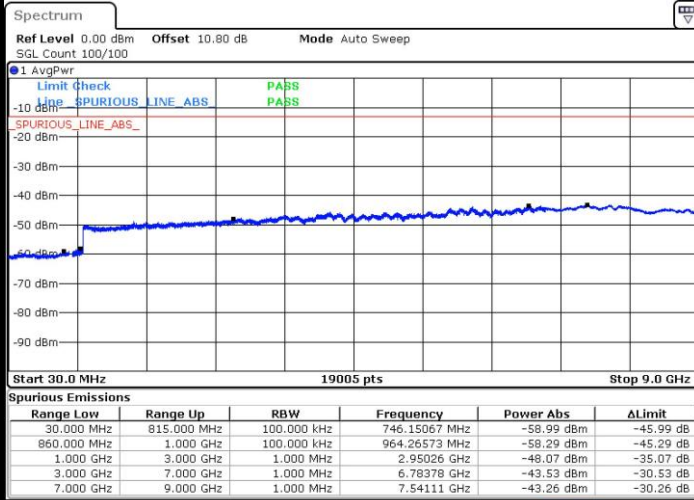


Date: 7.JAN.2019 00:28:34



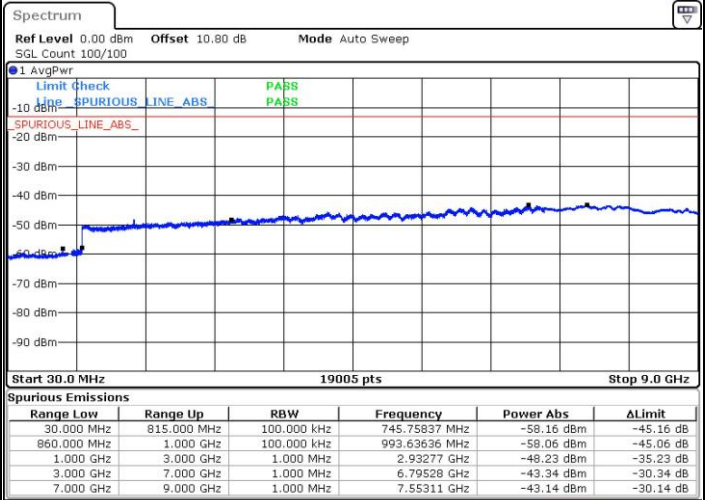
LTE Band 5 / 3MHz

Lowest Channel / 64QAM



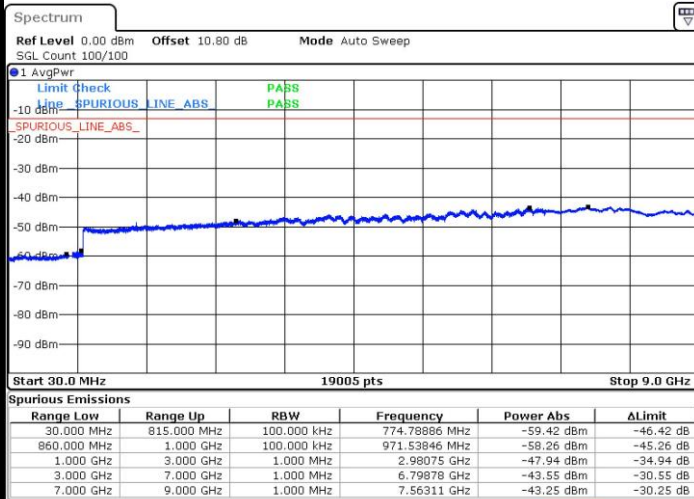
Date: 6 JAN 2019 23:49:59

Middle Channel / 64QAM



Date: 6 JAN 2019 23:51:22

Highest Channel / 64QAM

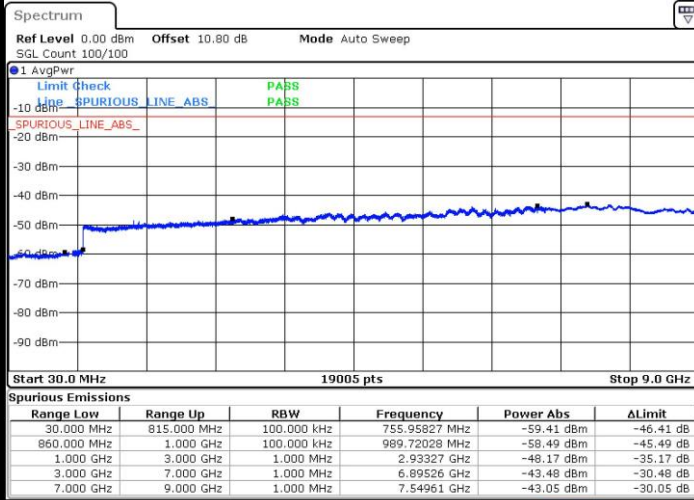


Date: 6 JAN 2019 23:56:05



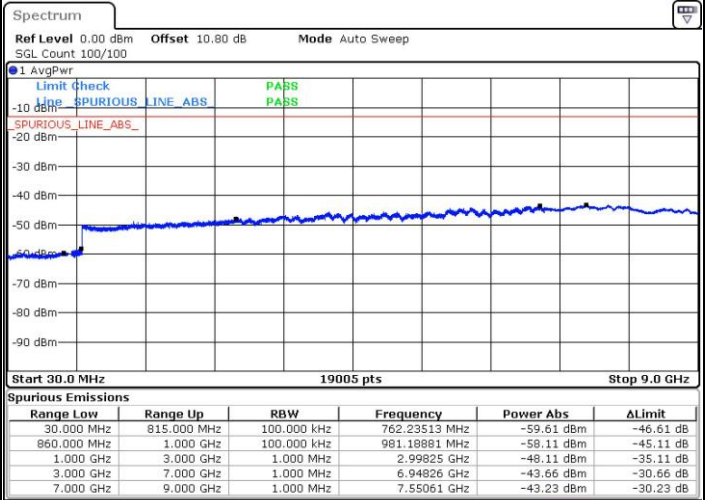
LTE Band 5 / 5MHz

Lowest Channel / 64QAM



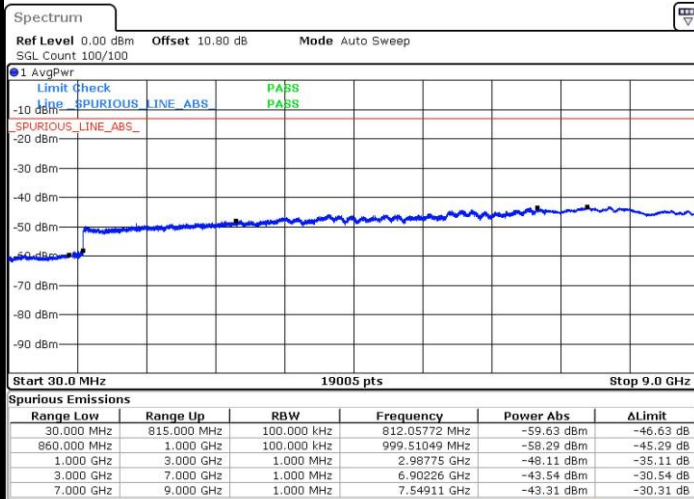
Date: 7.JAN.2019 00:00:48

Middle Channel / 64QAM



Date: 7.JAN.2019 00:02:11

Highest Channel / 64QAM

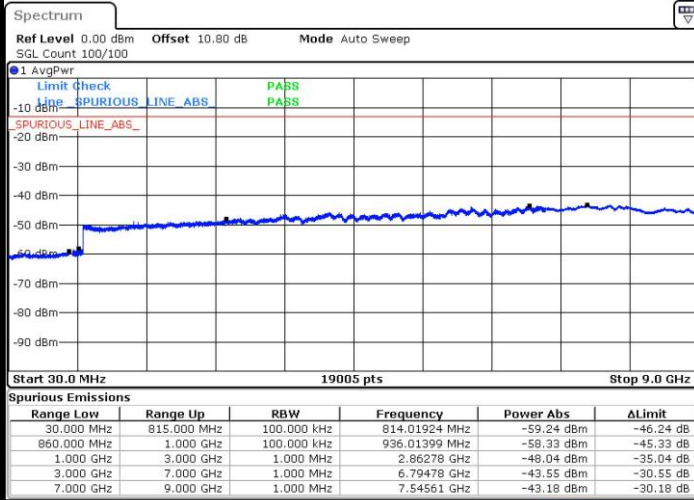


Date: 7.JAN.2019 00:06:55



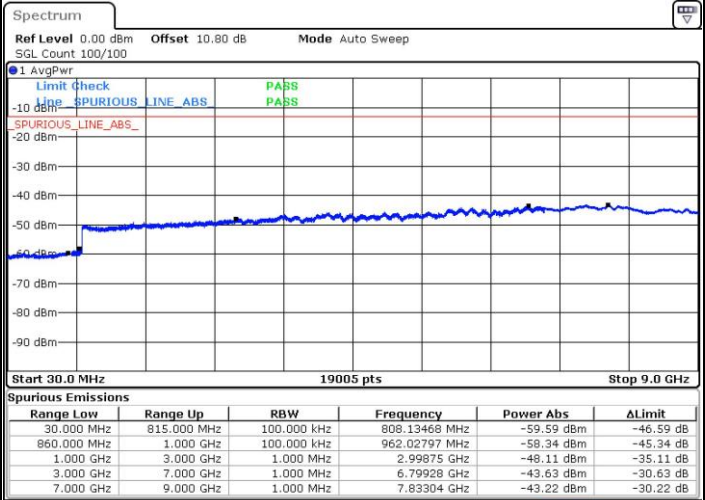
LTE Band 5 / 10MHz

Lowest Channel / 64QAM



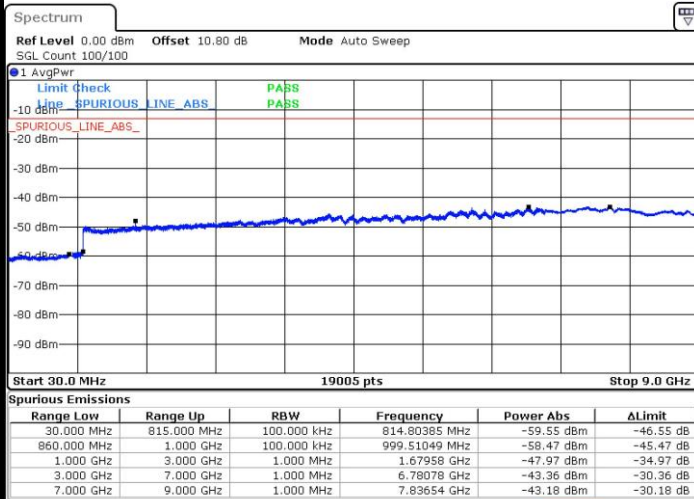
Date: 7.JAN.2019 00:11:38

Middle Channel / 64QAM



Date: 7.JAN.2019 00:13:01

Highest Channel / 64QAM



Date: 7.JAN.2019 00:17:44

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	0.0007	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0114	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0030	
-20	Normal Voltage	0.0141	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0111	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0033	

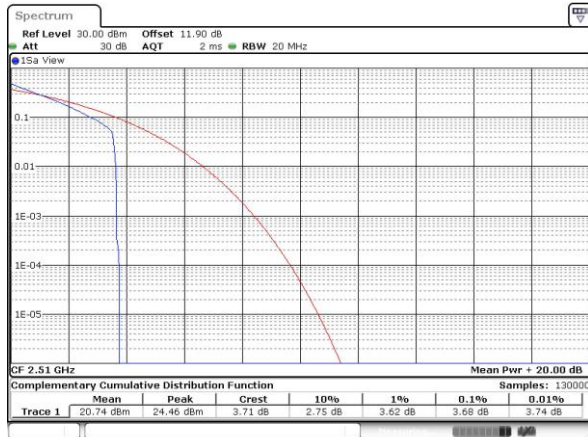
Note:

1. Normal Voltage =3.85 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.

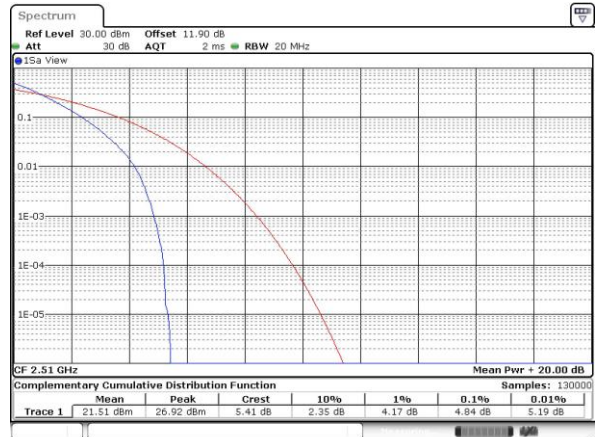
LTE Band 7

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	3.68	4.84	5.19	5.86	PASS
Middle CH	3.62	4.81	5.13	5.83	
Highest CH	3.59	4.96	5.01	5.91	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.93	6.38	-	-	PASS
Middle CH	6.20	6.38	-	-	
Highest CH	6.12	6.52	-	-	

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


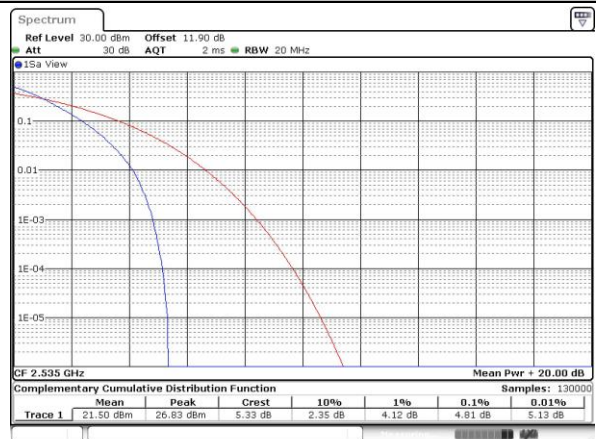
Date: 8 JAN 2019 14:58:21

Lowest Channel / Full RB


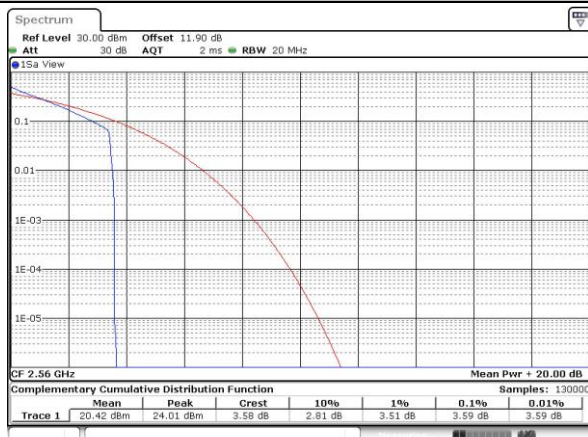
Date: 8 JAN 2019 14:58:32

Middle Channel / 1RB


Date: 8 JAN 2019 14:58:49

Middle Channel / Full RB


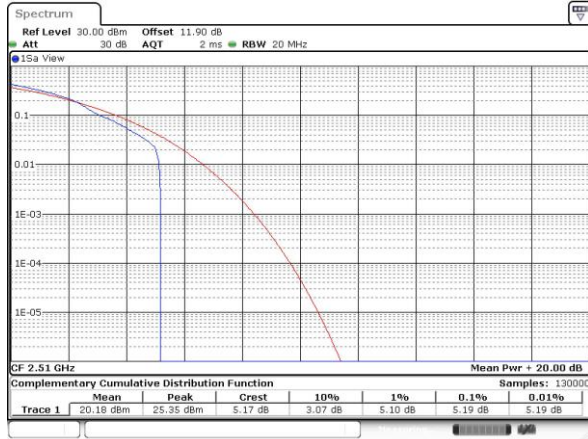
Date: 8 JAN 2019 14:59:03

Highest Channel / 1RB


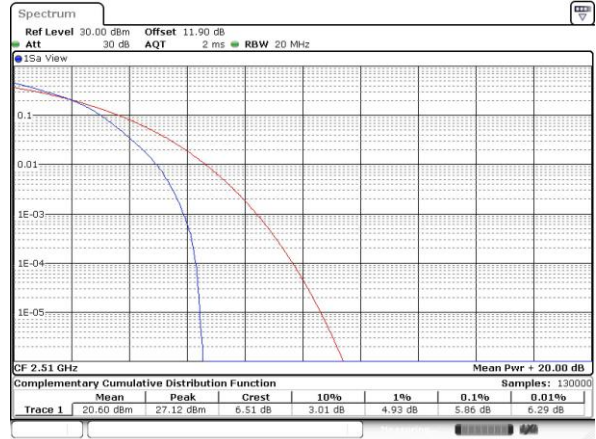
Date: 8 JAN 2019 14:59:20

Highest Channel / Full RB

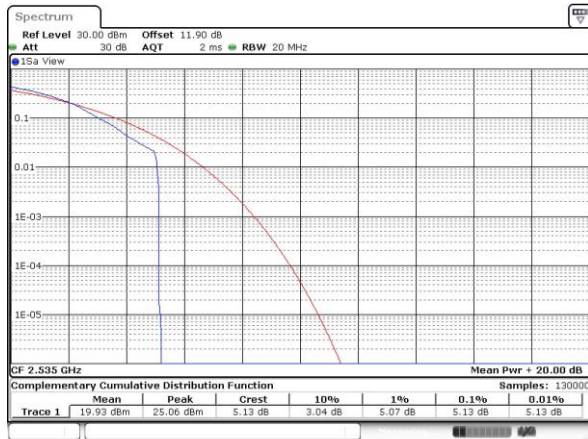

Date: 8 JAN 2019 14:59:34

LTE Band 7 / 20MHz / 16QAM
Lowest Channel / 1RB


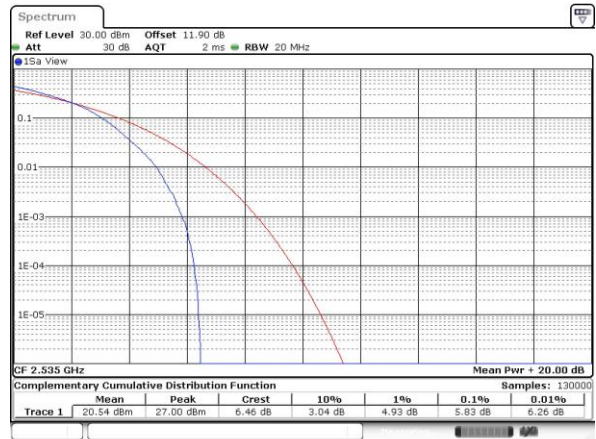
Date: 8 JAN 2019 14:57:08

Lowest Channel / Full RB


Date: 8 JAN 2019 14:57:27

Middle Channel / 1RB


Date: 8 JAN 2019 14:57:38

Middle Channel / Full RB


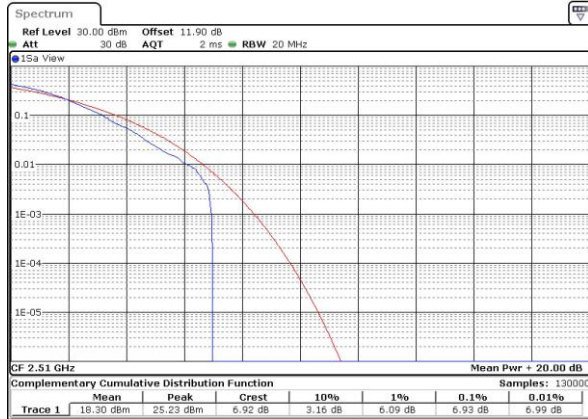
Date: 8 JAN 2019 14:57:48

Highest Channel / 1RB

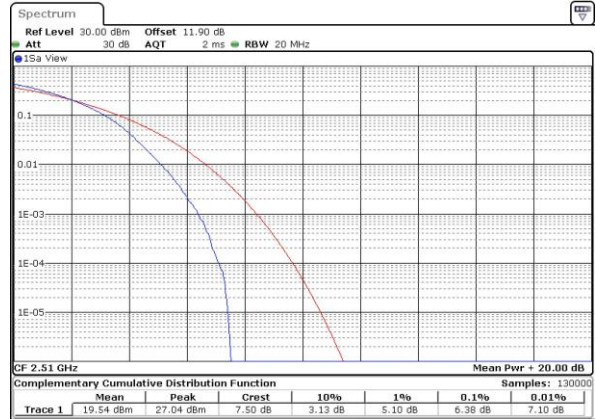

Date: 8 JAN 2019 14:57:59

Highest Channel / Full RB

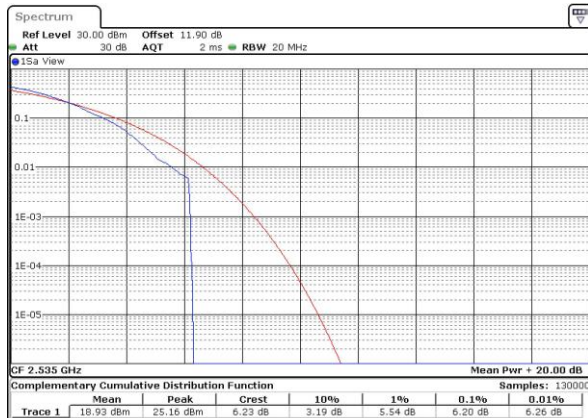

Date: 8 JAN 2019 14:58:10

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


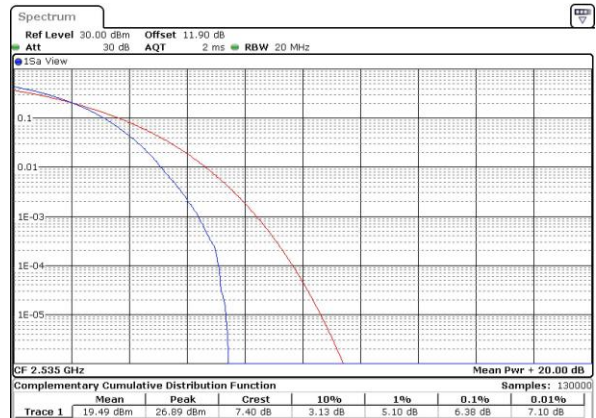
Date: 8 JAN 2019 14:59:46

Lowest Channel / Full RB


Date: 8 JAN 2019 14:59:59

Middle Channel / 1RB


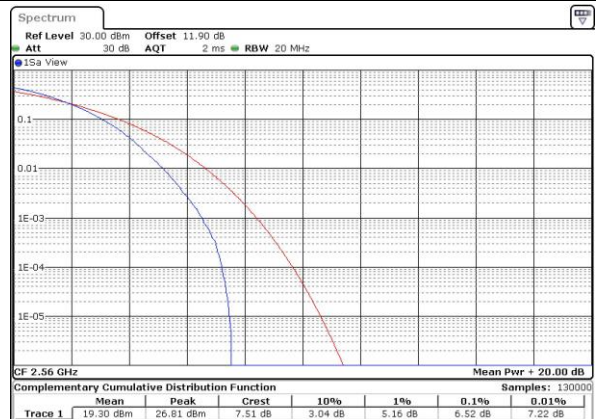
Date: 8 JAN 2019 15:00:11

Middle Channel / Full RB


Date: 8 JAN 2019 15:00:29

Highest Channel / 1RB


Date: 8 JAN 2019 15:00:41

Highest Channel / Full RB


Date: 8 JAN 2019 15:00:55

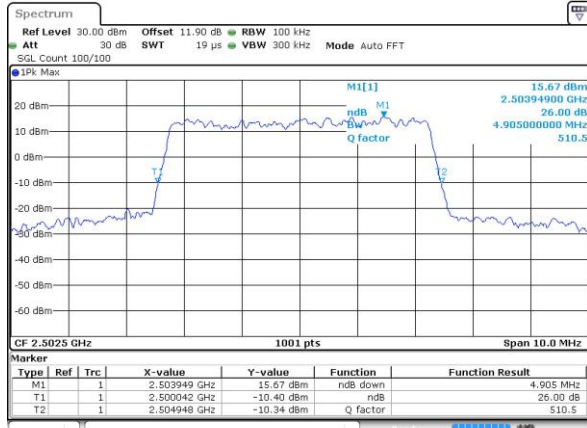
**26dB Bandwidth**

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	-	-	-	-	4.91	4.90	9.79	9.65	14.33	14.63	20.42	20.02
Middle CH	-	-	-	-	4.85	4.90	9.75	9.81	14.33	14.48	20.22	20.10
Highest CH	-	-	-	-	4.92	4.92	9.79	9.77	14.33	14.51	20.30	20.22
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.89	-	9.71	-	14.33	-	20.26	-
Middle CH	-	-	-	-	4.93	-	9.67	-	14.65	-	20.18	-
Highest CH	-	-	-	-	4.89	-	9.91	-	14.45	-	20.26	-

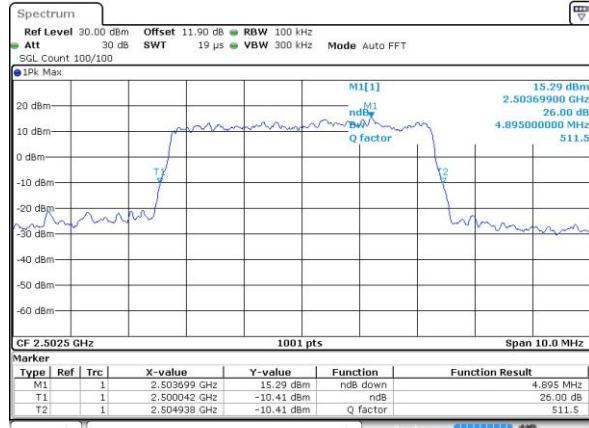


LTE Band 7

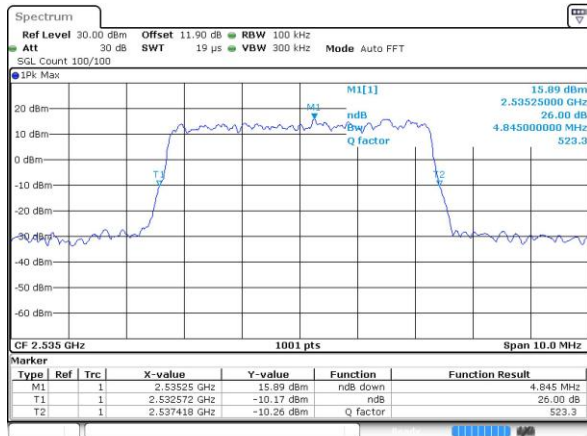
Lowest Channel / 5MHz / QPSK



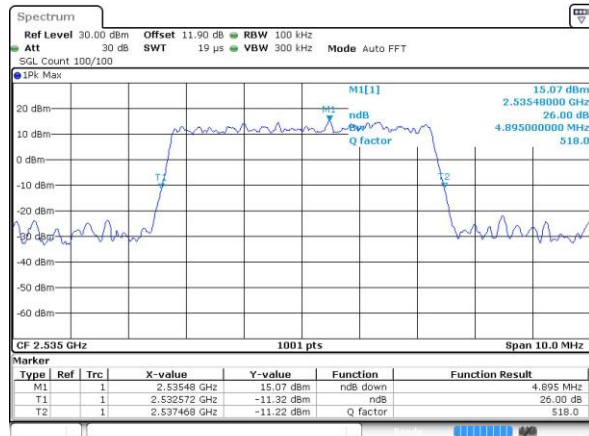
Lowest Channel / 5MHz / 16QAM



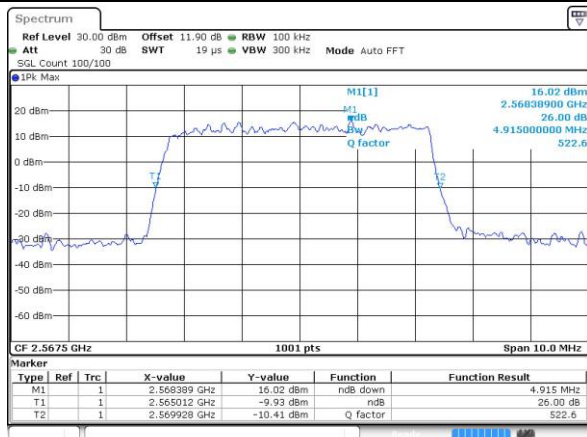
Middle Channel / 5MHz / QPSK



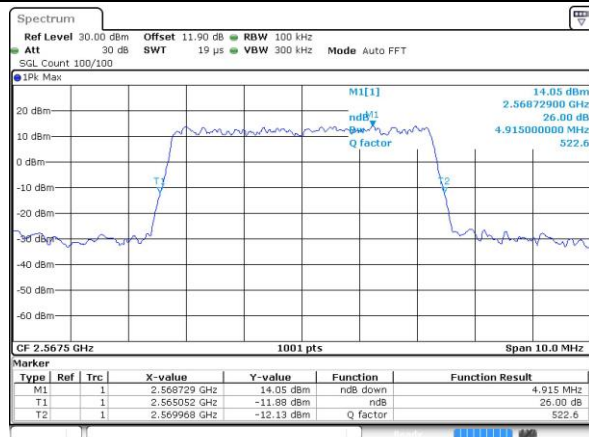
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



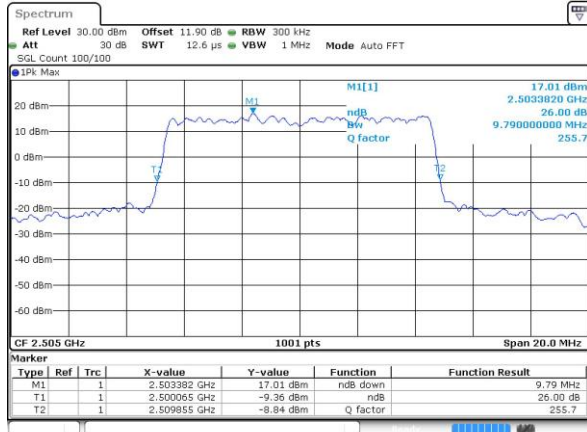
Highest Channel / 5MHz / 16QAM



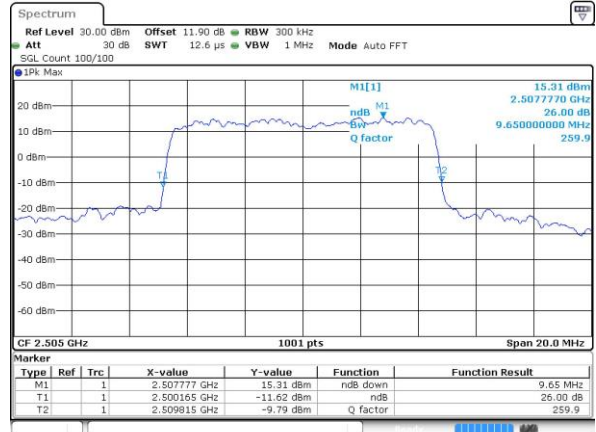


LTE Band 7

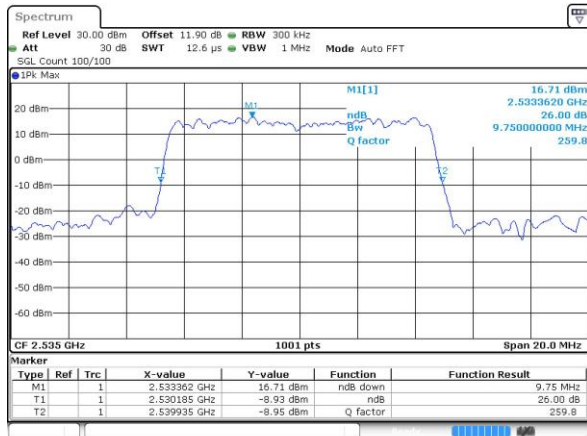
Lowest Channel / 10MHz / QPSK



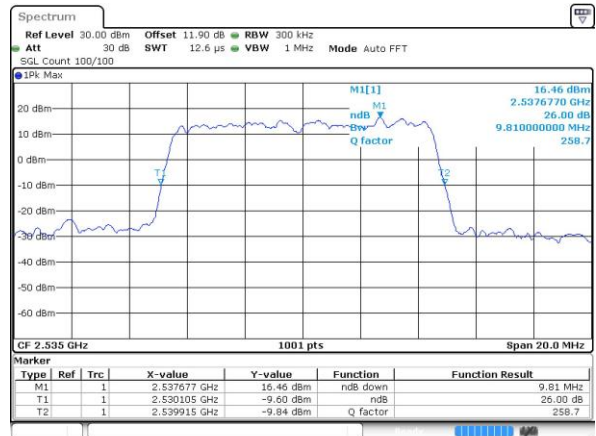
Lowest Channel / 10MHz / 16QAM



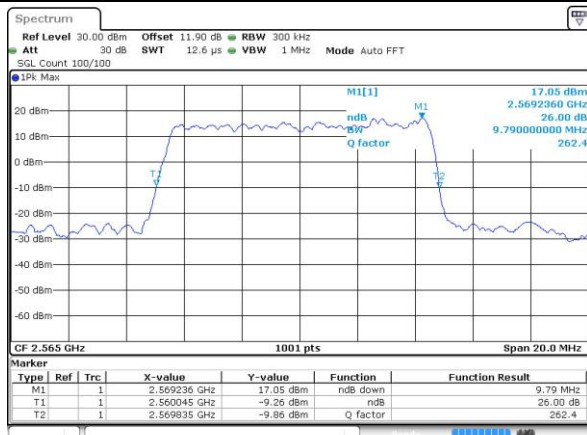
Middle Channel / 10MHz / QPSK



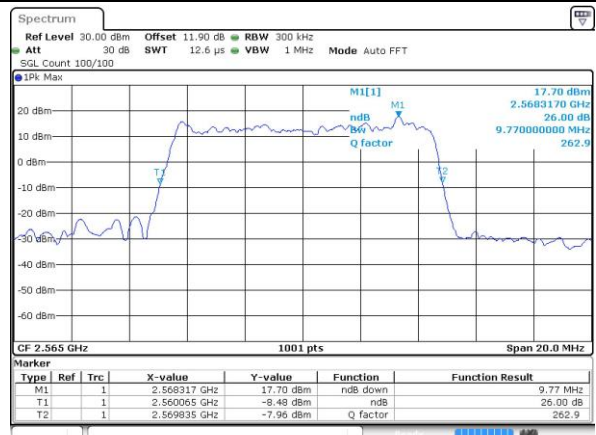
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



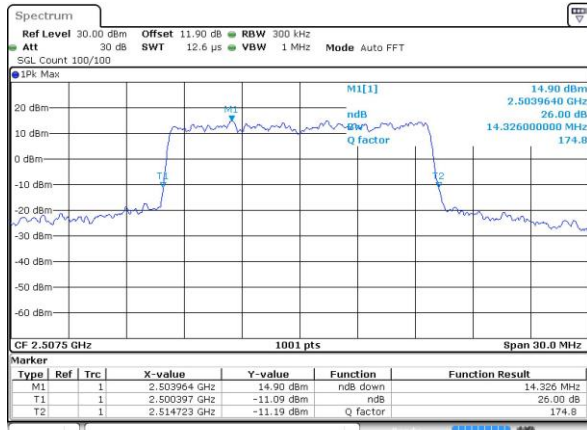
Highest Channel / 10MHz / 16QAM



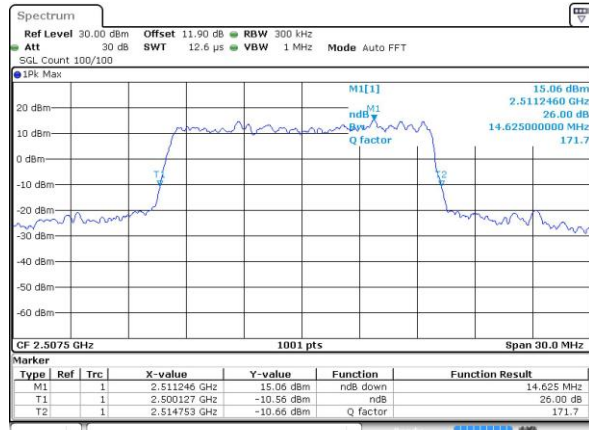


LTE Band 7

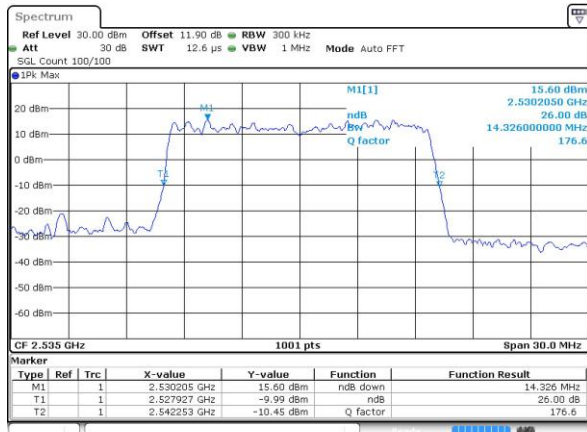
Lowest Channel / 15MHz / QPSK



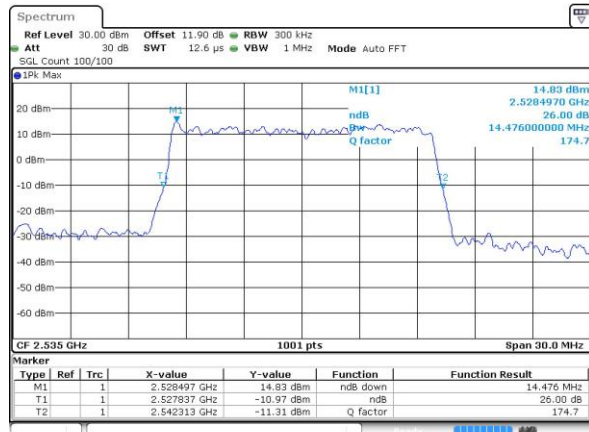
Lowest Channel / 15MHz / 16QAM



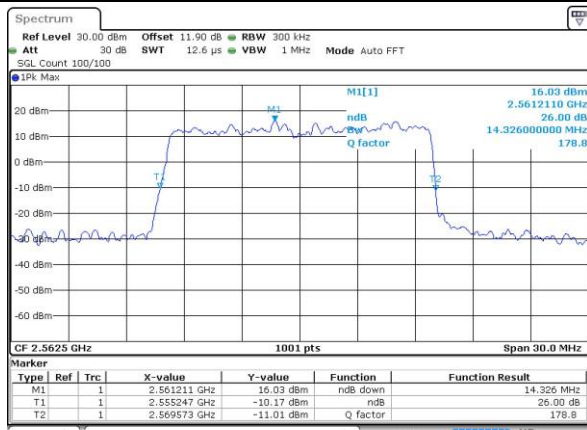
Middle Channel / 15MHz / QPSK



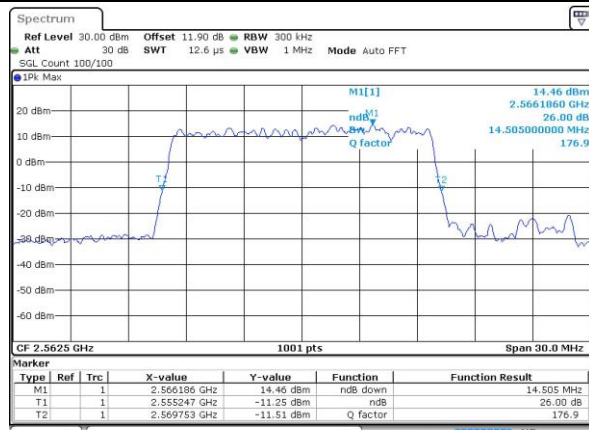
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



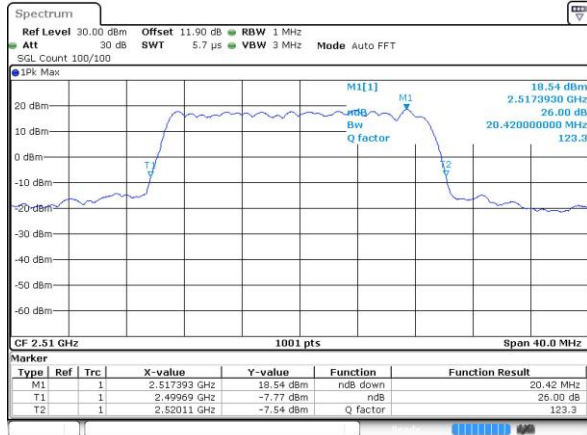
Highest Channel / 15MHz / 16QAM



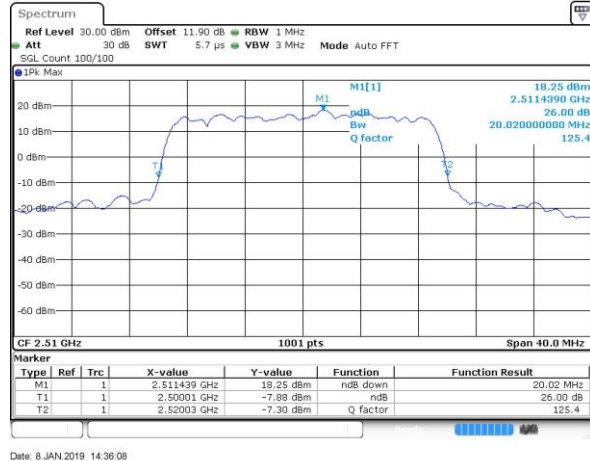


LTE Band 7

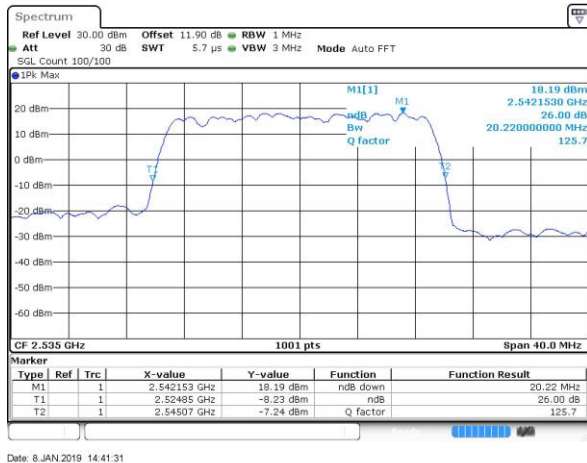
Lowest Channel / 20MHz / QPSK



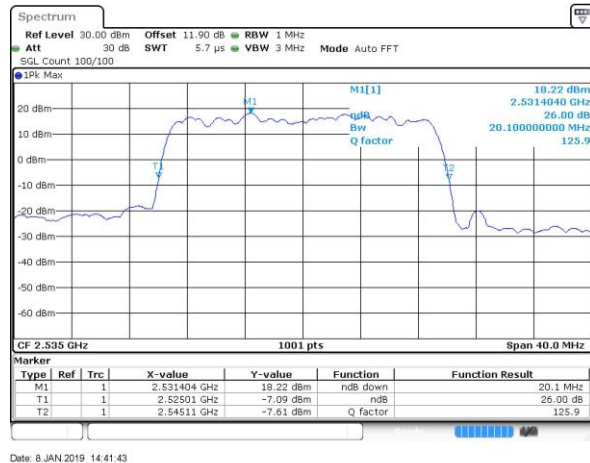
Lowest Channel / 20MHz / 16QAM



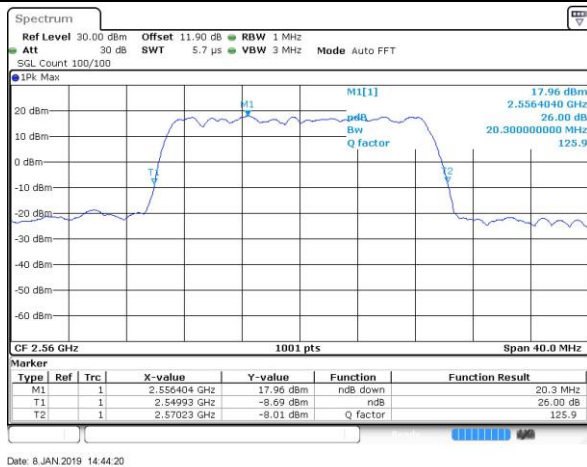
Middle Channel / 20MHz / QPSK



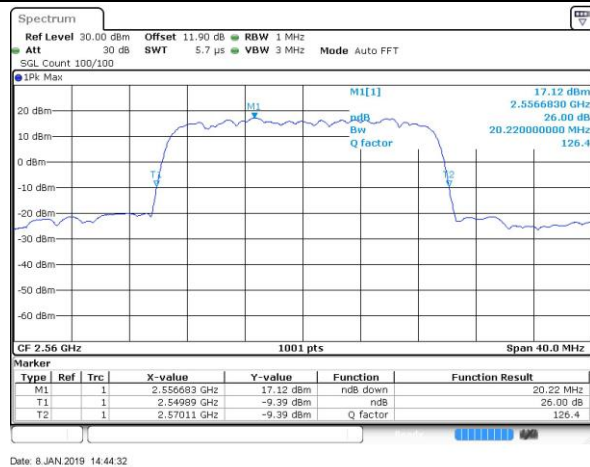
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



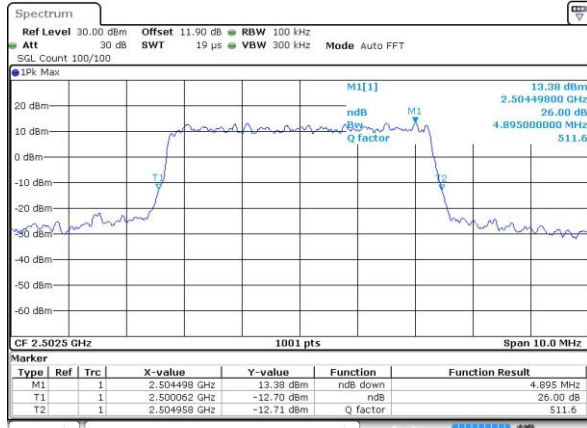
Highest Channel / 20MHz / 16QAM



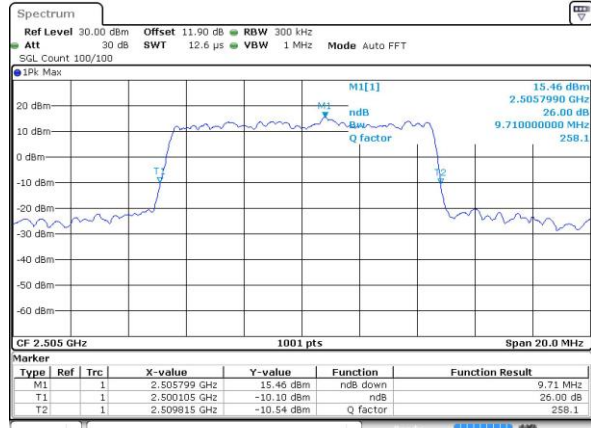


LTE Band 7

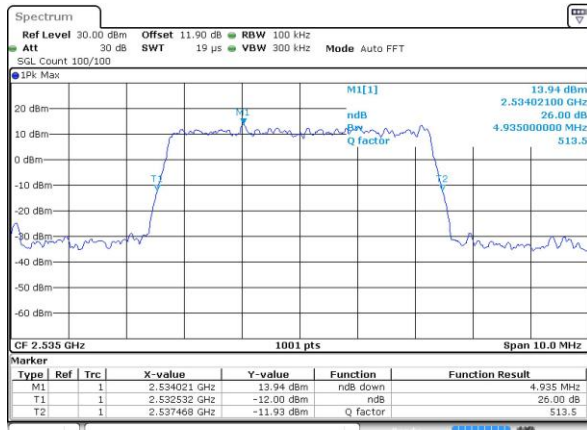
Lowest Channel / 5MHz / 64QAM



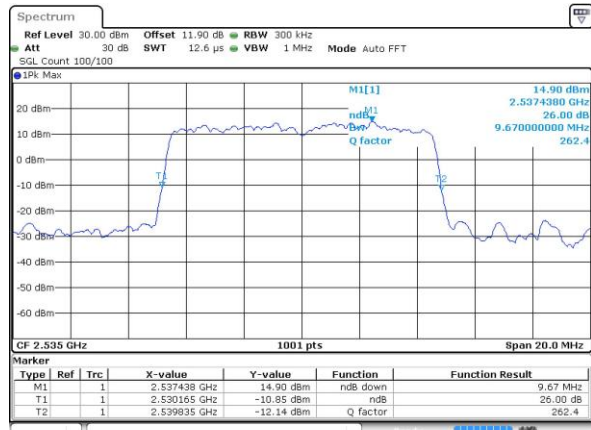
Lowest Channel / 10MHz / 64QAM



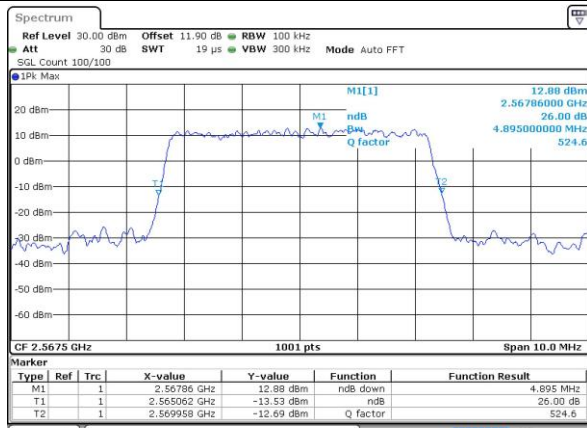
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM

