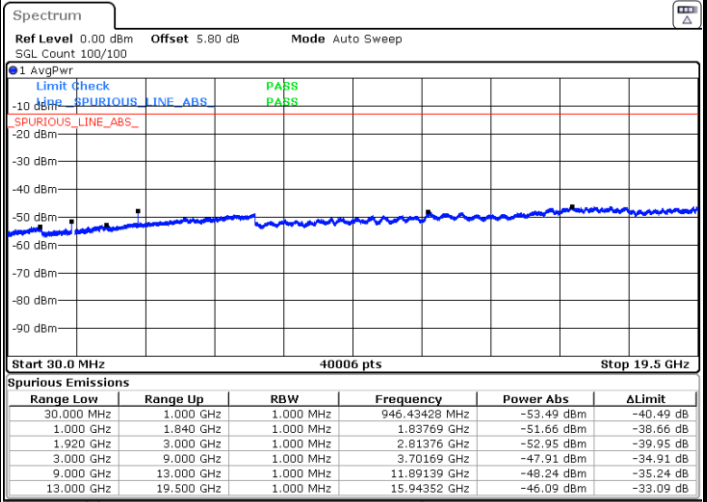
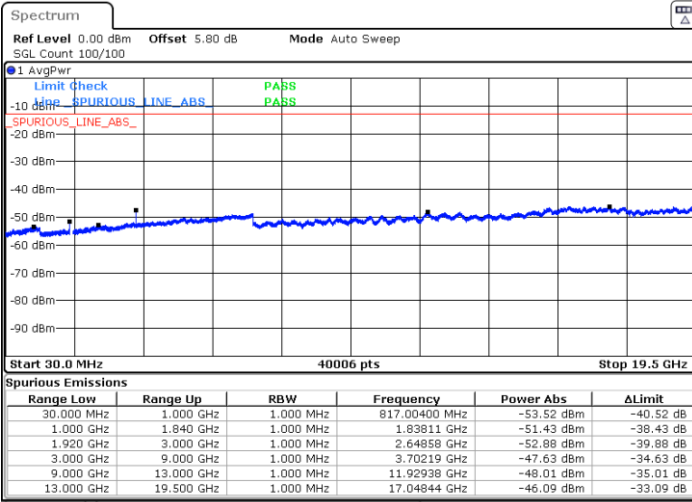




LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

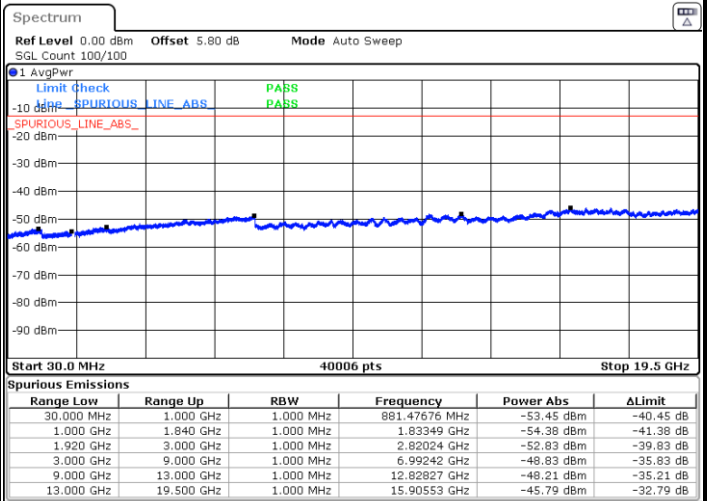
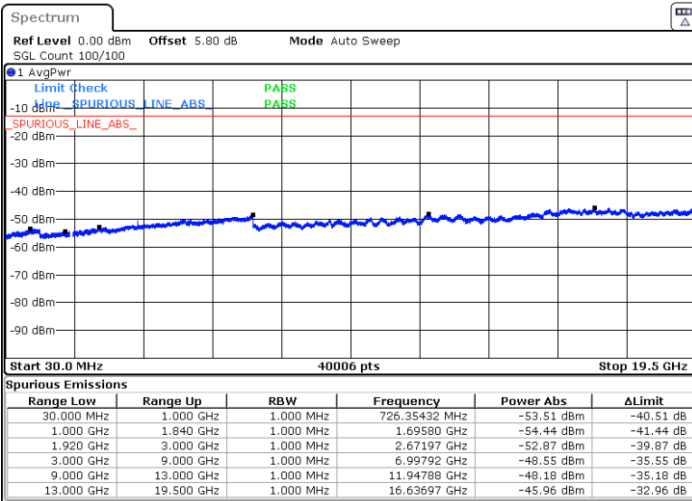


Date: 19 JAN 2020 22:50:33

Date: 19 JAN 2020 22:51:28

Middle Channel / QPSK

Middle Channel / 16QAM



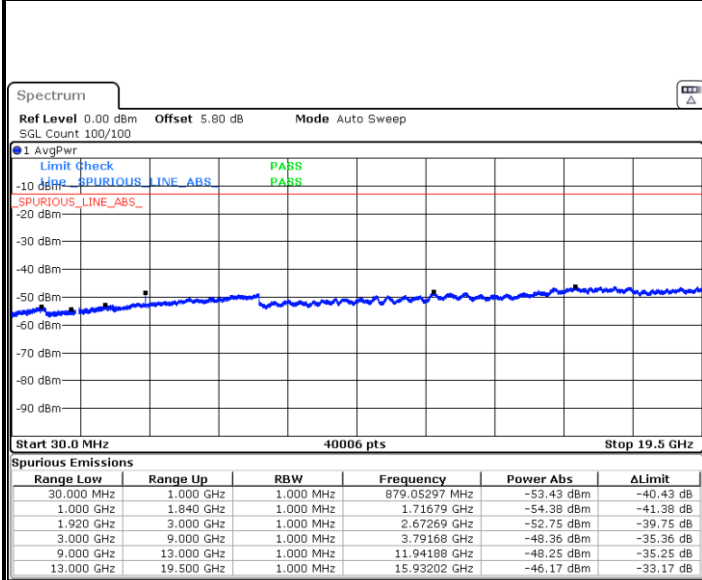
Date: 19 JAN 2020 22:53:02

Date: 19 JAN 2020 22:53:57



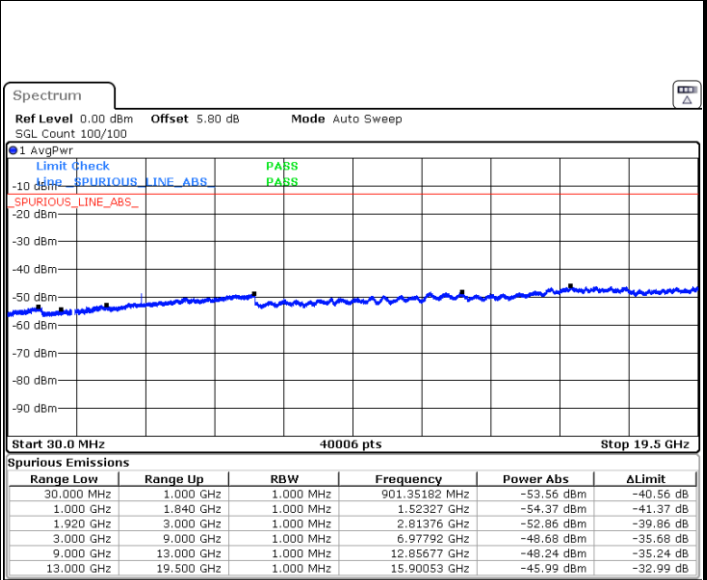
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 19 JAN 2020 23:00:01

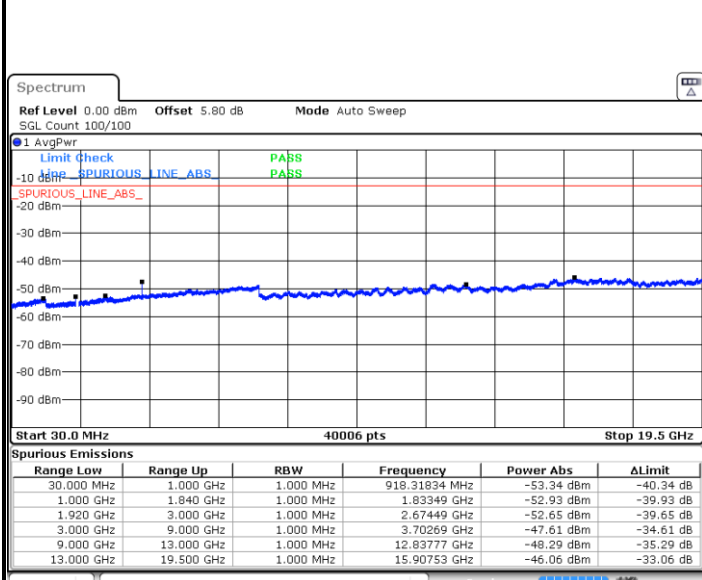
Highest Channel / 16QAM



Date: 19 JAN 2020 23:00:55

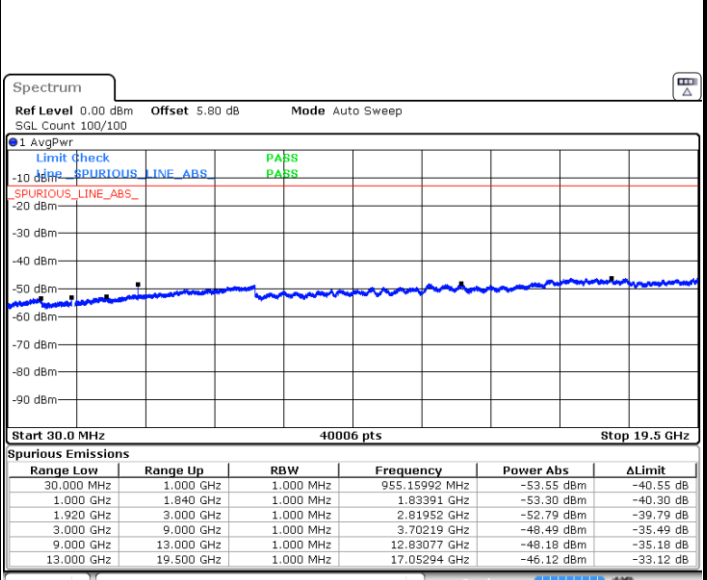
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 19 JAN 2020 23:07:00

Lowest Channel / 16QAM



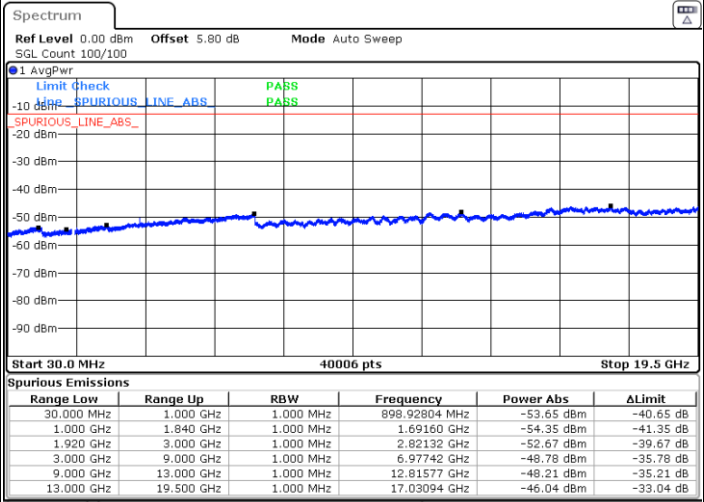
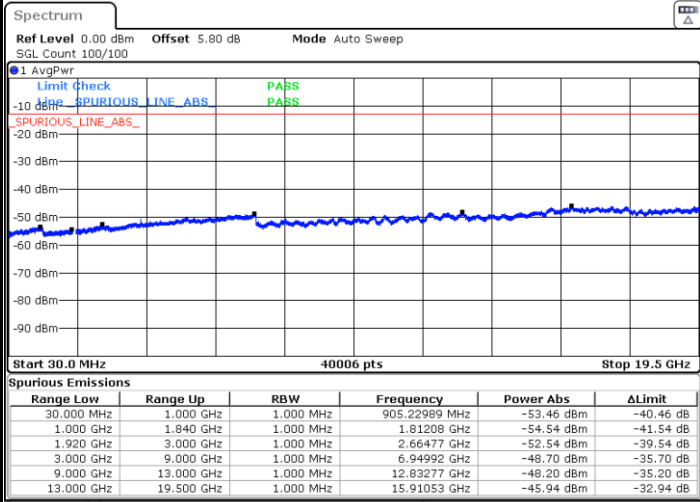
Date: 19 JAN 2020 23:07:54



LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

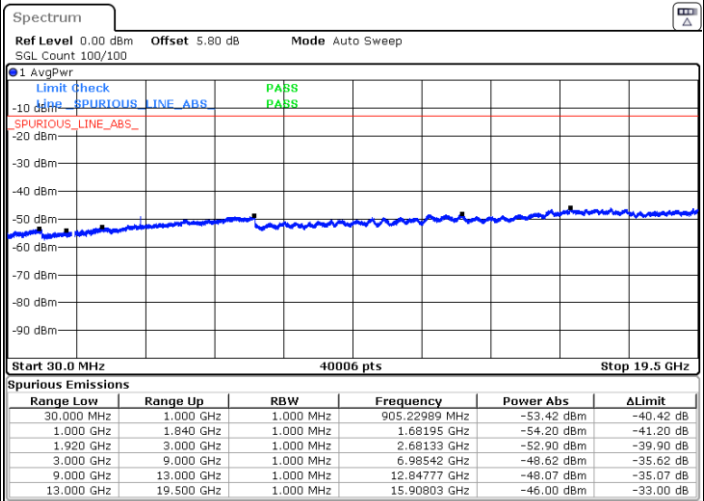
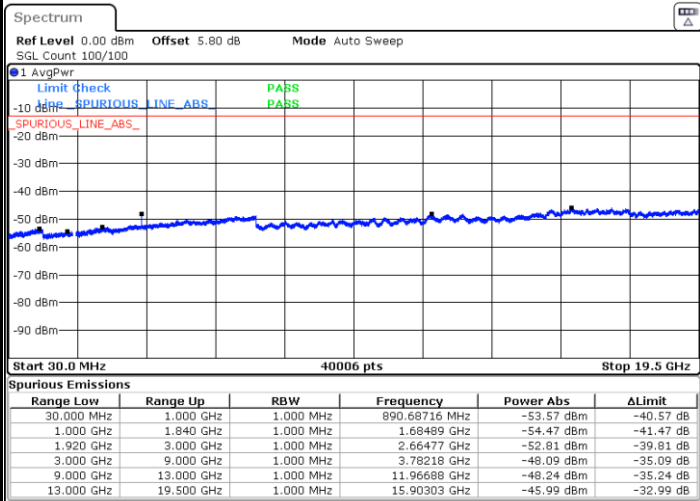


Date: 19 JAN 2020 23:09:29

Date: 19 JAN 2020 23:10:23

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 19 JAN 2020 23:16:27

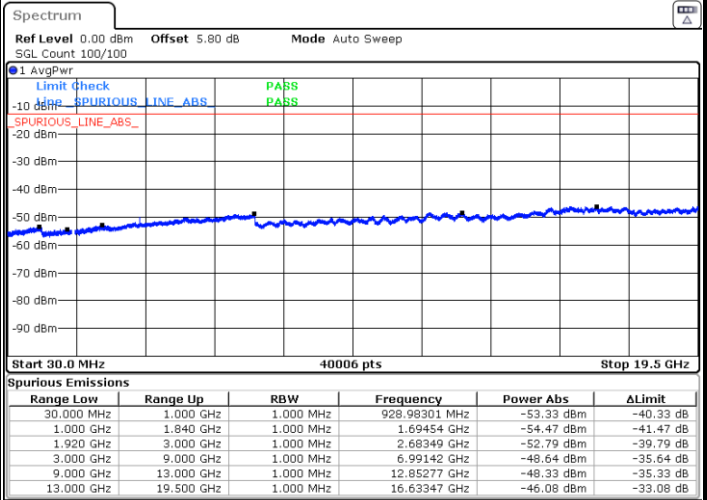
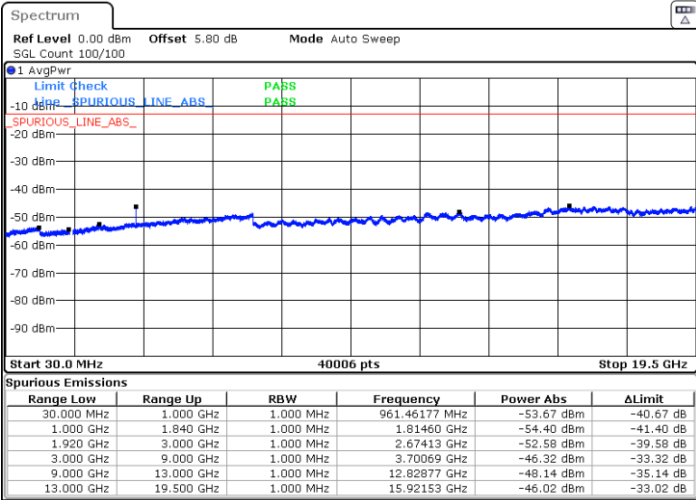
Date: 19 JAN 2020 23:17:22



LTE Band 2 / 1.4MHz

Lowest Channel / 64QAM

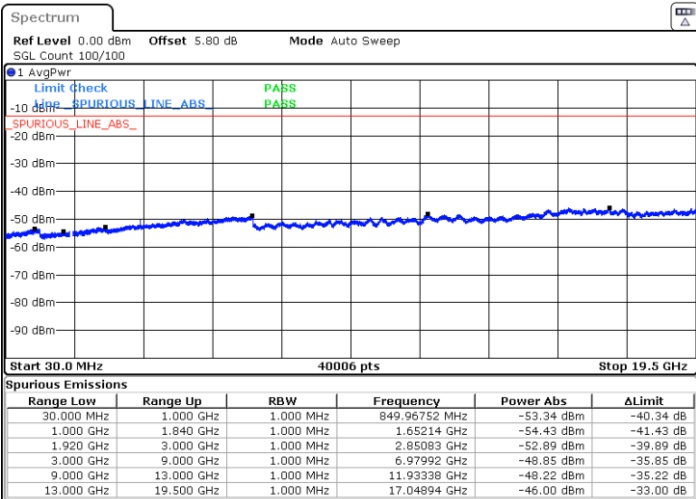
Middle Channel / 64QAM



Date: 19 JAN 2020 23:51:15

Date: 19 JAN 2020 23:52:10

Highest Channel / 64QAM

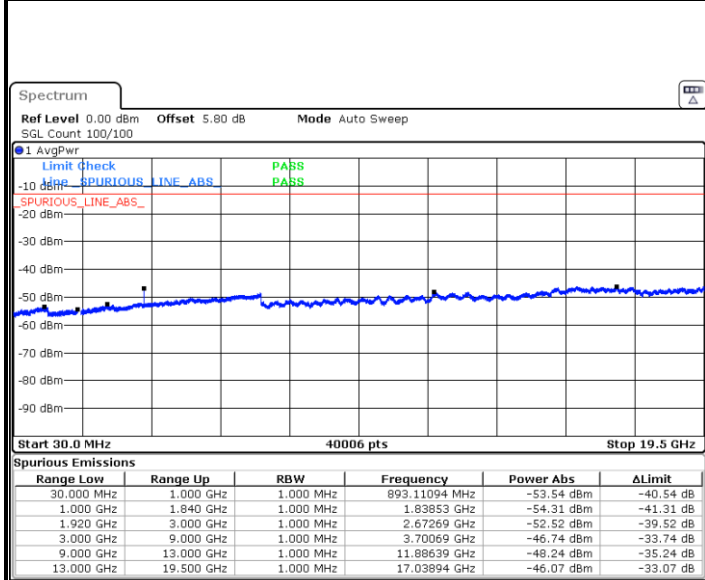


Date: 19 JAN 2020 23:53:04



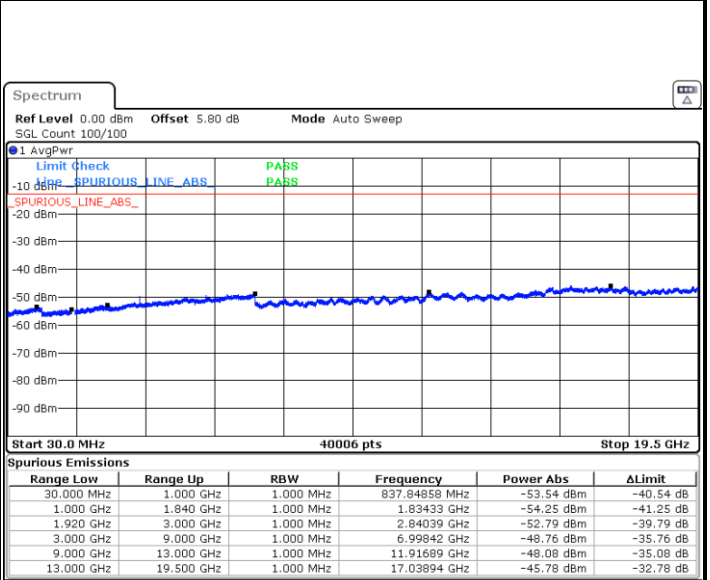
LTE Band 2 / 3MHz

Lowest Channel / 64QAM



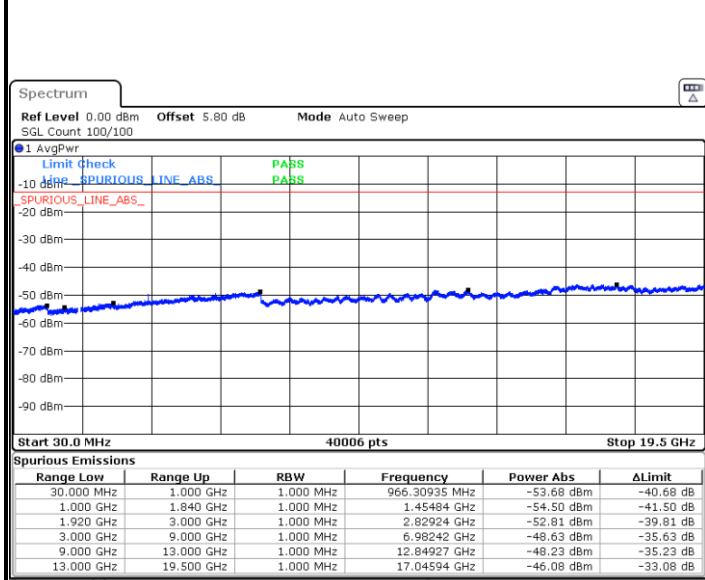
Date: 19 JAN 2020 23:53:59

Middle Channel / 64QAM

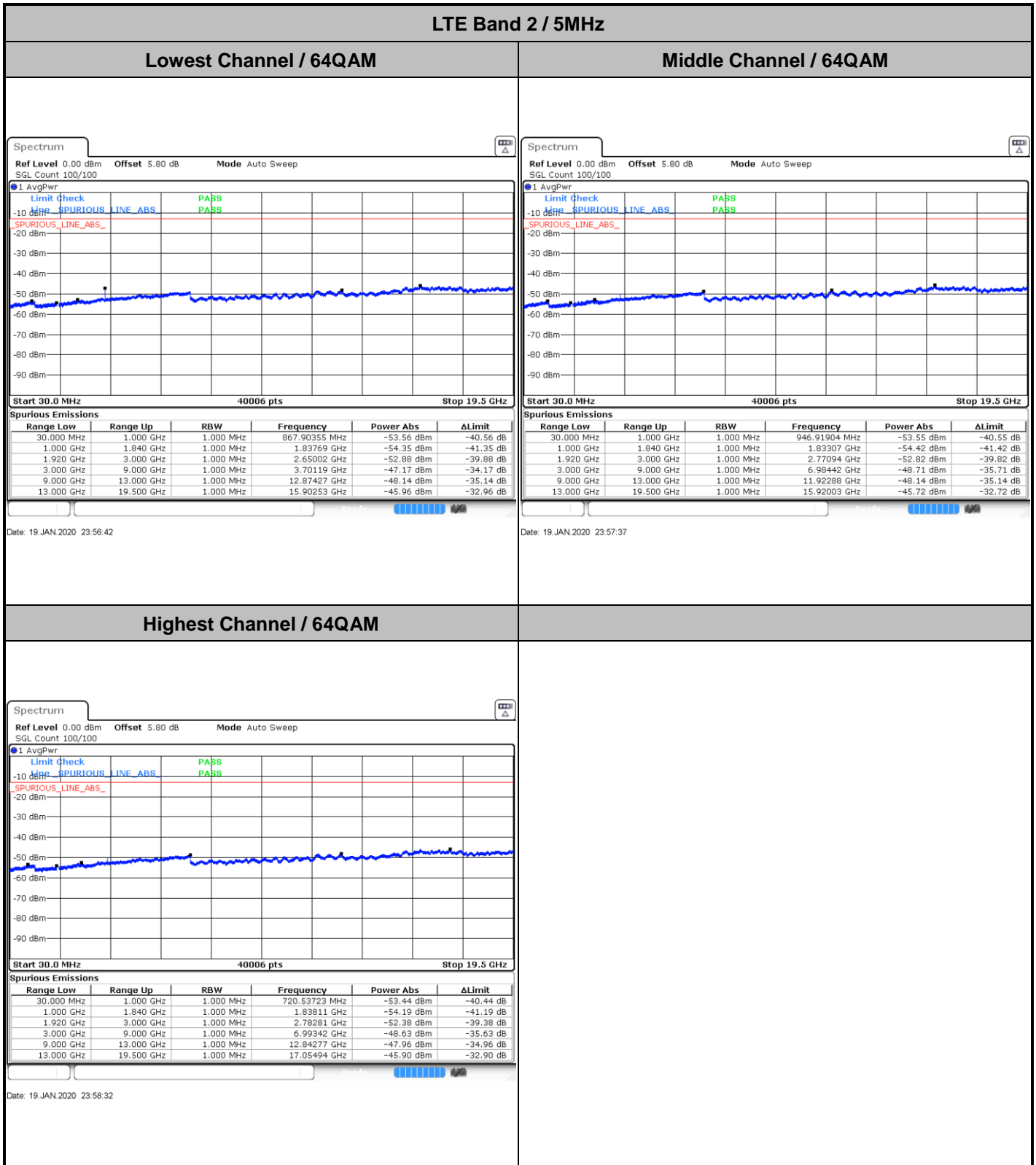


Date: 19 JAN 2020 23:54:54

Highest Channel / 64QAM



Date: 19 JAN 2020 23:55:48

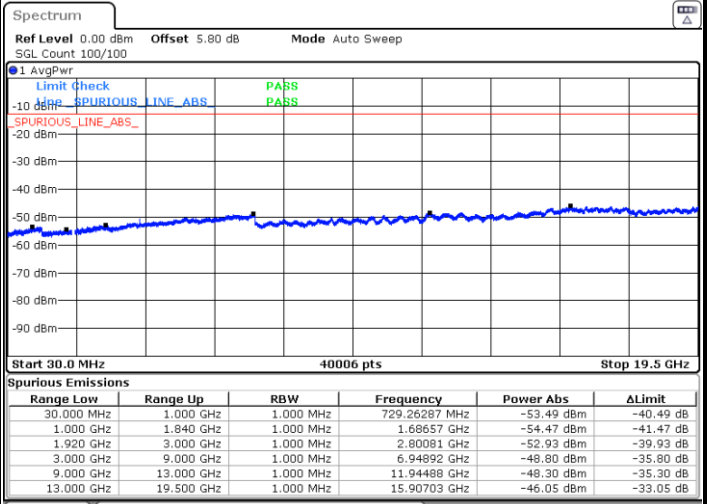
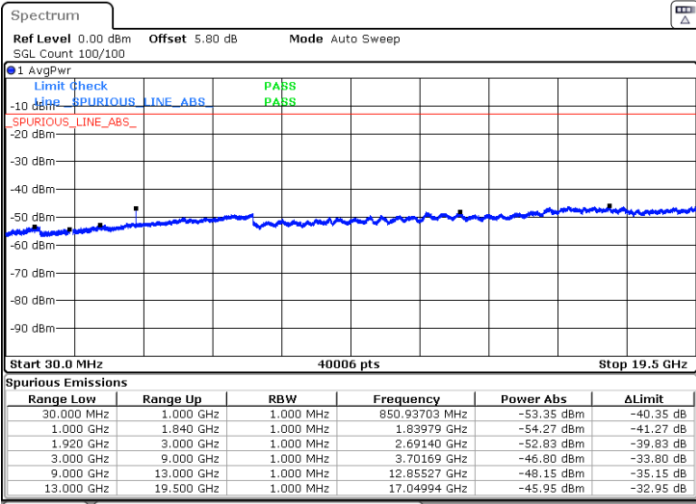




LTE Band 2 / 10MHz

Lowest Channel / 64QAM

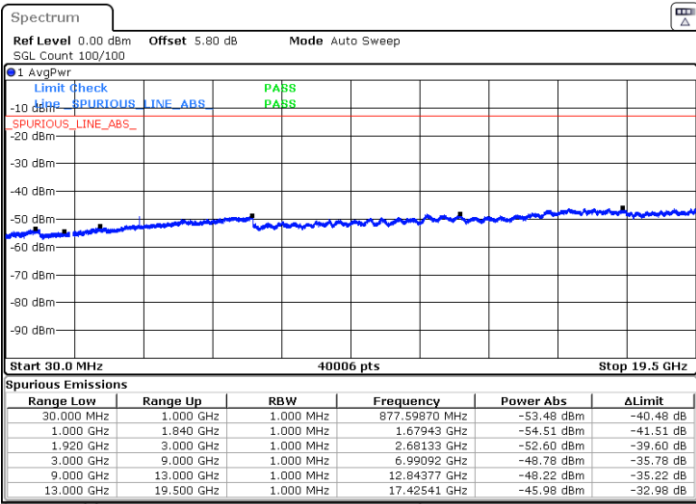
Middle Channel / 64QAM



Date: 19 JAN 2020 23:59:26

Date: 20 JAN 2020 00:00:21

Highest Channel / 64QAM



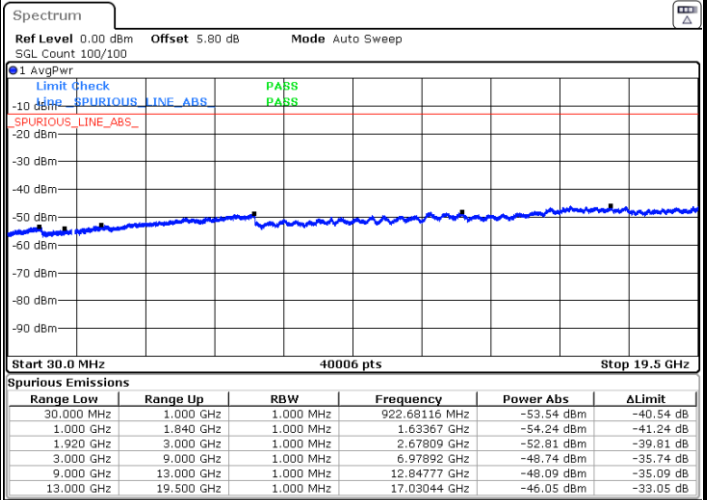
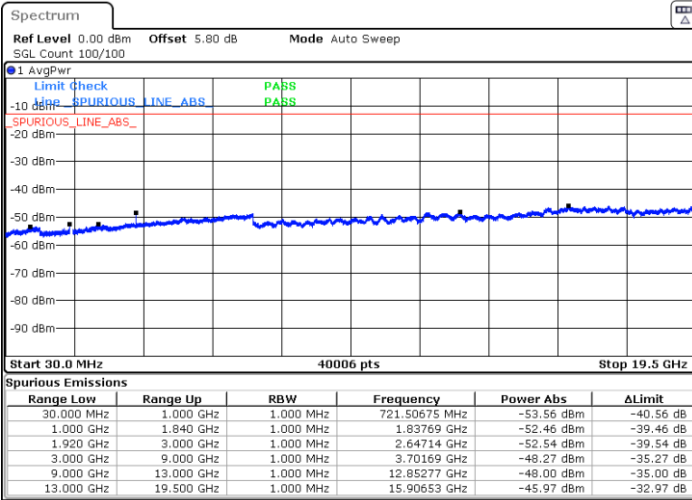
Date: 20 JAN 2020 00:01:15



LTE Band 2 / 15MHz

Lowest Channel / 64QAM

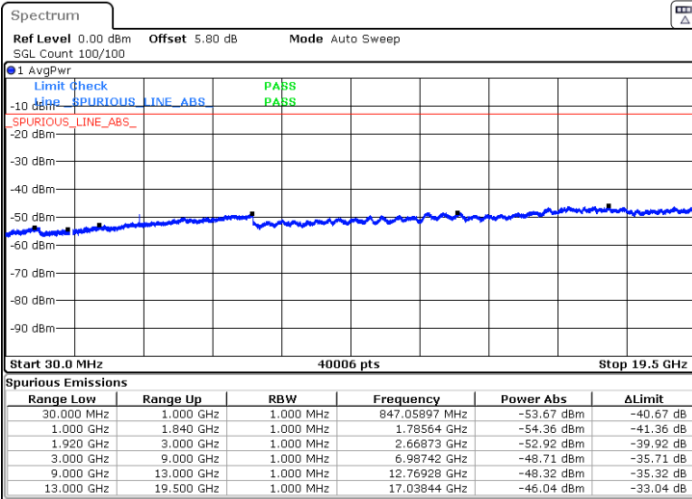
Middle Channel / 64QAM



Date: 20 JAN 2020 00:02:10

Date: 20 JAN 2020 00:03:04

Highest Channel / 64QAM



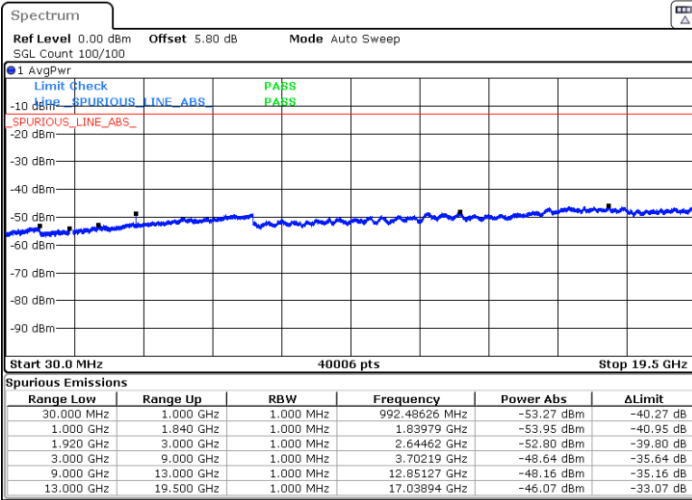
Date: 20 JAN 2020 00:03:59



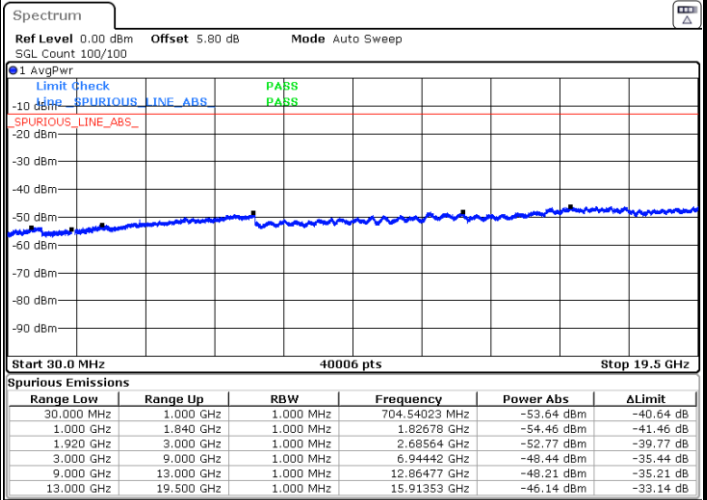
LTE Band 2 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

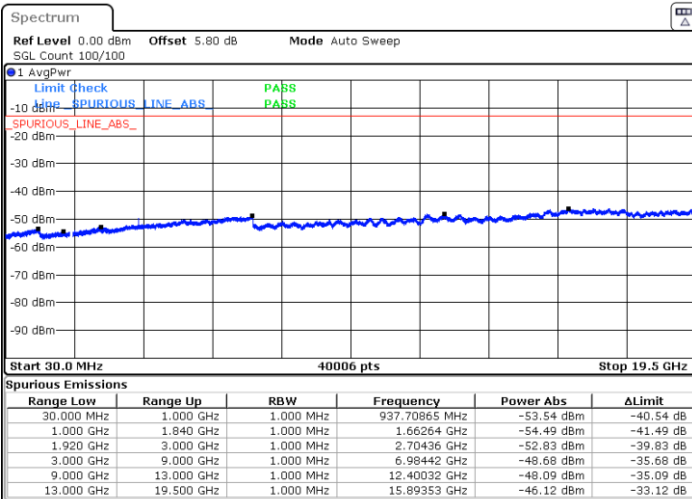


Date: 20 JAN 2020 00:04:53



Date: 20 JAN 2020 00:05:48

Highest Channel / 64QAM



Date: 20 JAN 2020 00:06:42



Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 5

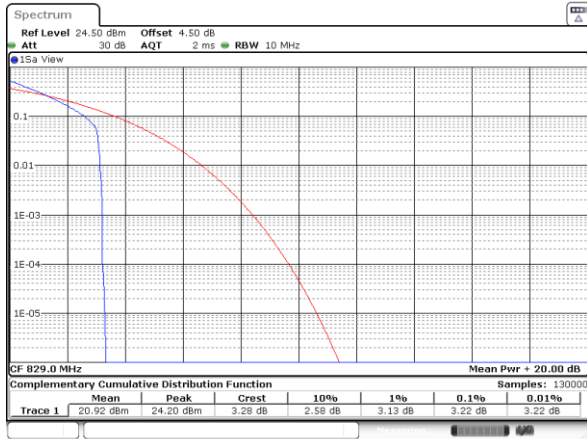
## Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.22	4.70	3.91	5.59	<b>PASS</b>
Middle CH	3.42	4.96	4.32	5.86	
Highest CH	3.54	4.64	4.14	5.59	
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH	4.20	5.59	<b>PASS</b>		
Middle CH	4.72	5.97			
Highest CH	4.46	5.64			



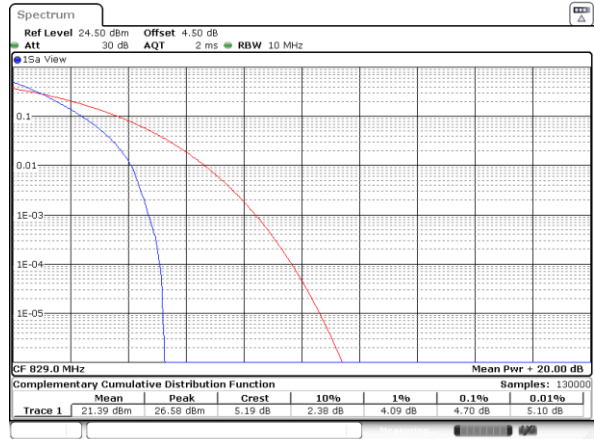
LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



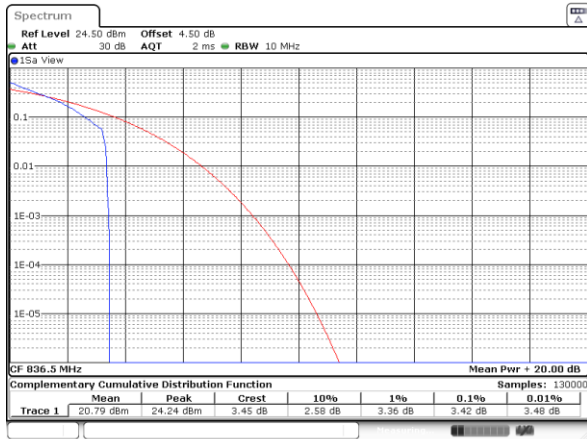
Date: 20 JAN 2020 01:52:06

Lowest Channel / Full RB



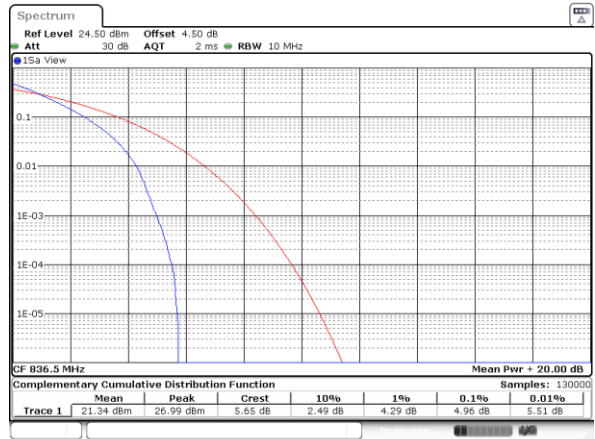
Date: 20 JAN 2020 01:52:16

Middle Channel / 1RB



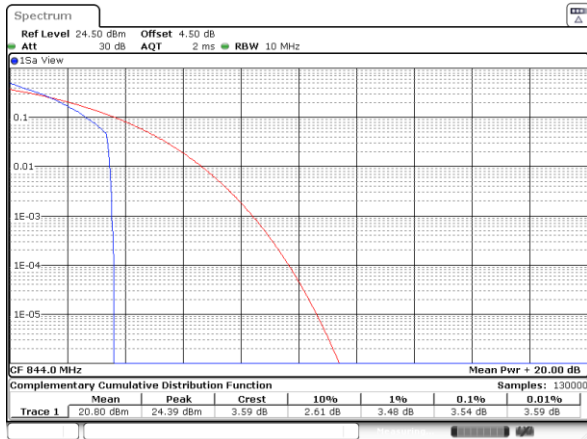
Date: 20 JAN 2020 01:51:58

Middle Channel / Full RB



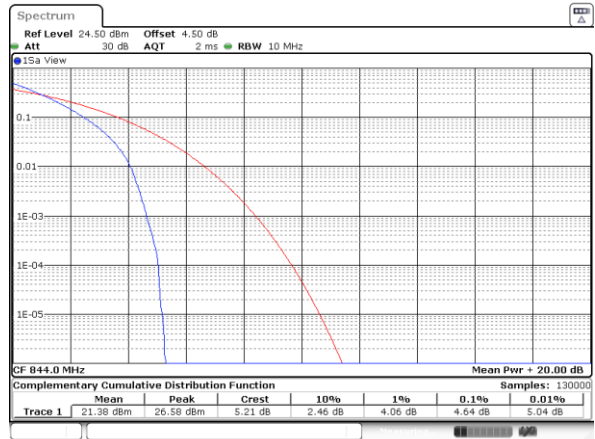
Date: 20 JAN 2020 01:51:50

Highest Channel / 1RB



Date: 20 JAN 2020 01:51:32

Highest Channel / Full RB

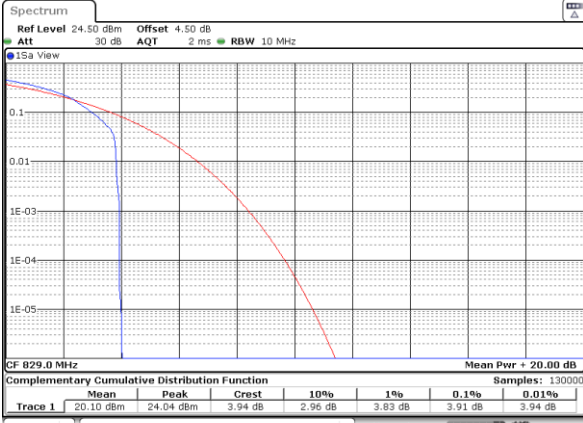


Date: 20 JAN 2020 01:51:41



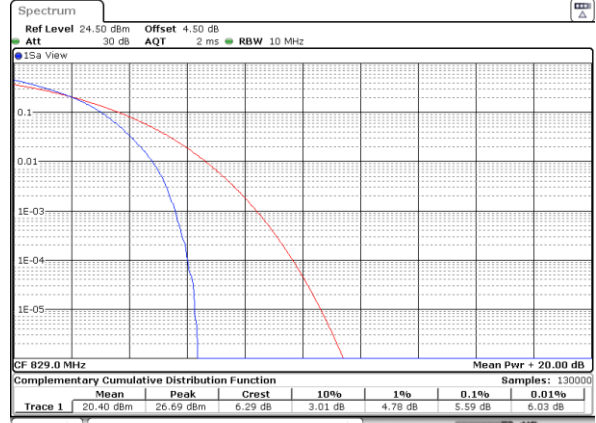
LTE Band 5 / 10MHz / 16QAM

Lowest Channel / 1RB



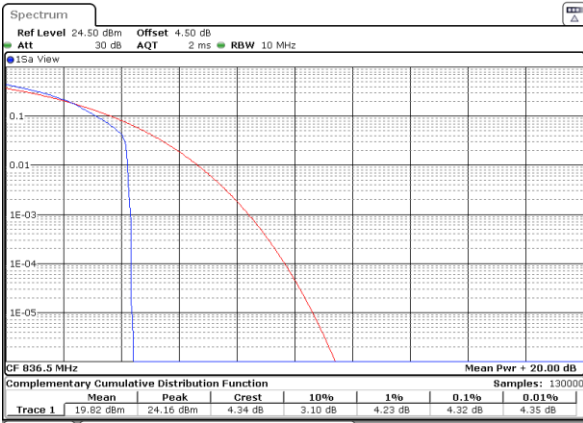
Date: 20 JAN 2020 01:50:06

Lowest Channel / Full RB



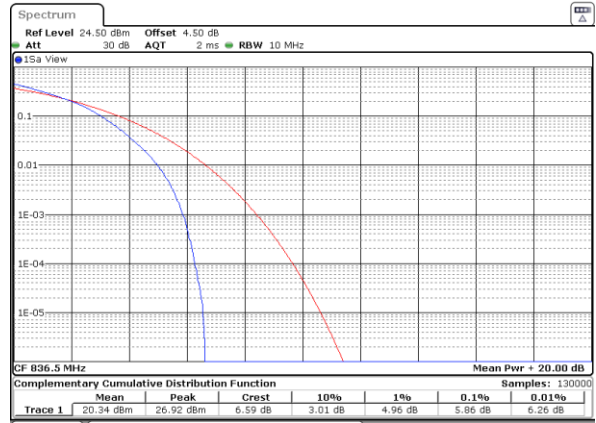
Date: 20 JAN 2020 01:50:14

Middle Channel / 1RB



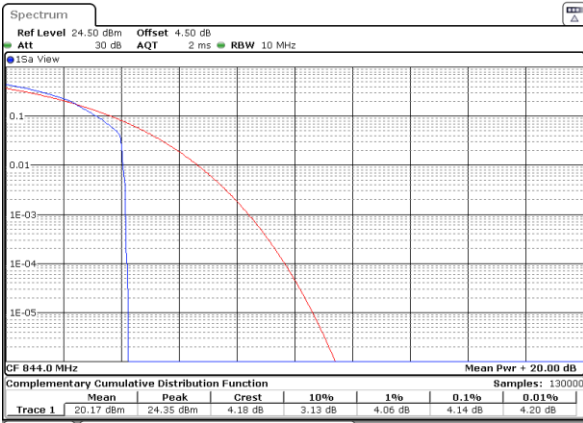
Date: 20 JAN 2020 01:50:22

Middle Channel / Full RB



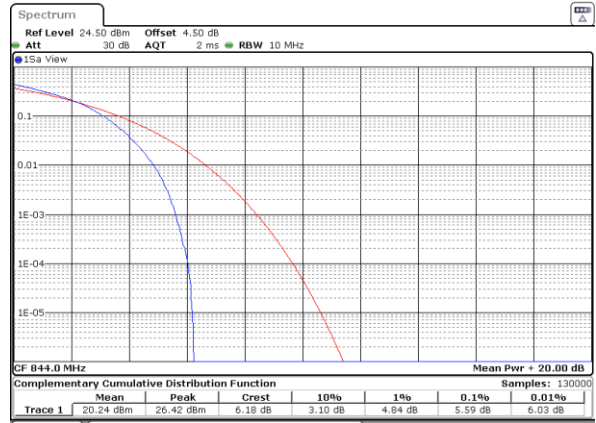
Date: 20 JAN 2020 01:50:31

Highest Channel / 1RB



Date: 20 JAN 2020 01:50:40

Highest Channel / Full RB

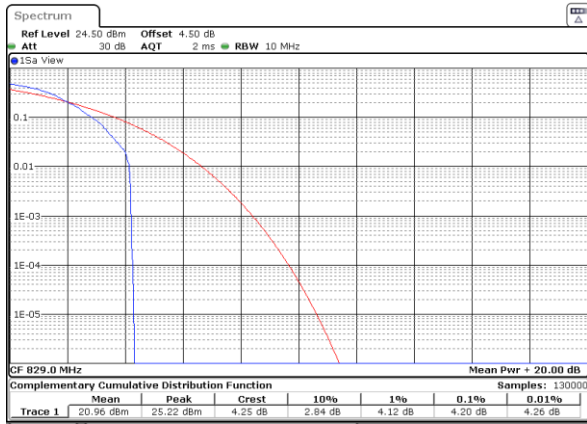


Date: 20 JAN 2020 01:51:24



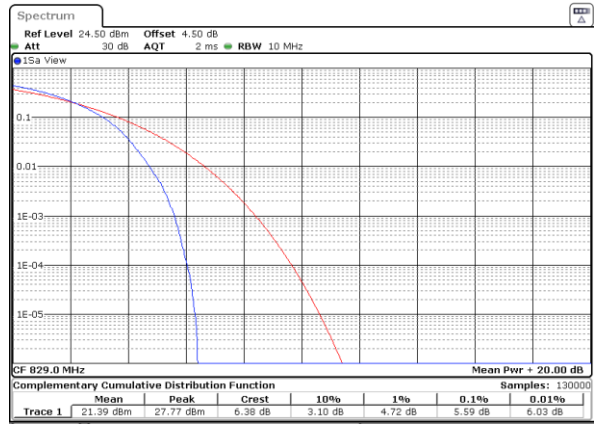
LTE Band 5 / 10MHz / 64QAM

Lowest Channel / 1RB



Date: 20 JAN 2020 02:38:19

Lowest Channel / Full RB



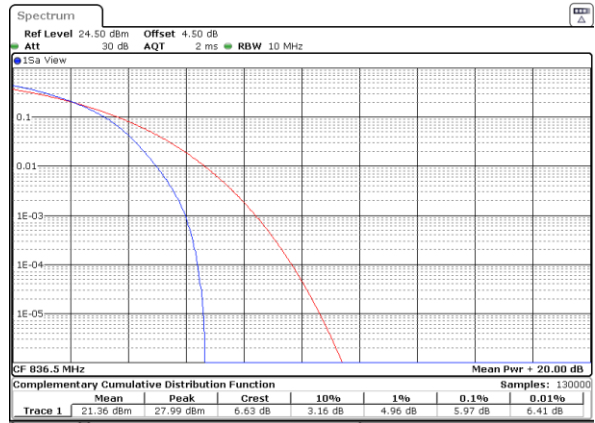
Date: 20 JAN 2020 02:39:32

Middle Channel / 1RB



Date: 20 JAN 2020 02:38:08

Middle Channel / Full RB



Date: 20 JAN 2020 02:39:00

Highest Channel / 1RB



Date: 20 JAN 2020 02:38:39

Highest Channel / Full RB



Date: 20 JAN 2020 02:38:52



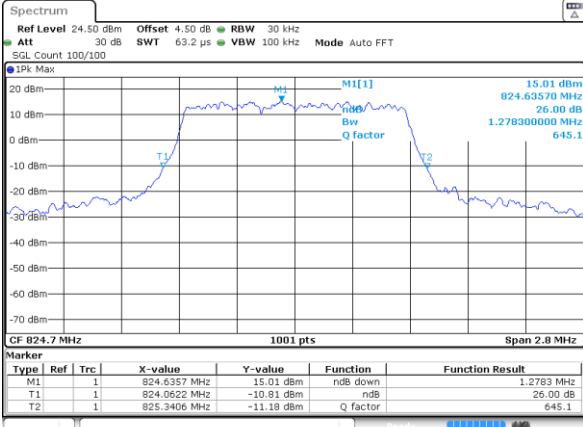
**26dB Bandwidth**

Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM				
Lowest CH	1.278	1.278	3.015	2.973	4.905	4.905	9.99	9.67				
Middle CH	1.256	1.284	3.003	3.021	4.895	4.935	9.79	9.73				
Highest CH	1.281	1.270	3.051	3.015	5.025	4.975	9.71	10.03				
Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz					
Mod.	64QAM		64QAM		64QAM		64QAM					
Lowest CH	1.276		2.985		4.985		9.87		-	-	-	-
Middle CH	1.292		3.039		4.835		9.75		-	-	-	-
Highest CH	1.273		3.021		4.925		9.91		-	-	-	-



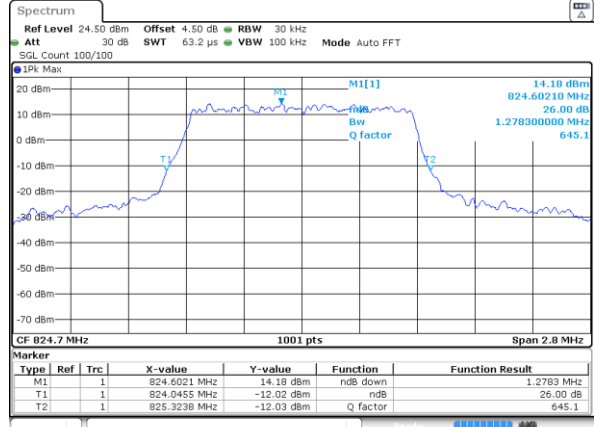
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



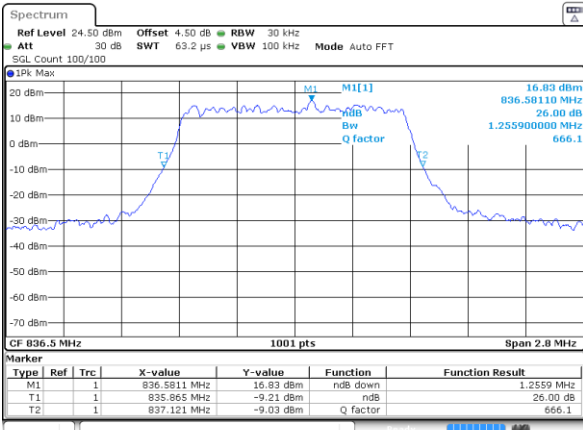
Date: 20 JAN 2020 00:28:12

Lowest Channel / 1.4MHz / 16QAM



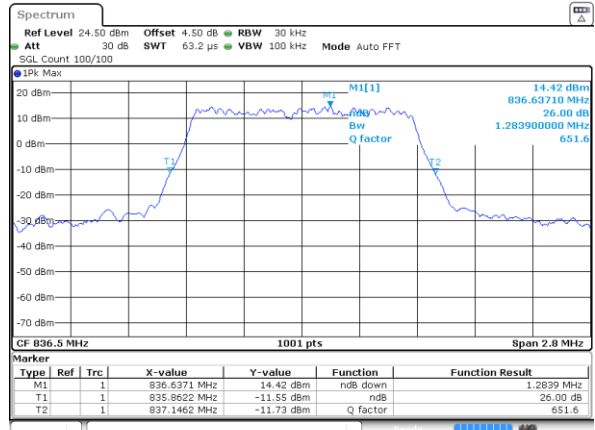
Date: 20 JAN 2020 00:28:02

Middle Channel / 1.4MHz / QPSK



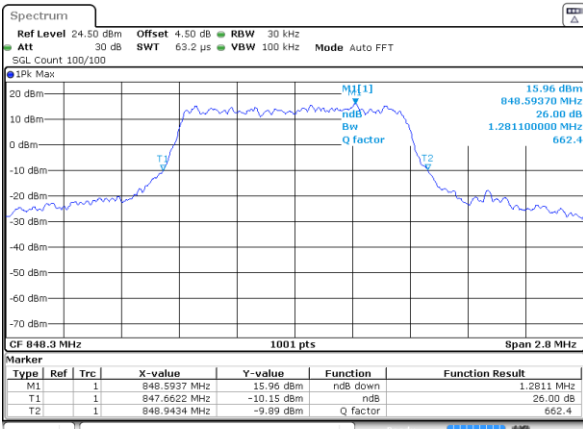
Date: 20 JAN 2020 00:37:01

Middle Channel / 1.4MHz / 16QAM



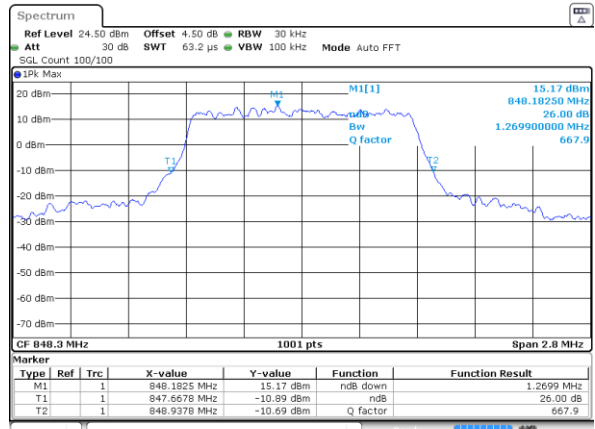
Date: 20 JAN 2020 00:37:11

Highest Channel / 1.4MHz / QPSK



Date: 20 JAN 2020 00:39:30

Highest Channel / 1.4MHz / 16QAM

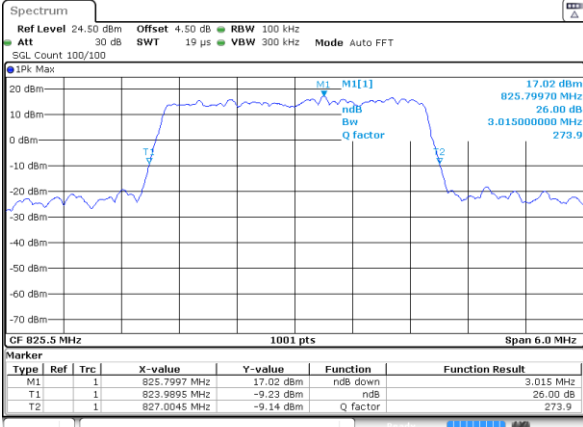


Date: 20 JAN 2020 00:39:40



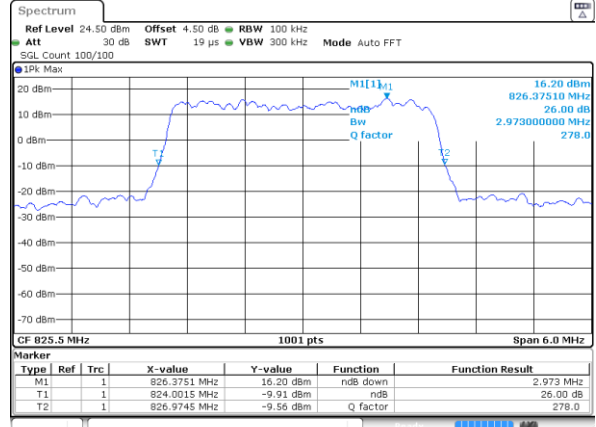
LTE Band 5

Lowest Channel / 3MHz / QPSK



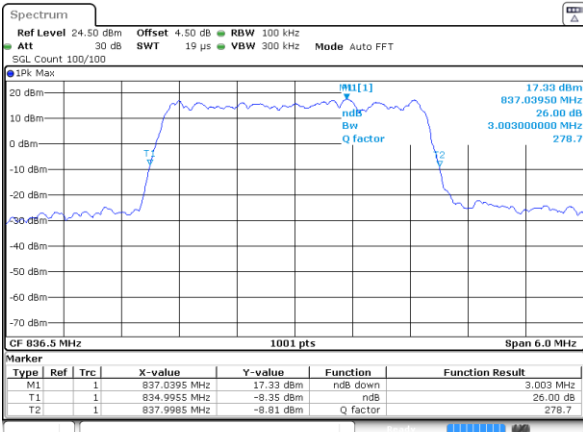
Date: 20 JAN 2020 00:48:28

Lowest Channel / 3MHz / 16QAM



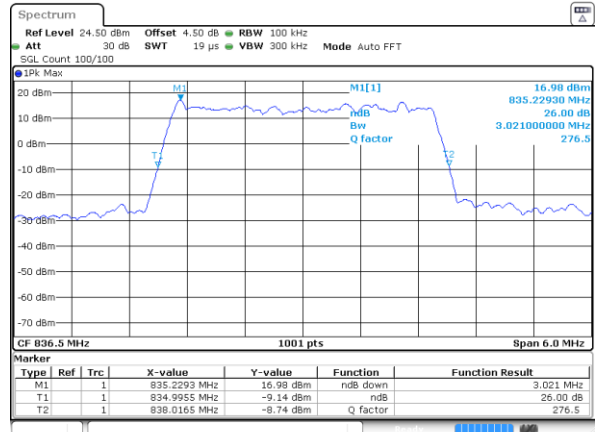
Date: 20 JAN 2020 00:48:38

Middle Channel / 3MHz / QPSK



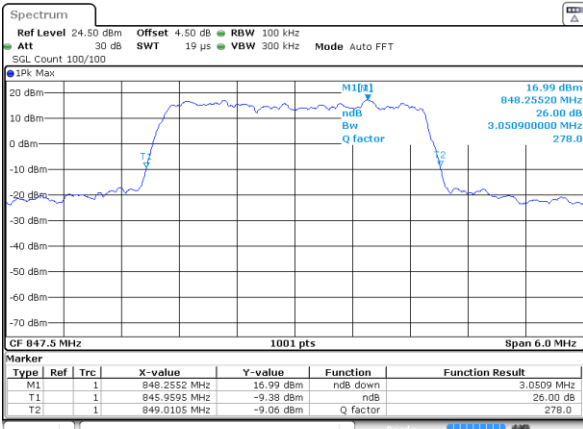
Date: 20 JAN 2020 00:57:27

Middle Channel / 3MHz / 16QAM



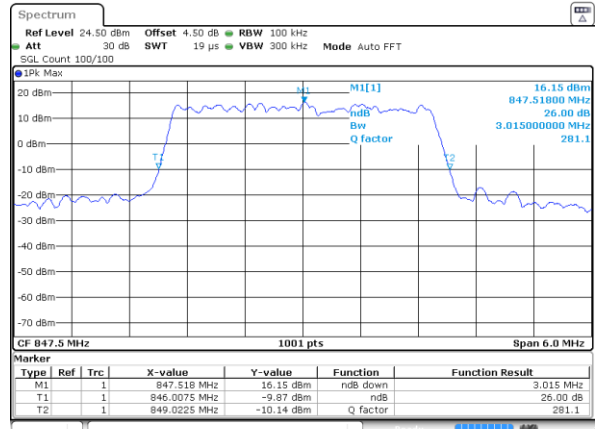
Date: 20 JAN 2020 00:57:37

Highest Channel / 3MHz / QPSK



Date: 20 JAN 2020 00:59:55

Highest Channel / 3MHz / 16QAM

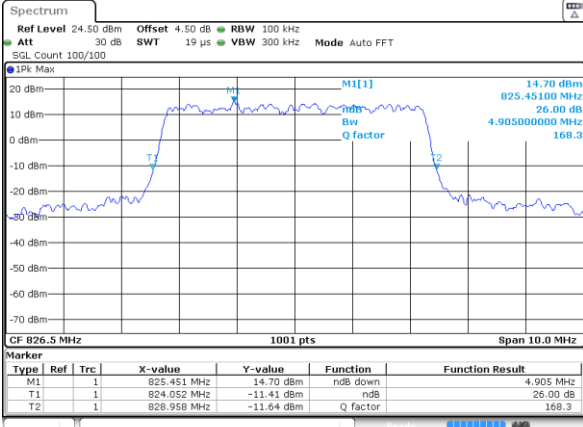


Date: 20 JAN 2020 01:00:05



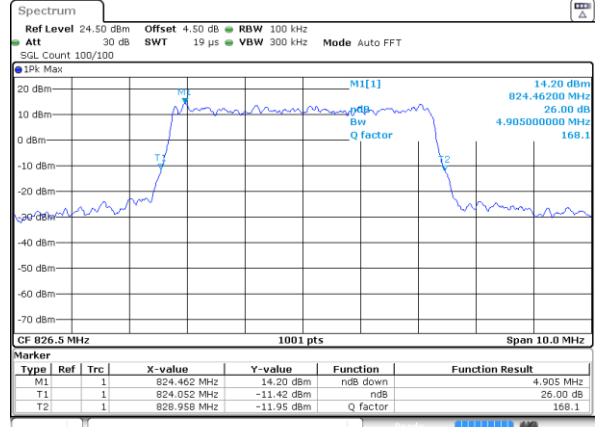
LTE Band 5

Lowest Channel / 5MHz / QPSK



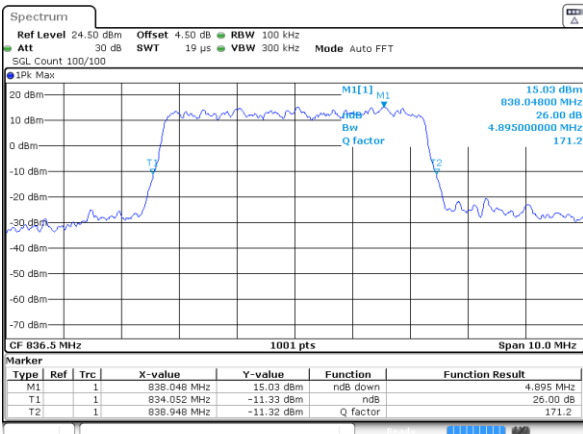
Date: 20 JAN 2020 01:08:54

Lowest Channel / 5MHz / 16QAM



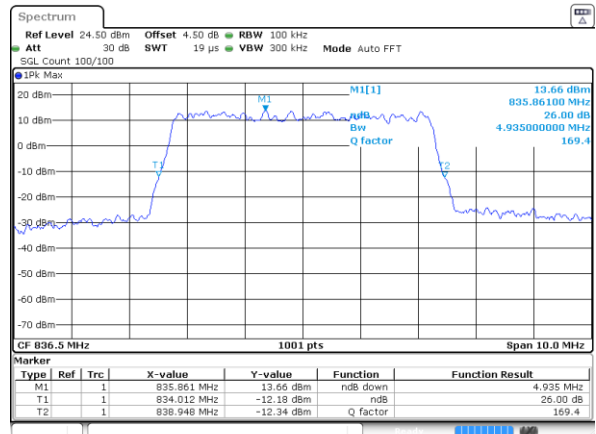
Date: 20 JAN 2020 01:09:04

Middle Channel / 5MHz / QPSK



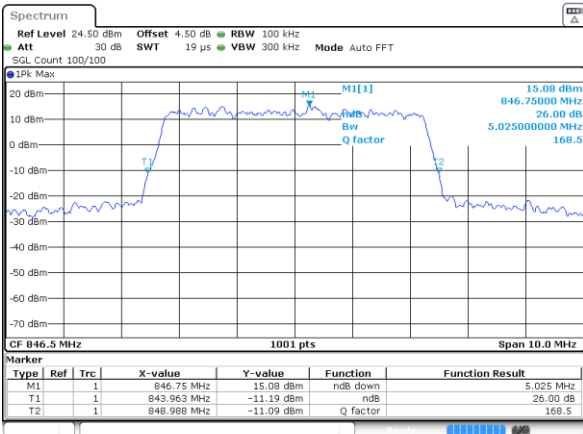
Date: 20 JAN 2020 01:17:52

Middle Channel / 5MHz / 16QAM



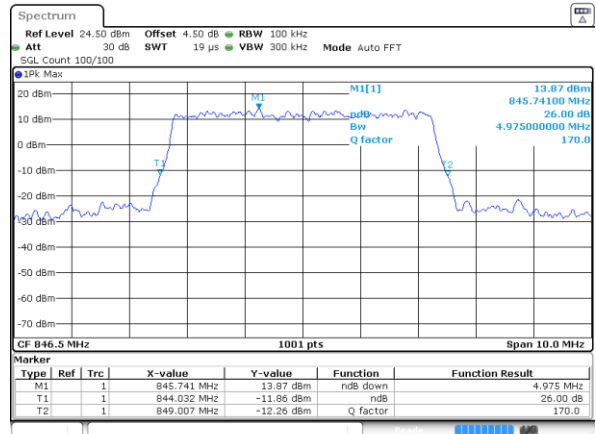
Date: 20 JAN 2020 01:18:02

Highest Channel / 5MHz / QPSK



Date: 20 JAN 2020 01:20:21

Highest Channel / 5MHz / 16QAM

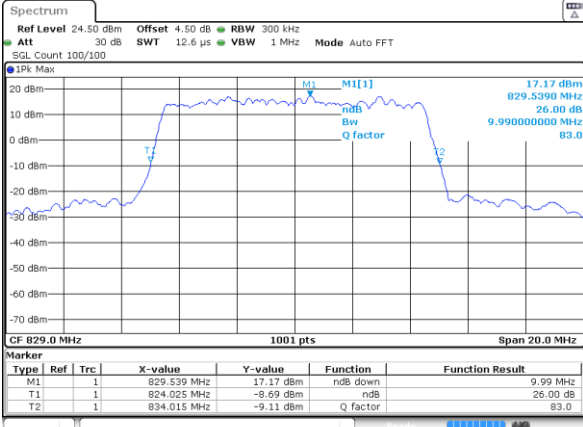


Date: 20 JAN 2020 01:20:31



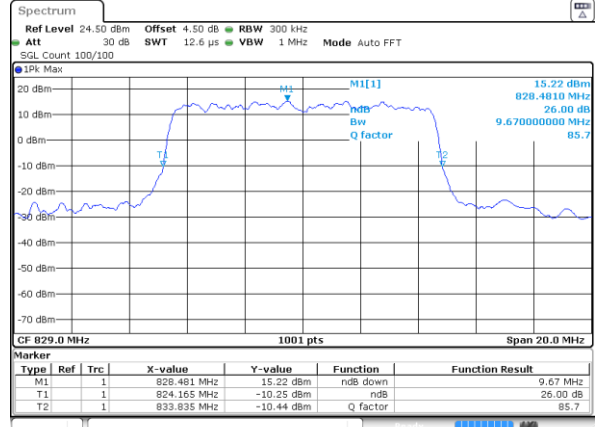
LTE Band 5

Lowest Channel / 10MHz / QPSK



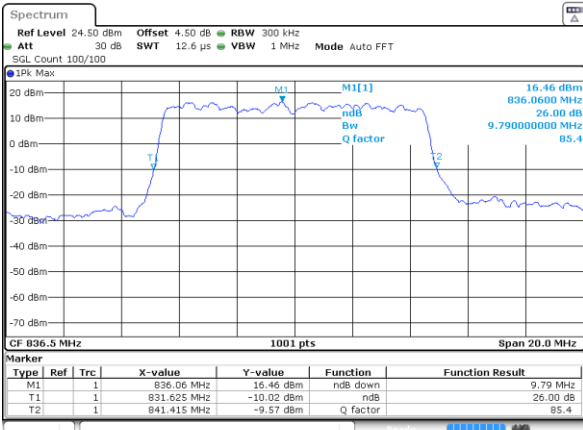
Date: 20 JAN 2020 01:29:19

Lowest Channel / 10MHz / 16QAM



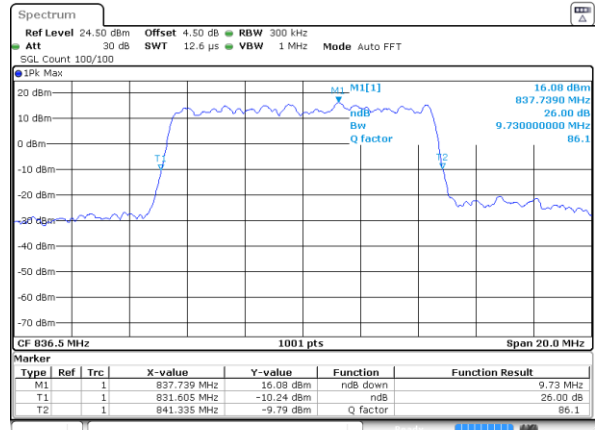
Date: 20 JAN 2020 01:29:29

Middle Channel / 10MHz / QPSK



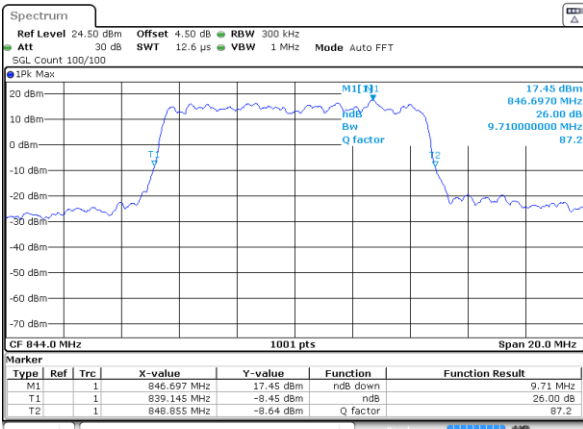
Date: 20 JAN 2020 01:38:18

Middle Channel / 10MHz / 16QAM



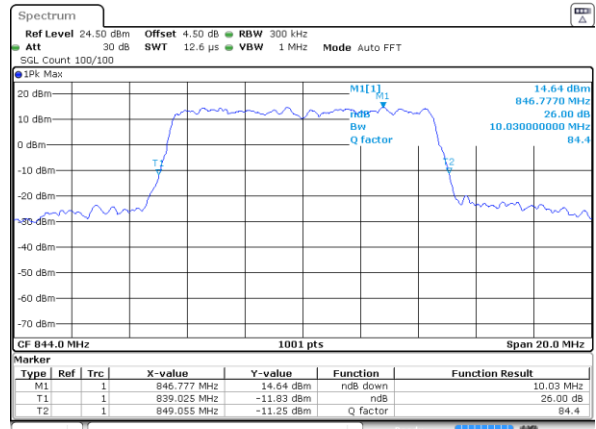
Date: 20 JAN 2020 01:38:28

Highest Channel / 10MHz / QPSK



Date: 20 JAN 2020 01:40:46

Highest Channel / 10MHz / 16QAM

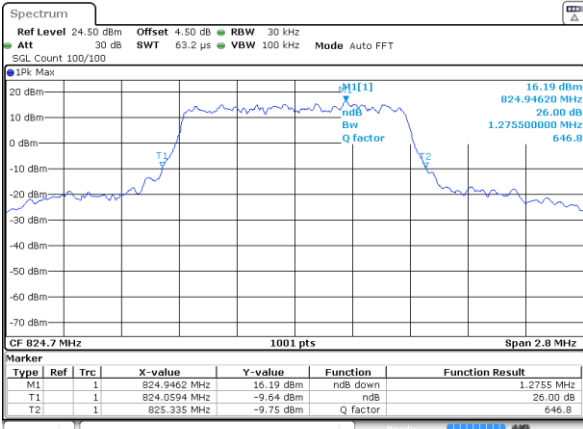


Date: 20 JAN 2020 01:40:56



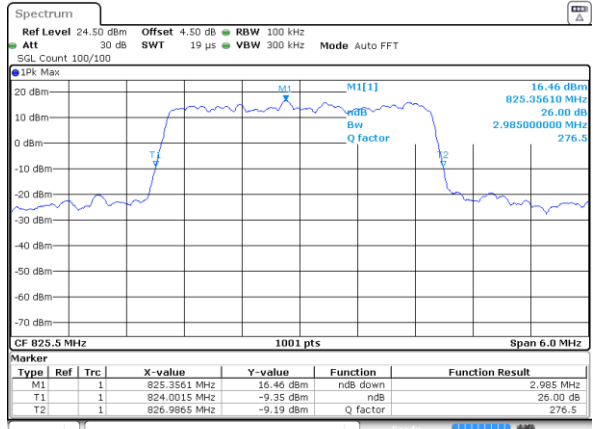
LTE Band 5

Lowest Channel / 1.4MHz / 64QAM



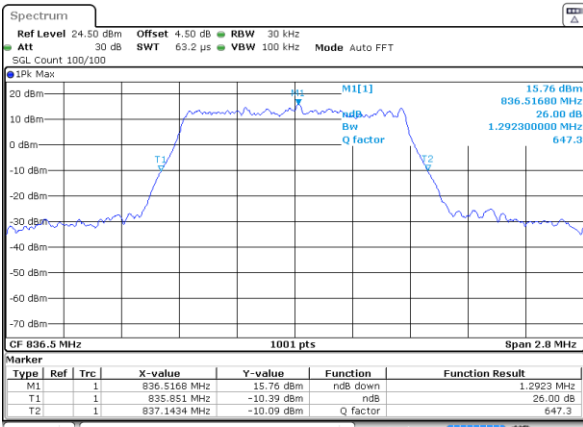
Date: 20 JAN 2020 02:44:52

Lowest Channel / 3MHz / 64QAM



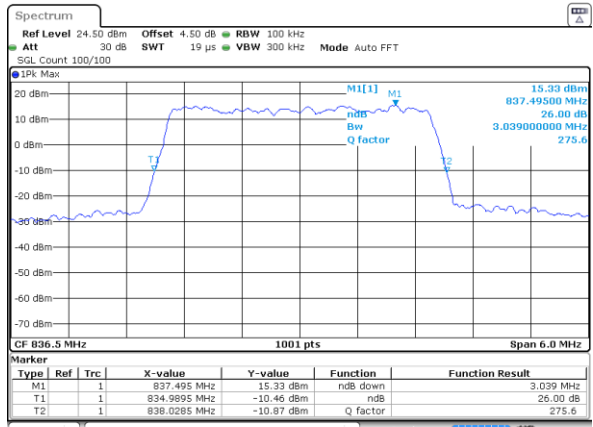
Date: 20 JAN 2020 02:00:51

Middle Channel / 1.4MHz / 64QAM



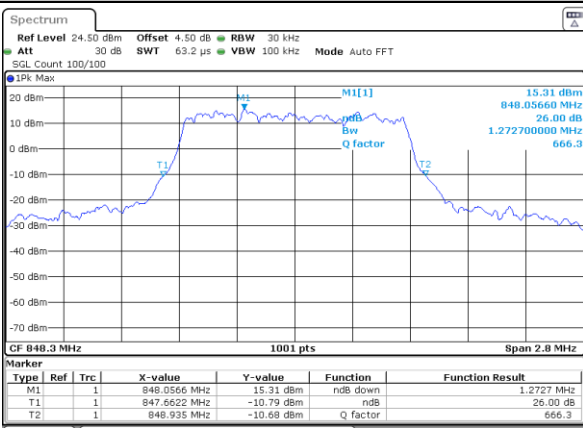
Date: 20 JAN 2020 01:56:02

Middle Channel / 3MHz / 64QAM



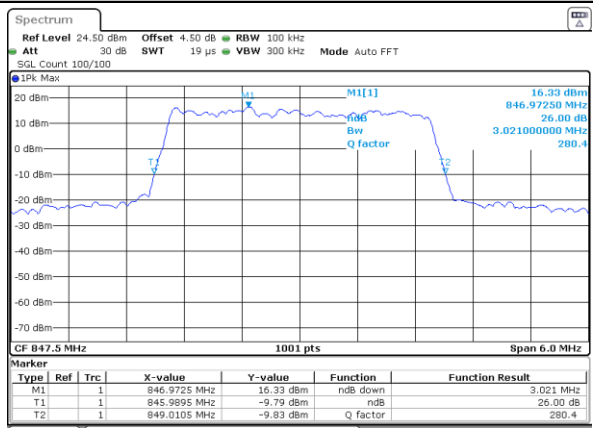
Date: 20 JAN 2020 02:06:15

Highest Channel / 1.4MHz / 64QAM



Date: 20 JAN 2020 01:56:22

Highest Channel / 3MHz / 64QAM

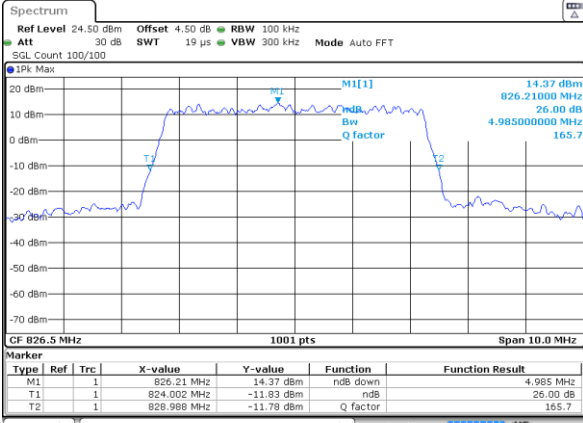


Date: 20 JAN 2020 02:06:35



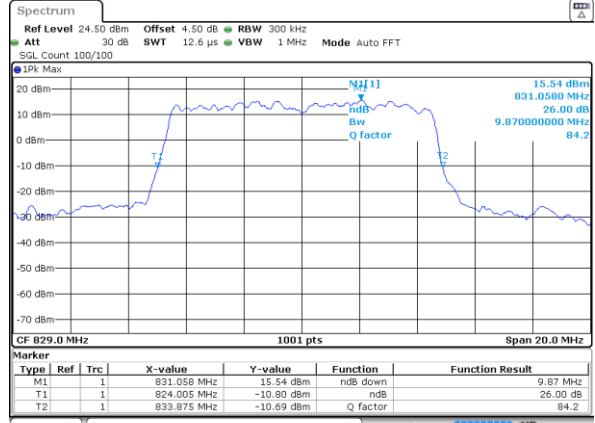
LTE Band 5

Lowest Channel / 5MHz / 64QAM



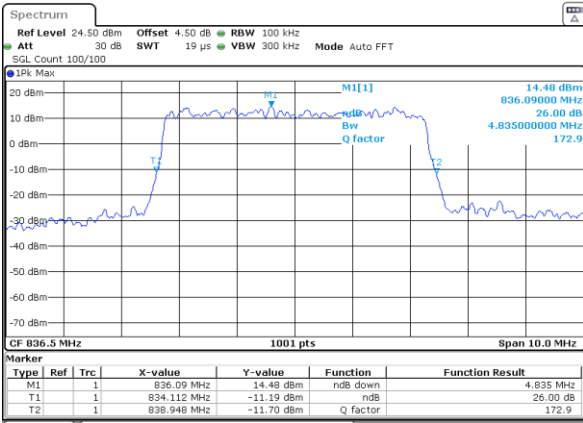
Date: 20 JAN 2020 02:11:04

Lowest Channel / 10MHz / 64QAM



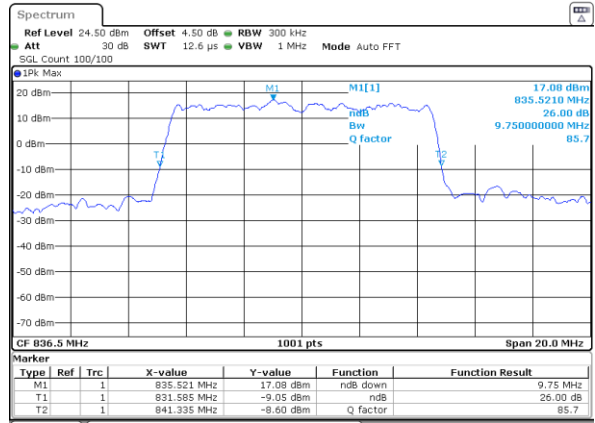
Date: 20 JAN 2020 02:21:17

Middle Channel / 5MHz / 64QAM



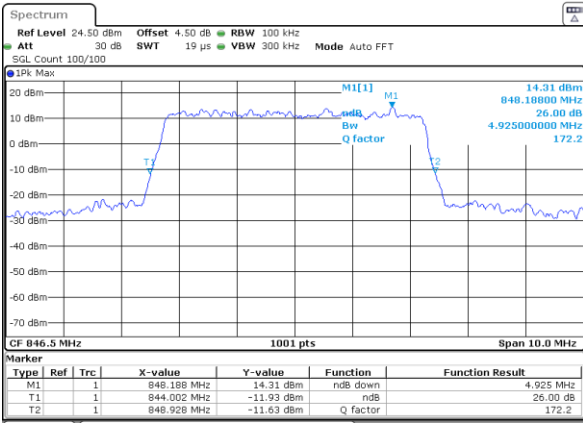
Date: 20 JAN 2020 02:16:28

Middle Channel / 10MHz / 64QAM



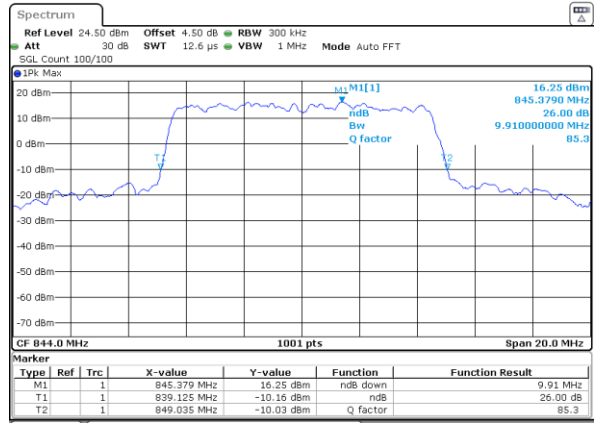
Date: 20 JAN 2020 02:33:17

Highest Channel / 5MHz / 64QAM



Date: 20 JAN 2020 02:16:48

Highest Channel / 10MHz / 64QAM



Date: 20 JAN 2020 02:33:37



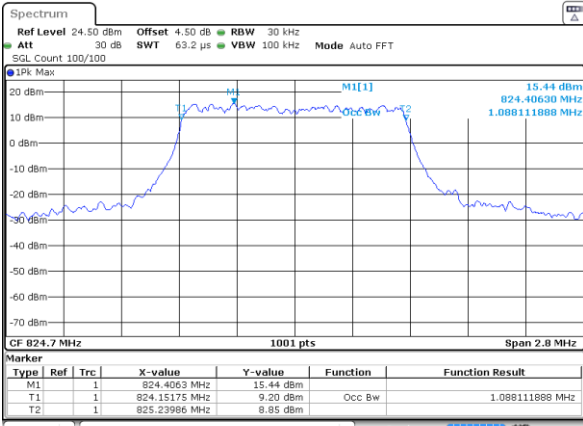
**Occupied Bandwidth**

Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM				
Lowest CH	1.09	1.09	2.71	2.73	4.48	4.51	9.01	9.05				
Middle CH	1.09	1.09	2.73	2.73	4.48	4.49	9.03	9.01				
Highest CH	1.09	1.10	2.70	2.71	4.49	4.47	9.03	9.05				
Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz					
Mod.	64QAM		64QAM		64QAM		64QAM					
Lowest CH	1.10		2.72		4.48		9.05		-	-	-	-
Middle CH	1.11		2.72		4.47		9.03		-	-	-	-
Highest CH	1.09		2.70		4.50		9.07		-	-	-	-



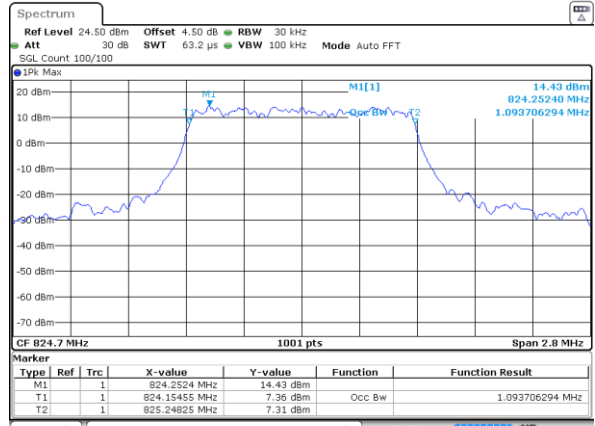
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



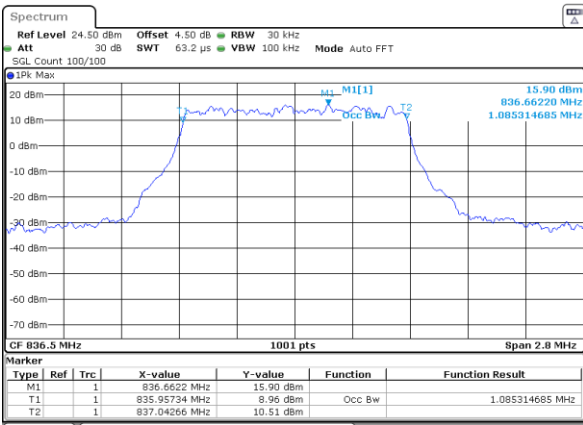
Date: 20 JAN 2020 00:27:42

Lowest Channel / 1.4MHz / 16QAM



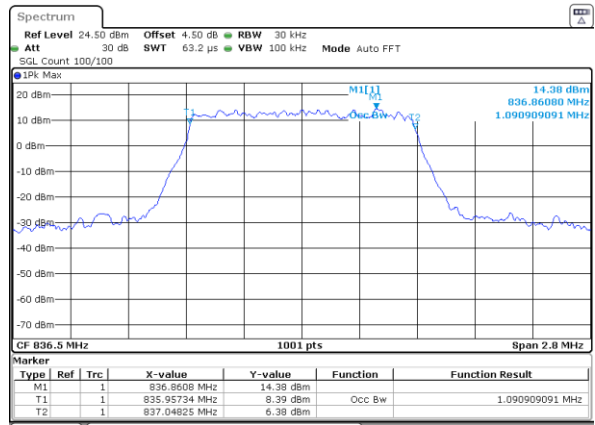
Date: 20 JAN 2020 00:27:52

Middle Channel / 1.4MHz / QPSK



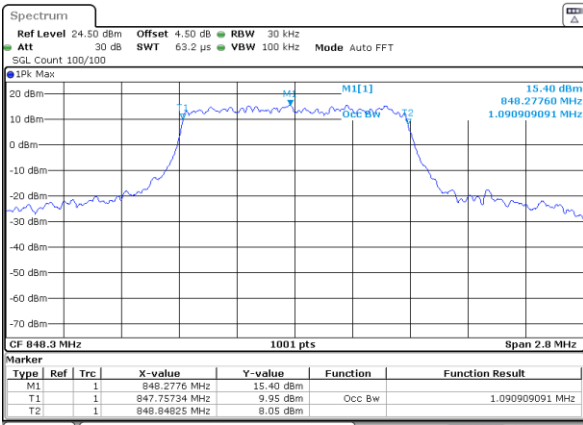
Date: 20 JAN 2020 00:36:41

Middle Channel / 1.4MHz / 16QAM



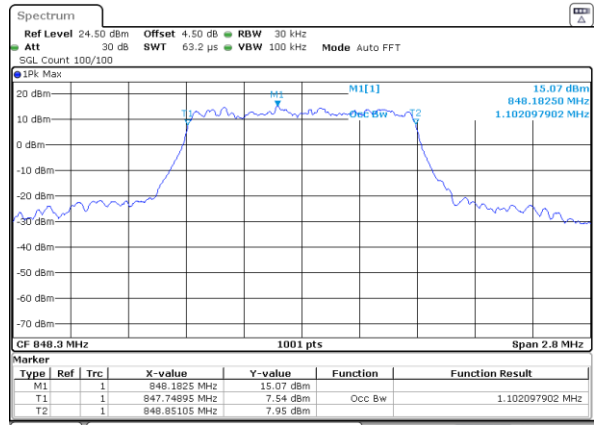
Date: 20 JAN 2020 00:36:51

Highest Channel / 1.4MHz / QPSK



Date: 20 JAN 2020 00:39:10

Highest Channel / 1.4MHz / 16QAM

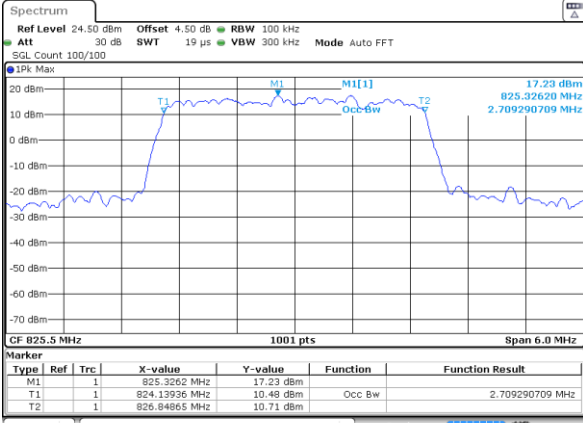


Date: 20 JAN 2020 00:39:20



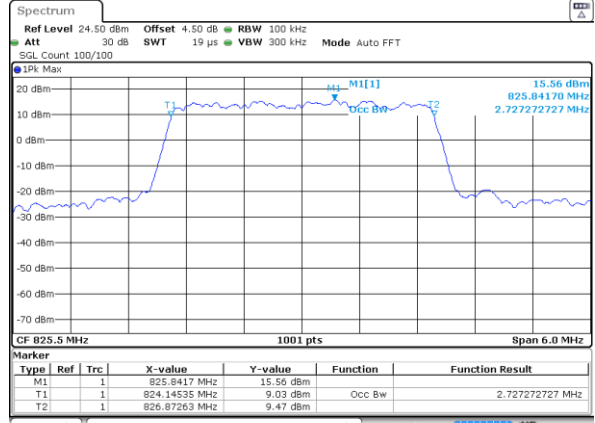
LTE Band 5

Lowest Channel / 3MHz / QPSK



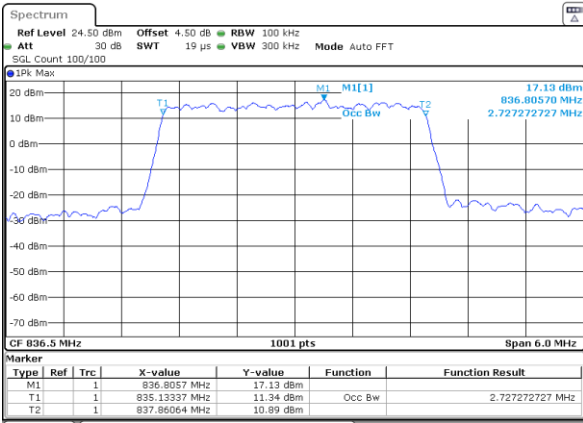
Date: 20 JAN 2020 00:48:08

Lowest Channel / 3MHz / 16QAM



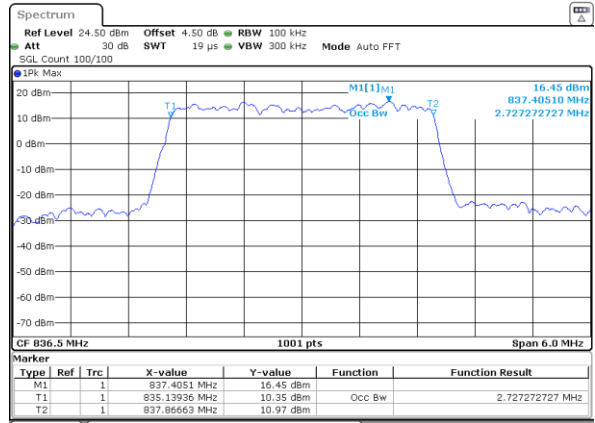
Date: 20 JAN 2020 00:48:18

Middle Channel / 3MHz / QPSK



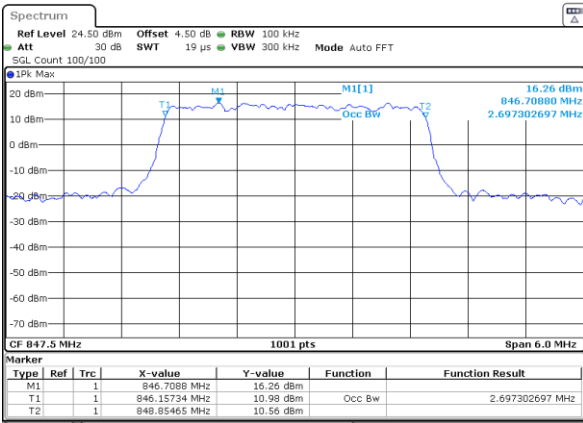
Date: 20 JAN 2020 00:57:07

Middle Channel / 3MHz / 16QAM



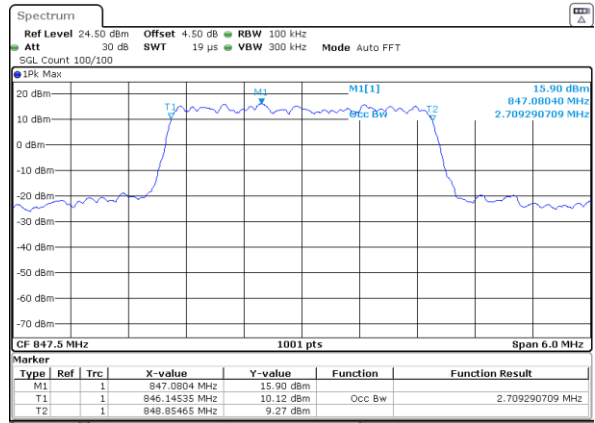
Date: 20 JAN 2020 00:57:17

Highest Channel / 3MHz / QPSK



Date: 20 JAN 2020 00:59:35

Highest Channel / 3MHz / 16QAM

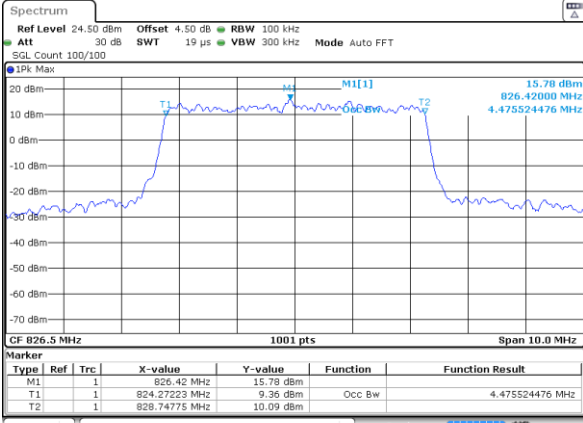


Date: 20 JAN 2020 00:59:45



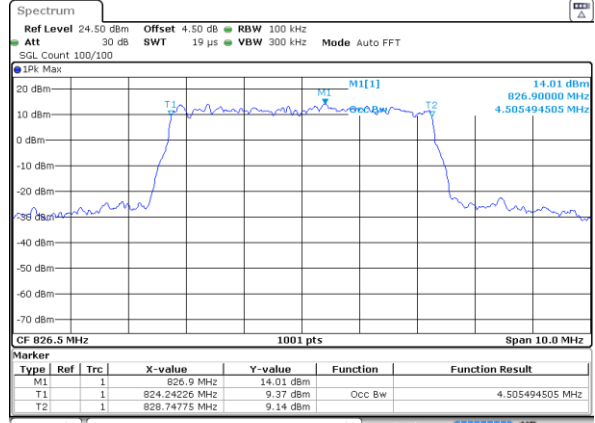
LTE Band 5

Lowest Channel / 5MHz / QPSK



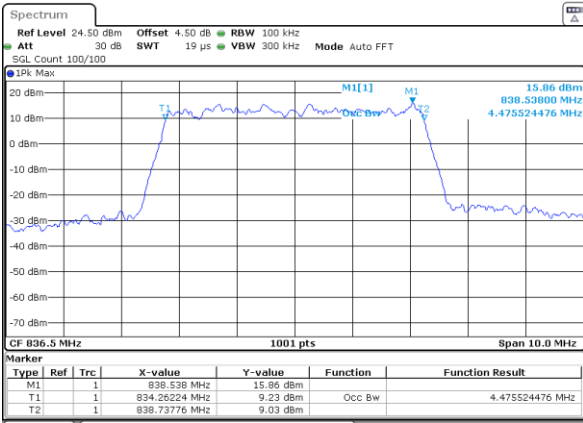
Date: 20 JAN 2020 01:08:34

Lowest Channel / 5MHz / 16QAM



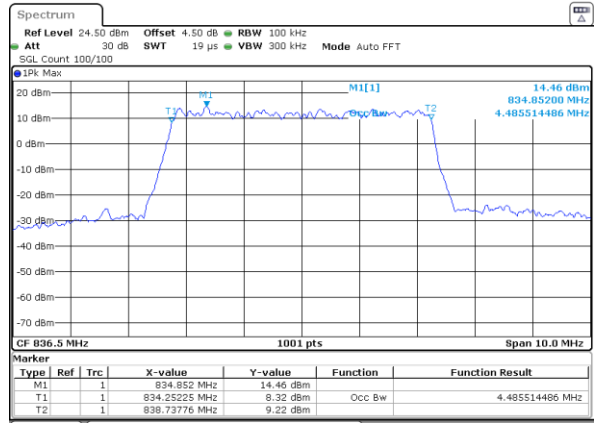
Date: 20 JAN 2020 01:08:44

Middle Channel / 5MHz / QPSK



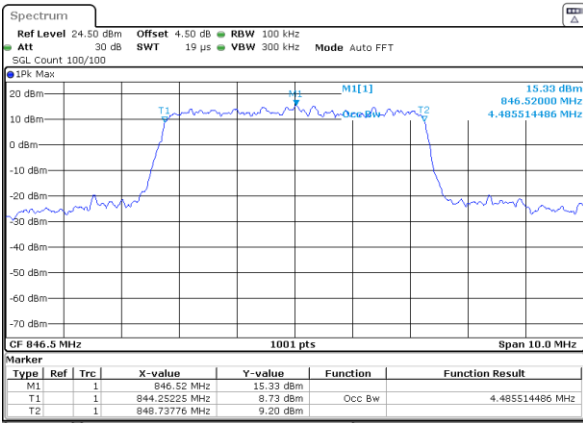
Date: 20 JAN 2020 01:17:32

Middle Channel / 5MHz / 16QAM



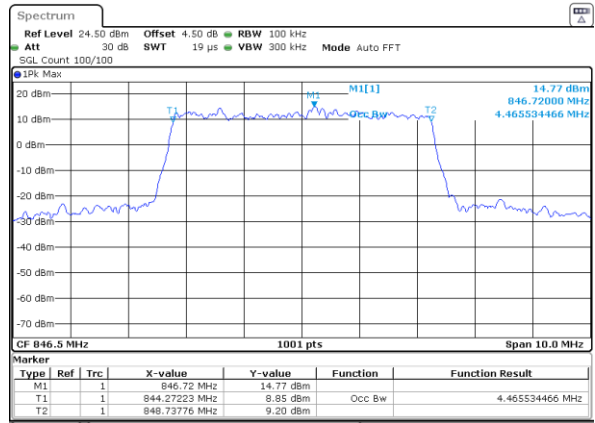
Date: 20 JAN 2020 01:17:42

Highest Channel / 5MHz / QPSK



Date: 20 JAN 2020 01:20:01

Highest Channel / 5MHz / 16QAM

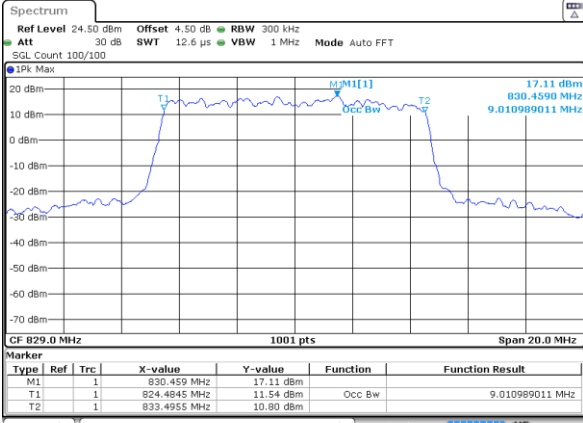


Date: 20 JAN 2020 01:20:11



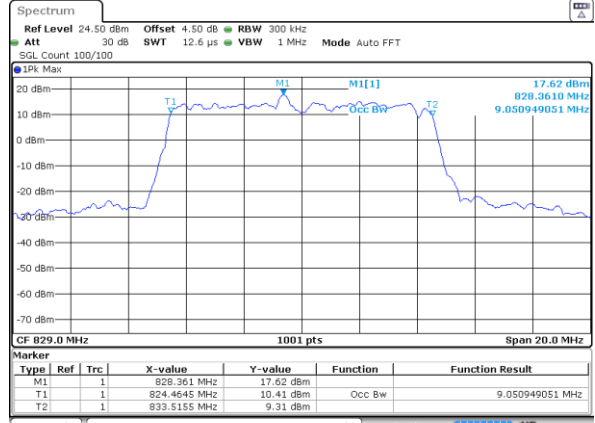
LTE Band 5

Lowest Channel / 10MHz / QPSK



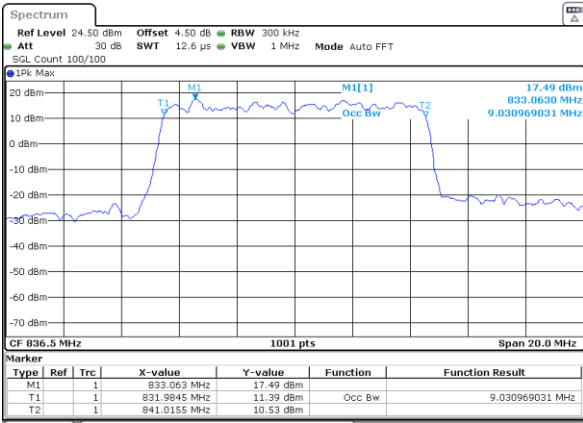
Date: 20 JAN 2020 01:28:59

Lowest Channel / 10MHz / 16QAM



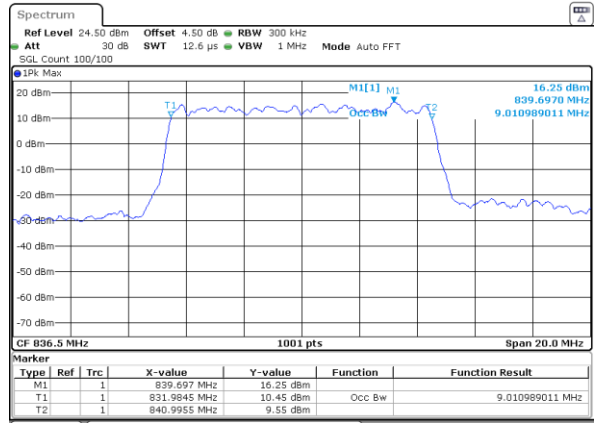
Date: 20 JAN 2020 01:29:09

Middle Channel / 10MHz / QPSK



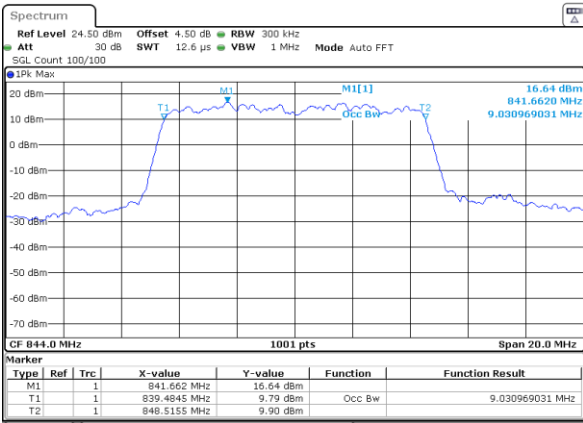
Date: 20 JAN 2020 01:37:58

Middle Channel / 10MHz / 16QAM



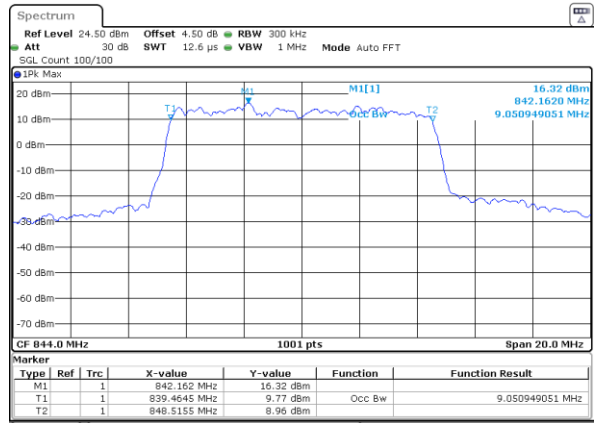
Date: 20 JAN 2020 01:38:08

Highest Channel / 10MHz / QPSK



Date: 20 JAN 2020 01:40:26

Highest Channel / 10MHz / 16QAM

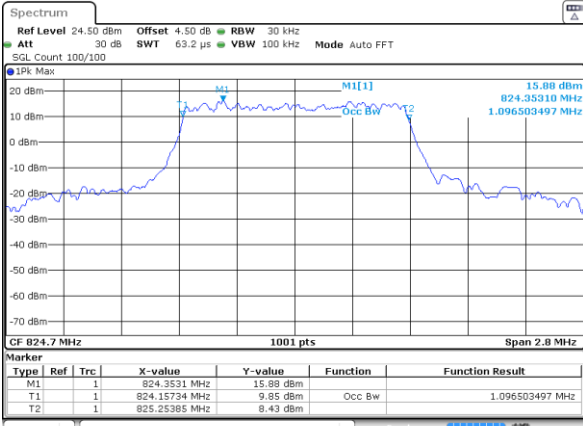


Date: 20 JAN 2020 01:40:36

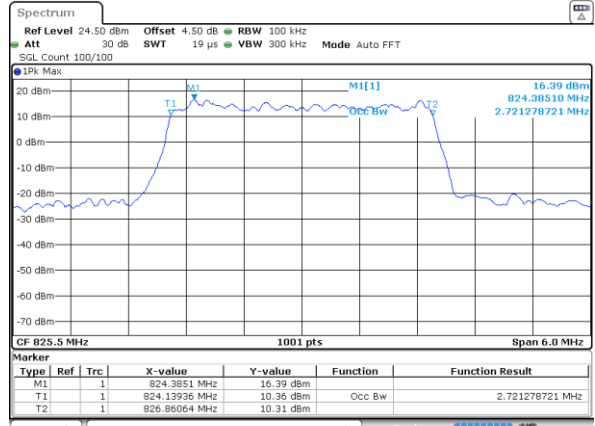


LTE Band 5

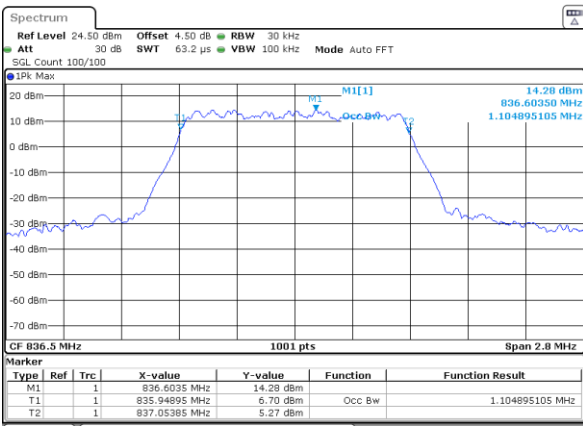
Lowest Channel / 1.4MHz / 64QAM



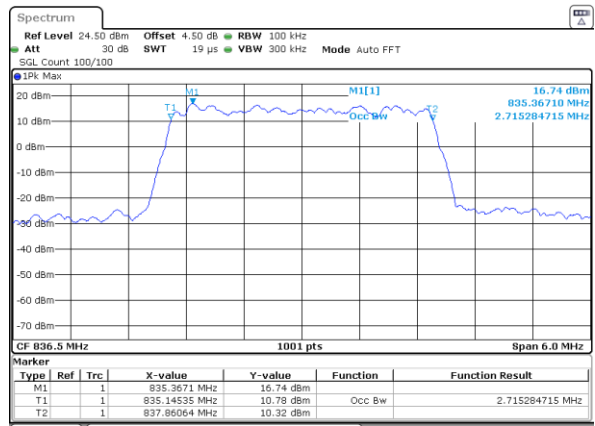
Lowest Channel / 3MHz / 64QAM



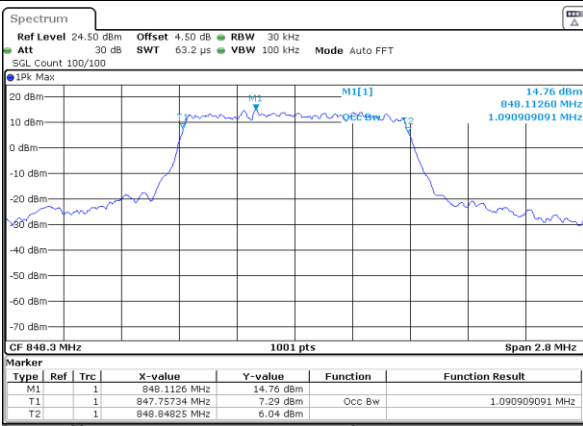
Middle Channel / 1.4MHz / 64QAM



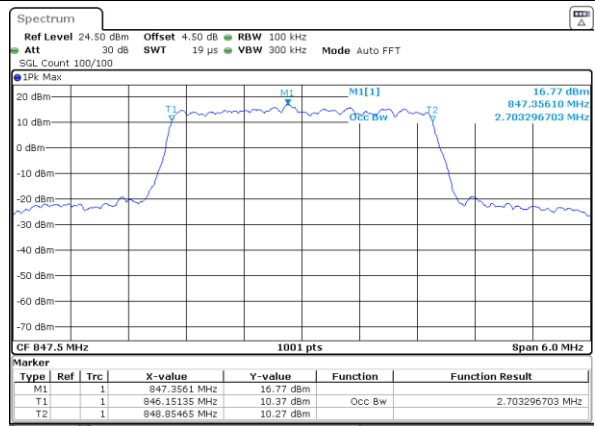
Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



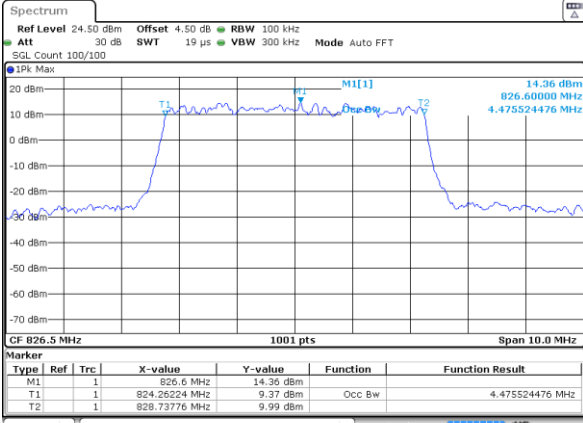
Highest Channel / 3MHz / 64QAM





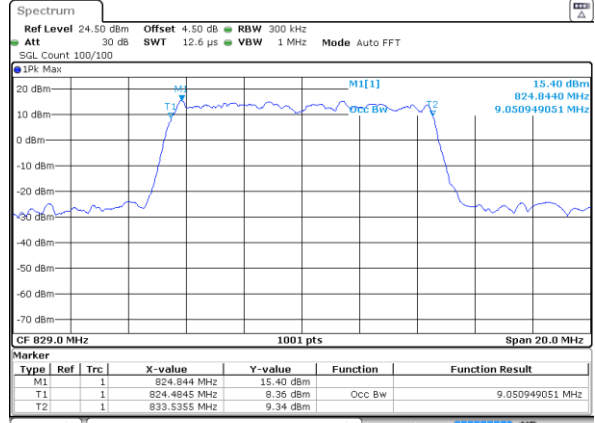
LTE Band 5

Lowest Channel / 5MHz / 64QAM



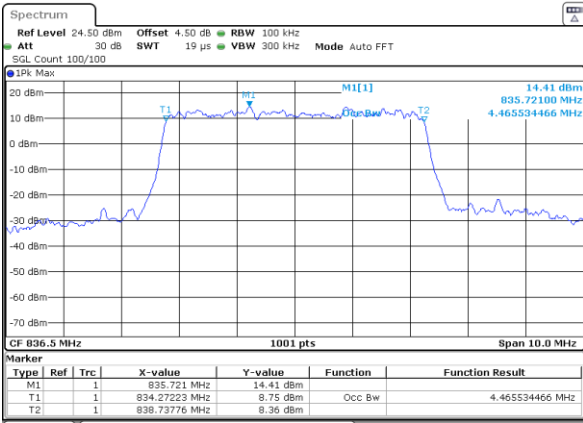
Date: 20 JAN 2020 02:10:54

Lowest Channel / 10MHz / 64QAM



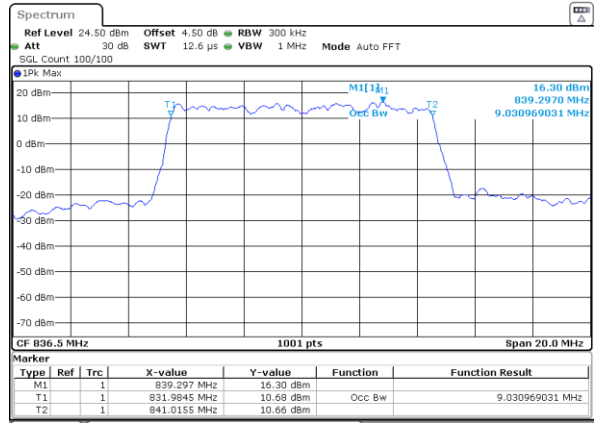
Date: 20 JAN 2020 02:21:07

Middle Channel / 5MHz / 64QAM



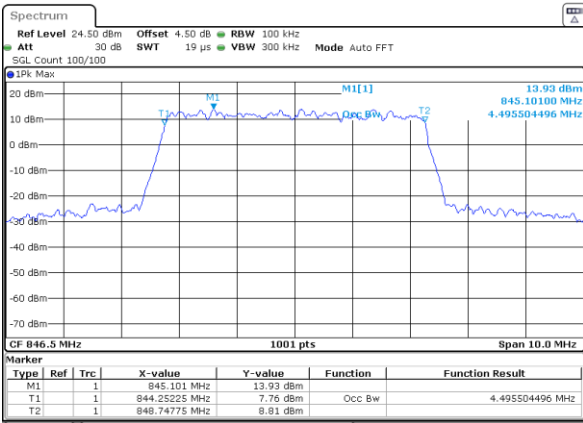
Date: 20 JAN 2020 02:16:18

Middle Channel / 10MHz / 64QAM



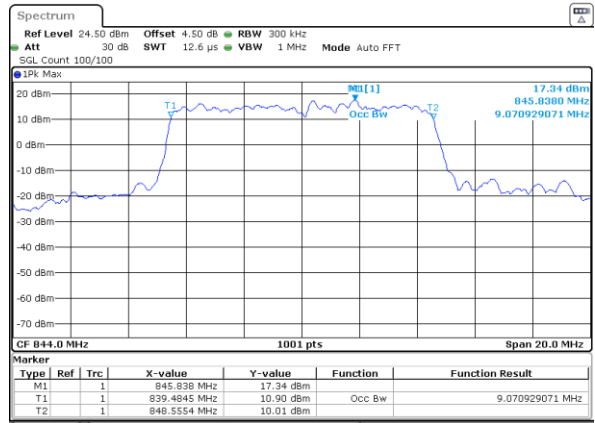
Date: 20 JAN 2020 02:33:07

Highest Channel / 5MHz / 64QAM



Date: 20 JAN 2020 02:16:38

Highest Channel / 10MHz / 64QAM



Date: 20 JAN 2020 02:33:27