



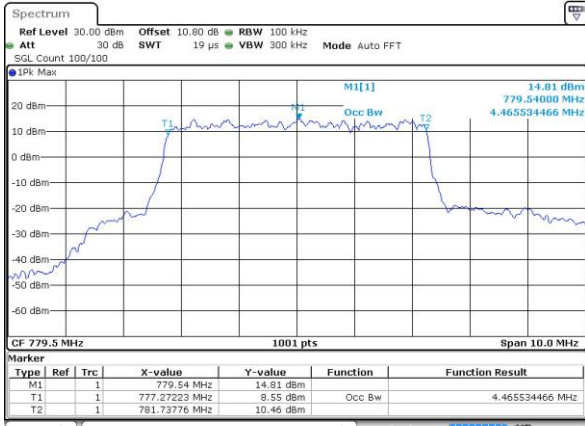
Occupied Bandwidth

Mode	LTE Band 13 : 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	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.47	9.05	9.01	-	-	-	-
Highest CH	-	-	-	-	4.49	4.51	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.48	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	-	9.03	-	-	-	-	-
Highest CH	-	-	-	-	4.51	-	-	-	-	-	-	-



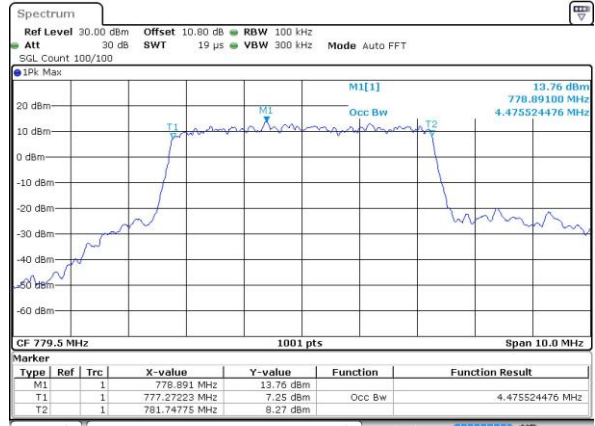
LTE Band 13

Lowest Channel / 5MHz / QPSK



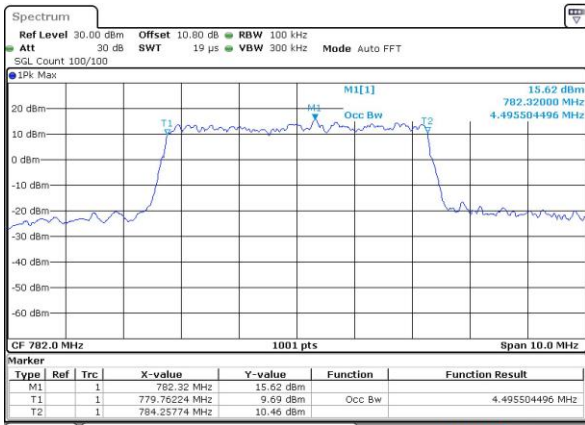
Date: 15.FEB.2019 16:52:26

Lowest Channel / 5MHz / 16QAM



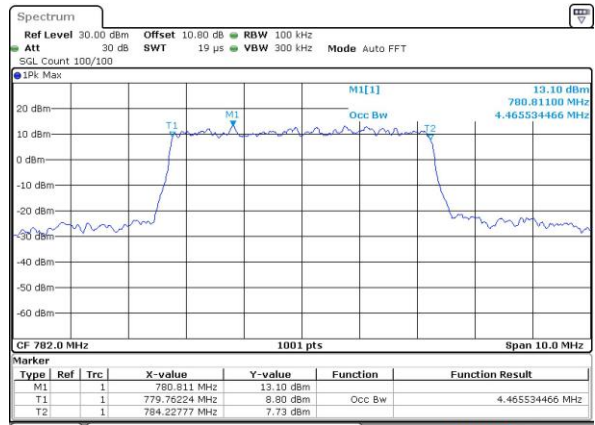
Date: 15.FEB.2019 16:52:37

Middle Channel / 5MHz / QPSK



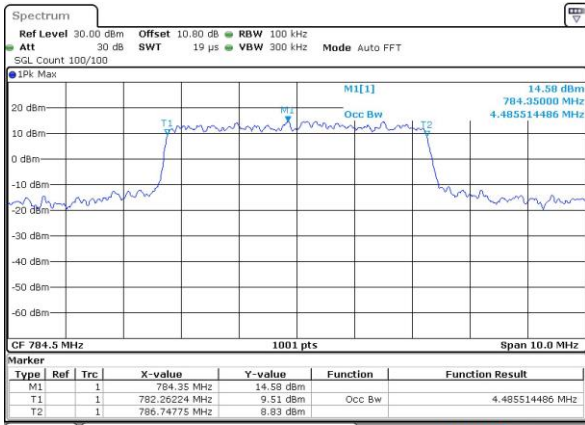
Date: 15.FEB.2019 17:03:06

Middle Channel / 5MHz / 16QAM



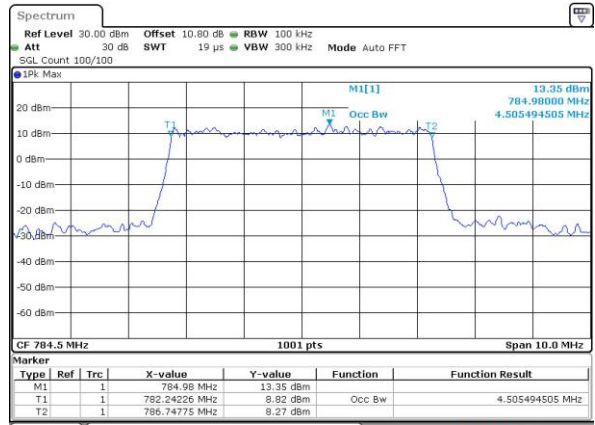
Date: 15.FEB.2019 17:02:55

Highest Channel / 5MHz / QPSK



Date: 15.FEB.2019 17:03:18

Highest Channel / 5MHz / 16QAM

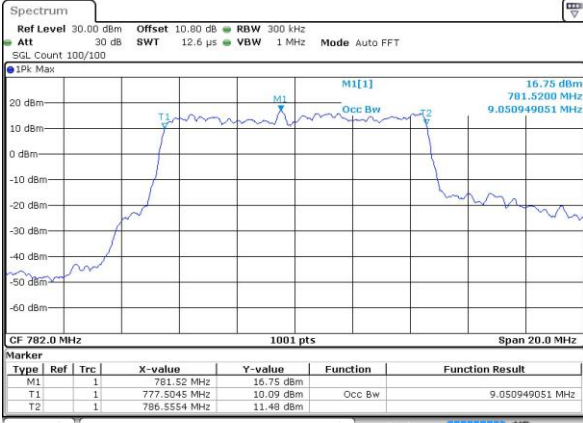


Date: 15.FEB.2019 17:03:29



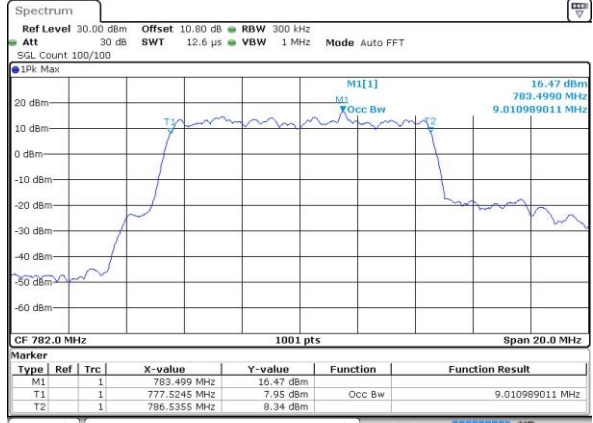
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 15 FEB 2019 17:21:54

Middle Channel / 10MHz / 16QAM

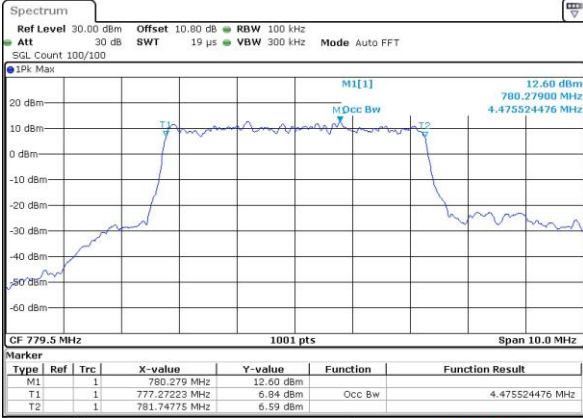


Date: 15 FEB 2019 17:22:05



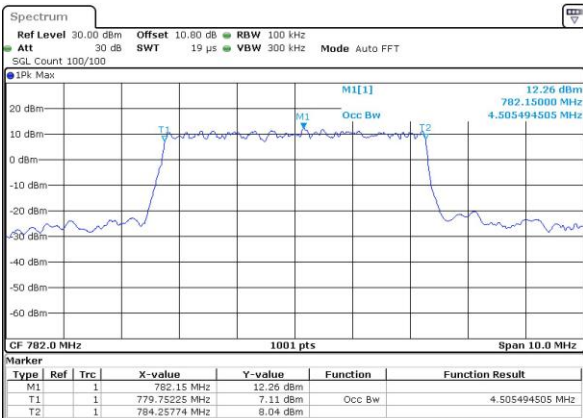
LTE Band 13

Lowest Channel / 5MHz / 64QAM



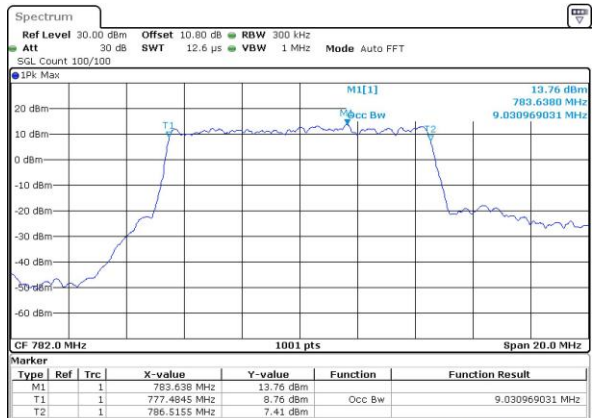
Date: 15.FEB.2019 17:12:04

Middle Channel / 5MHz / 64QAM



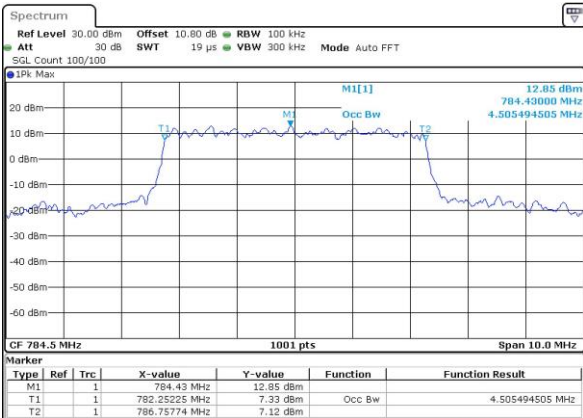
Date: 15.FEB.2019 17:17:19

Middle Channel / 10MHz / 64QAM



Date: 15.FEB.2019 17:34:01

Highest Channel / 5MHz / 64QAM



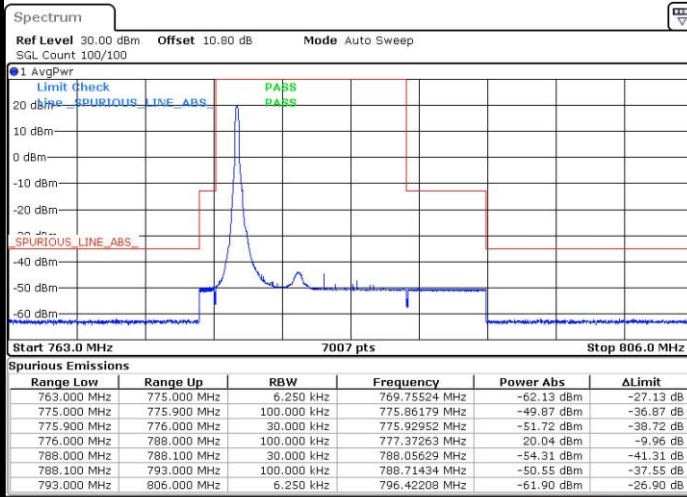
Date: 15.FEB.2019 17:17:31



Conducted Band Edge

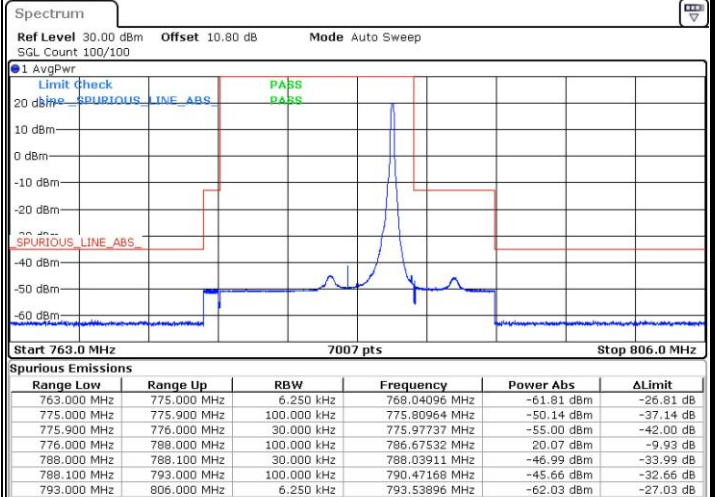
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



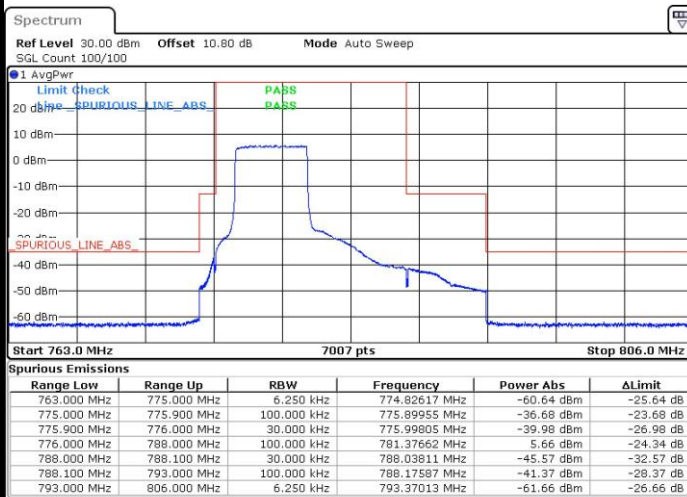
Date: 15.FEB.2019 21:45:11

Highest Band Edge / 1 RB



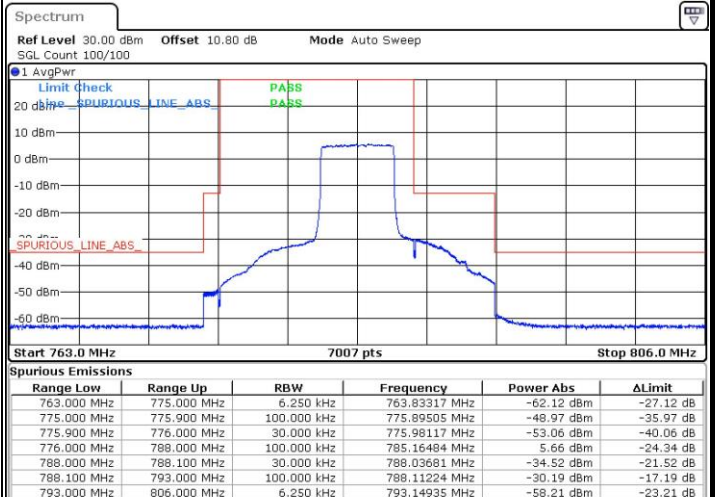
Date: 15.FEB.2019 21:51:53

Lowest Band Edge / Full RB



Date: 15.FEB.2019 21:36:38

Highest Band Edge / Full RB



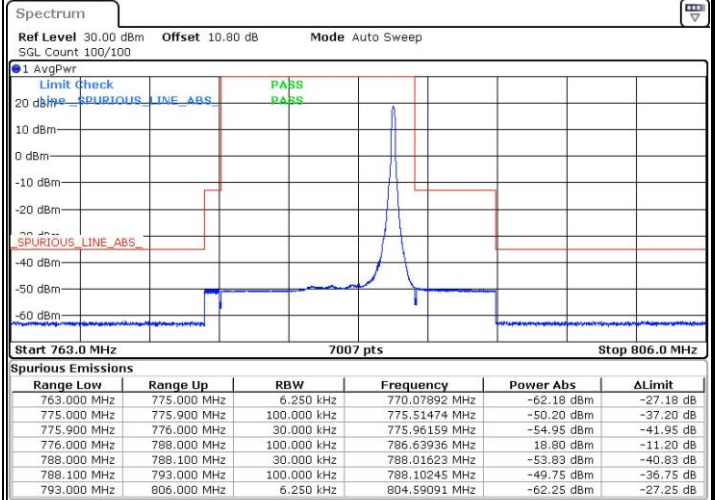
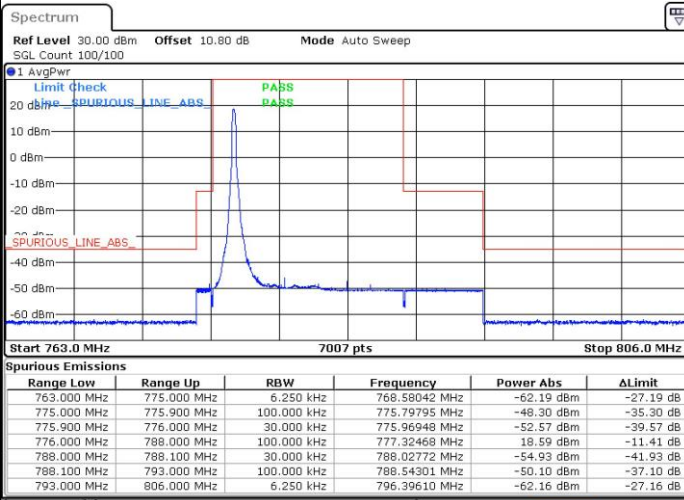
Date: 15.FEB.2019 21:46:52



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

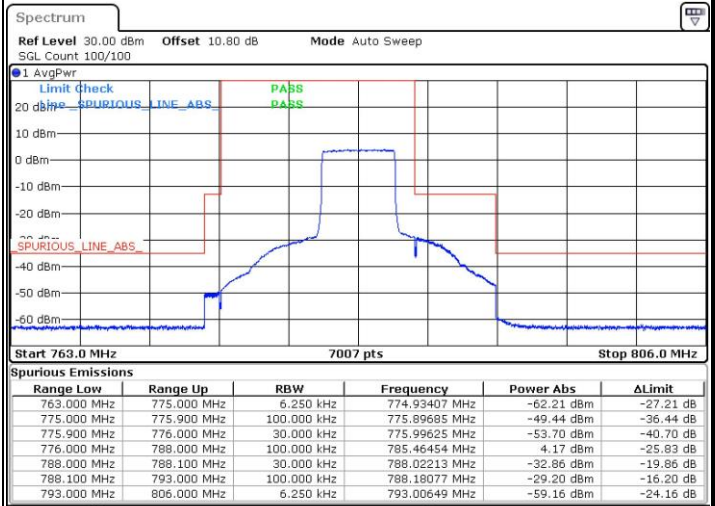
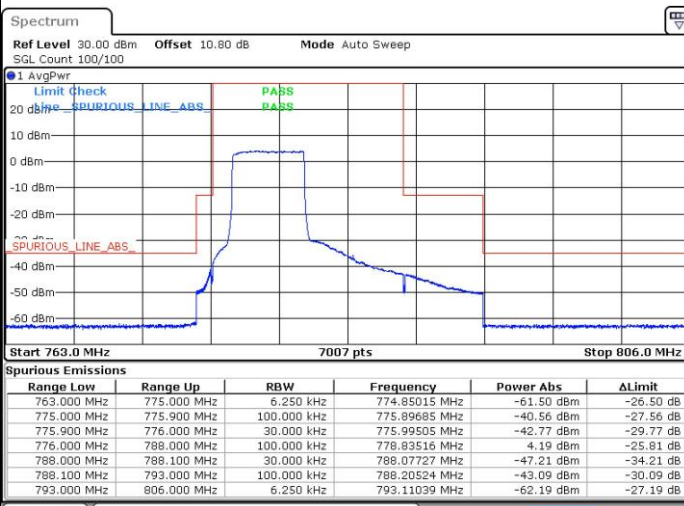


Date: 15.FEB.2019 21:43:31

Date: 15.FEB.2019 21:50:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



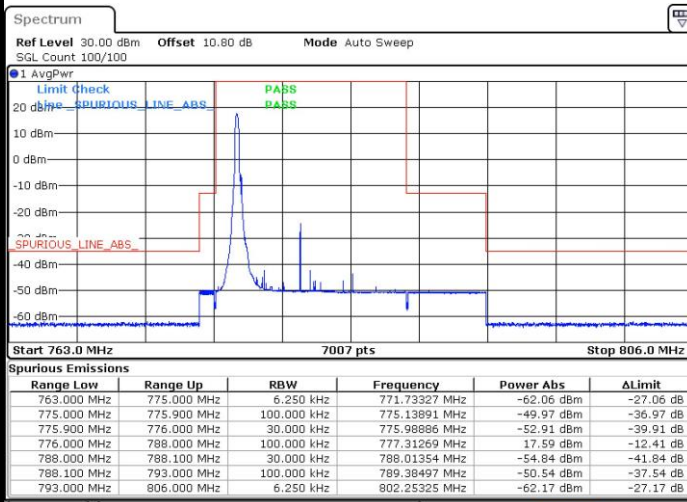
Date: 15.FEB.2019 21:38:19

Date: 15.FEB.2019 21:48:32



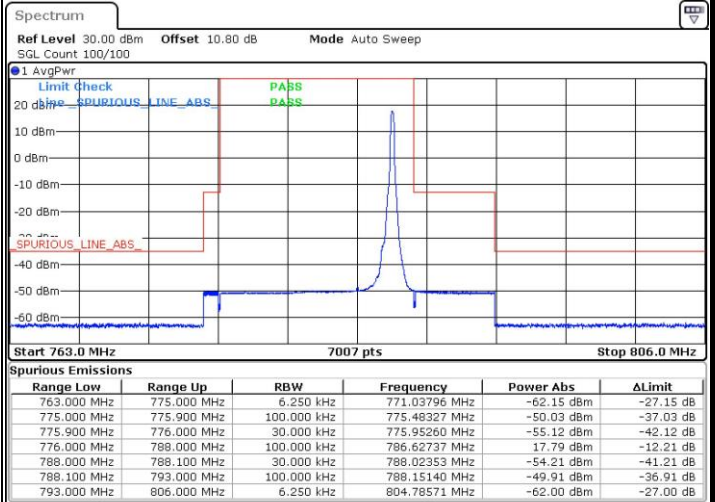
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



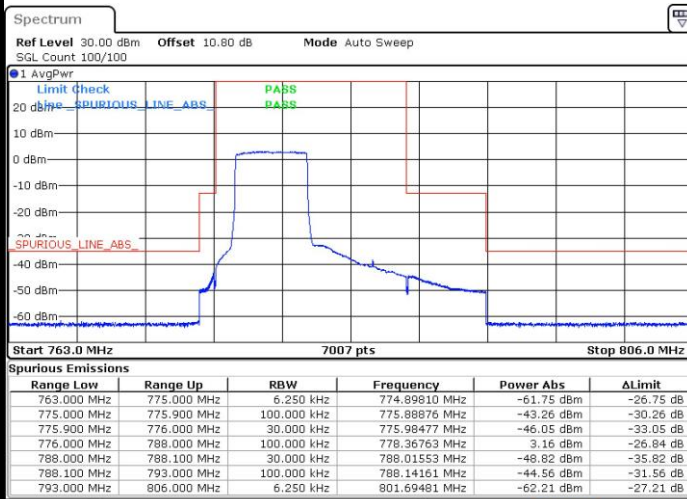
Date: 15.FEB.2019 21:55:13

Highest Band Edge / 1 RB



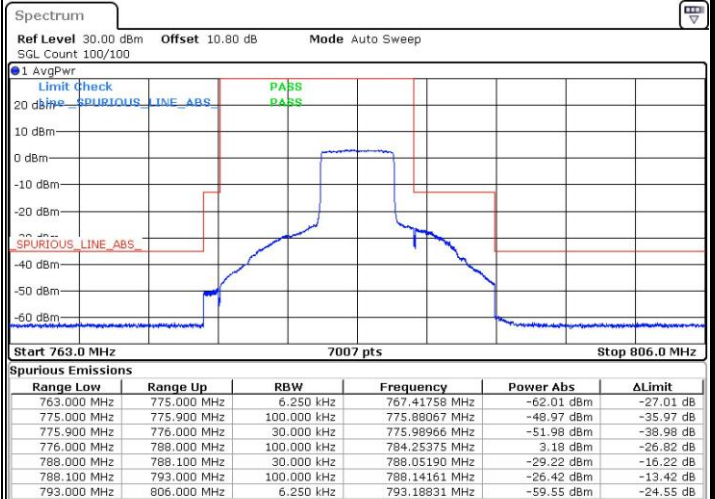
Date: 15.FEB.2019 22:15:31

Lowest Band Edge / Full RB



Date: 15.FEB.2019 21:53:33

Highest Band Edge / Full RB



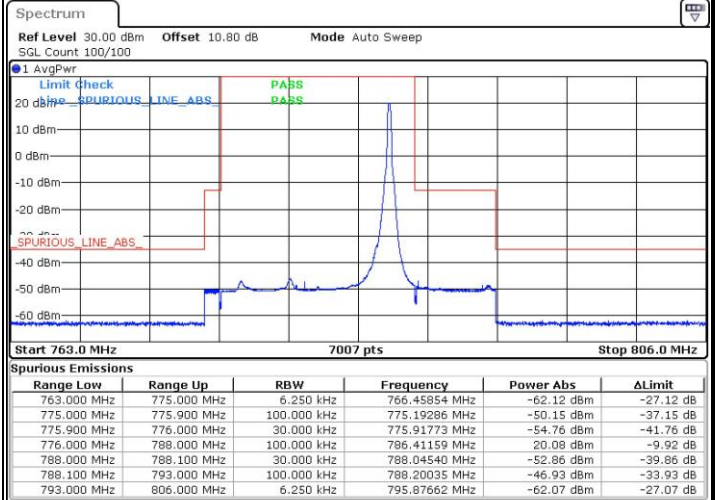
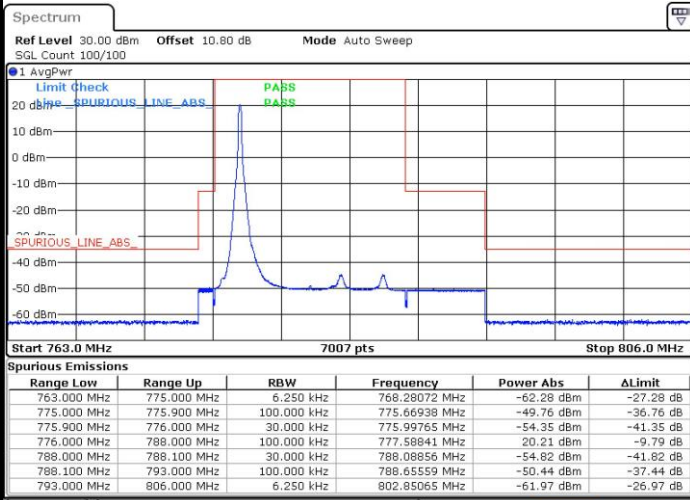
Date: 15.FEB.2019 21:56:54



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

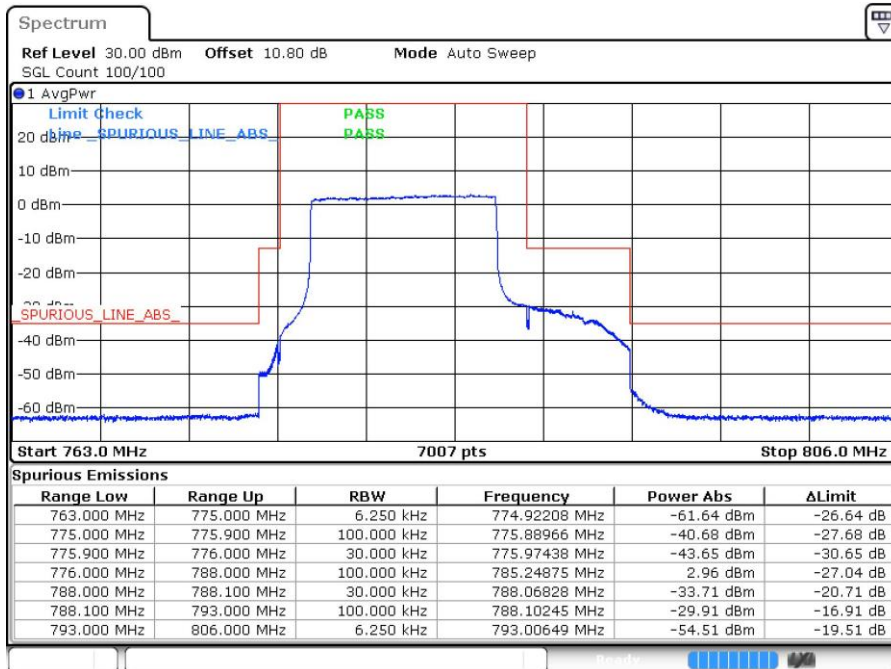
Highest Band Edge / 1 RB



Date: 15.FEB.2019 22:10:16

Date: 15.FEB.2019 22:11:56

Band Edge / Full RB

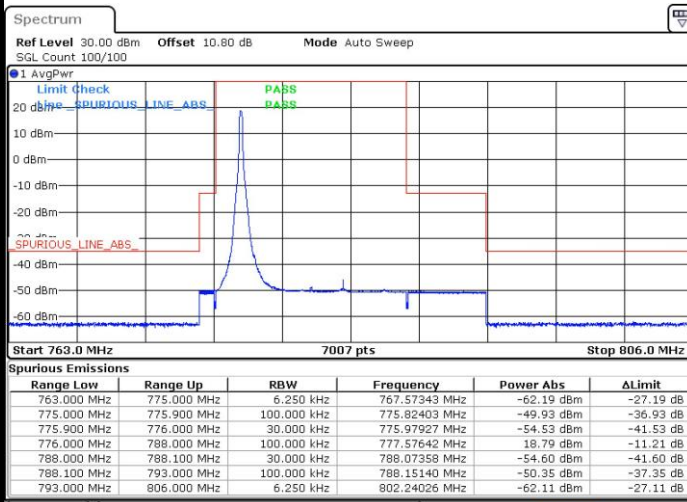


Date: 15.FEB.2019 22:05:15



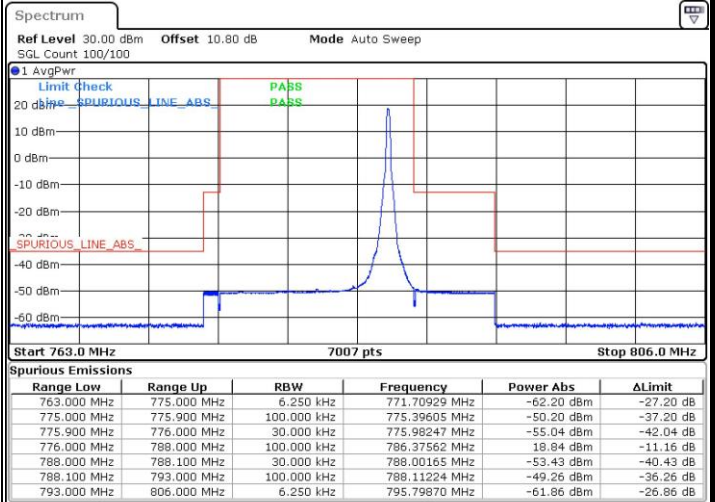
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



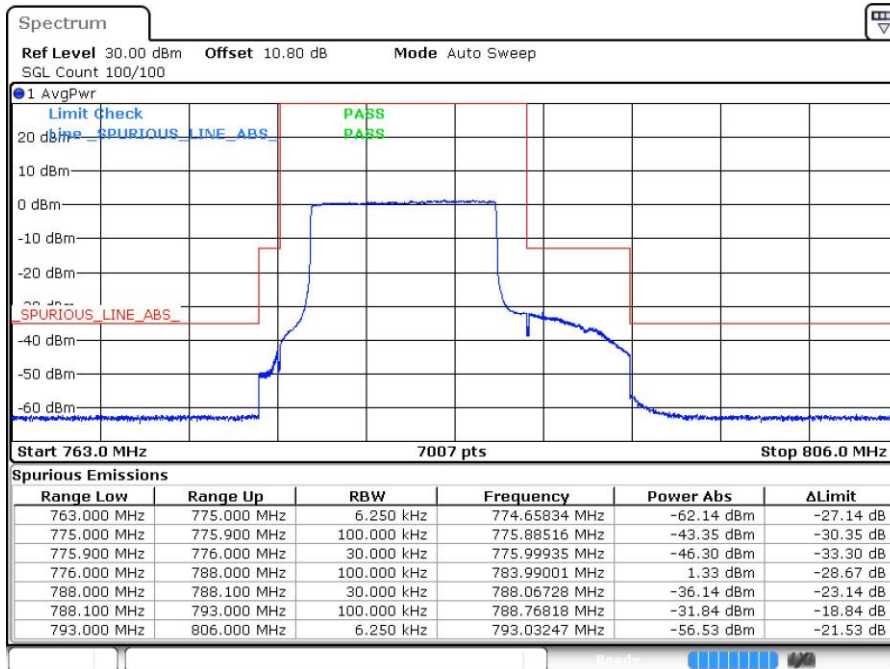
Date: 15.FEB.2019 22:08:36

Highest Band Edge / 1 RB



Date: 15.FEB.2019 22:13:37

Band Edge / Full RB

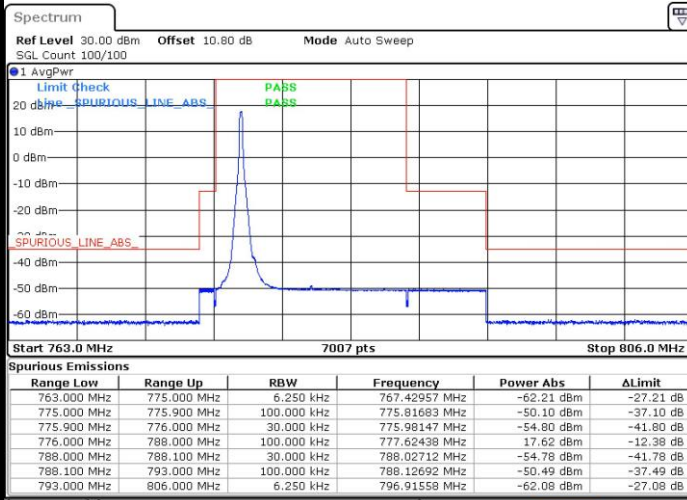


Date: 15.FEB.2019 22:08:55



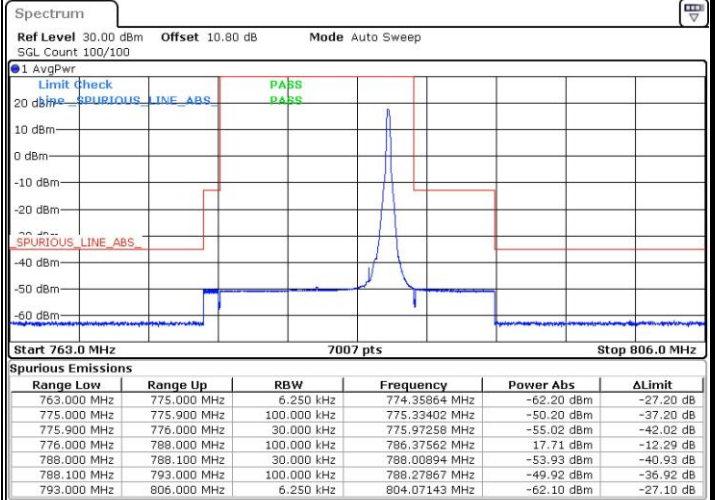
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



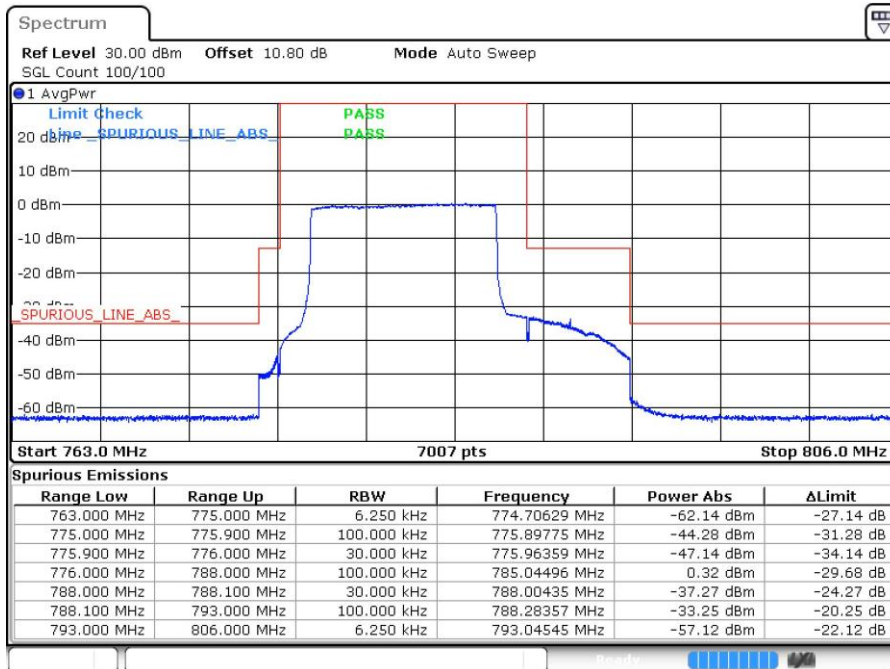
Date: 15.FEB.2019 22:01:55

Highest Band Edge / 1 RB



Date: 15.FEB.2019 22:03:35

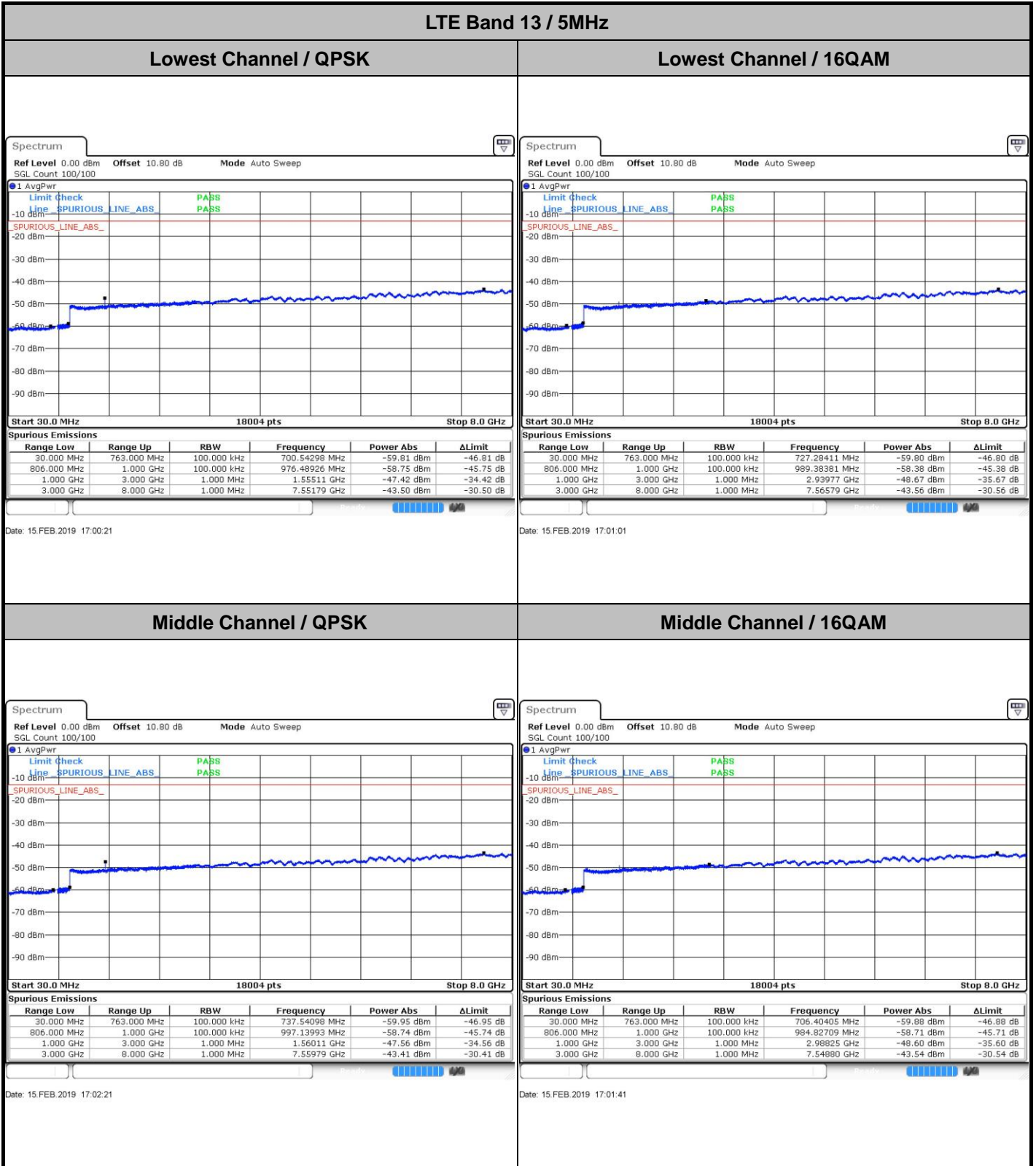
Band Edge / Full RB



Date: 15.FEB.2019 22:00:14



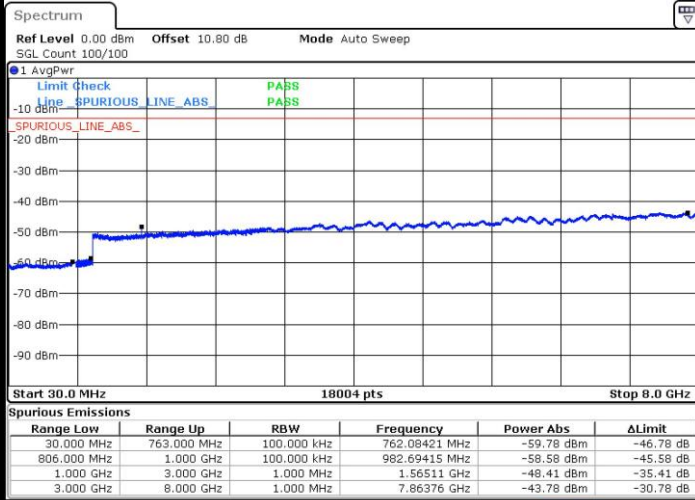
Conducted Spurious Emission





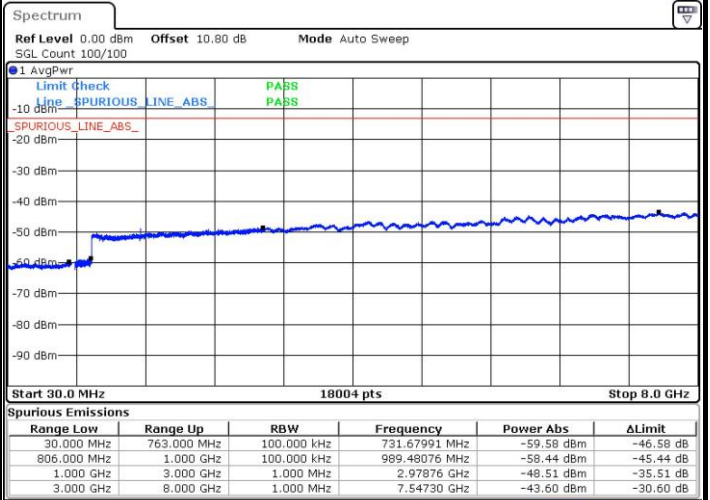
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 15.FEB.2019 17:11:13

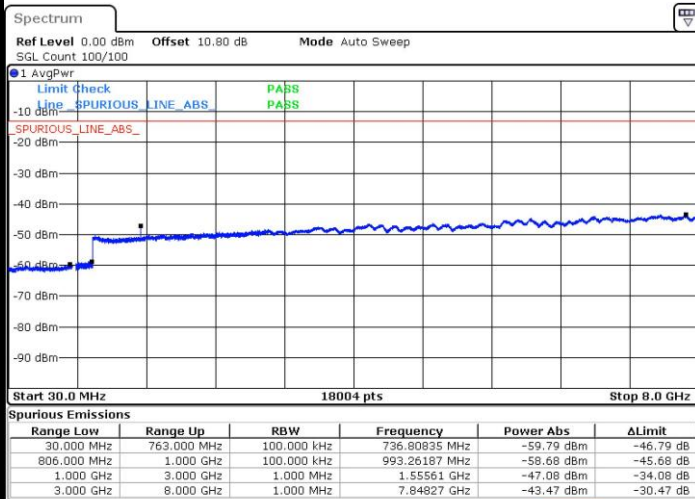
Highest Channel / 16QAM



Date: 15.FEB.2019 17:11:53

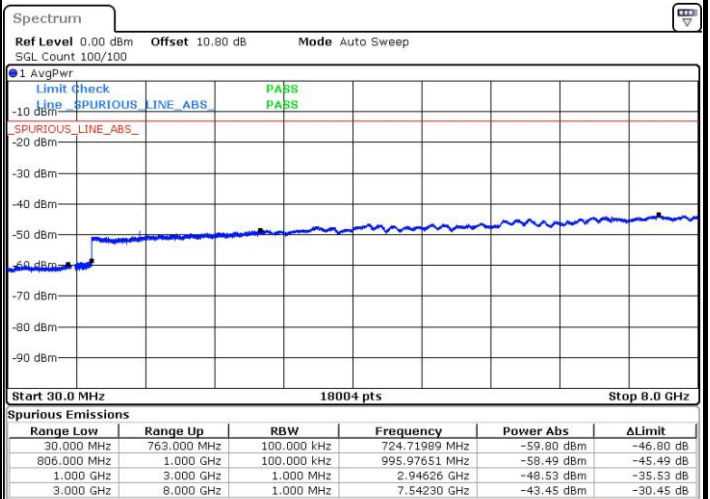
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 15.FEB.2019 17:33:50

Middle Channel / 16QAM



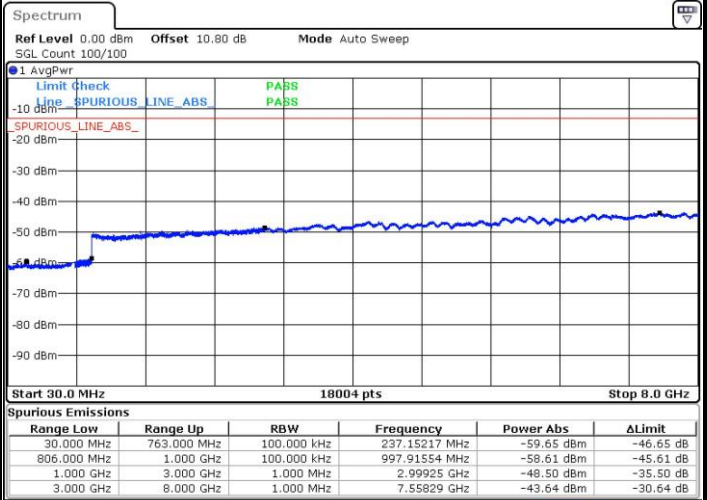
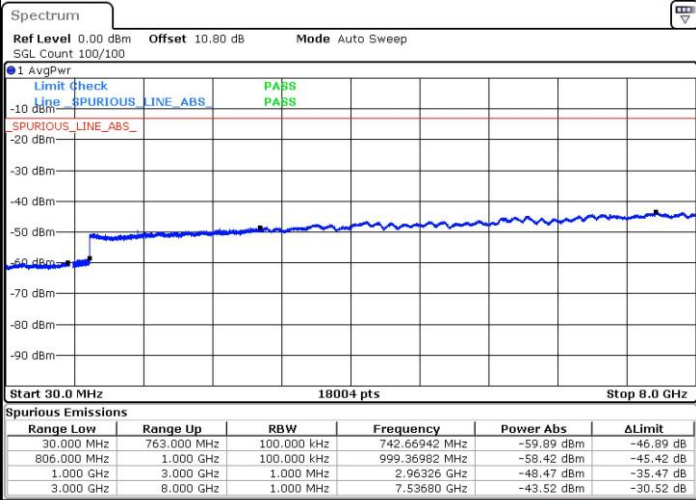
Date: 15.FEB.2019 17:33:10



LTE Band 13 / 5MHz

Lowest Channel / 64QAM

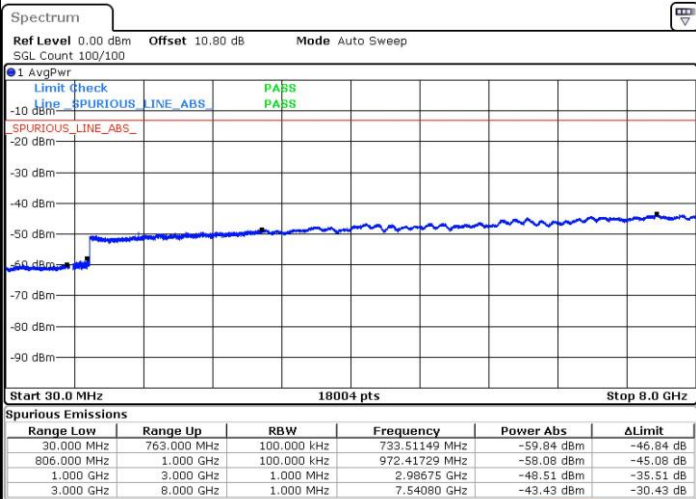
Middle Channel / 64QAM



Date: 15.FEB.2019 17:16:17

Date: 15.FEB.2019 17:16:57

Highest Channel / 64QAM

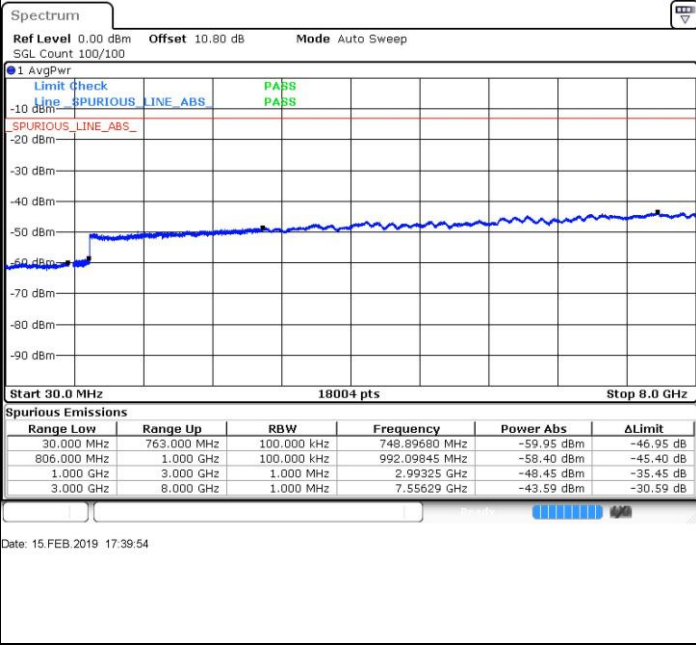


Date: 15.FEB.2019 17:21:43



LTE Band 13 / 10MHz

Middle Channel / 64QAM





Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0000	PASS
40	Normal Voltage	0.0070	
30	Normal Voltage	0.0072	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0100	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0084	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0010	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

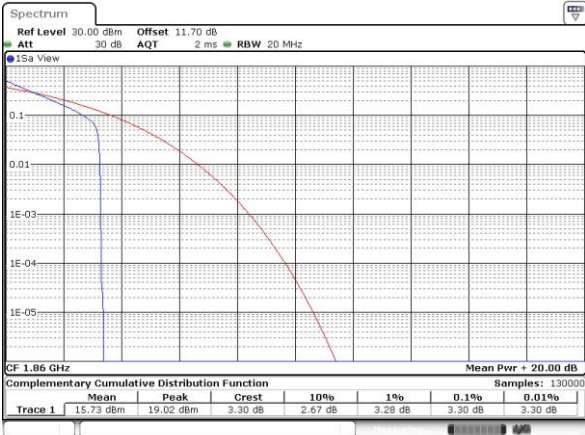
Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.30	4.41	4.03	5.39	PASS
Middle CH	3.30	4.49	4.09	5.51	
Highest CH	3.36	4.67	4.17	5.62	
Mode	LTE Band 25 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	4.99	6.12	-	-	PASS
Middle CH	5.22	6.23	-	-	
Highest CH	5.10	6.38	-	-	



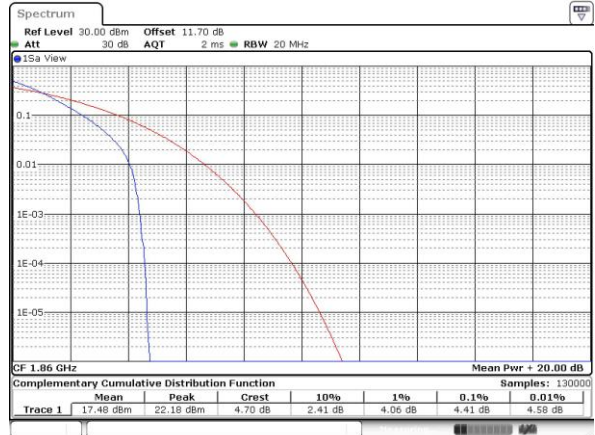
LTE Band 25 / 20MHz / QPSK

Lowest Channel / 1RB



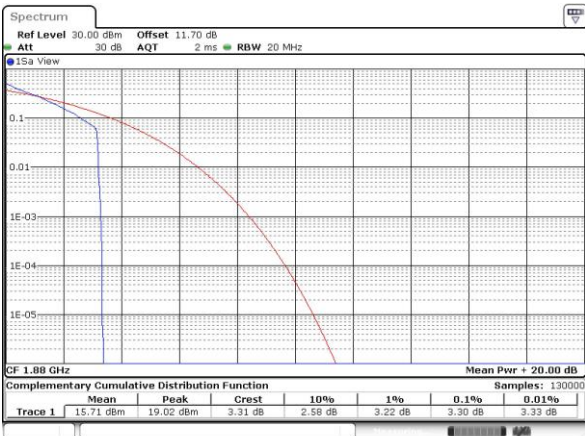
Date: 14 FEB 2019 01:38:28

Lowest Channel / Full RB



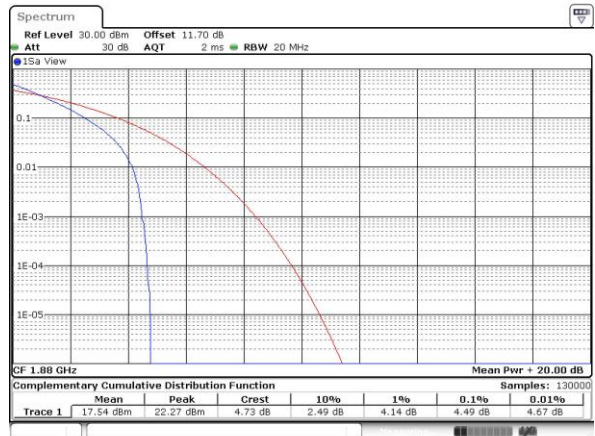
Date: 14 FEB 2019 01:38:38

Middle Channel / 1RB



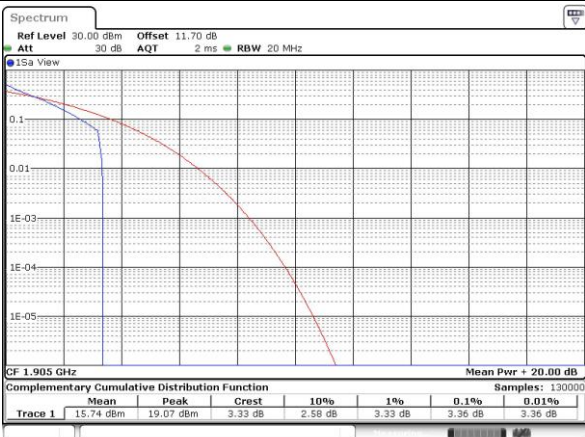
Date: 14 FEB 2019 01:39:08

Middle Channel / Full RB



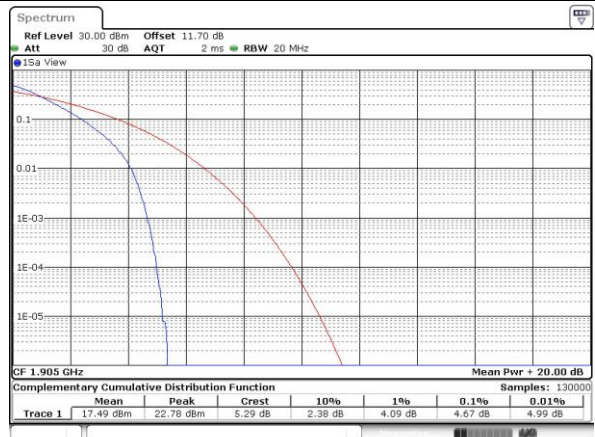
Date: 14 FEB 2019 01:39:18

Highest Channel / 1RB



Date: 14 FEB 2019 01:39:48

Highest Channel / Full RB

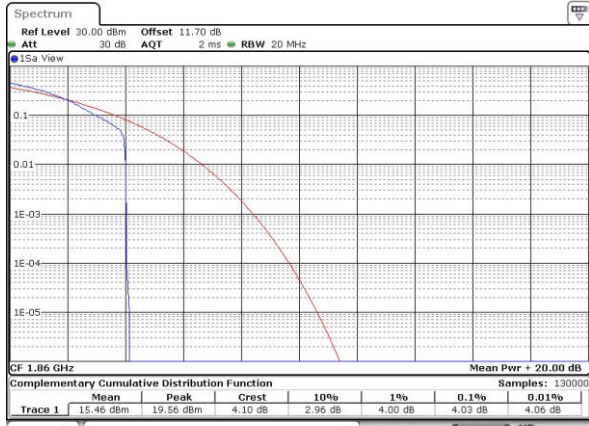


Date: 14 FEB 2019 01:39:58



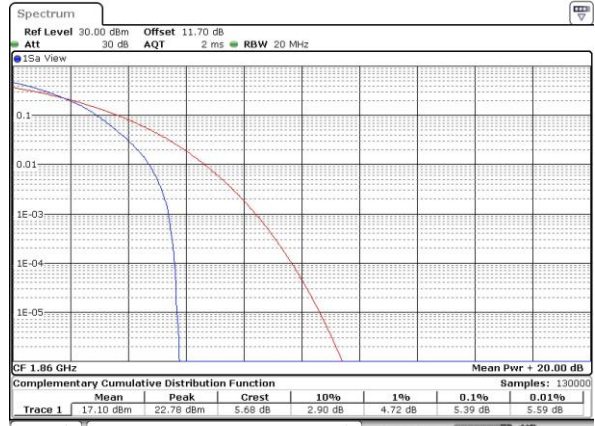
LTE Band 25 / 20MHz / 16QAM

Lowest Channel / 1RB



Date: 14 FEB 2019 01:38:08

Lowest Channel / Full RB



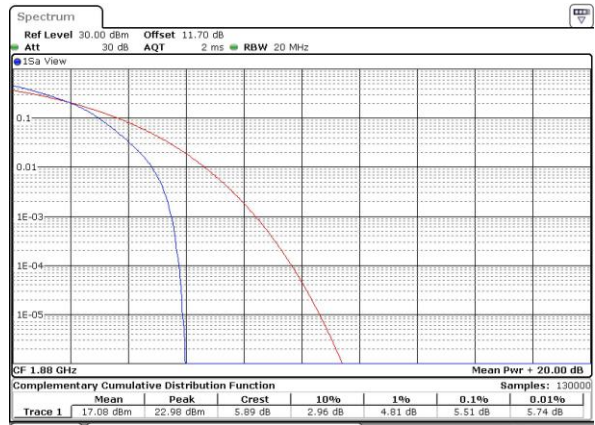
Date: 14 FEB 2019 01:38:18

Middle Channel / 1RB



Date: 14 FEB 2019 01:38:48

Middle Channel / Full RB



Date: 14 FEB 2019 01:38:58

Highest Channel / 1RB



Date: 14 FEB 2019 01:39:28

Highest Channel / Full RB

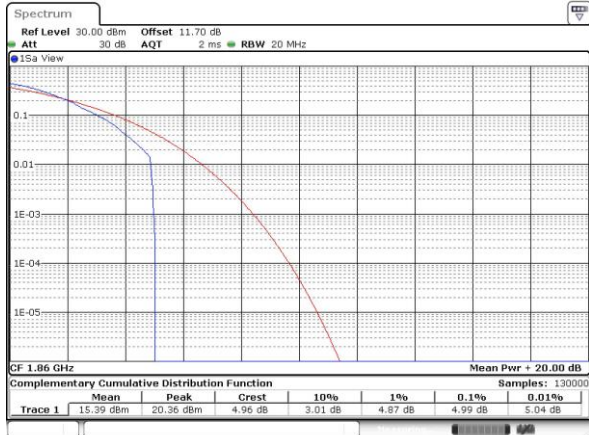


Date: 14 FEB 2019 01:39:38



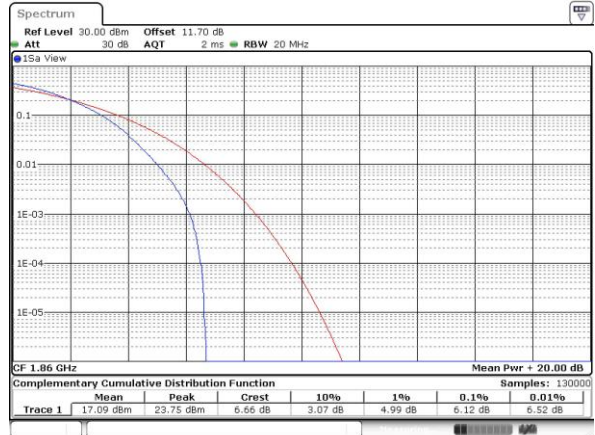
LTE Band 25 / 20MHz / 64QAM

Lowest Channel / 1RB



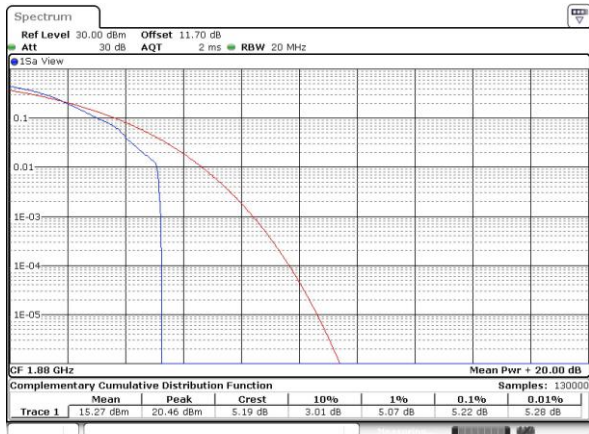
Date: 14 FEB 2019 01:37:09

Lowest Channel / Full RB



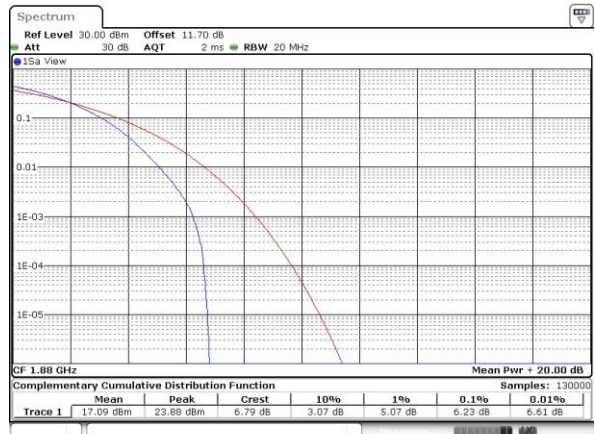
Date: 14 FEB 2019 01:37:18

Middle Channel / 1RB



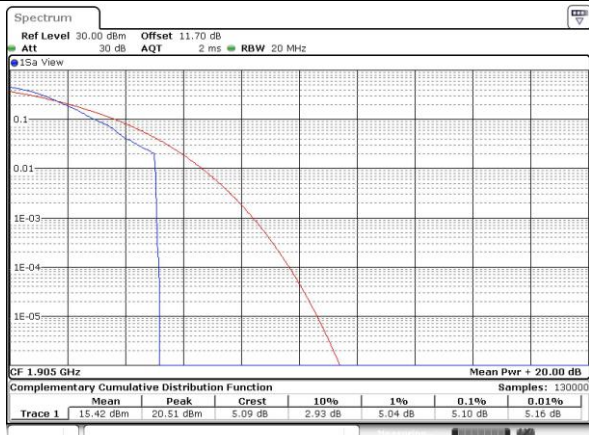
Date: 14 FEB 2019 01:37:28

Middle Channel / Full RB



Date: 14 FEB 2019 01:37:38

Highest Channel / 1RB



Date: 14 FEB 2019 01:37:48

Highest Channel / Full RB



Date: 14 FEB 2019 01:37:58



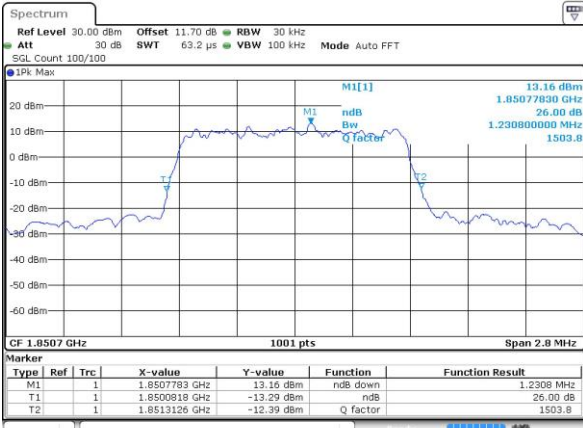
26dB Bandwidth

Mode	LTE Band 25 : 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	1.23	3.02	3.06	4.90	4.90	9.71	9.79	14.48	14.39	20.14	20.26
Middle CH	1.22	1.23	3.06	3.07	4.88	4.84	9.71	9.77	14.33	14.36	20.18	20.18
Highest CH	1.22	1.23	3.02	3.02	4.95	4.94	9.81	9.71	14.33	14.42	20.14	20.38
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.23	-	2.97	-	4.99	-	9.79	-	14.60	-	20.18	-
Middle CH	1.23	-	2.97	-	4.96	-	9.73	-	14.42	-	20.10	-
Highest CH	1.23	-	3.02	-	4.90	-	9.73	-	14.36	-	20.18	-



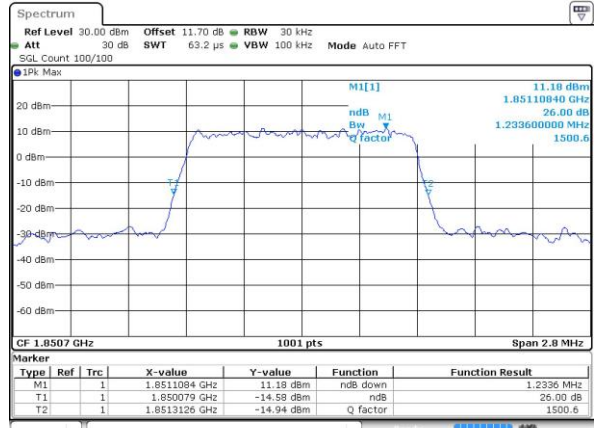
LTE Band 25

Lowest Channel / 1.4MHz / QPSK



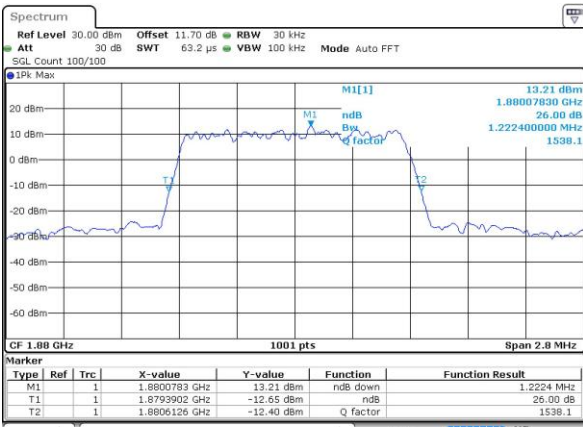
Date: 14 FEB 2019 00:30:28

Lowest Channel / 1.4MHz / 16QAM



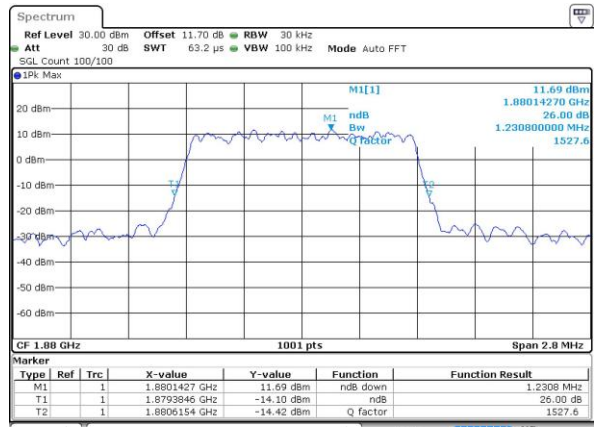
Date: 14 FEB 2019 00:30:37

Middle Channel / 1.4MHz / QPSK



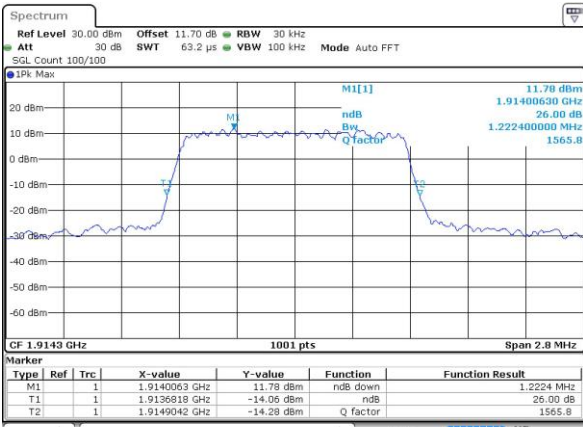
Date: 14 FEB 2019 00:37:33

Middle Channel / 1.4MHz / 16QAM



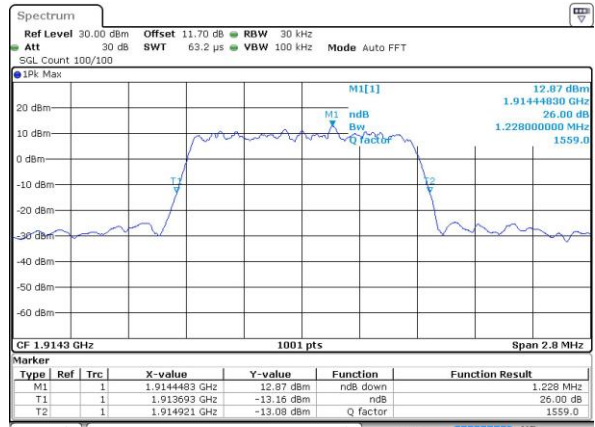
Date: 14 FEB 2019 00:37:45

Highest Channel / 1.4MHz / QPSK



Date: 14 FEB 2019 00:40:12

Highest Channel / 1.4MHz / 16QAM



Date: 14 FEB 2019 00:40:00