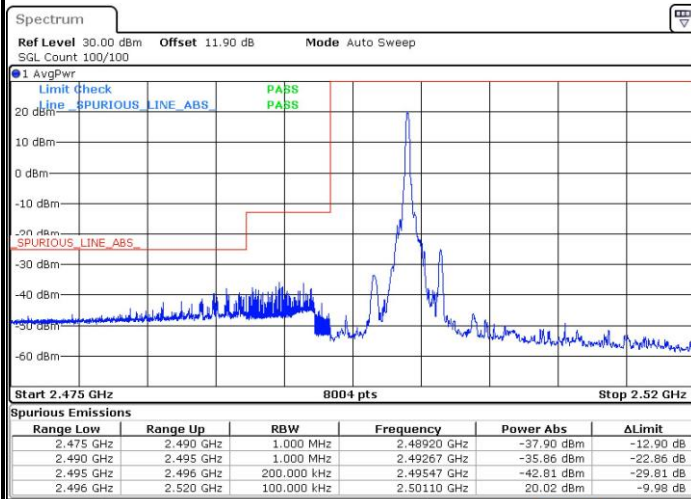


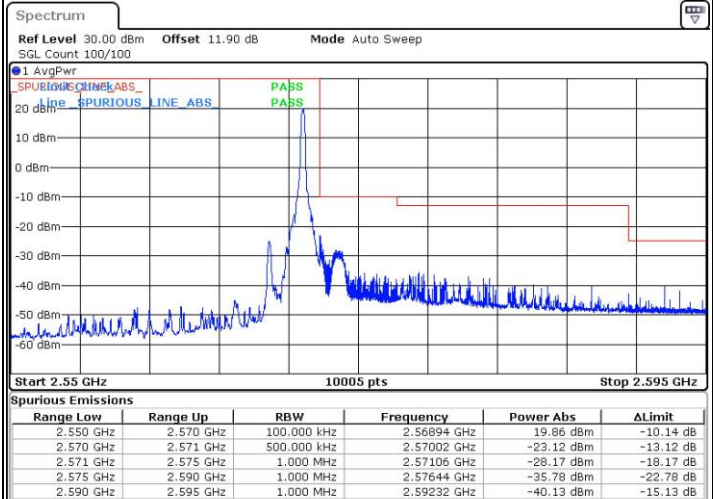


LTE Band 7 / 20MHz / 16QAM

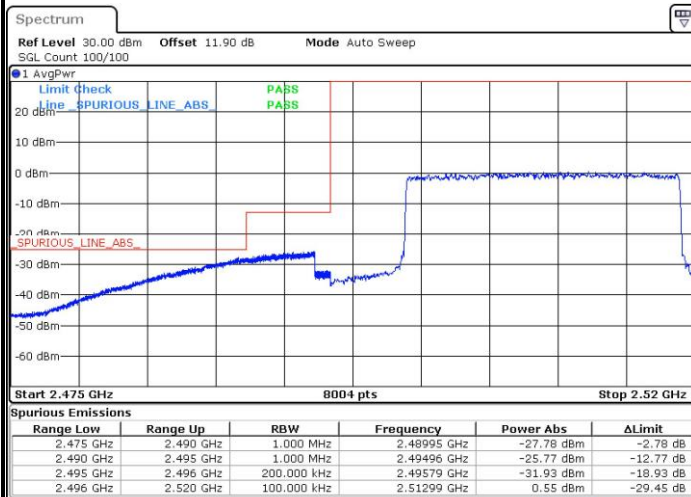
Lowest Band Edge / 1 RB



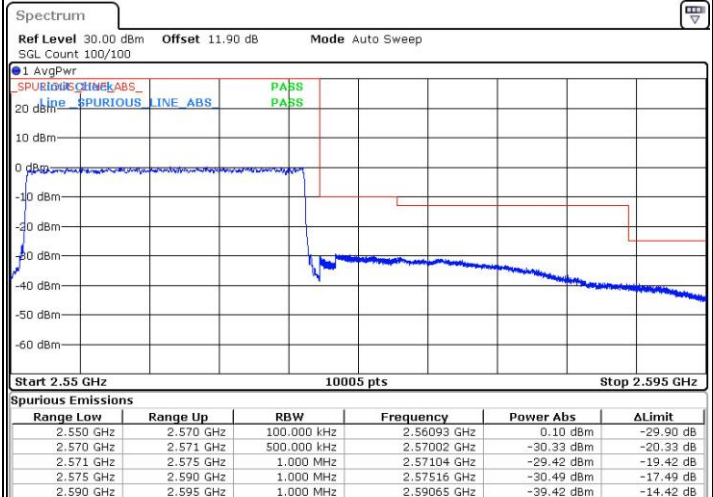
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



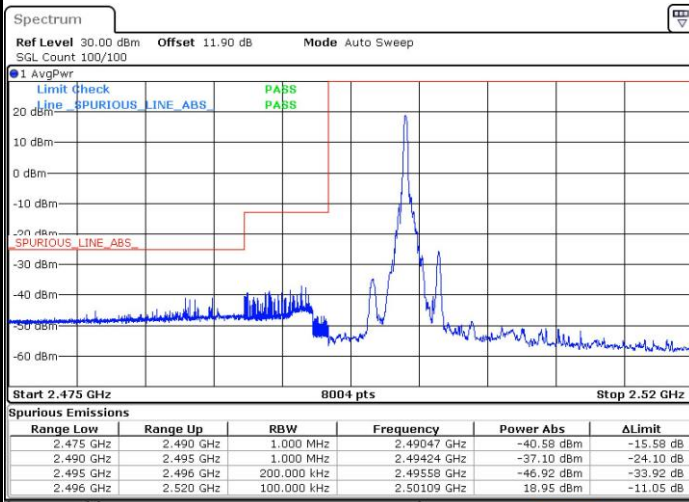
Highest Band Edge / Full RB



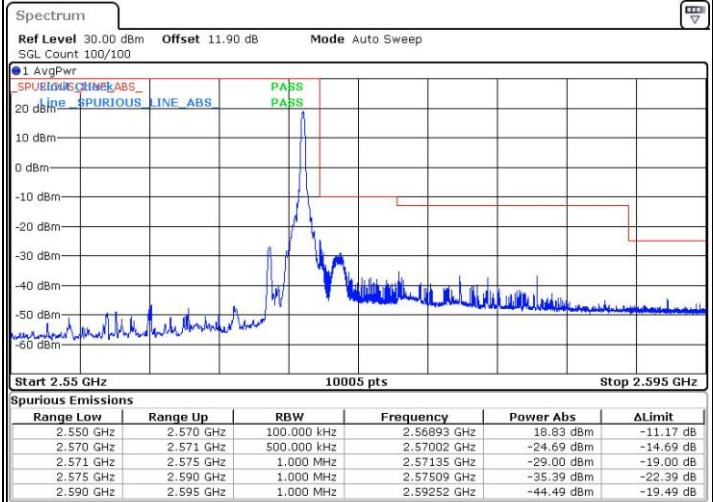


LTE Band 7 / 20MHz / 64QAM

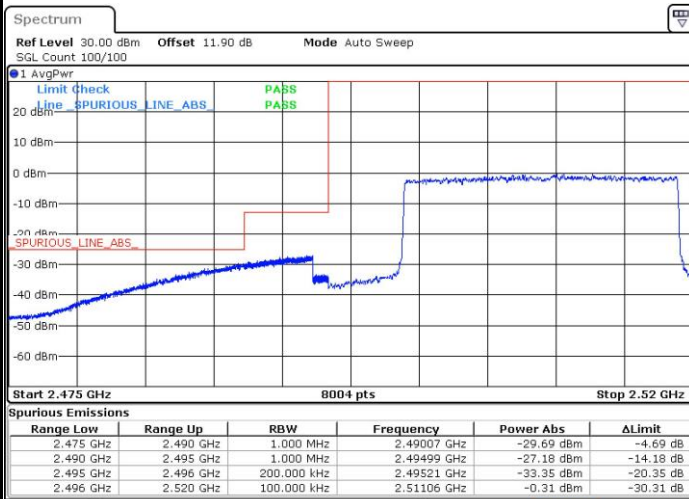
Lowest Band Edge / 1 RB



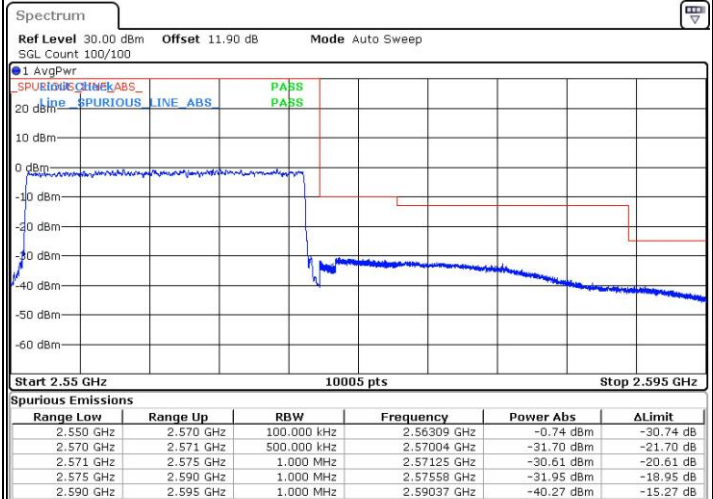
Highest Band Edge / 1 RB

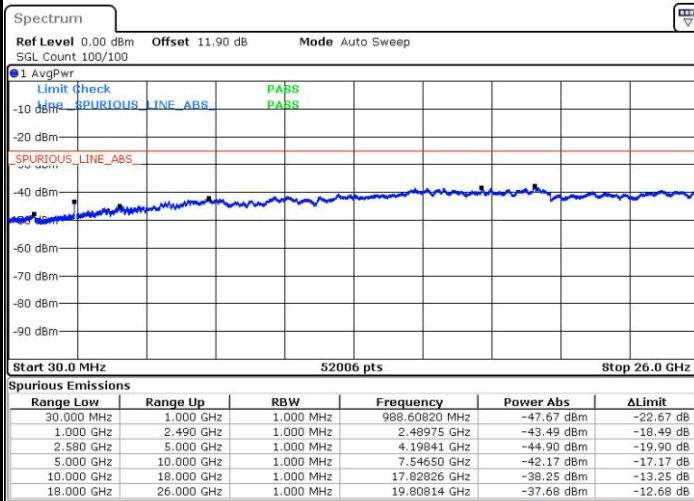


Lowest Band Edge / Full RB

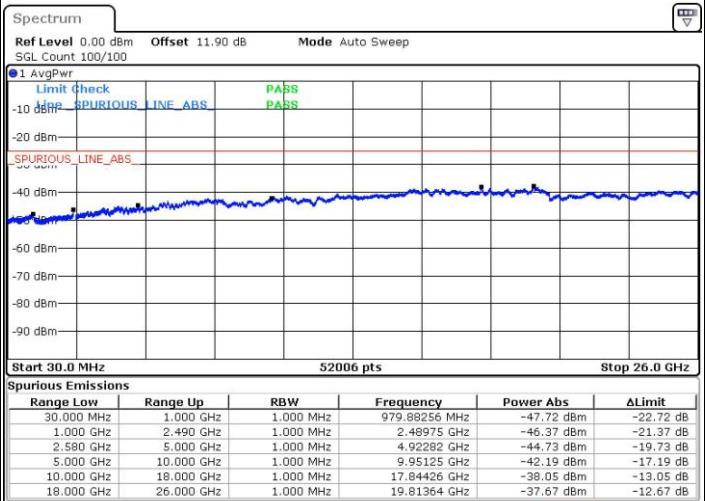


Highest Band Edge / Full RB

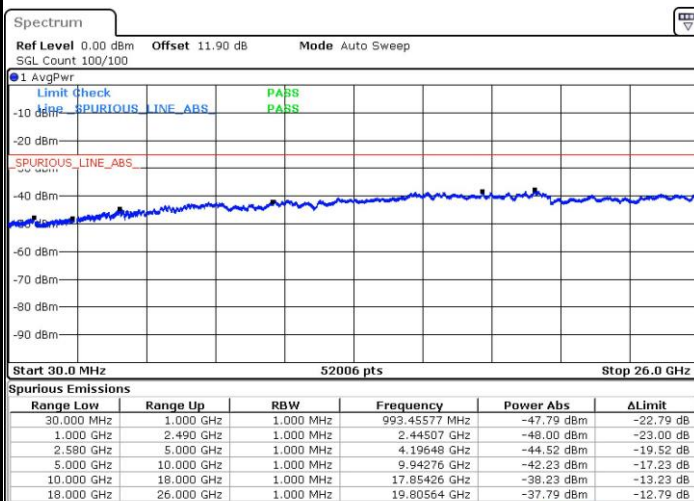


**Conducted Spurious Emission****LTE Band 7 / 5MHz****Lowest Channel / QPSK**

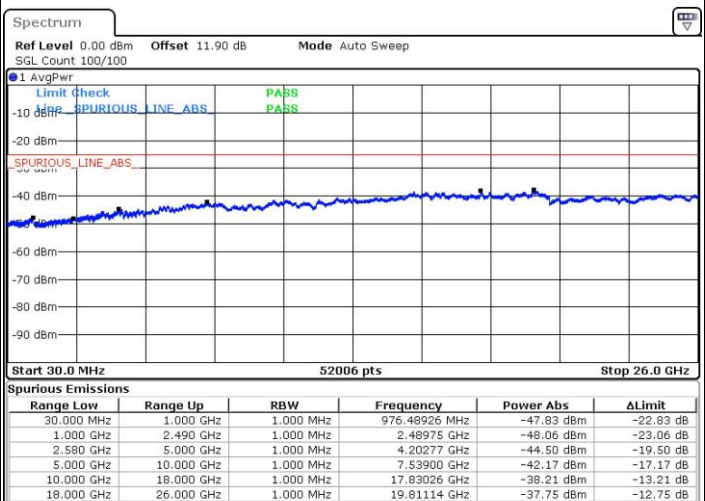
Date: 8 JAN 2019 13:36:46

Lowest Channel / 16QAM

Date: 8 JAN 2019 13:37:47

Middle Channel / QPSK

Date: 8 JAN 2019 13:39:34

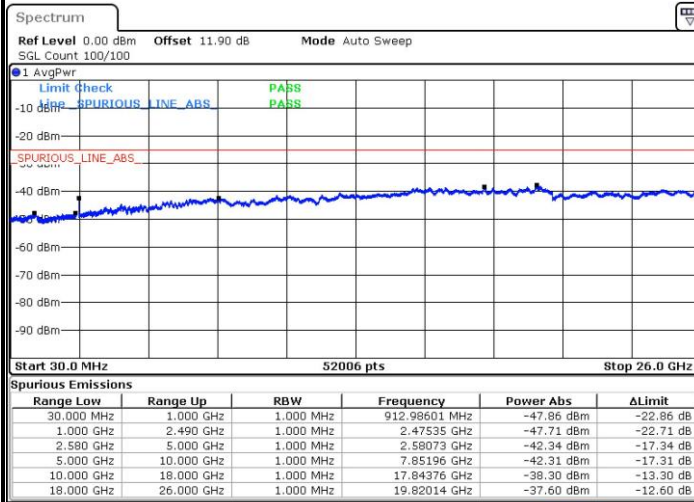
Middle Channel / 16QAM

Date: 8 JAN 2019 13:40:34



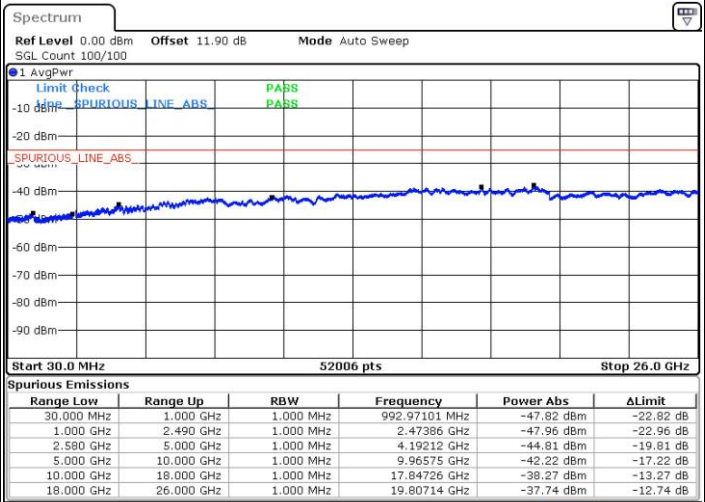
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 8 JAN 2019 13:45:11

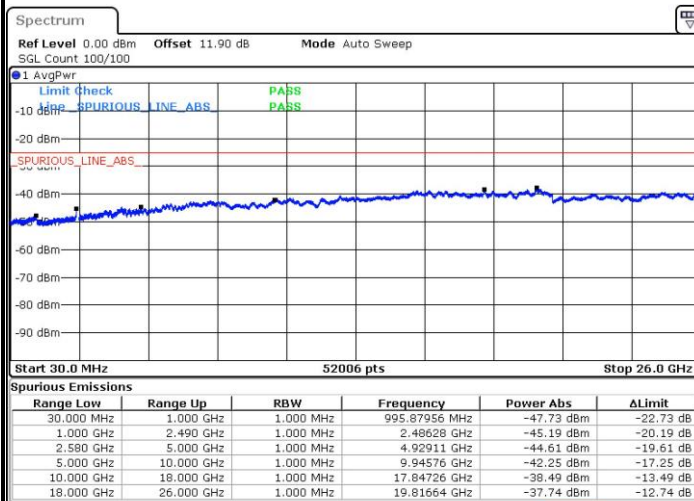
Highest Channel / 16QAM



Date: 8 JAN 2019 13:46:11

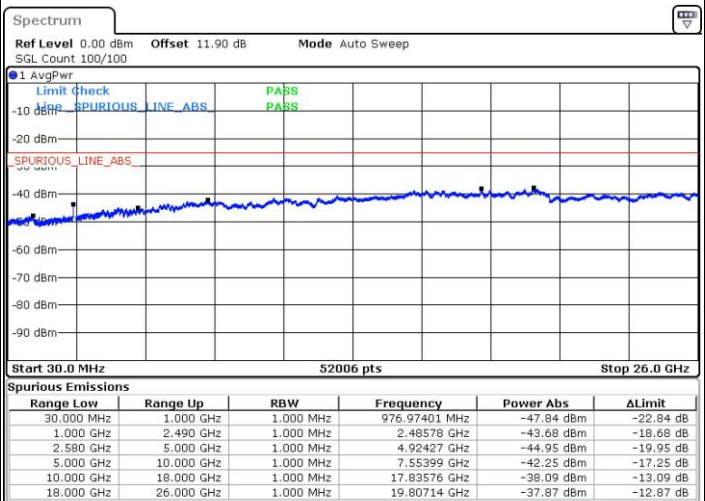
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 8 JAN 2019 13:57:49

Lowest Channel / 16QAM

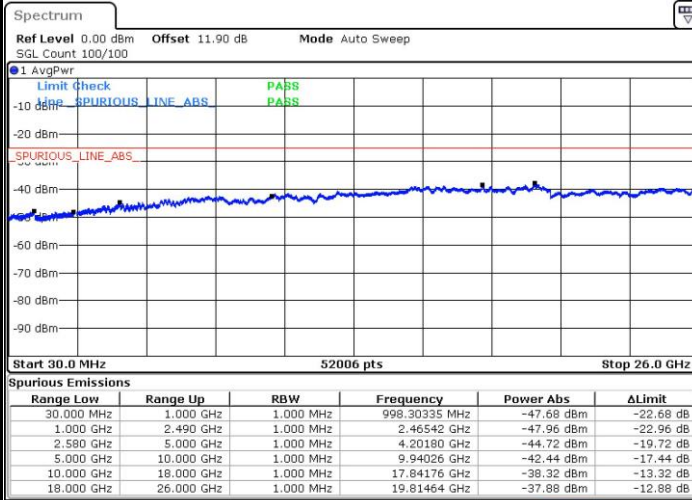


Date: 8 JAN 2019 13:58:49



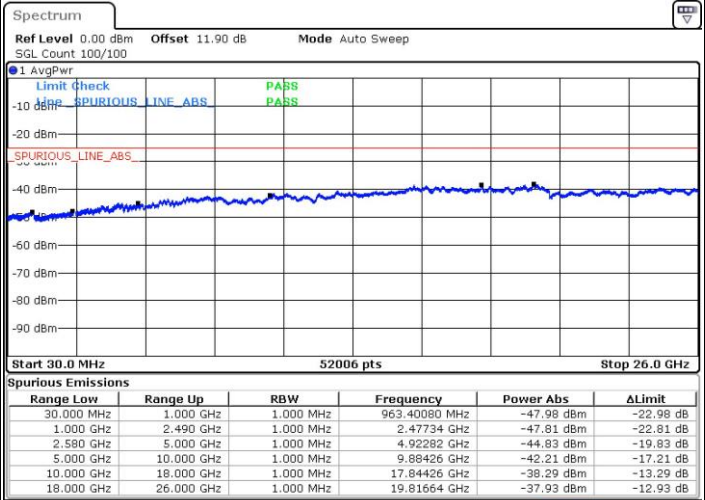
LTE Band 7 / 10MHz

Middle Channel / QPSK



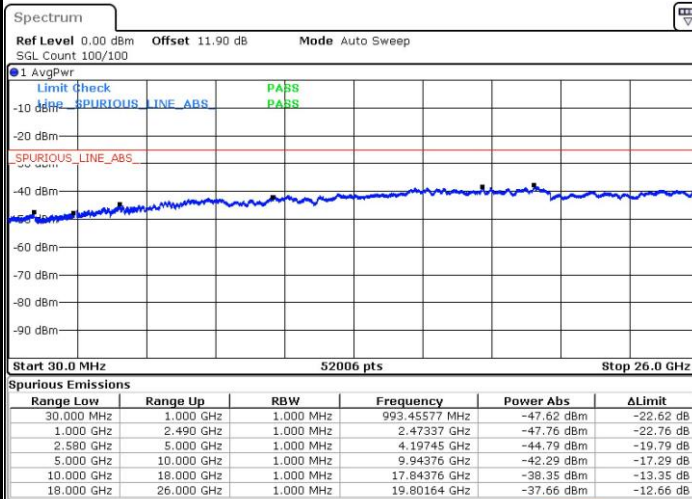
Date: 8 JAN 2019 14:00:37

Middle Channel / 16QAM



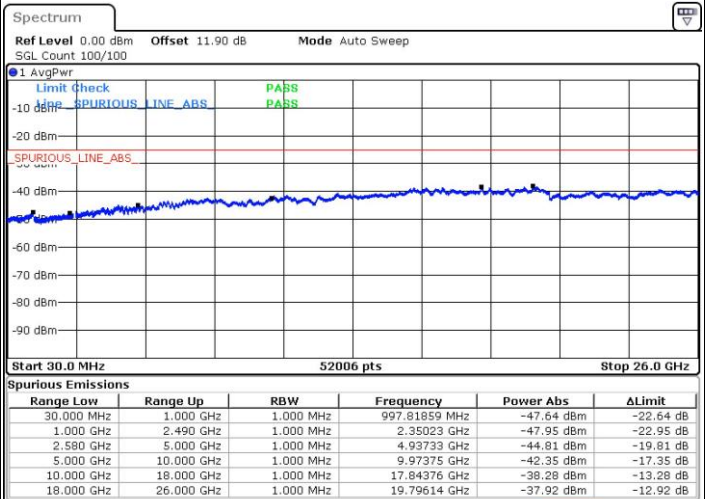
Date: 8 JAN 2019 14:01:36

Highest Channel / QPSK



Date: 8 JAN 2019 14:06:13

Highest Channel / 16QAM

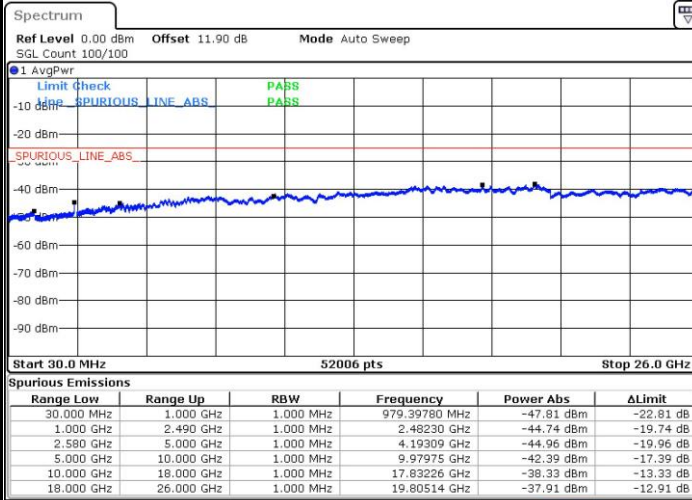


Date: 8 JAN 2019 14:07:14



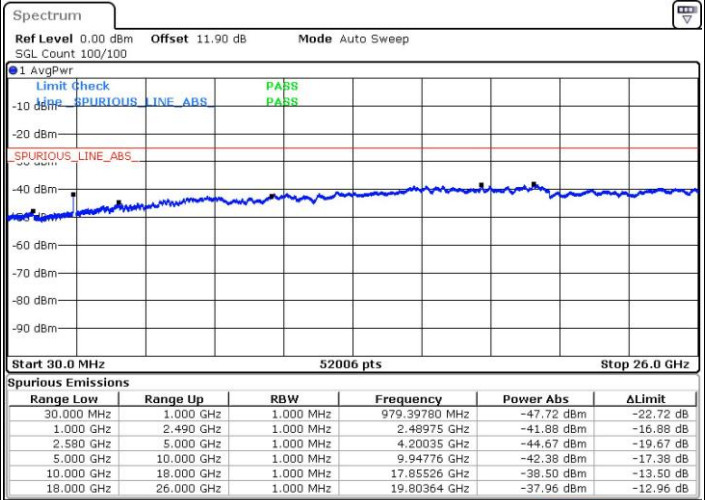
LTE Band 7 / 15MHz

Lowest Channel / QPSK



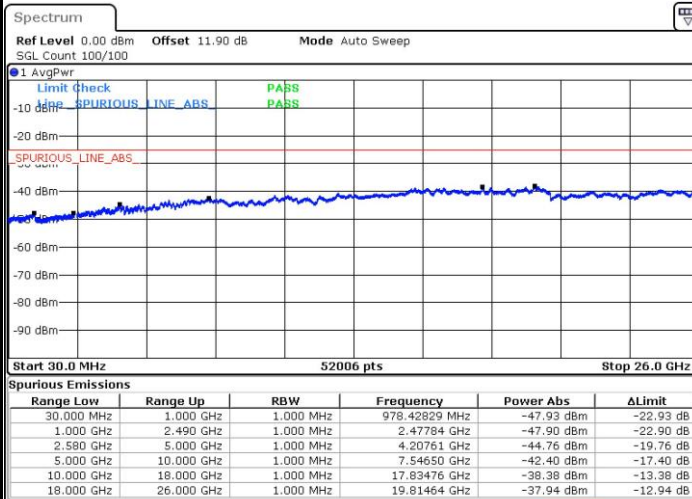
Date: 8 JAN 2019 14:18:52

Lowest Channel / 16QAM



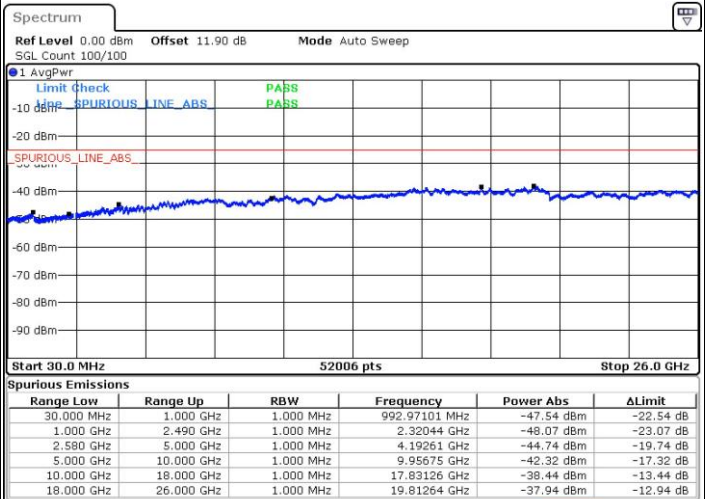
Date: 8 JAN 2019 14:19:52

Middle Channel / QPSK



Date: 8 JAN 2019 14:21:39

Middle Channel / 16QAM

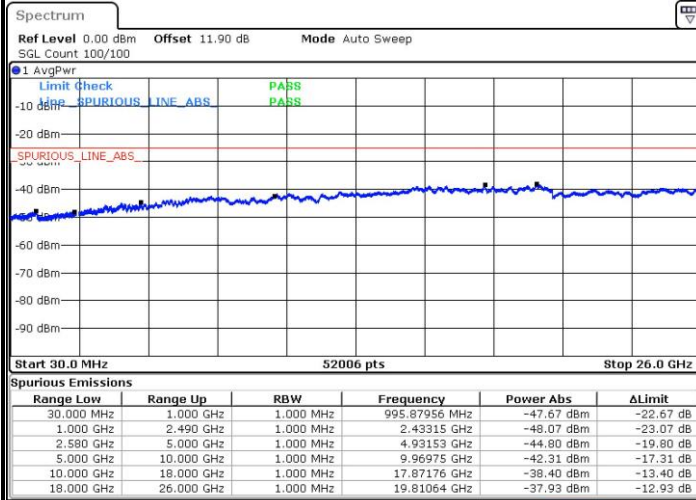


Date: 8 JAN 2019 14:22:39



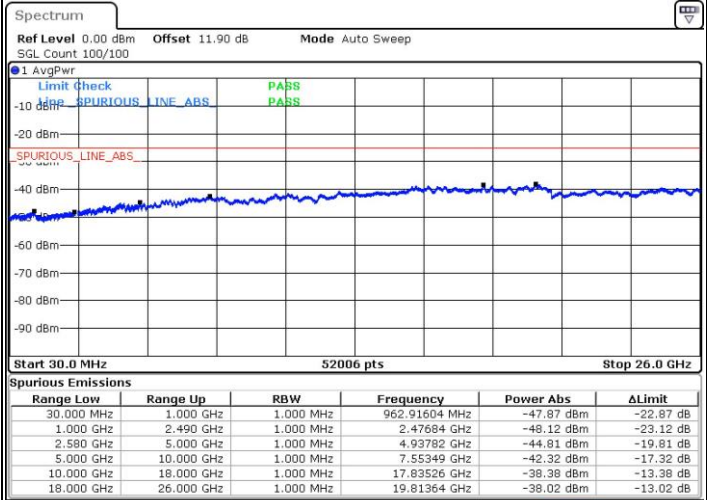
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 8 JAN 2019 14:27:16

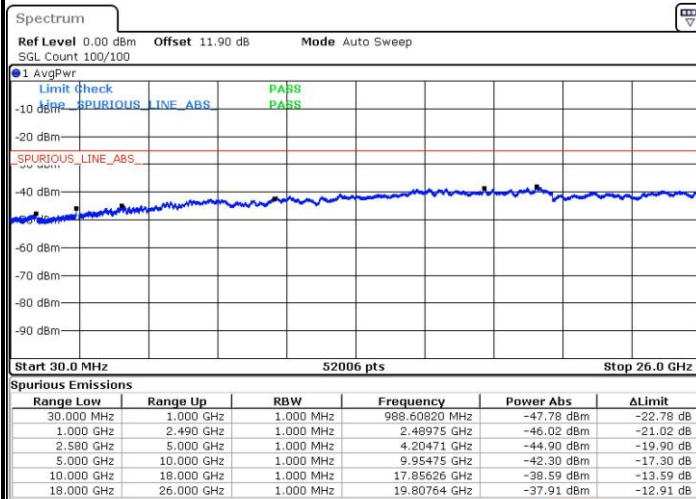
Highest Channel / 16QAM



Date: 8 JAN 2019 14:28:17

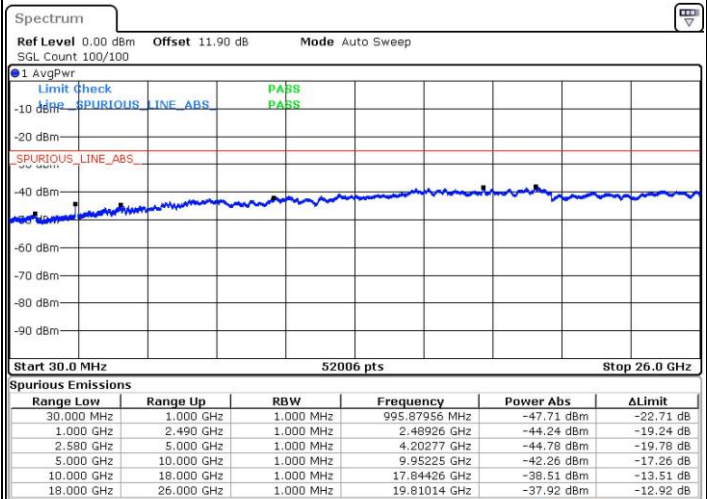
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 8 JAN 2019 14:39:55

Lowest Channel / 16QAM

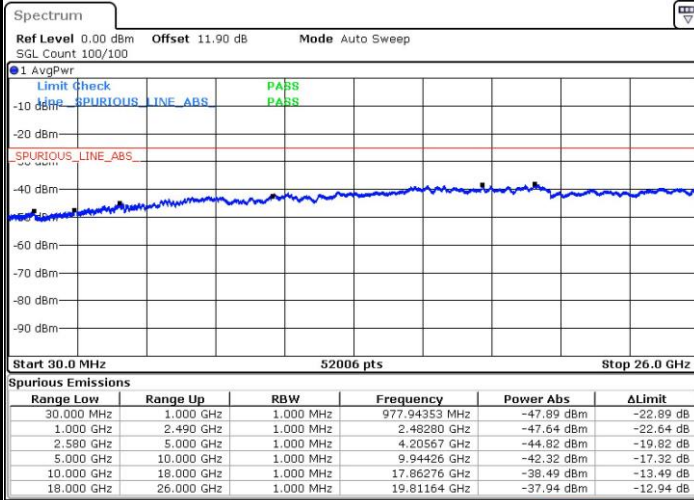


Date: 8 JAN 2019 14:40:55



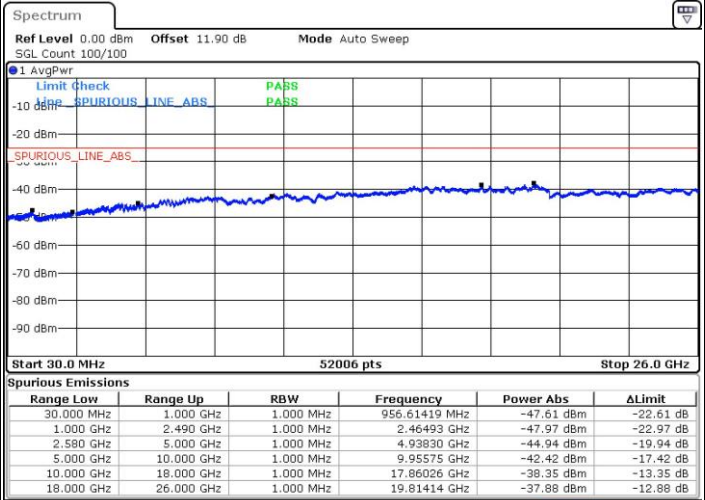
LTE Band 7 / 20MHz

Middle Channel / QPSK



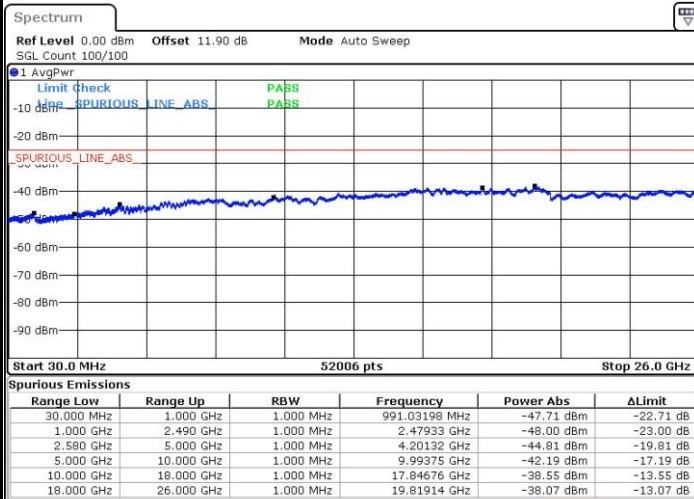
Date: 8 JAN 2019 14:42:43

Middle Channel / 16QAM



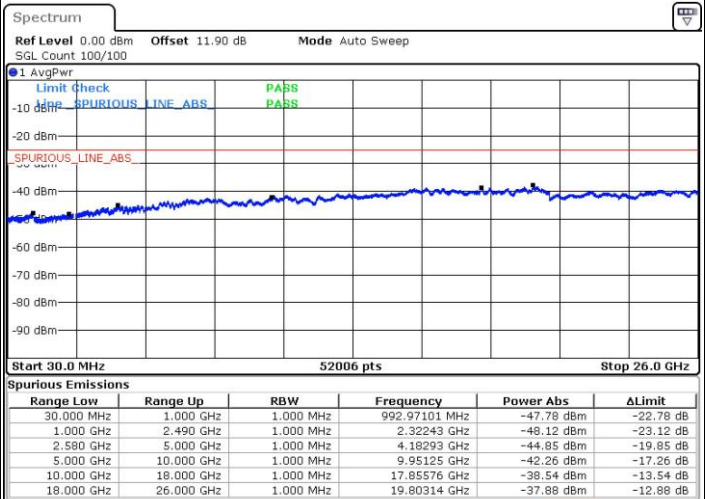
Date: 8 JAN 2019 14:43:43

Highest Channel / QPSK



Date: 8 JAN 2019 14:48:19

Highest Channel / 16QAM

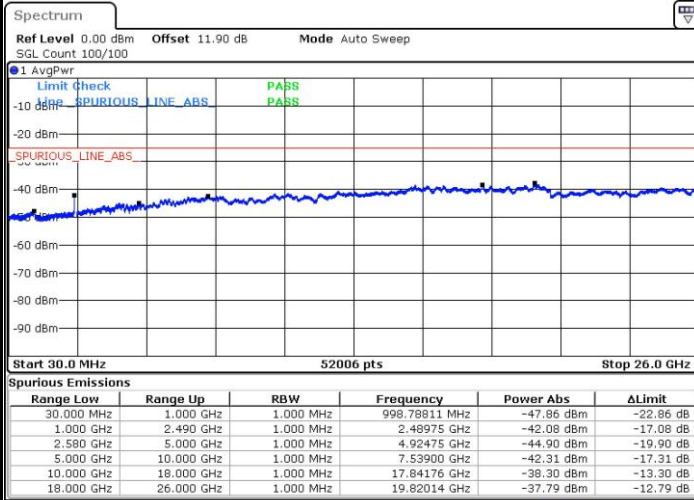


Date: 8 JAN 2019 14:49:20



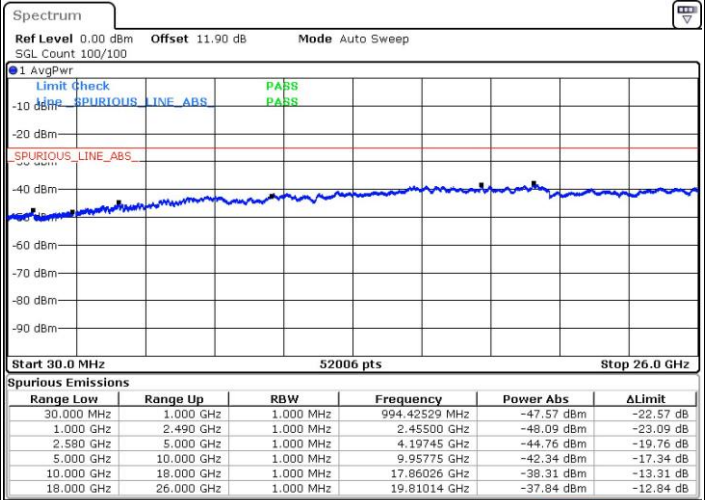
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



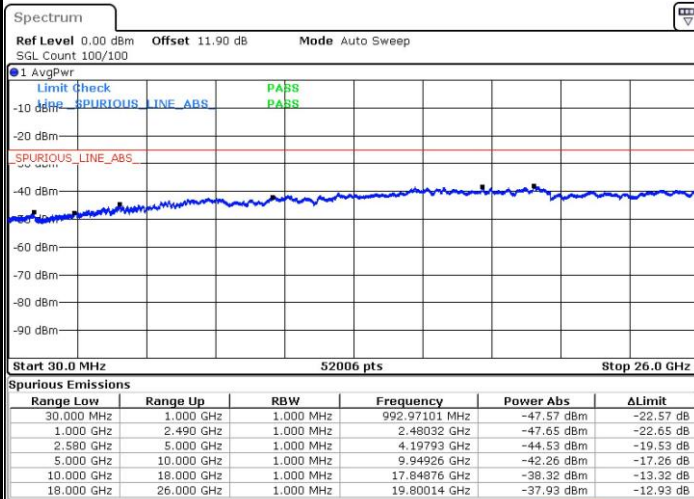
Date: 8 JAN 2019 13:49:00

Middle Channel / 64QAM



Date: 8 JAN 2019 13:50:24

Highest Channel / 64QAM

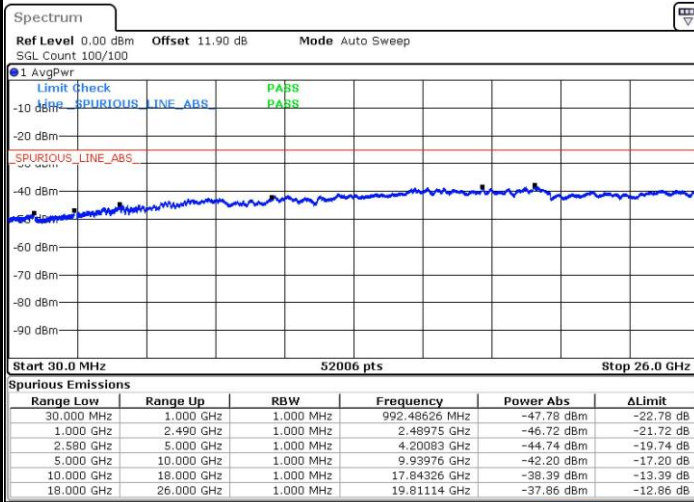


Date: 8 JAN 2019 13:53:12



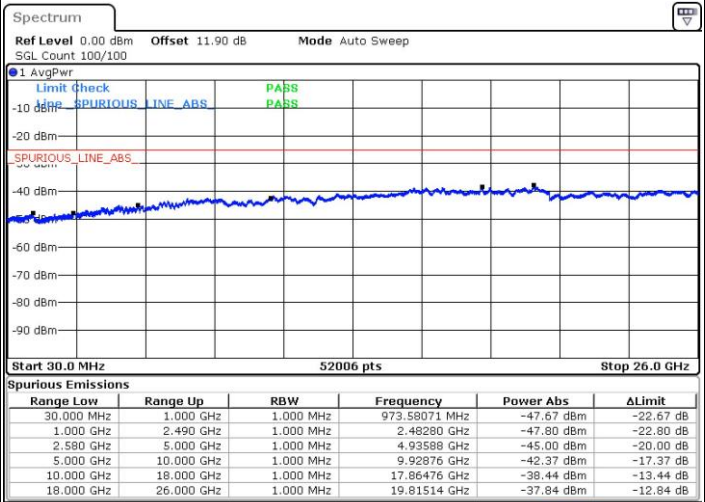
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



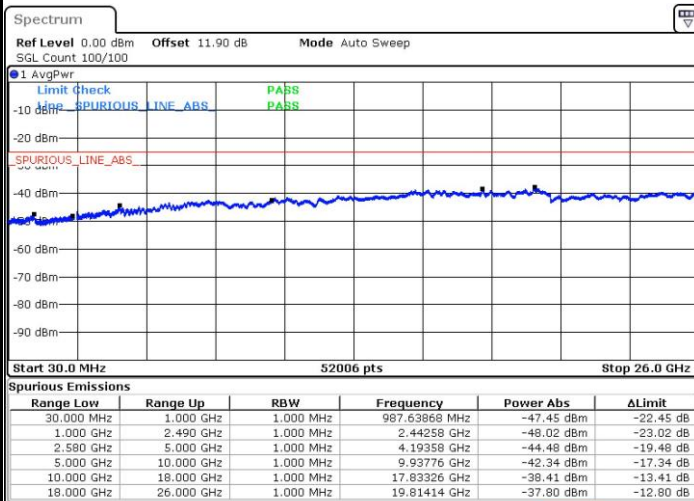
Date: 8 JAN 2019 14:10:02

Middle Channel / 64QAM



Date: 8 JAN 2019 14:11:26

Highest Channel / 64QAM

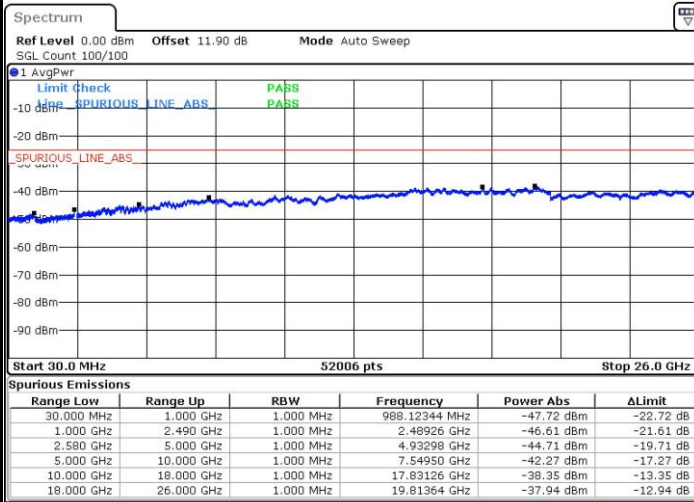


Date: 8 JAN 2019 14:14:14



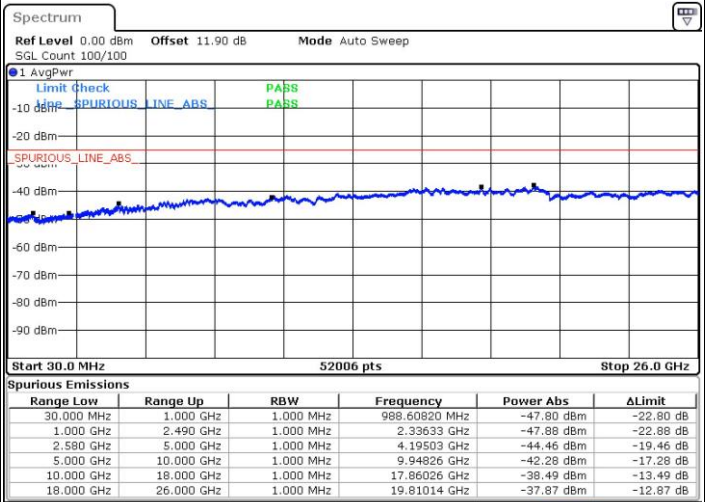
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



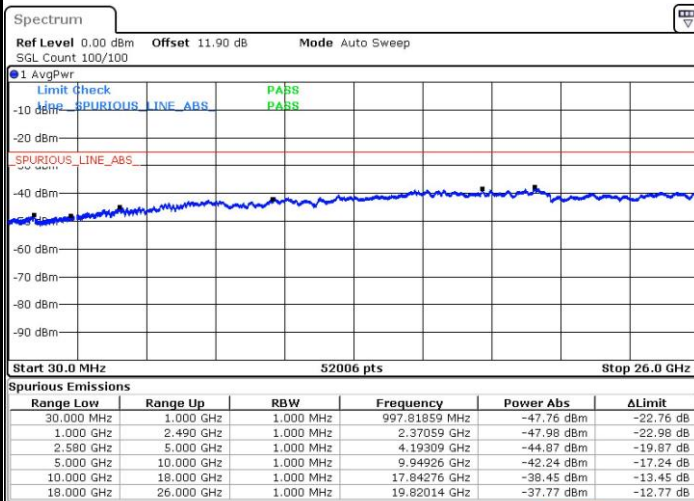
Date: 8 JAN 2019 14:31:06

Middle Channel / 64QAM



Date: 8 JAN 2019 14:32:29

Highest Channel / 64QAM

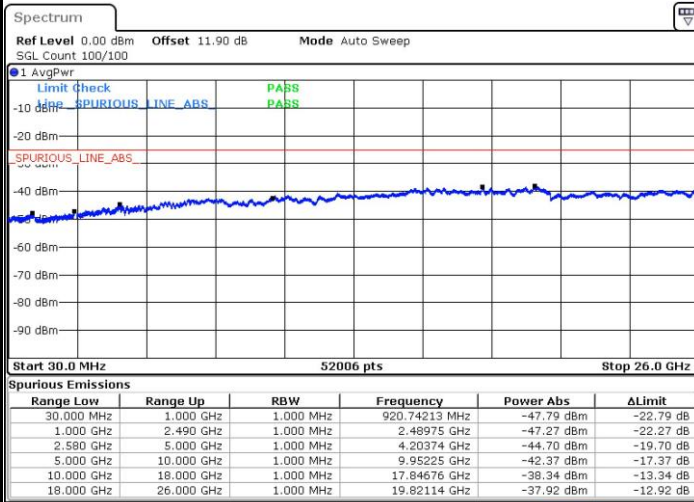


Date: 8 JAN 2019 14:35:18



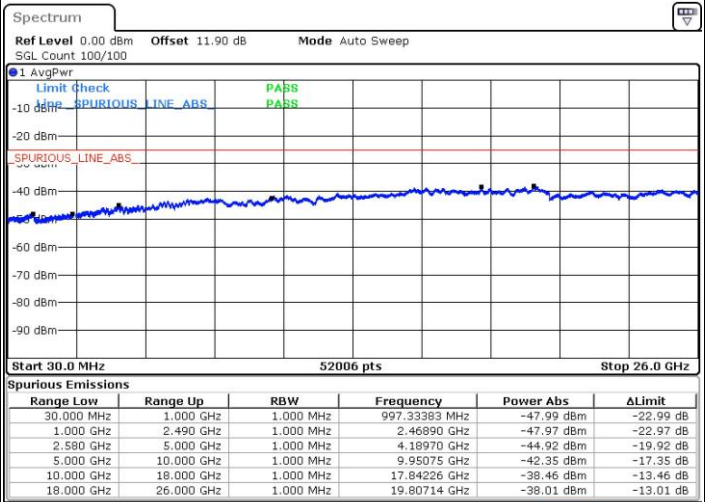
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



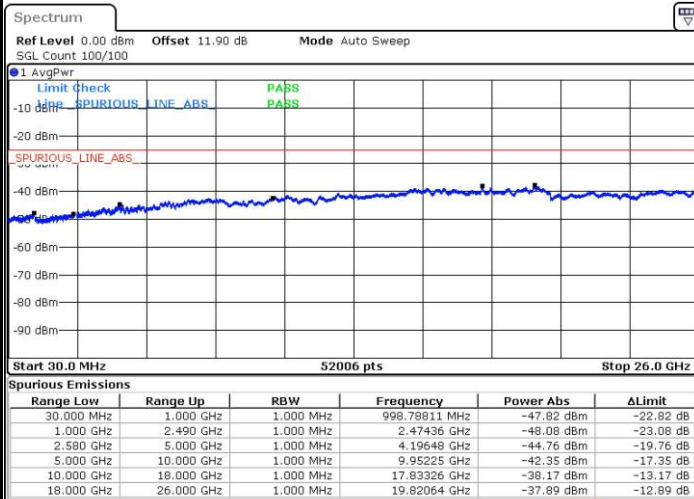
Date: 8 JAN 2019 14:52:08

Middle Channel / 64QAM



Date: 8 JAN 2019 14:53:32

Highest Channel / 64QAM



Date: 8 JAN 2019 14:56:20

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0069	PASS
40	Normal Voltage	0.0069	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0072	
0	Normal Voltage	0.0066	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0067	

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.



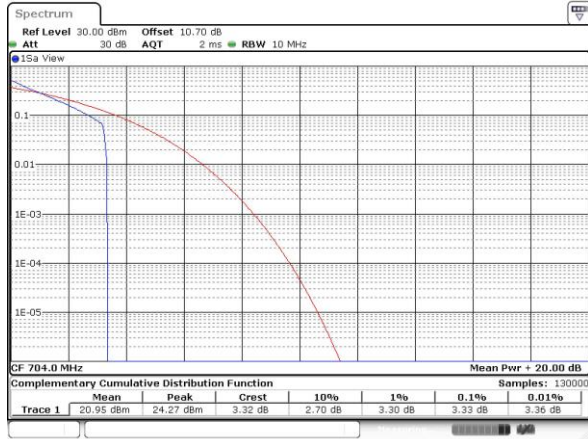
LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.33	4.29	4.06	5.33	PASS
Middle CH	3.3	4.35	4.12	5.33	
Highest CH	3.39	4.32	4.23	5.36	
Mode	LTE Band 12 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	4.99	6.00	-	-	PASS
Middle CH	5.19	6.03	-	-	
Highest CH	5.04	6.00	-	-	

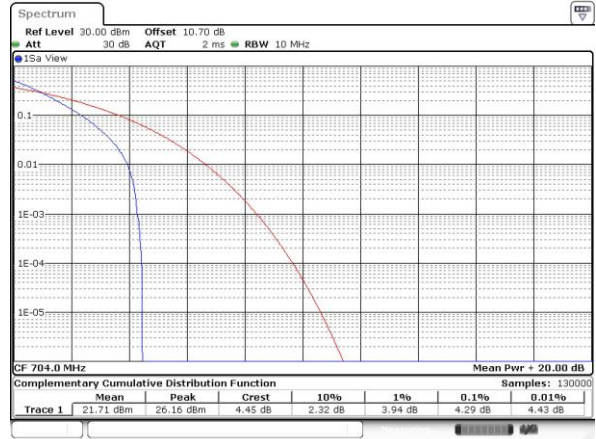
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



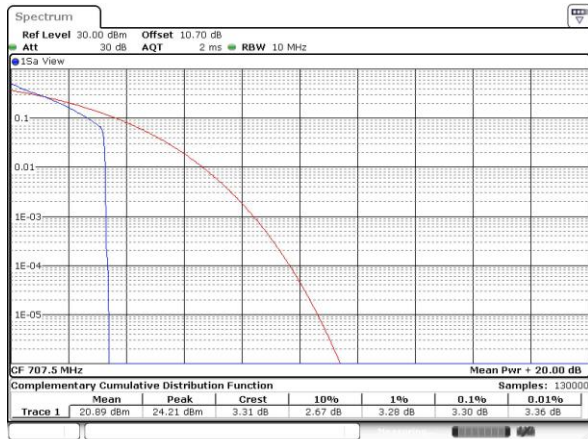
Date: 7 JAN 2019 16:30:53

Lowest Channel / Full RB



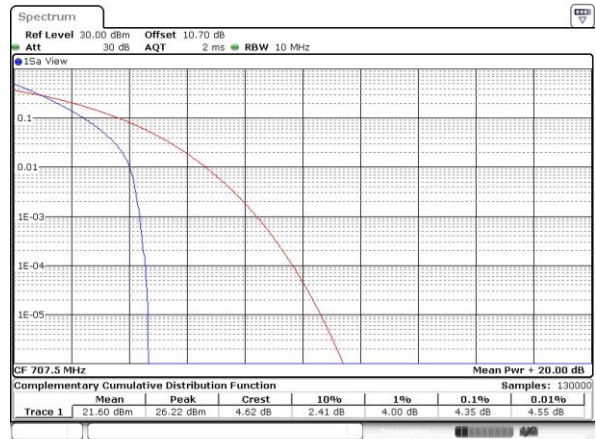
Date: 7 JAN 2019 16:30:43

Middle Channel / 1RB



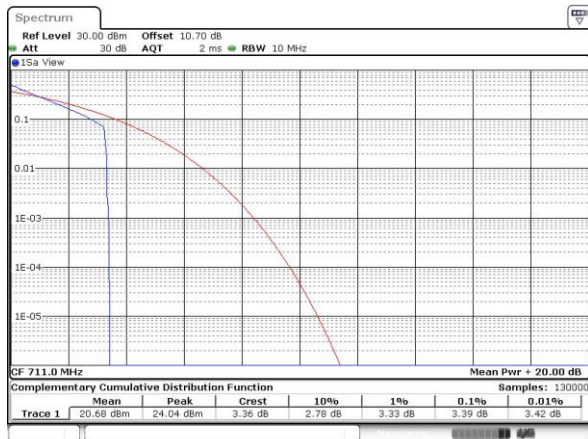
Date: 7 JAN 2019 16:31:03

Middle Channel / Full RB



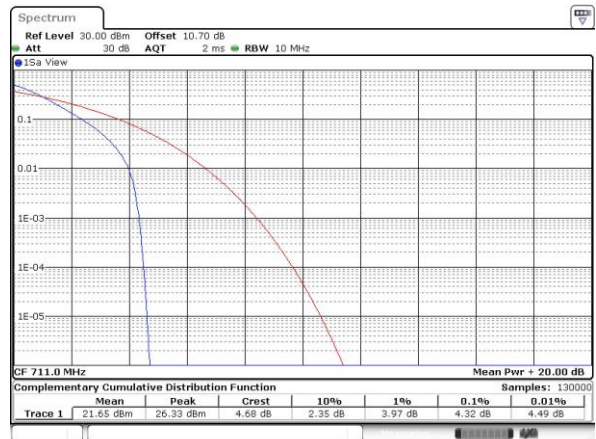
Date: 7 JAN 2019 16:31:13

Highest Channel / 1RB



Date: 7 JAN 2019 16:31:32

Highest Channel / Full RB

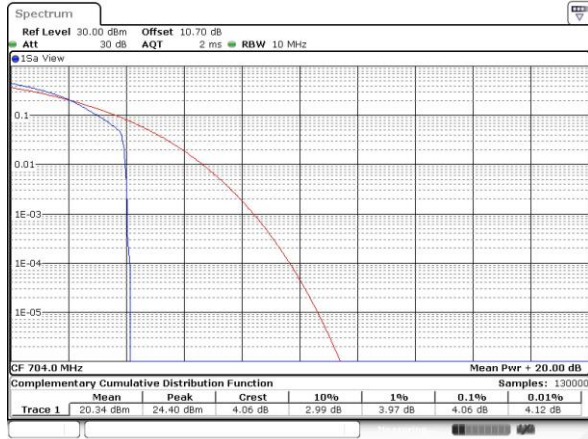


Date: 7 JAN 2019 16:31:23

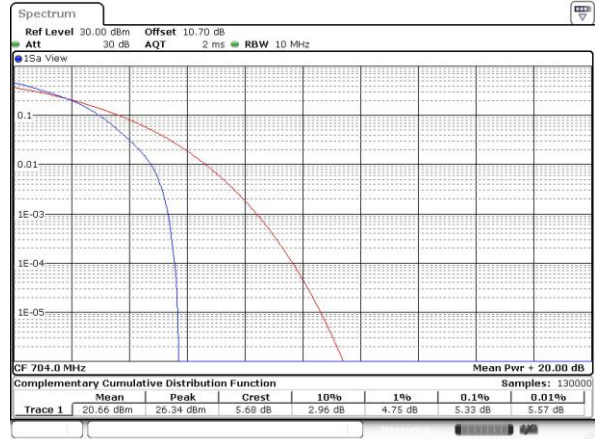


LTE Band 12 / 10MHz / 16QAM

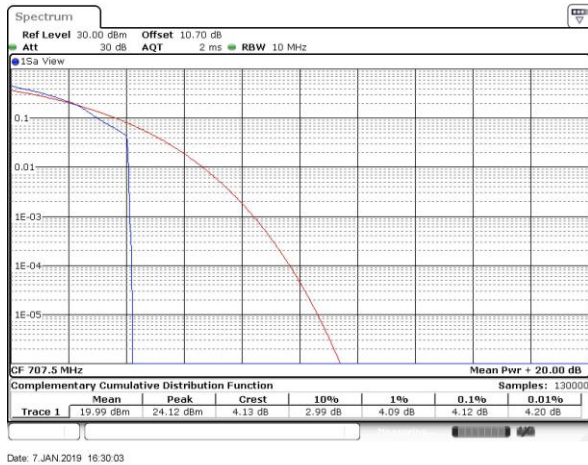
Lowest Channel / 1RB



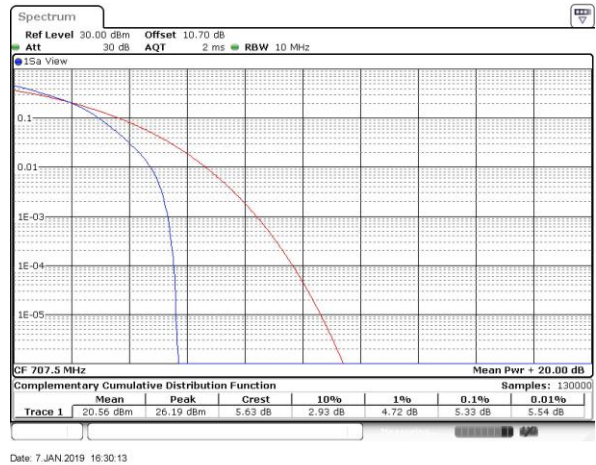
Lowest Channel / Full RB



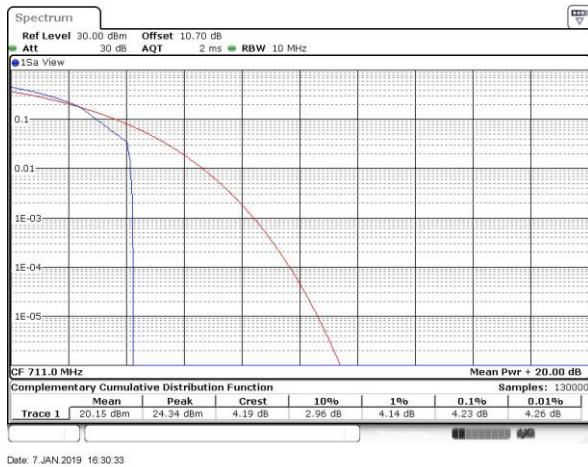
Middle Channel / 1RB



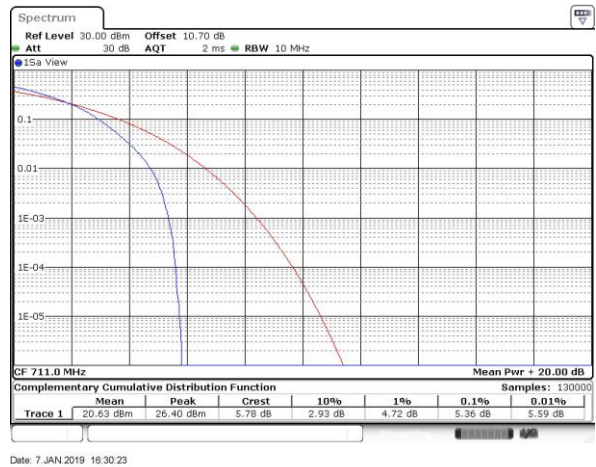
Middle Channel / Full RB



Highest Channel / 1RB



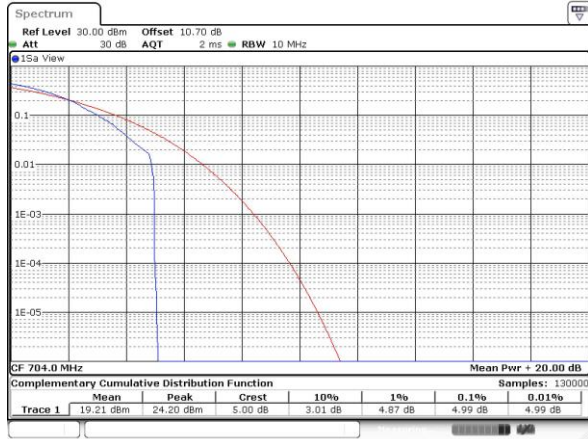
Highest Channel / Full RB





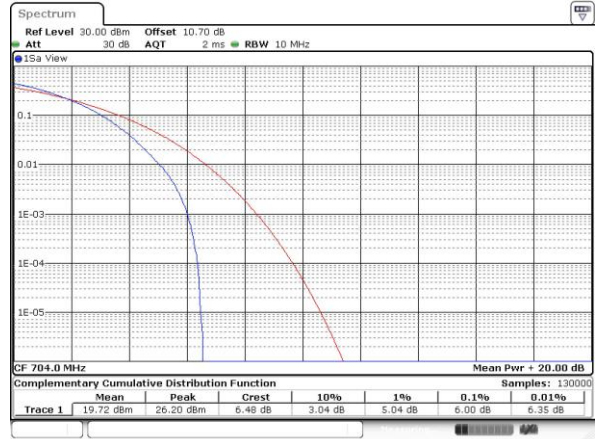
LTE Band 12 / 10MHz / 64QAM

Lowest Channel / 1RB



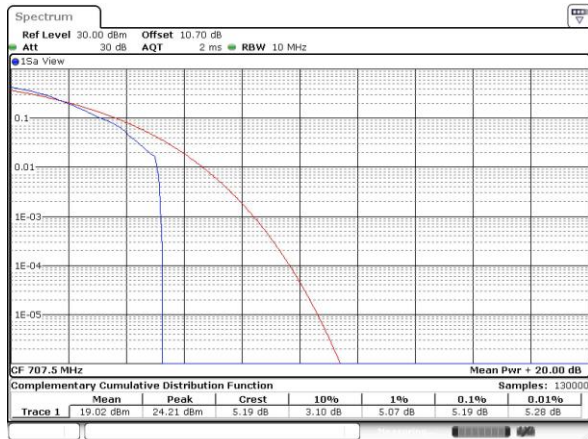
Date: 7 JAN 2019 16:22:21

Lowest Channel / Full RB



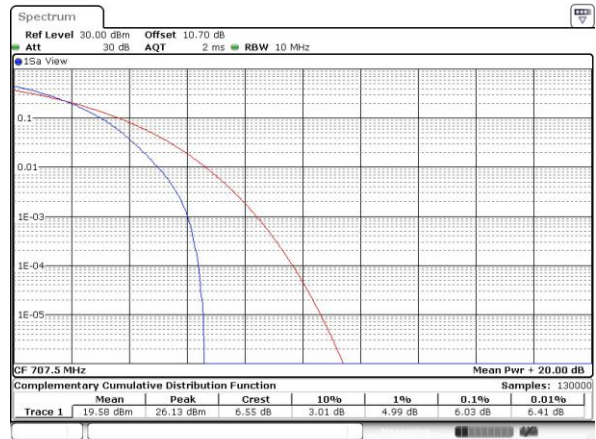
Date: 7 JAN 2019 16:17:49

Middle Channel / 1RB



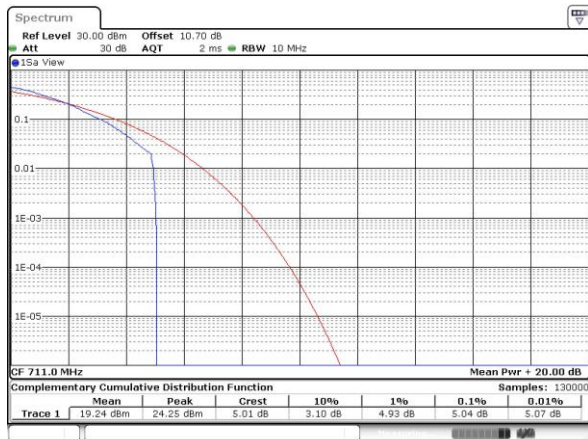
Date: 7 JAN 2019 16:22:45

Middle Channel / Full RB



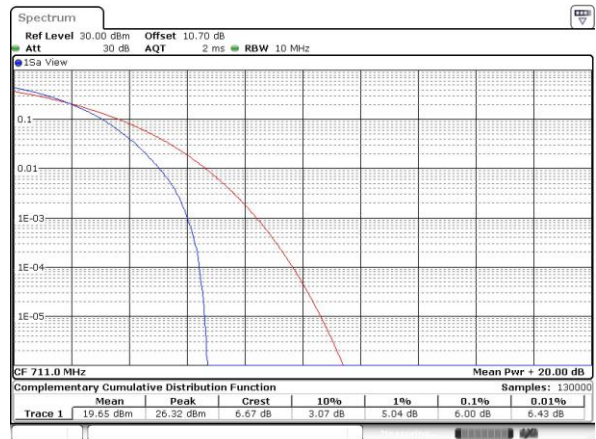
Date: 7 JAN 2019 16:29:13

Highest Channel / 1RB



Date: 7 JAN 2019 16:29:33

Highest Channel / Full RB



Date: 7 JAN 2019 16:29:23

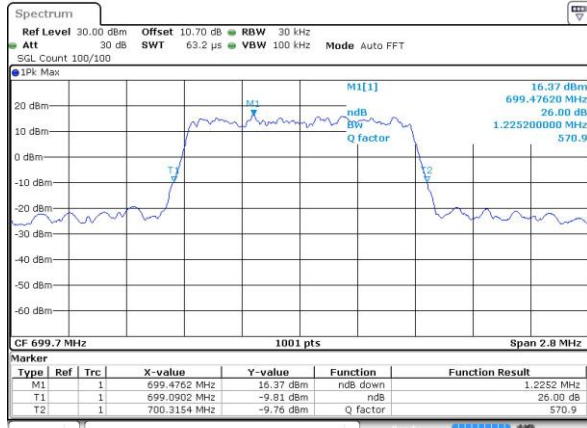
**26dB Bandwidth**

Mode	LTE Band 12 : 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	1.23	1.25	3.03	3.07	4.93	4.92	9.81	9.79	-	-	-	-
Middle CH	1.23	1.23	3.02	3.05	4.93	4.92	9.93	9.69	-	-	-	-
Highest CH	1.23	1.23	3.00	3.06	4.95	4.89	9.77	9.79	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.23	-	3.03	-	4.88	-	9.91	-	-	-	-	-
Middle CH	1.23	-	2.99	-	4.91	-	9.69	-	-	-	-	-
Highest CH	1.23	-	3.05	-	4.92	-	9.69	-	-	-	-	-



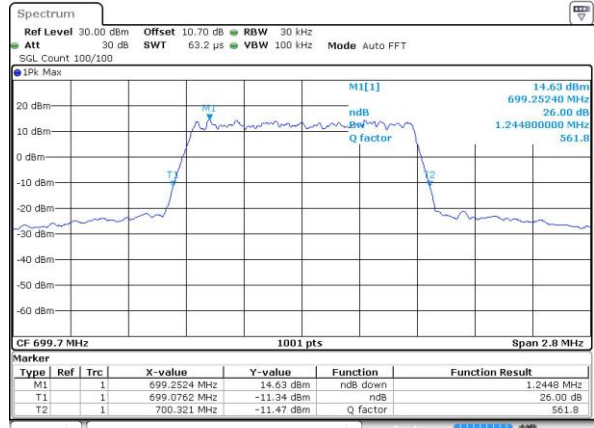
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



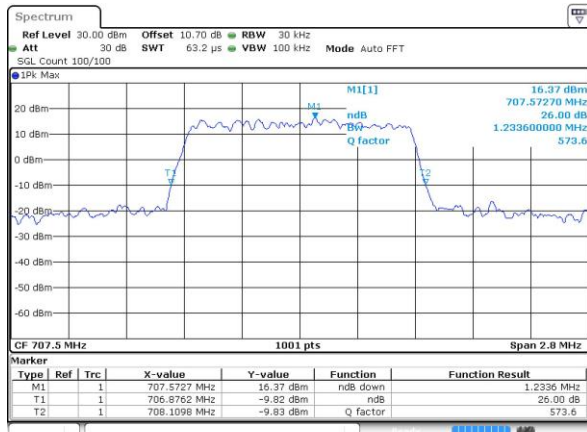
Date: 7 JAN 2019 15:01:45

Lowest Channel / 1.4MHz / 16QAM



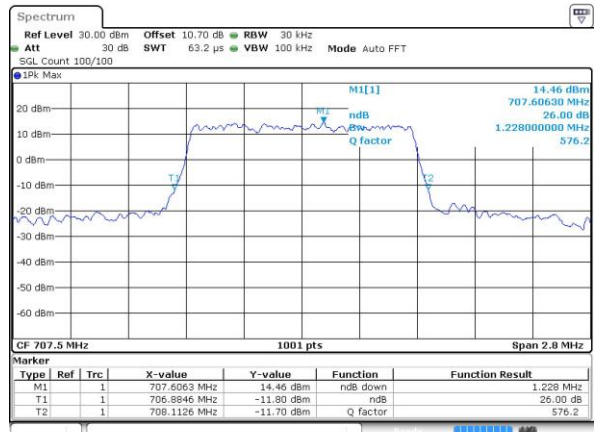
Date: 7 JAN 2019 15:01:33

Middle Channel / 1.4MHz / QPSK



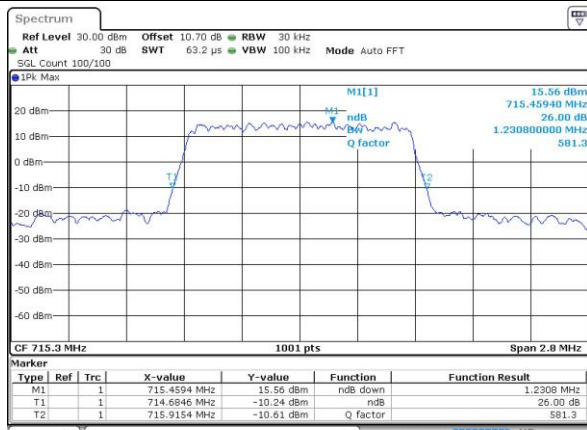
Date: 7 JAN 2019 15:08:20

Middle Channel / 1.4MHz / 16QAM



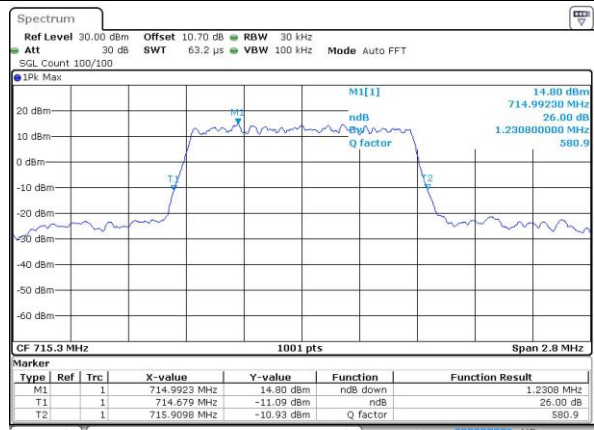
Date: 7 JAN 2019 15:08:32

Highest Channel / 1.4MHz / QPSK



Date: 7 JAN 2019 15:11:18

Highest Channel / 1.4MHz / 16QAM

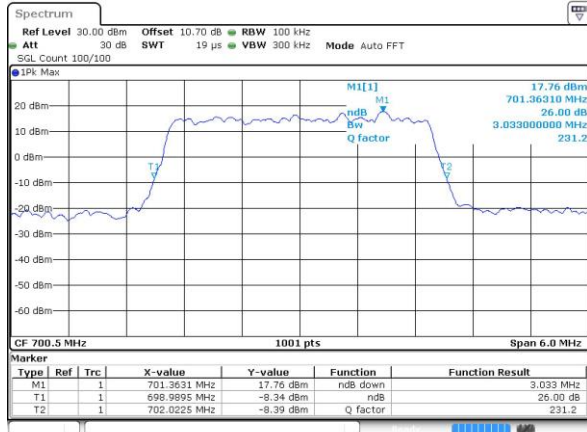


Date: 7 JAN 2019 15:11:06

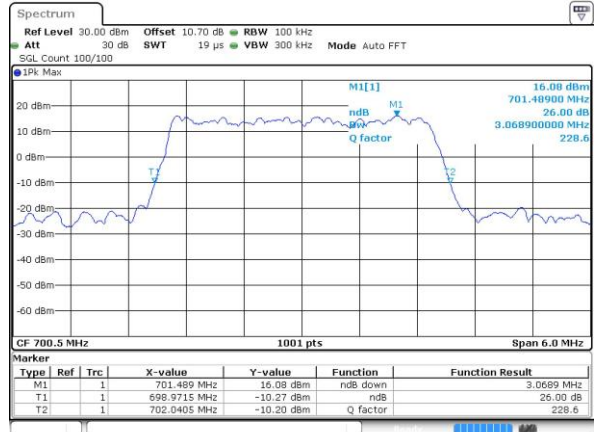


LTE Band 12

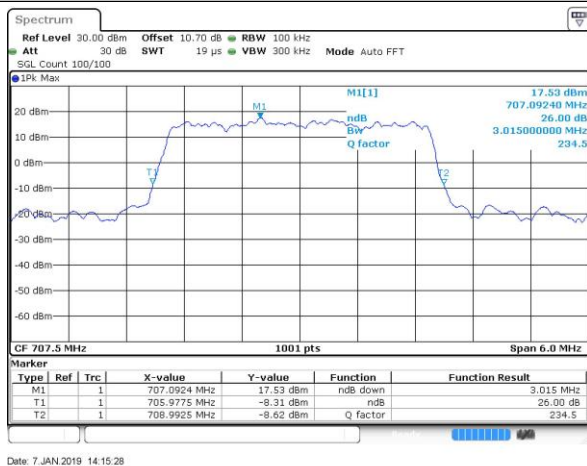
Lowest Channel / 3MHz / QPSK



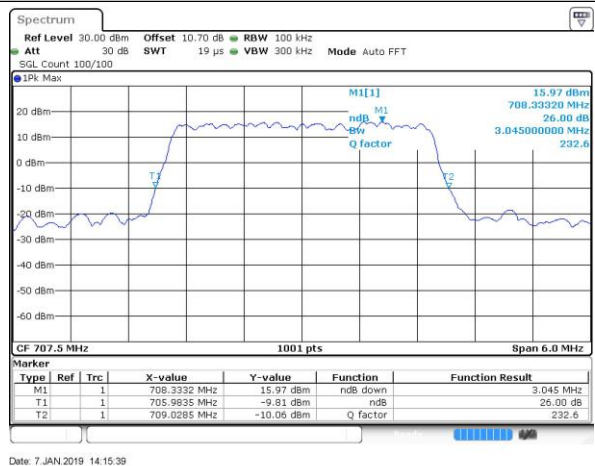
Lowest Channel / 3MHz / 16QAM



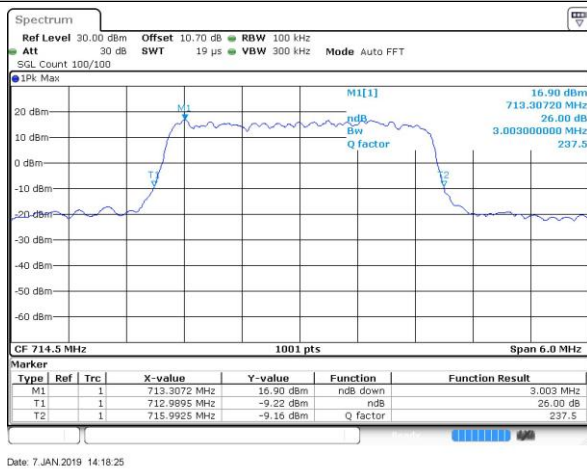
Middle Channel / 3MHz / QPSK



Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



Highest Channel / 3MHz / 16QAM

