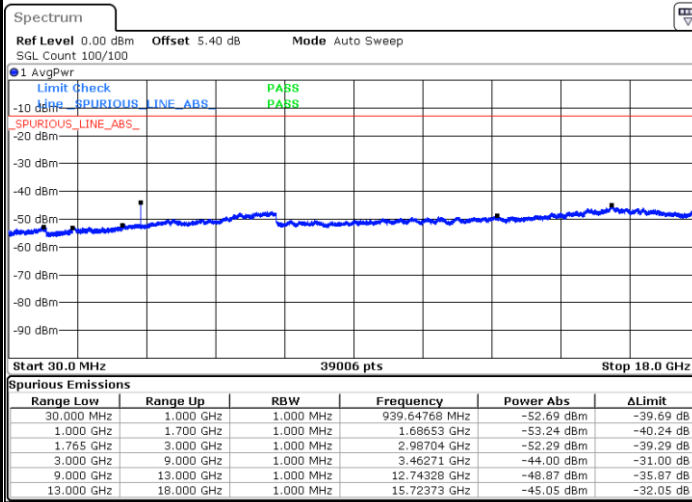




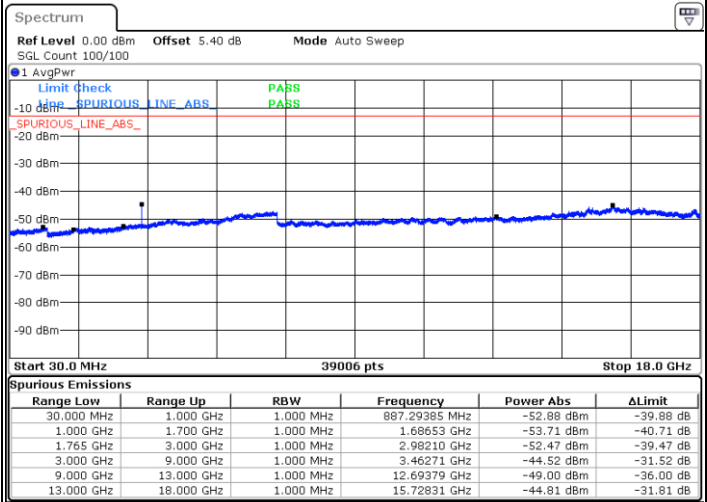
LTE Band 4 / 3MHz

Middle Channel / QPSK



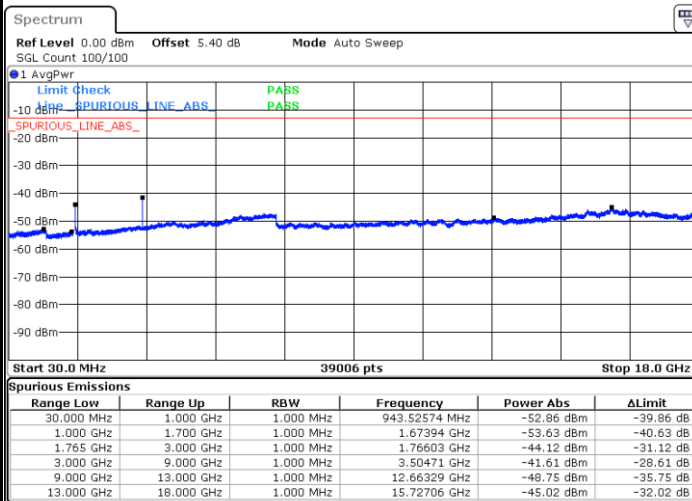
Date: 24 APR 2020 21:15:56

Middle Channel / 16QAM



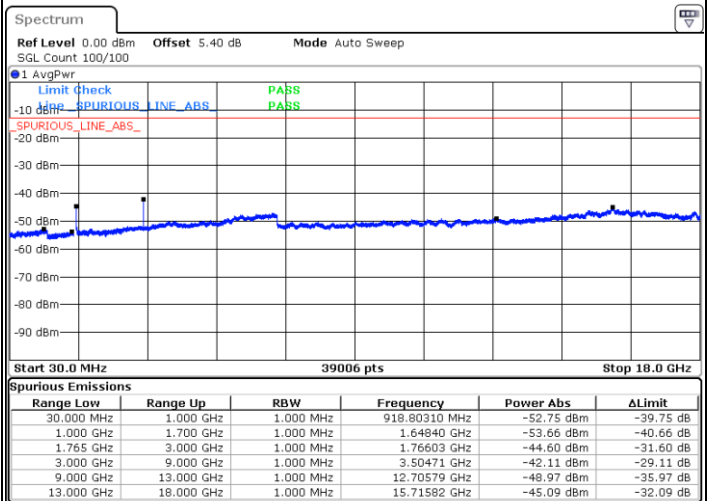
Date: 24 APR 2020 21:16:50

Highest Channel / QPSK



Date: 24 APR 2020 21:22:54

Highest Channel / 16QAM

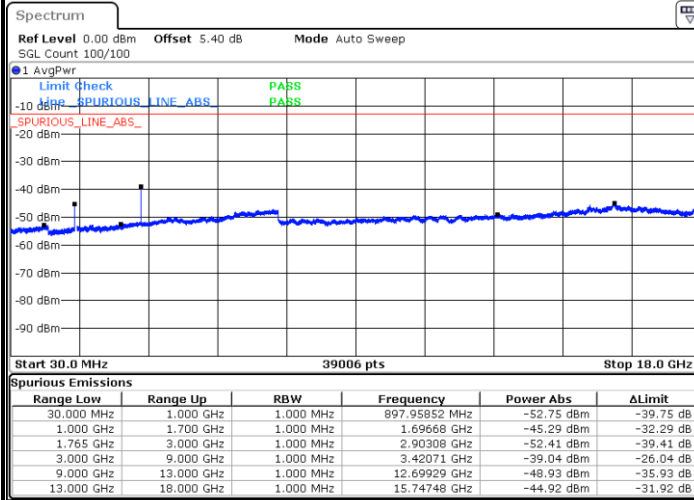


Date: 24 APR 2020 21:23:49



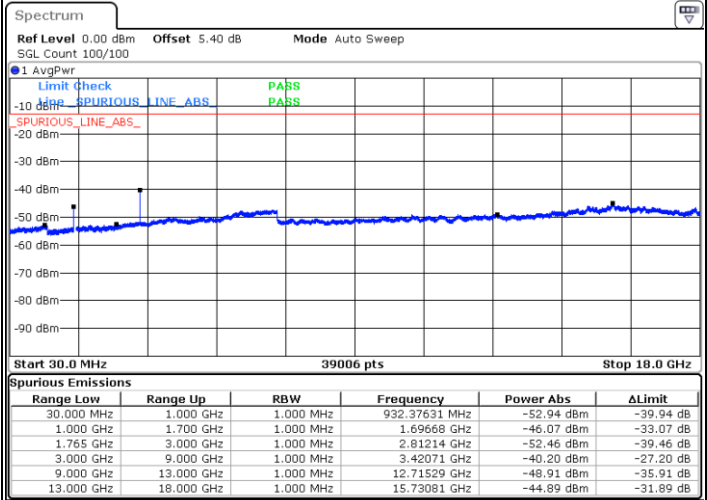
LTE Band 4 / 5MHz

Lowest Channel / QPSK



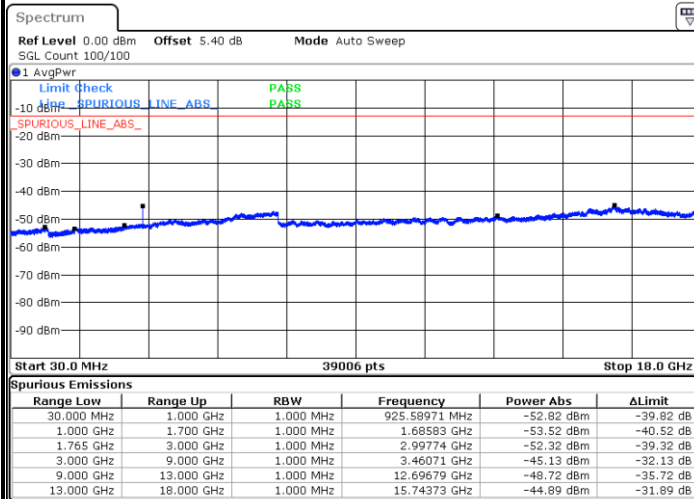
Date: 24 APR 2020 21:29:52

Lowest Channel / 16QAM



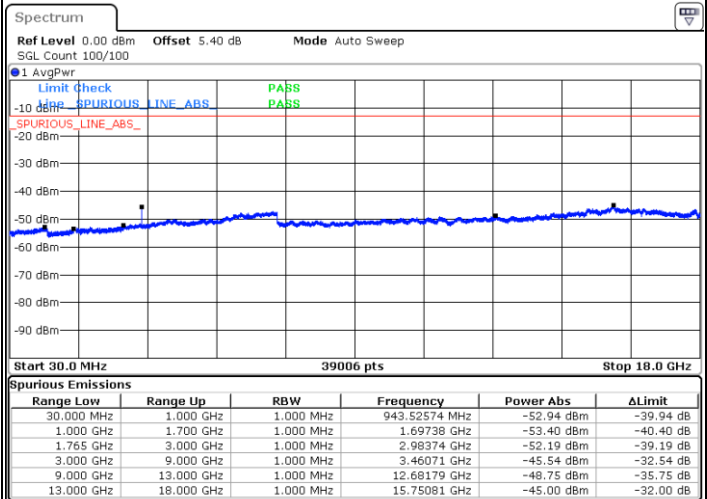
Date: 24 APR 2020 21:30:47

Middle Channel / QPSK



Date: 24 APR 2020 21:32:21

Middle Channel / 16QAM

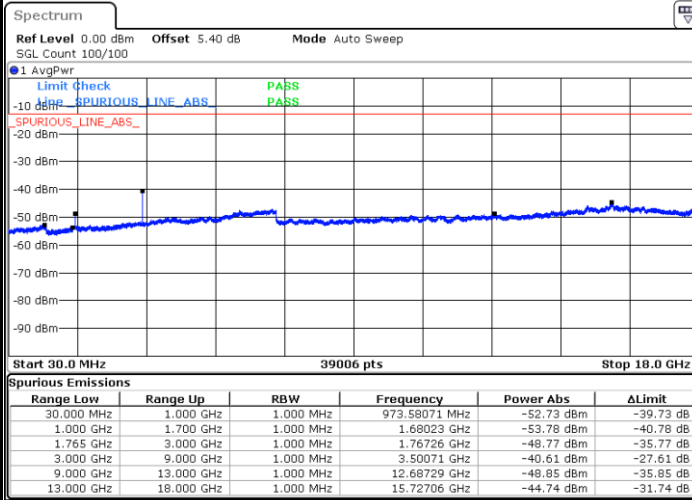


Date: 24 APR 2020 21:33:15



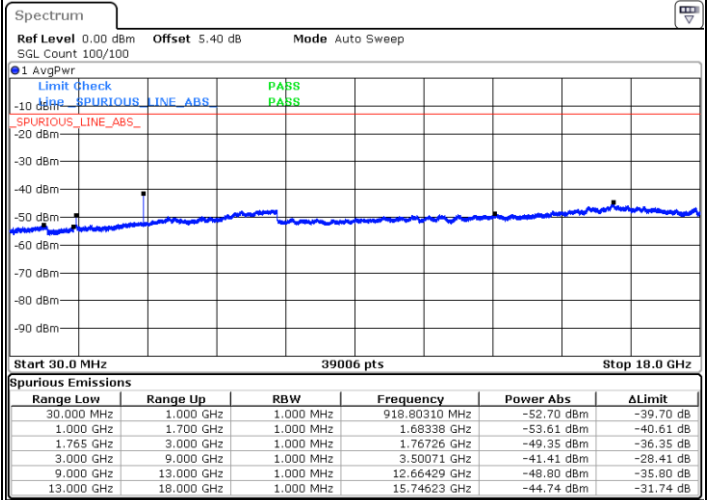
LTE Band 4 / 5MHz

Highest Channel / QPSK



Date: 24 APR 2020 21:39:19

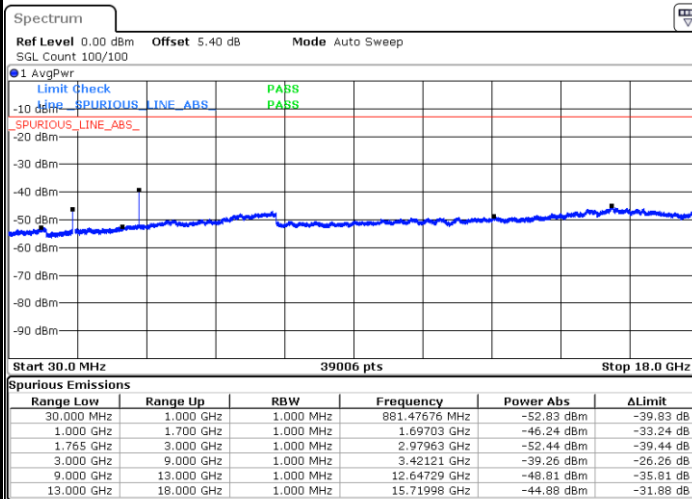
Highest Channel / 16QAM



Date: 24 APR 2020 21:40:14

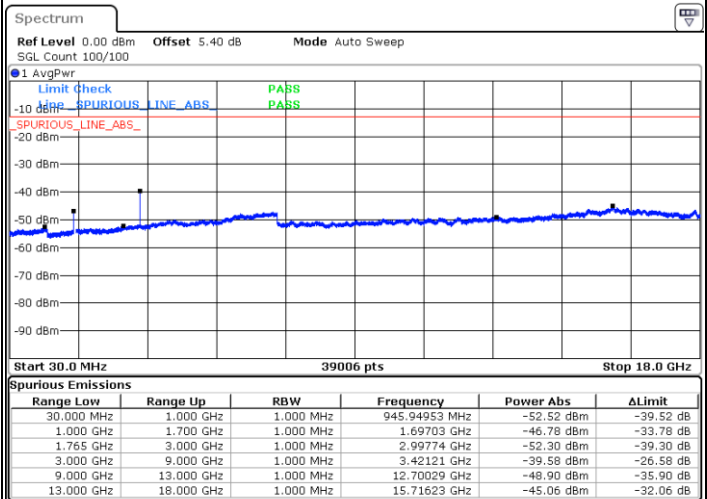
LTE Band 4 / 10MHz

Lowest Channel / QPSK



Date: 24 APR 2020 21:46:18

Lowest Channel / 16QAM

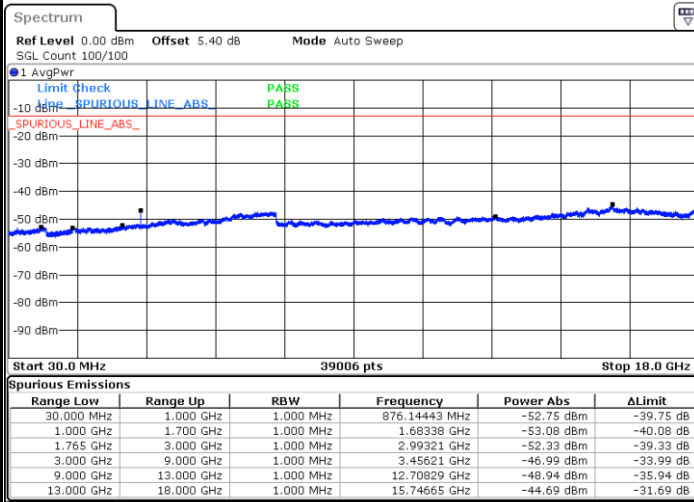


Date: 24 APR 2020 21:47:12



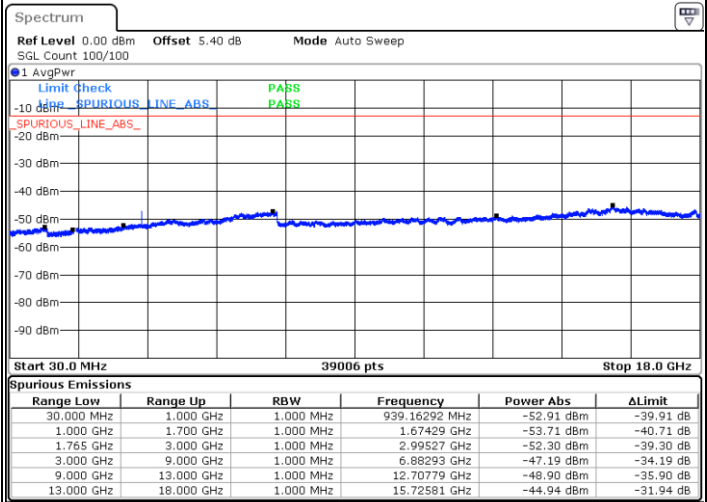
LTE Band 4 / 10MHz

Middle Channel / QPSK



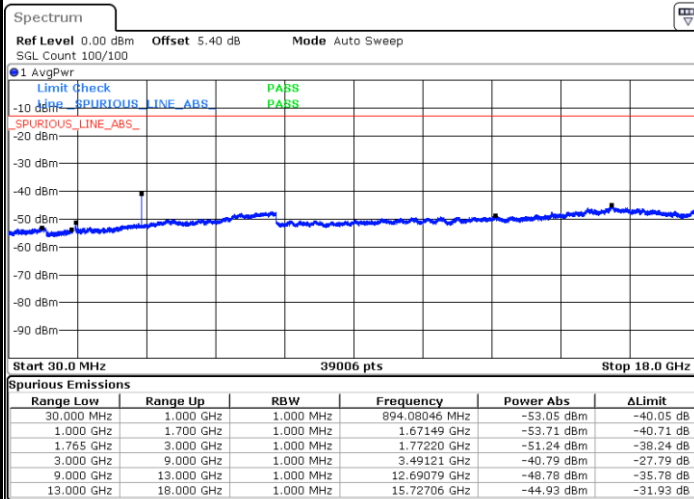
Date: 24 APR 2020 21:48:46

Middle Channel / 16QAM



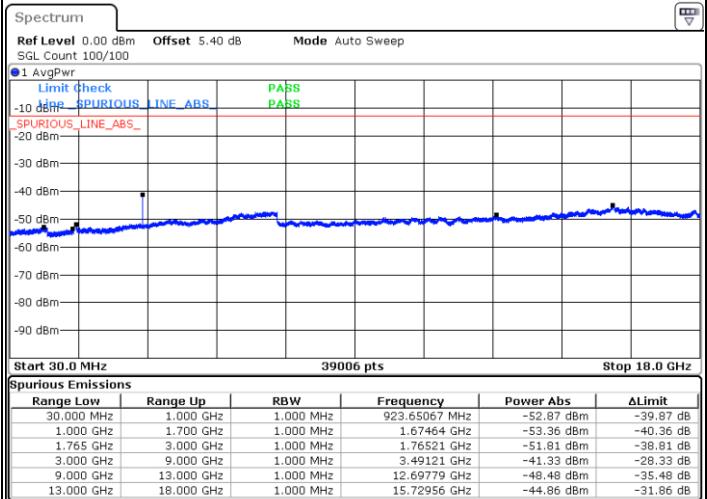
Date: 24 APR 2020 21:49:41

Highest Channel / QPSK



Date: 24 APR 2020 21:55:45

Highest Channel / 16QAM

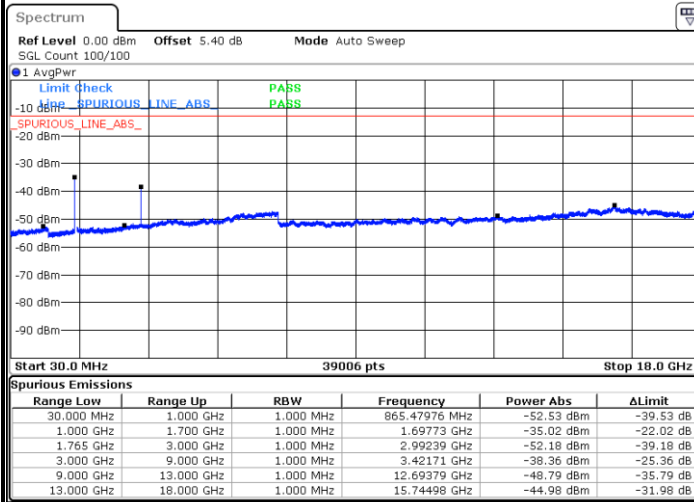


Date: 24 APR 2020 21:56:39



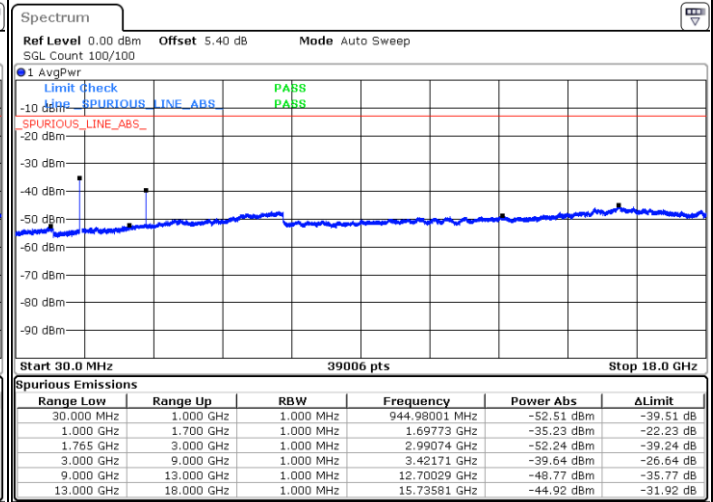
LTE Band 4 / 15MHz

Lowest Channel / QPSK



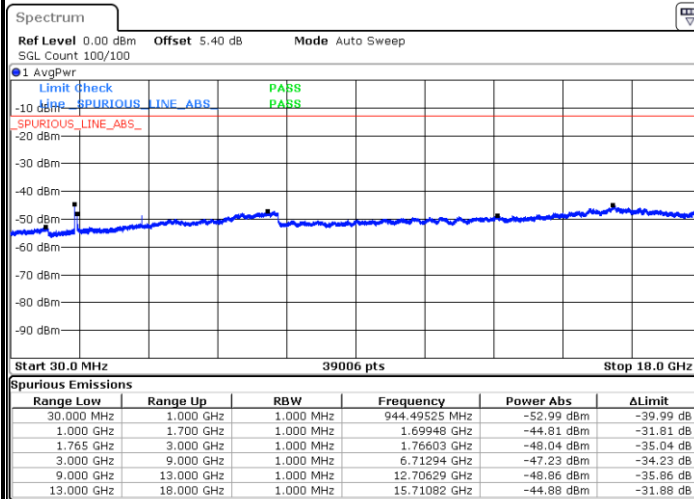
Date: 24 APR 2020 22:02:43

Lowest Channel / 16QAM



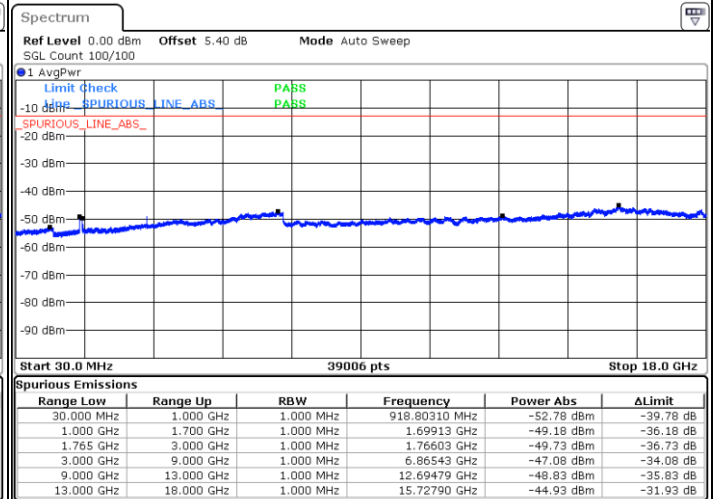
Date: 24 APR 2020 22:03:38

Middle Channel / QPSK



Date: 24 APR 2020 22:05:12

Middle Channel / 16QAM

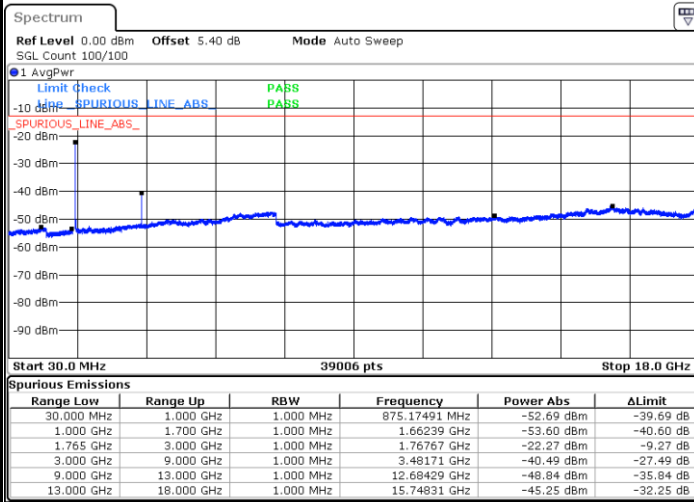


Date: 24 APR 2020 22:06:06



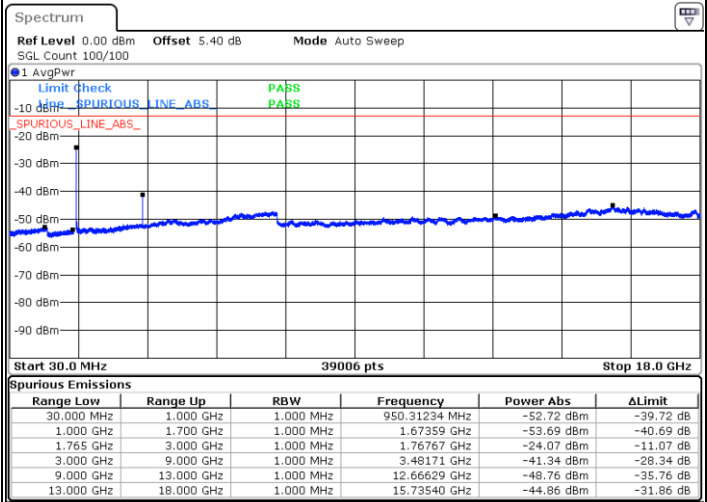
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 24 APR 2020 22:12:10

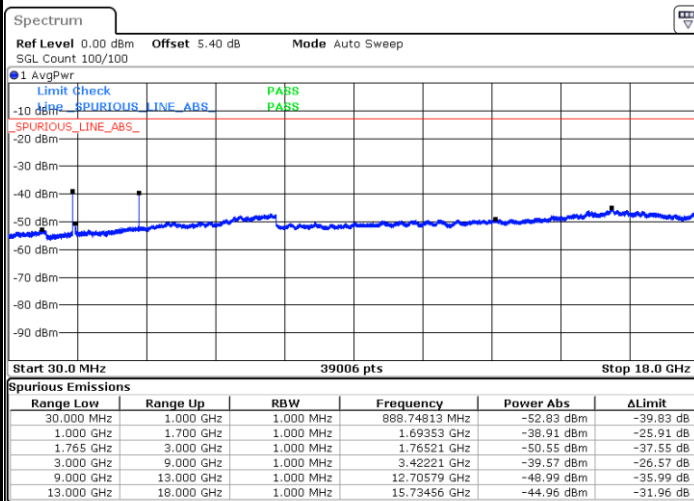
Highest Channel / 16QAM



Date: 24 APR 2020 22:13:04

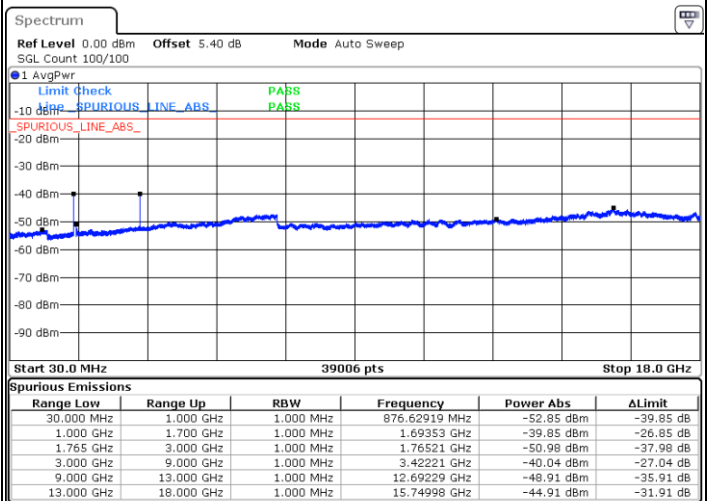
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 24 APR 2020 22:19:08

Lowest Channel / 16QAM

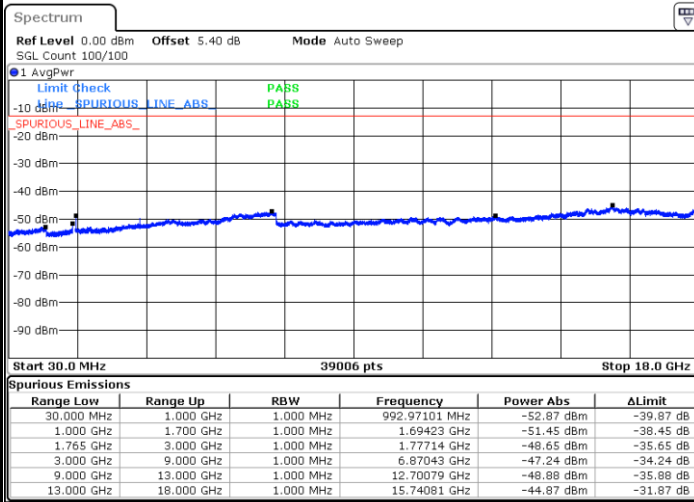


Date: 24 APR 2020 22:20:03



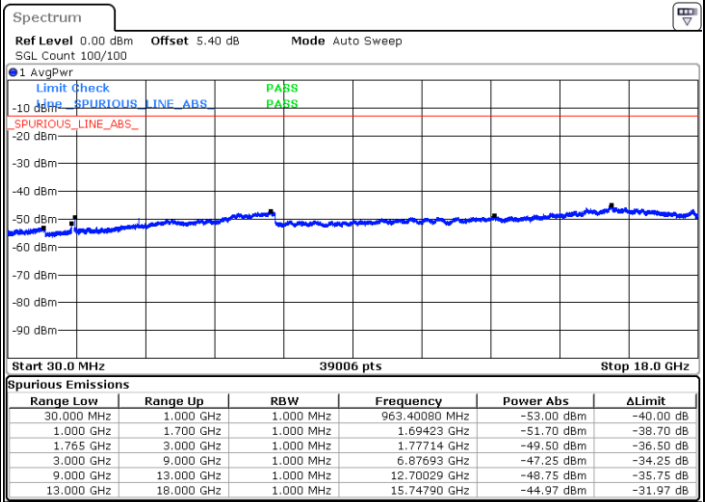
LTE Band 4 / 20MHz

Middle Channel / QPSK



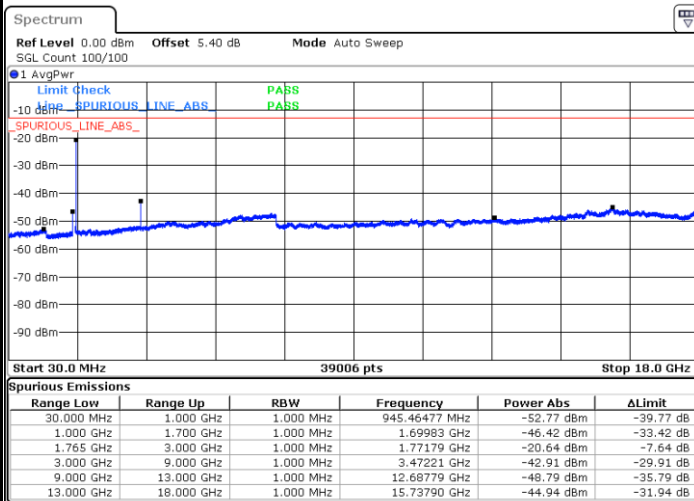
Date: 24 APR 2020 22:21:37

Middle Channel / 16QAM



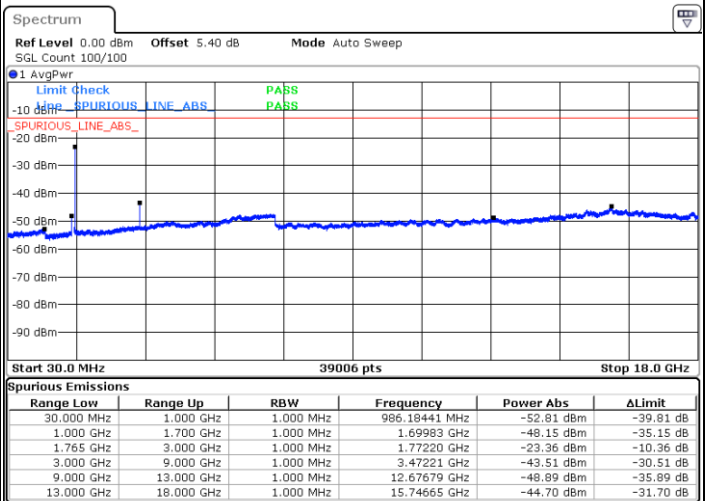
Date: 24 APR 2020 22:22:31

Highest Channel / QPSK



Date: 24 APR 2020 22:28:35

Highest Channel / 16QAM

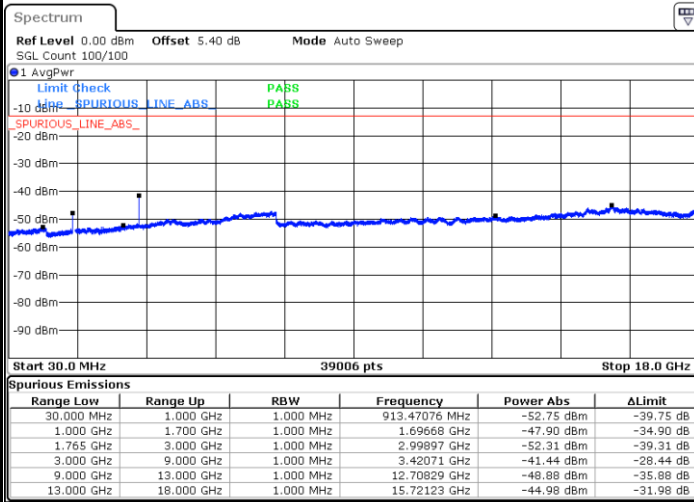


Date: 24 APR 2020 22:29:29



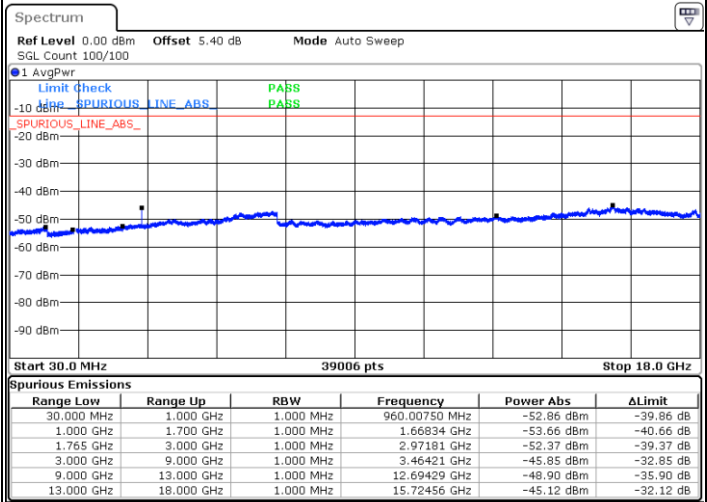
LTE Band 4 / 1.4MHz

Lowest Channel / 64QAM



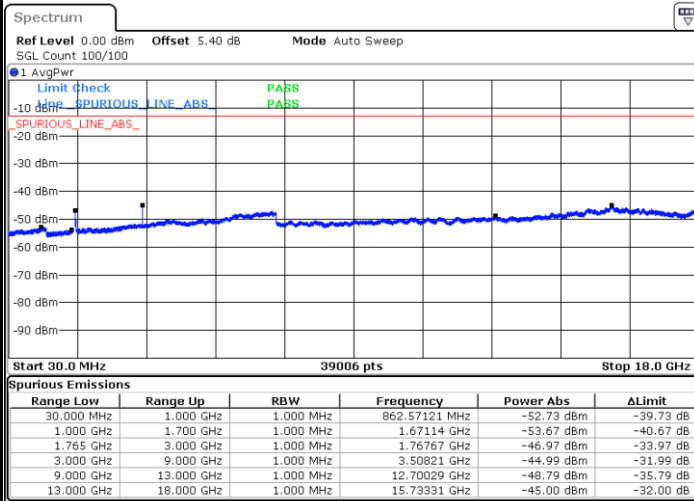
Date: 24 APR 2020 22:34:53

Middle Channel / 64QAM



Date: 24 APR 2020 22:36:08

Highest Channel / 64QAM

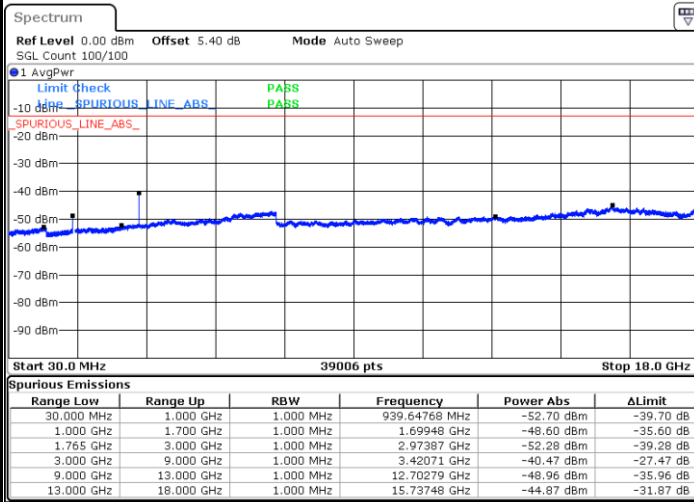


Date: 24 APR 2020 22:39:37



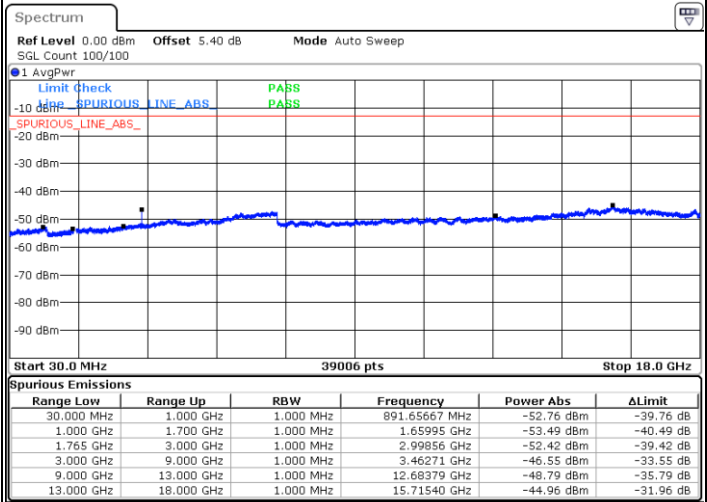
LTE Band 4 / 3MHz

Lowest Channel / 64QAM



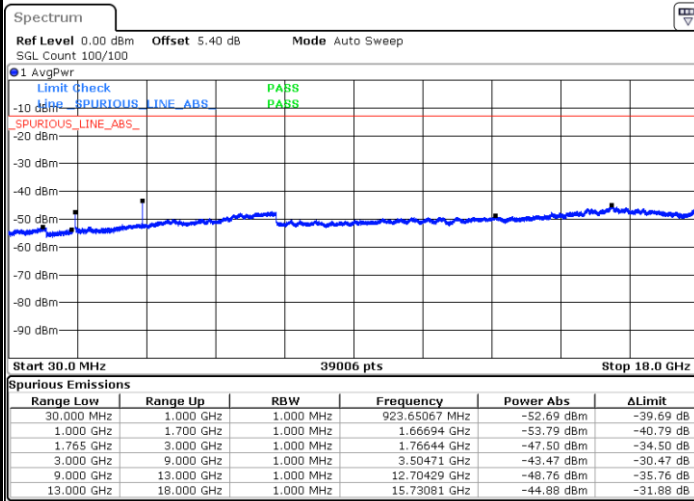
Date: 24 APR 2020 22:43:07

Middle Channel / 64QAM



Date: 24 APR 2020 22:44:21

Highest Channel / 64QAM

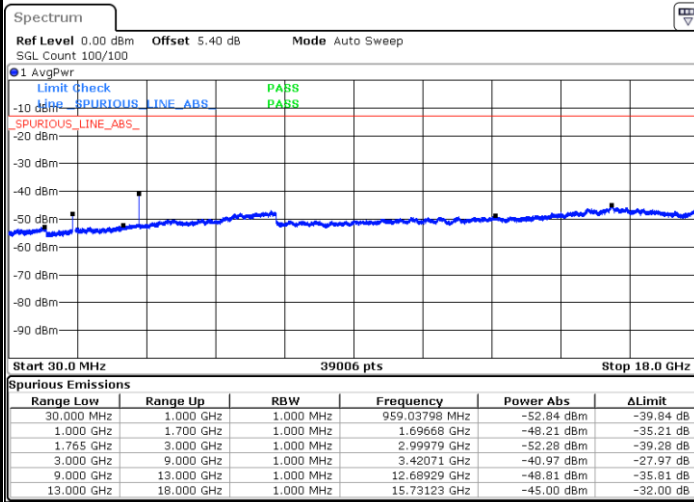


Date: 24 APR 2020 22:47:51



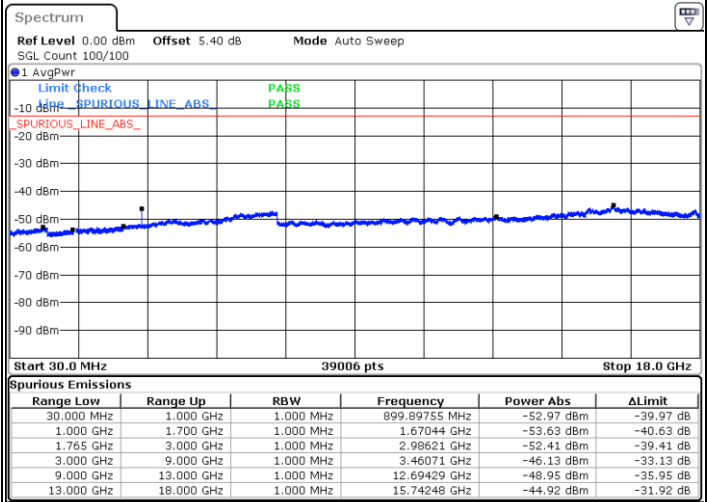
LTE Band 4 / 5MHz

Lowest Channel / 64QAM



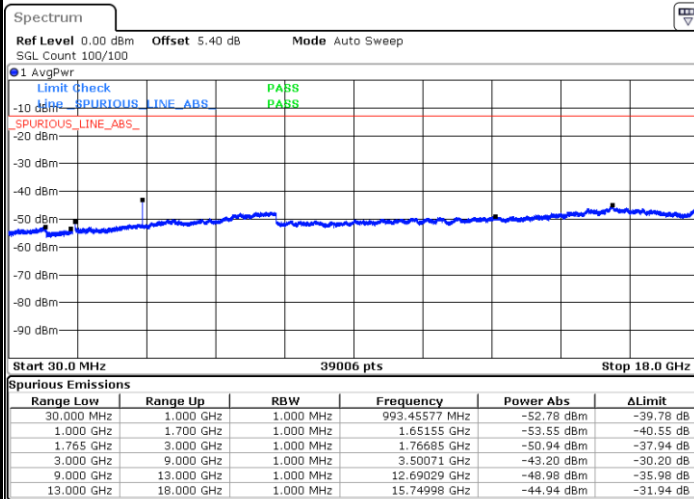
Date: 24 APR 2020 22:51:20

Middle Channel / 64QAM



Date: 24 APR 2020 22:52:35

Highest Channel / 64QAM

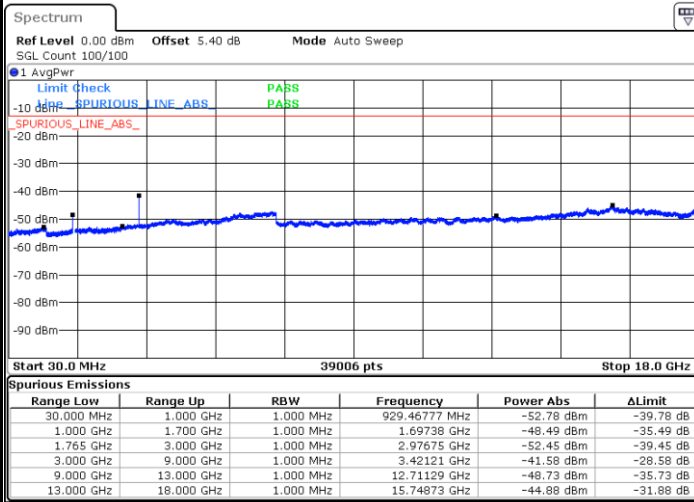


Date: 24 APR 2020 22:56:04



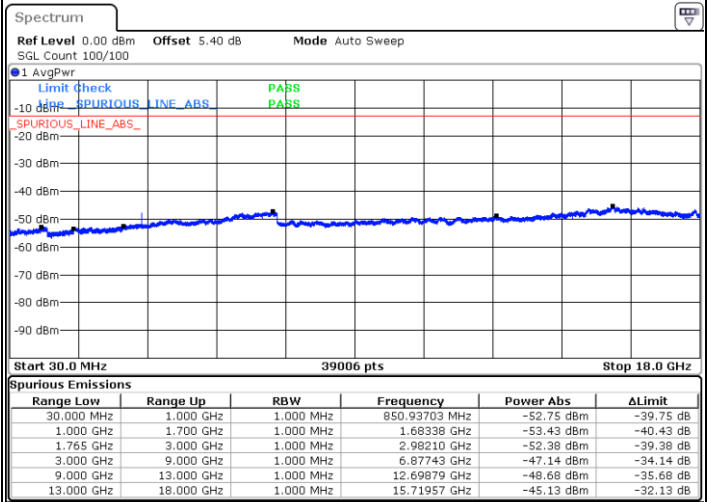
LTE Band 4 / 10MHz

Lowest Channel / 64QAM



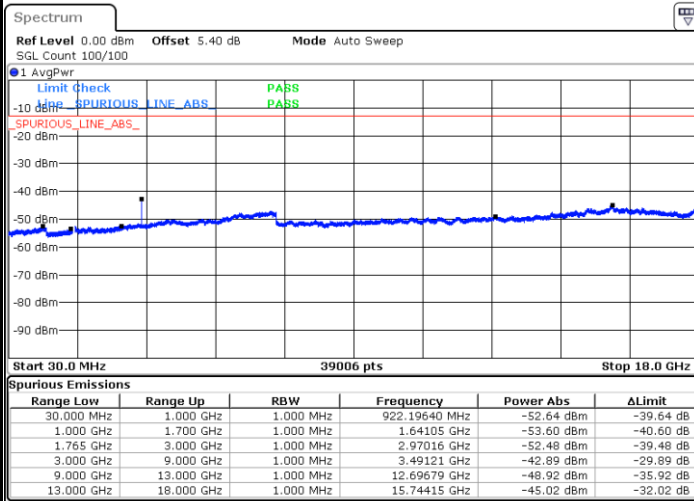
Date: 24 APR 2020 22:59:33

Middle Channel / 64QAM



Date: 24 APR 2020 23:00:48

Highest Channel / 64QAM

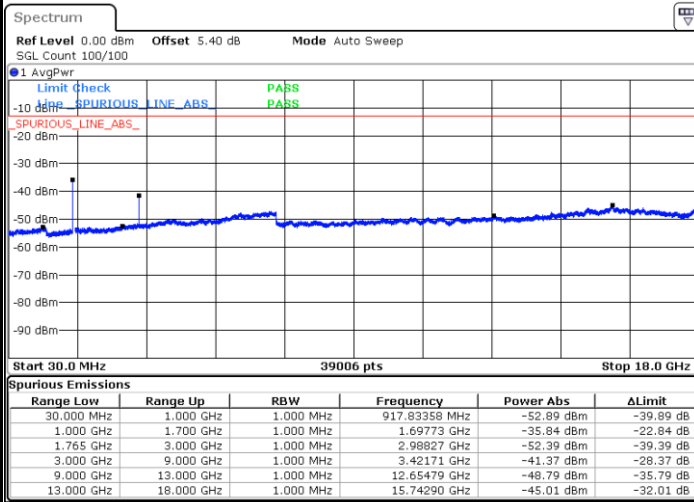


Date: 24 APR 2020 23:04:17



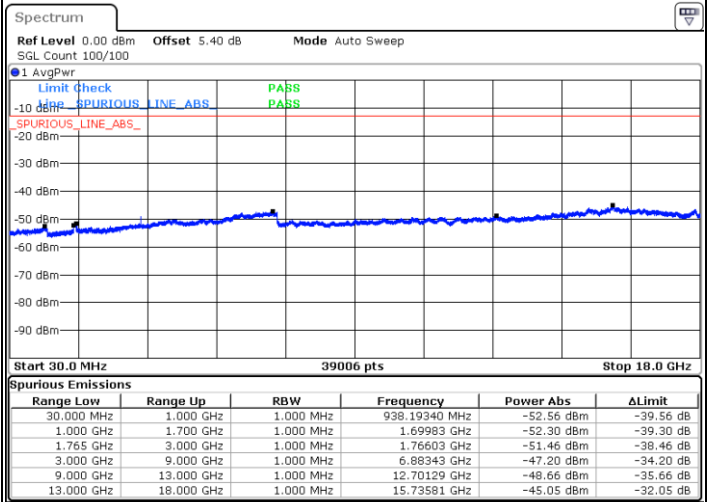
LTE Band 4 / 15MHz

Lowest Channel / 64QAM



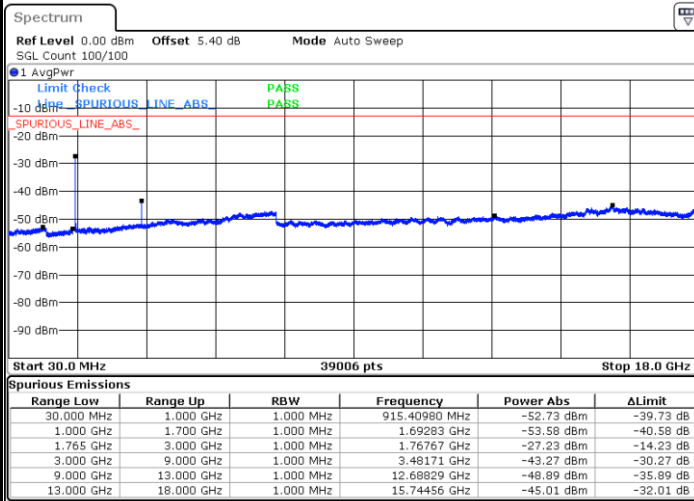
Date: 24 APR 2020 23:07:46

Middle Channel / 64QAM



Date: 24 APR 2020 23:09:01

Highest Channel / 64QAM

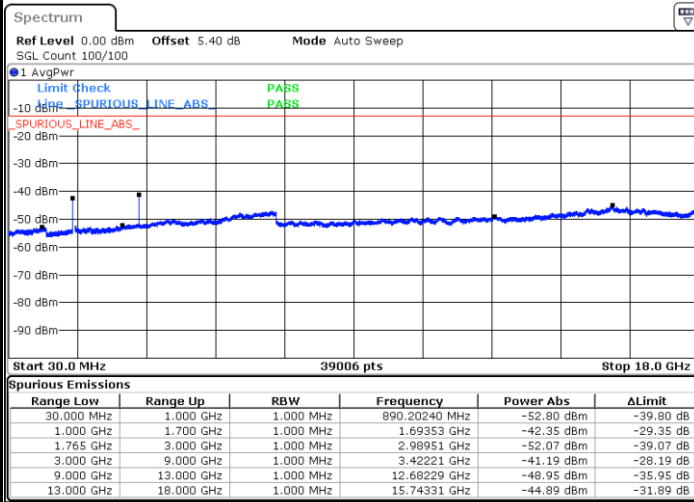


Date: 24 APR 2020 23:12:30



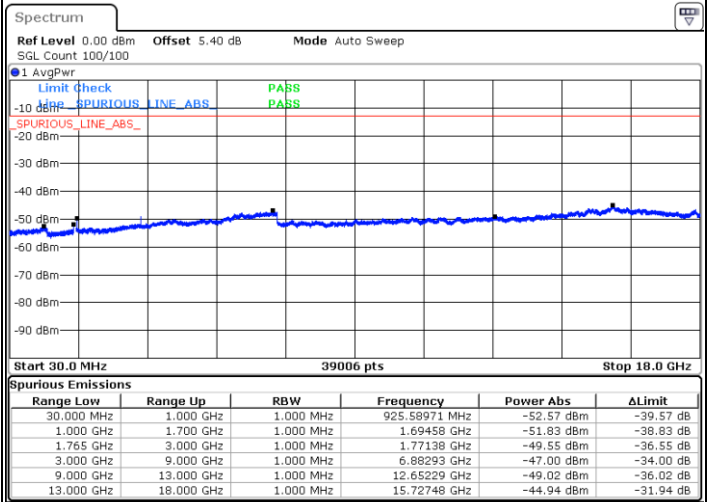
LTE Band 4 / 20MHz

Lowest Channel / 64QAM



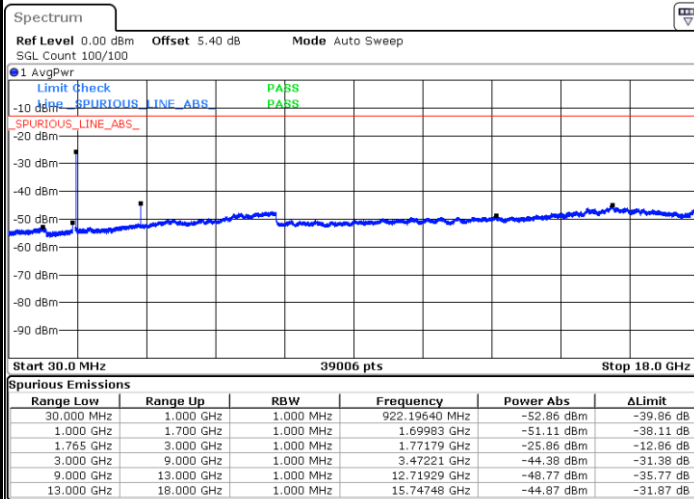
Date: 24 APR 2020 23:15:59

Middle Channel / 64QAM



Date: 24 APR 2020 23:17:14

Highest Channel / 64QAM



Date: 24 APR 2020 23:20:44

**Frequency Stability**

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0012	

Note:

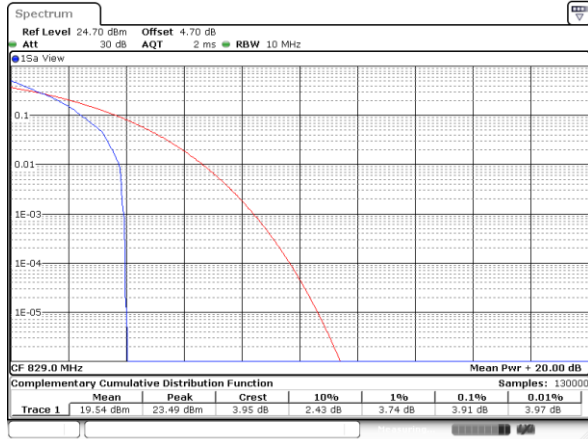
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



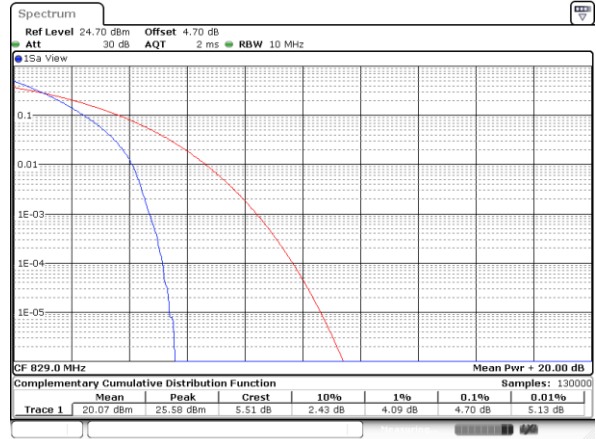
LTE Band 5

Peak-to-Average Ratio

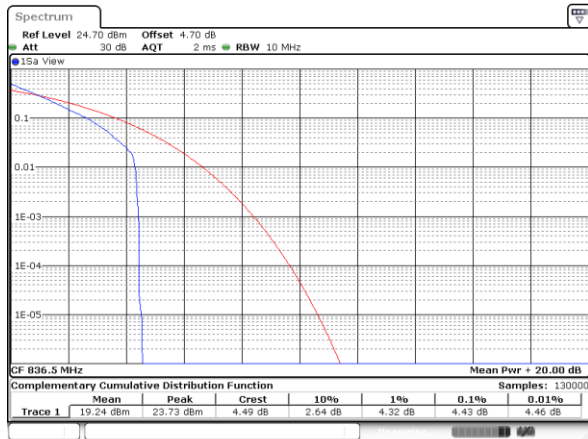
Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.91	4.70	4.67	5.62	PASS
Middle CH	4.43	4.90	4.75	5.77	
Highest CH	4.14	4.67	4.72	5.62	
Mode	LTE Band 5 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.54	6.06	-	-	PASS
Middle CH	6.06	6.23	-	-	
Highest CH	6.00	6.12	-	-	

LTE Band 5 / 10MHz / QPSK
Lowest Channel / 1RB


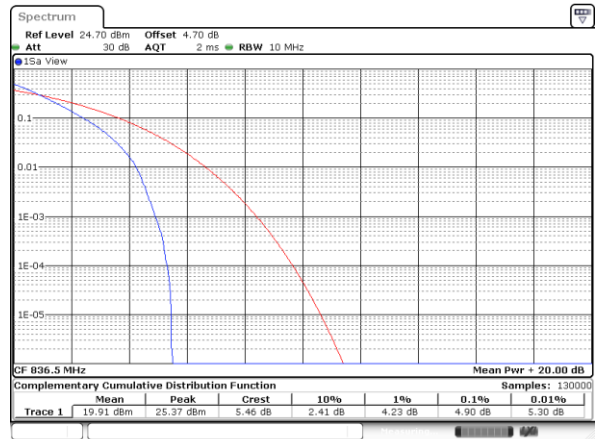
Date: 1 MAY 2020 12:18:49

Lowest Channel / Full RB


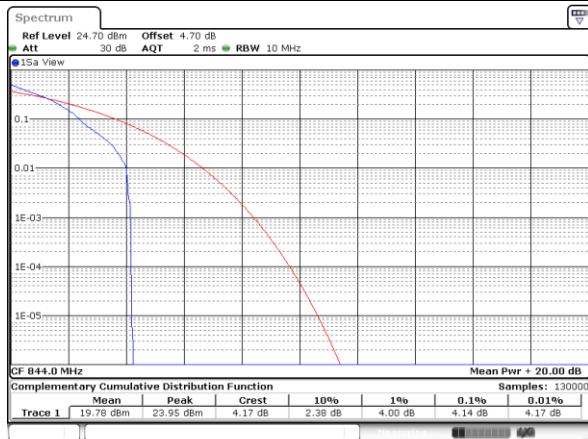
Date: 1 MAY 2020 12:18:57

Middle Channel / 1RB


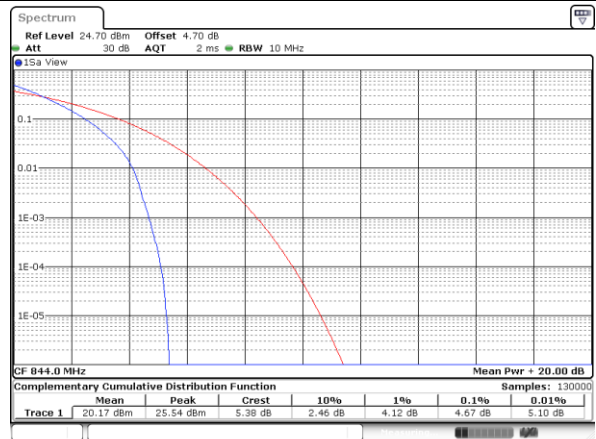
Date: 1 MAY 2020 12:18:40

Middle Channel / Full RB


Date: 1 MAY 2020 12:18:31

Highest Channel / 1RB


Date: 1 MAY 2020 12:18:05

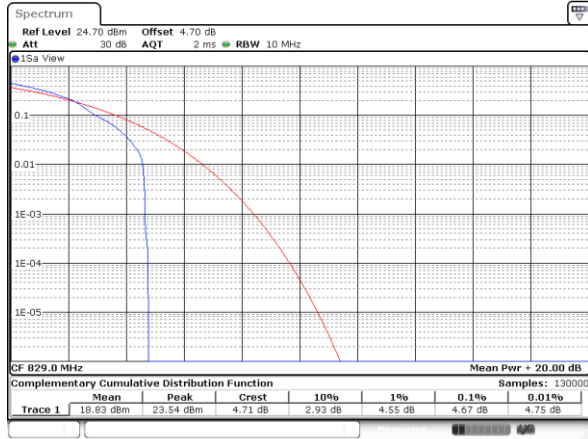
Highest Channel / Full RB


Date: 1 MAY 2020 12:18:23

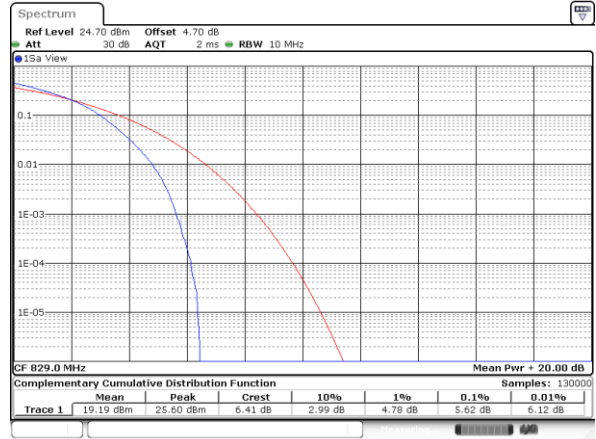


LTE Band 5 / 10MHz / 16QAM

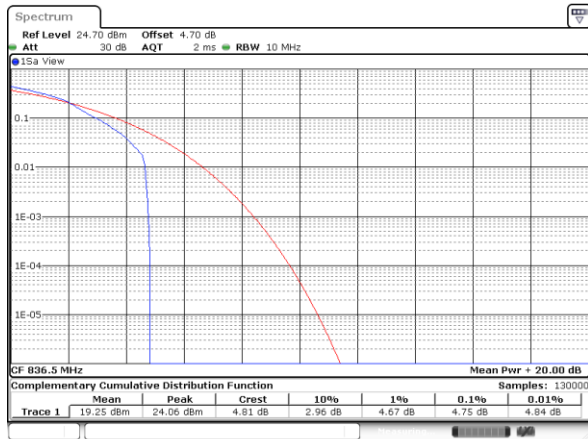
Lowest Channel / 1RB



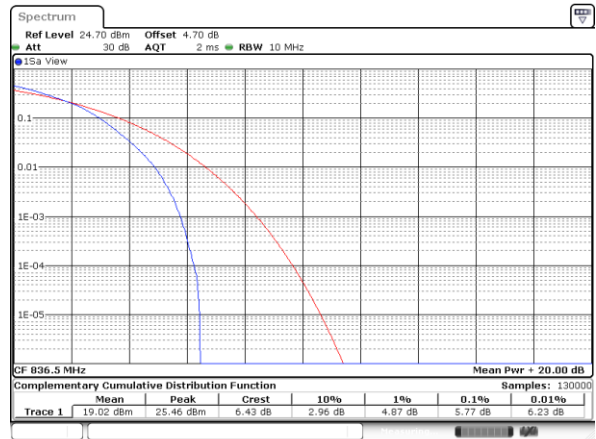
Lowest Channel / Full RB



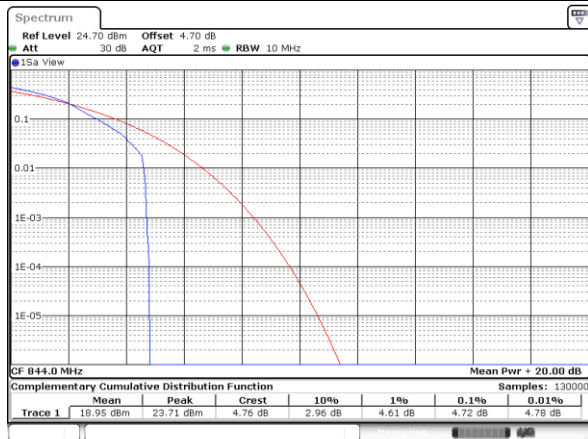
Middle Channel / 1RB



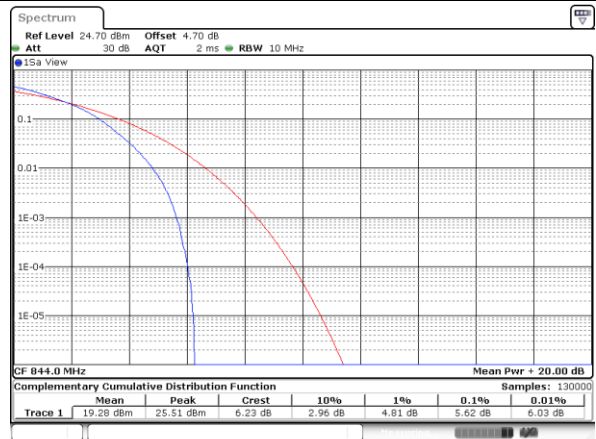
Middle Channel / Full RB



Highest Channel / 1RB



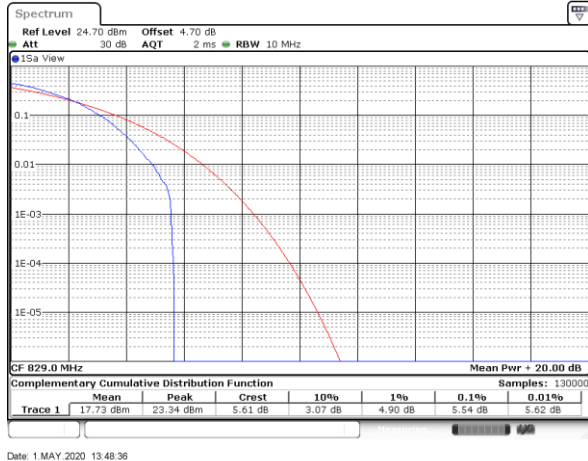
Highest Channel / Full RB



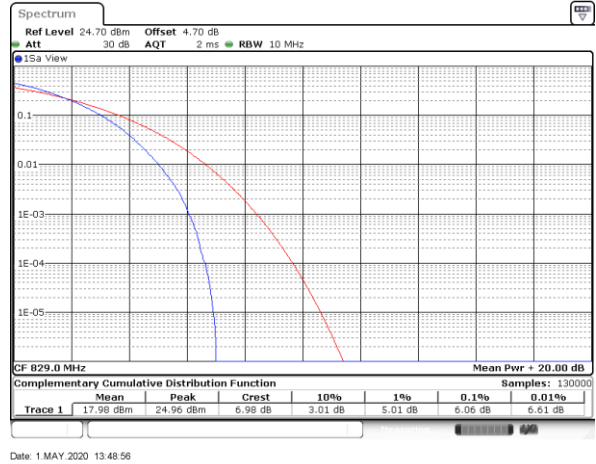


LTE Band 5 / 10MHz / 64QAM

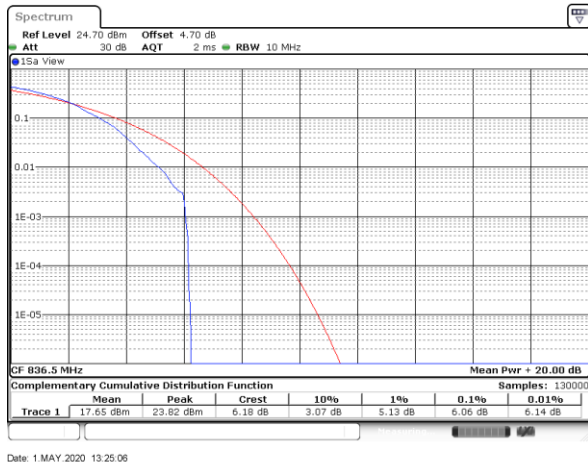
Lowest Channel / 1RB



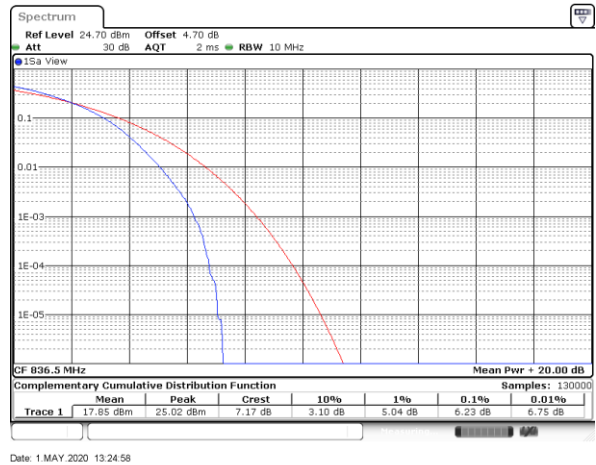
Lowest Channel / Full RB



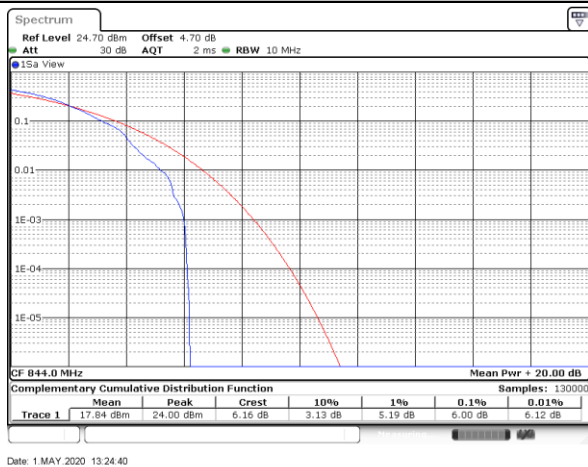
Middle Channel / 1RB



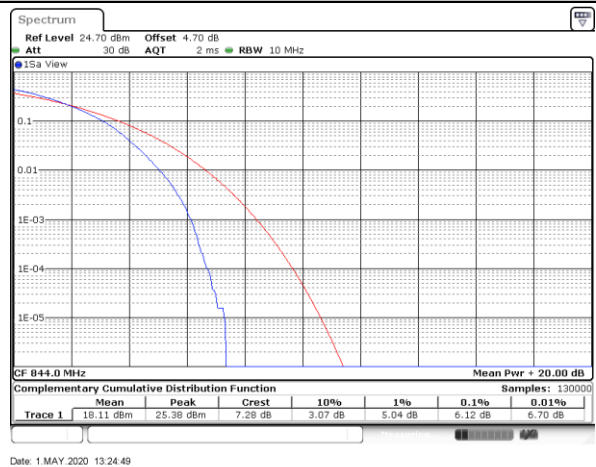
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



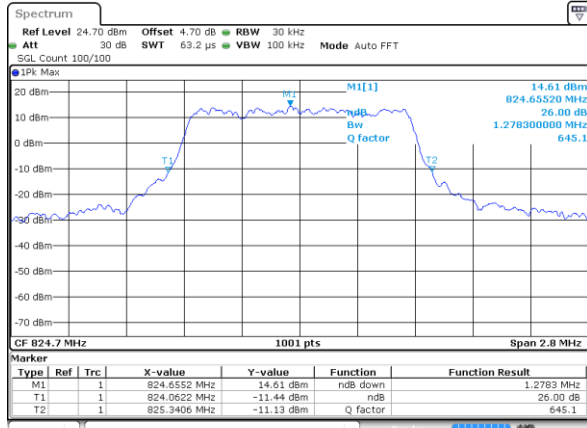
**26dB Bandwidth**

Mode	LTE Band 5 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.28	1.28	2.99	3.01	4.92	4.88	9.93	9.63
Middle CH	1.24	1.26	3.03	2.99	4.97	4.88	9.87	9.73
Highest CH	1.26	1.30	3.02	3.02	4.90	4.89	9.75	9.73
Mode	LTE Band 5 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.26		3.03		4.96		9.69	
Middle CH	1.27		3.03		4.91		9.81	
Highest CH	1.28		3.00		4.86		9.77	



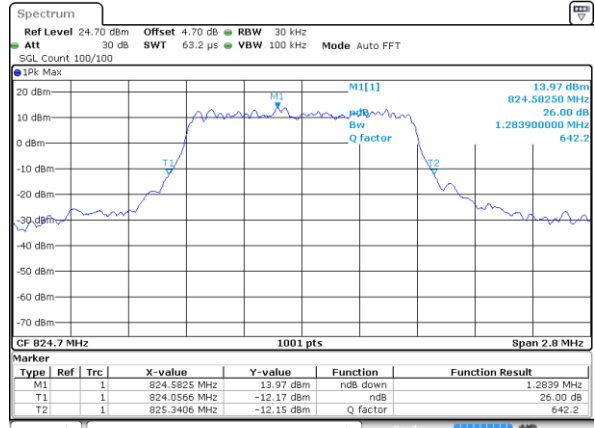
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



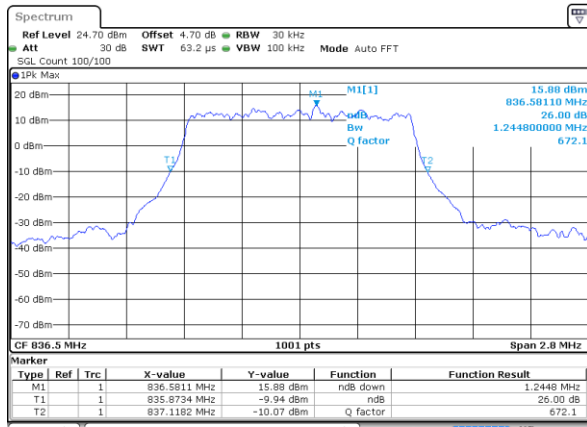
Date: 1 MAY 2020 10:31:04

Lowest Channel / 1.4MHz / 16QAM



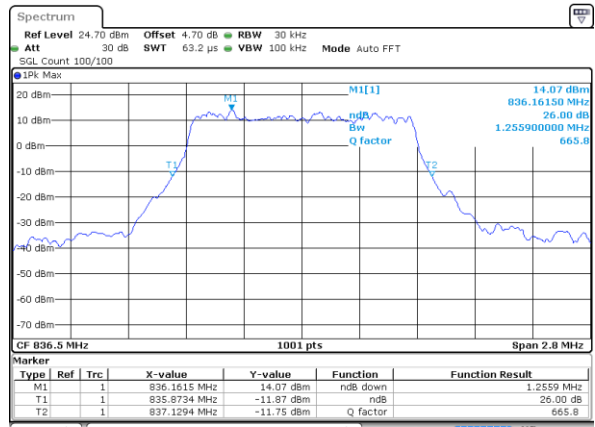
Date: 1 MAY 2020 10:30:54

Middle Channel / 1.4MHz / QPSK



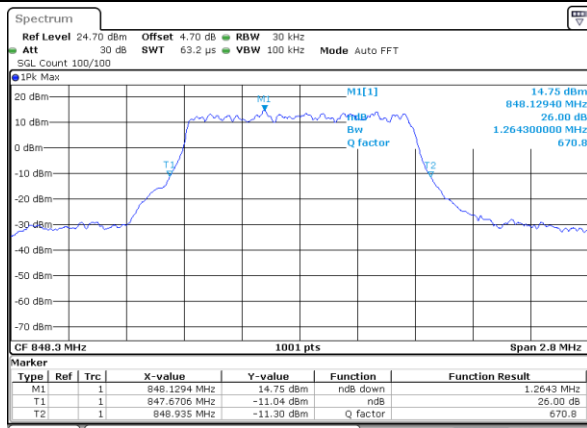
Date: 1 MAY 2020 10:52:30

Middle Channel / 1.4MHz / 16QAM



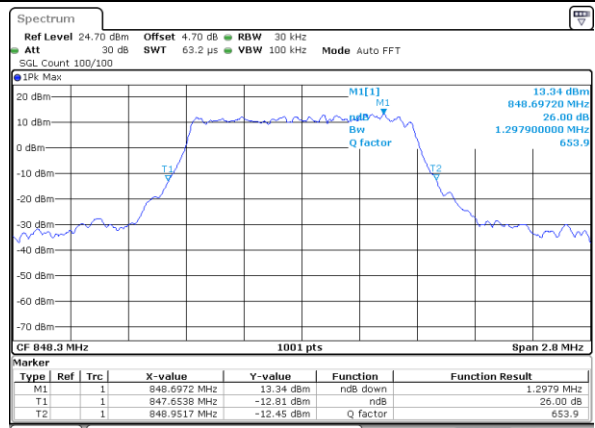
Date: 1 MAY 2020 10:52:39

Highest Channel / 1.4MHz / QPSK



Date: 1 MAY 2020 10:54:59

Highest Channel / 1.4MHz / 16QAM

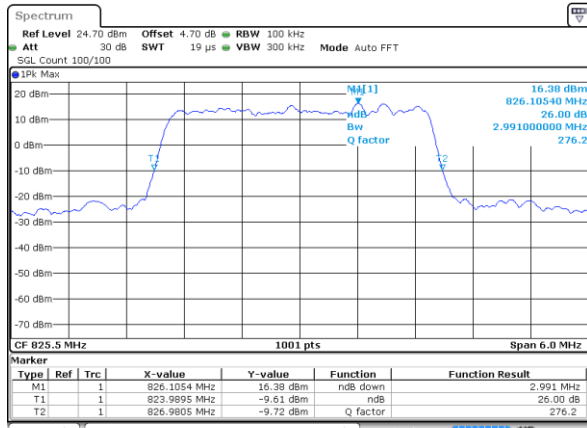


Date: 1 MAY 2020 10:55:09

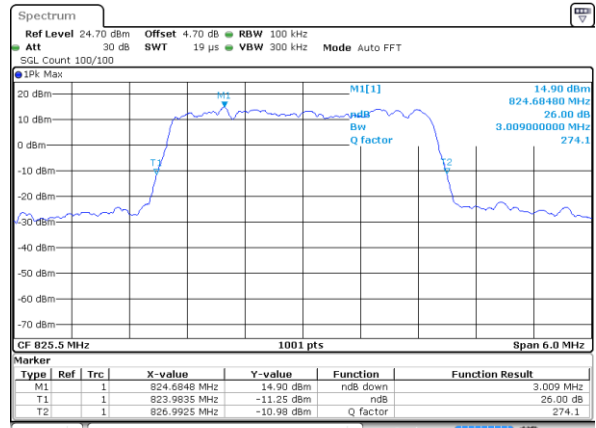


LTE Band 5

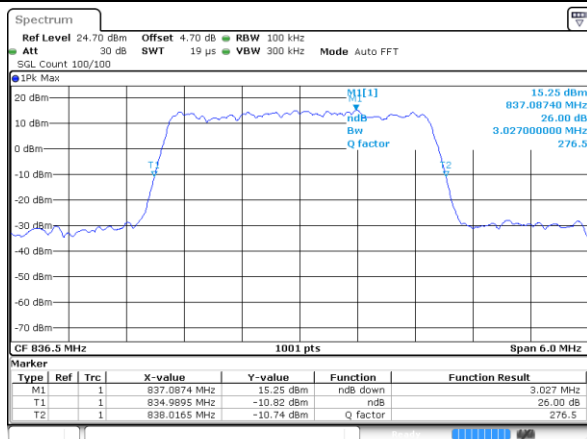
Lowest Channel / 3MHz / QPSK



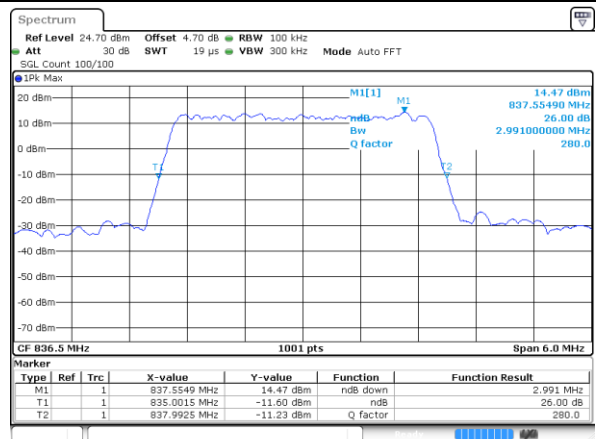
Lowest Channel / 3MHz / 16QAM



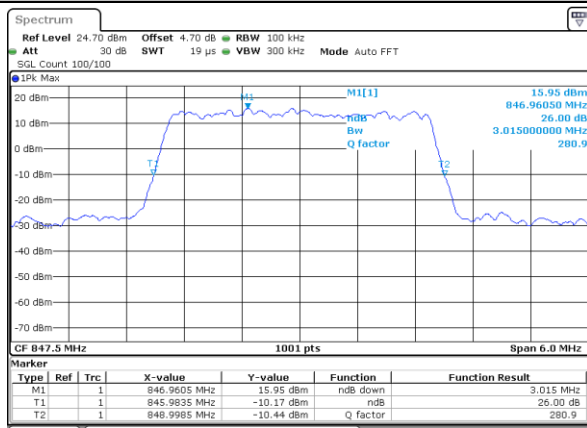
Middle Channel / 3MHz / QPSK



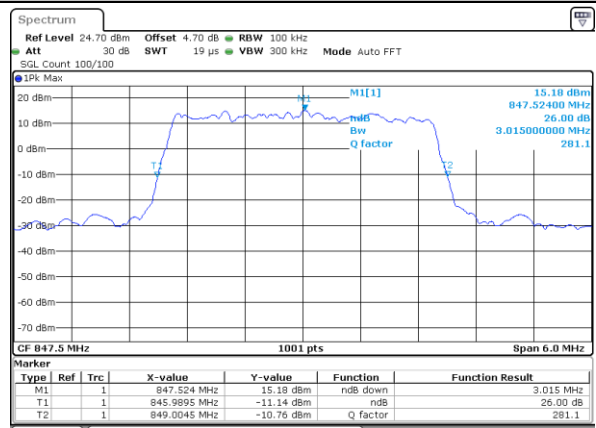
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



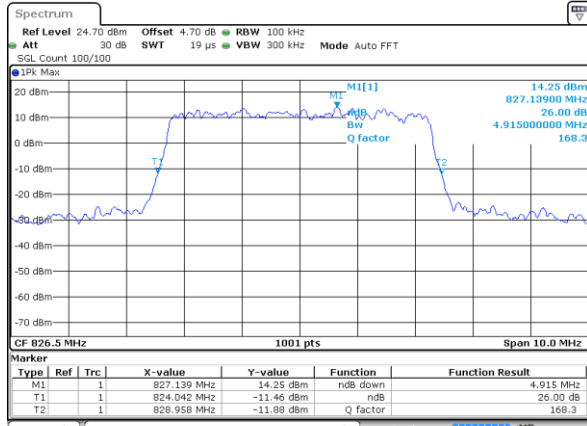
Highest Channel / 3MHz / 16QAM



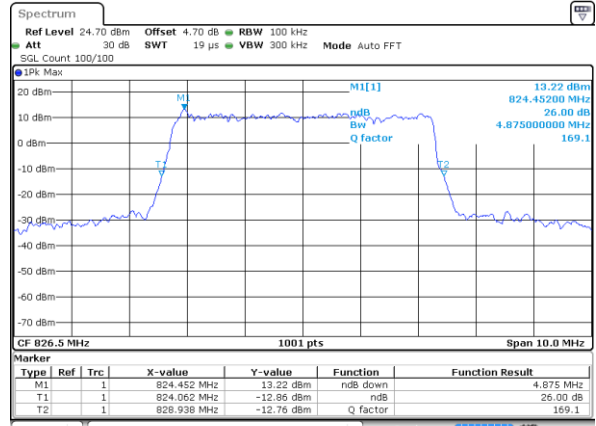


LTE Band 5

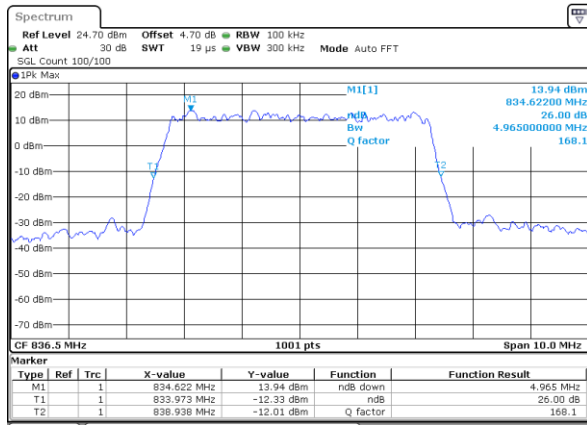
Lowest Channel / 5MHz / QPSK



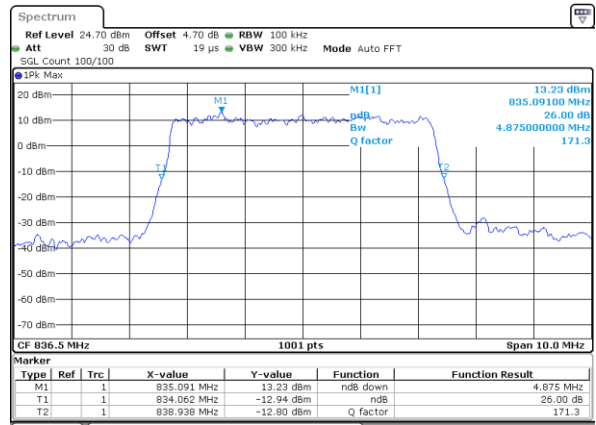
Lowest Channel / 5MHz / 16QAM



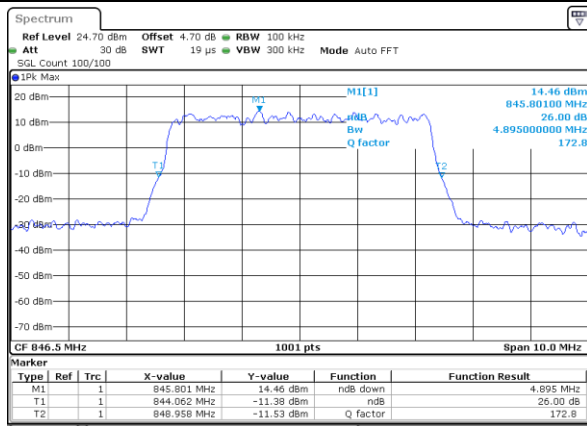
Middle Channel / 5MHz / QPSK



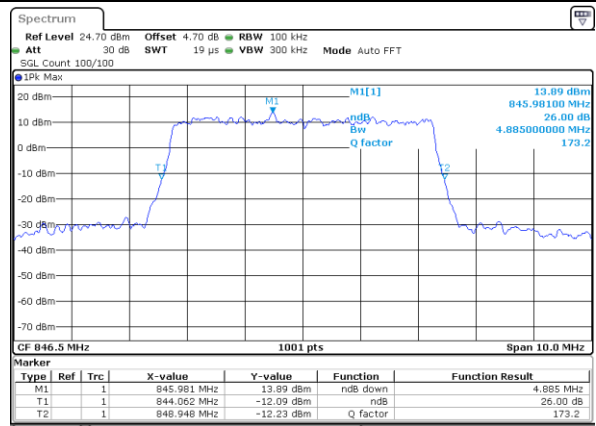
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



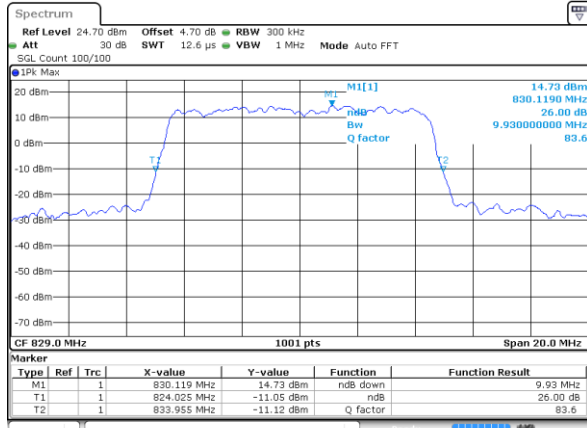
Highest Channel / 5MHz / 16QAM



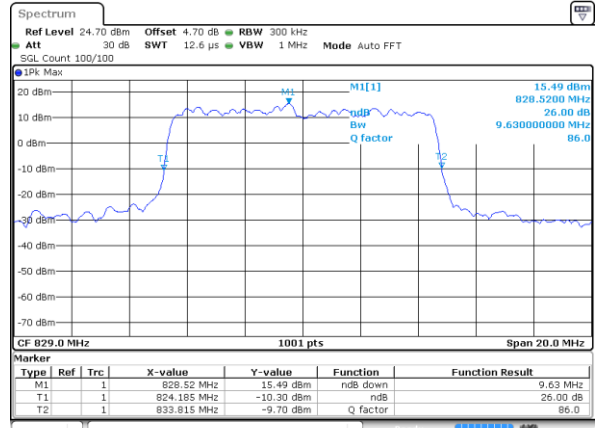


LTE Band 5

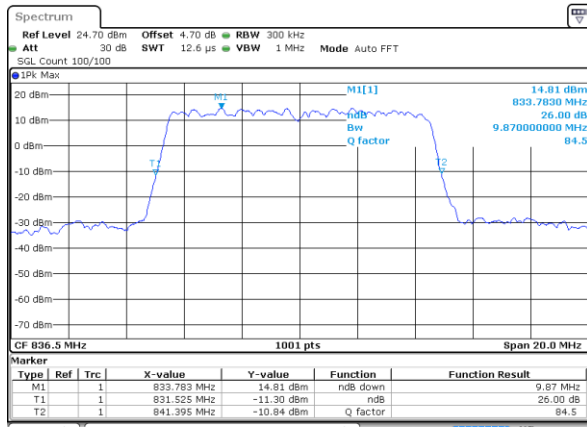
Lowest Channel / 10MHz / QPSK



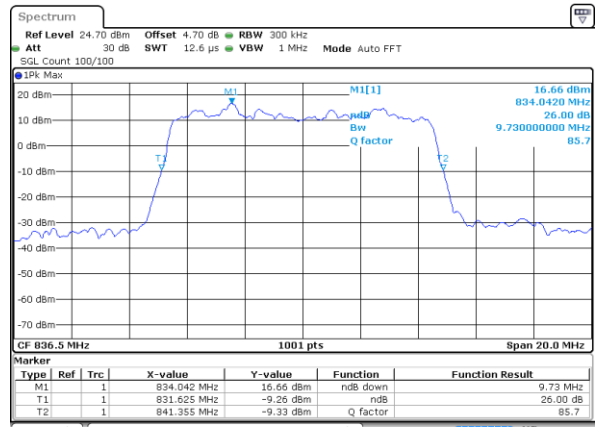
Lowest Channel / 10MHz / 16QAM



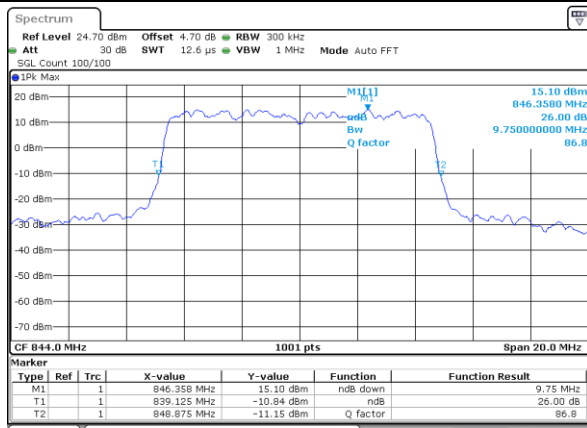
Middle Channel / 10MHz / QPSK



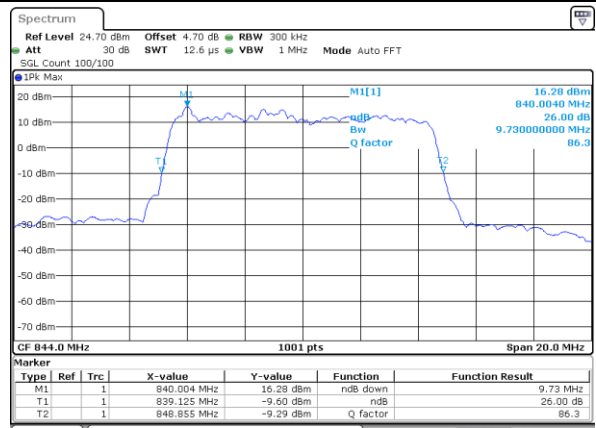
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



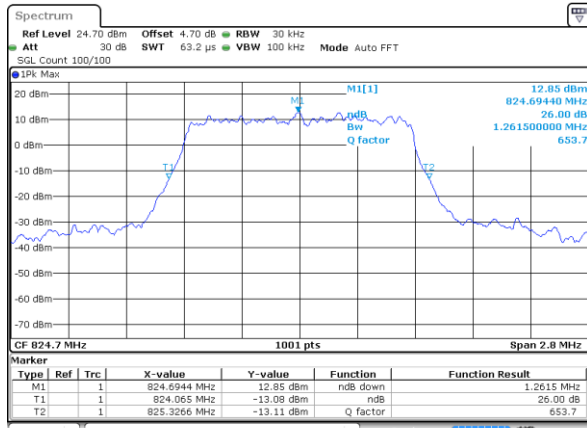
Highest Channel / 10MHz / 16QAM





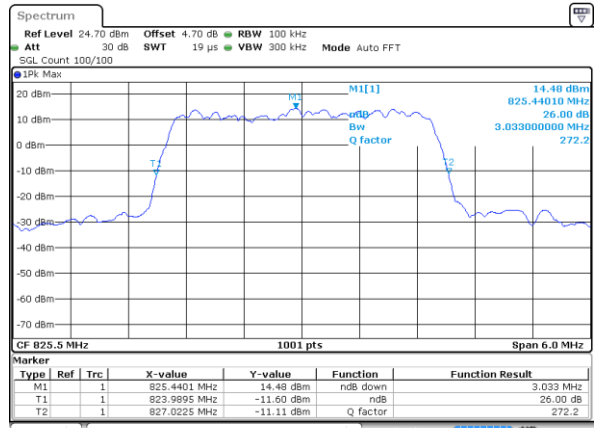
LTE Band 5

Lowest Channel / 1.4MHz / 64QAM



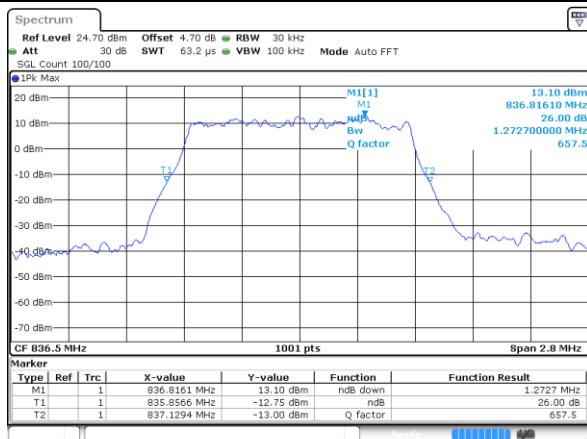
Date: 1 MAY 2020 13:50:55

Lowest Channel / 3MHz / 64QAM



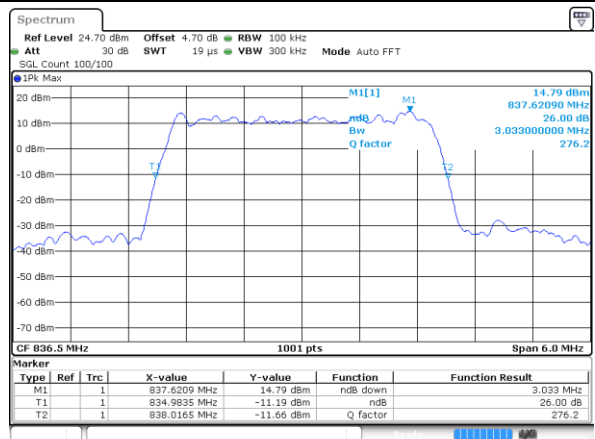
Date: 1 MAY 2020 12:32:18

Middle Channel / 1.4MHz / 64QAM



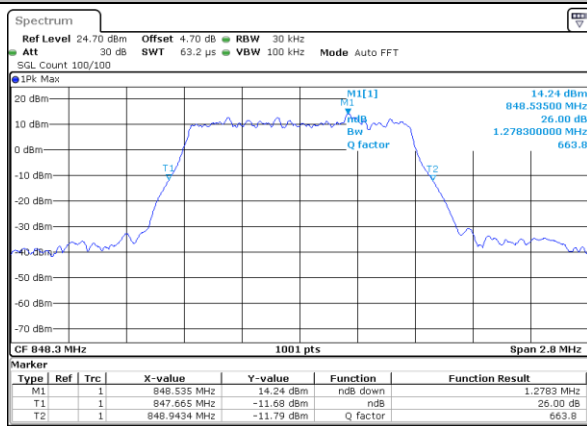
Date: 1 MAY 2020 12:23:42

Middle Channel / 3MHz / 64QAM



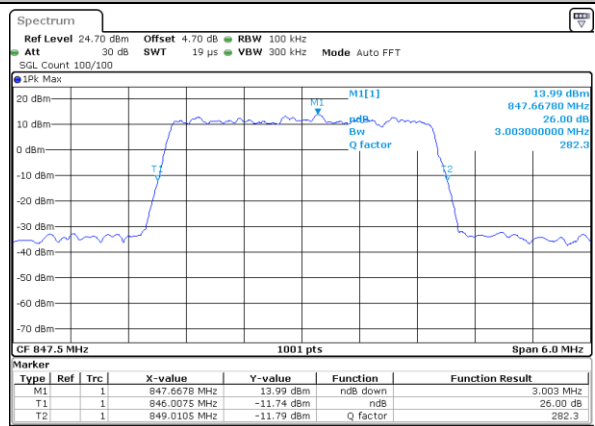
Date: 1 MAY 2020 12:48:05

Highest Channel / 1.4MHz / 64QAM



Date: 1 MAY 2020 12:26:05

Highest Channel / 3MHz / 64QAM

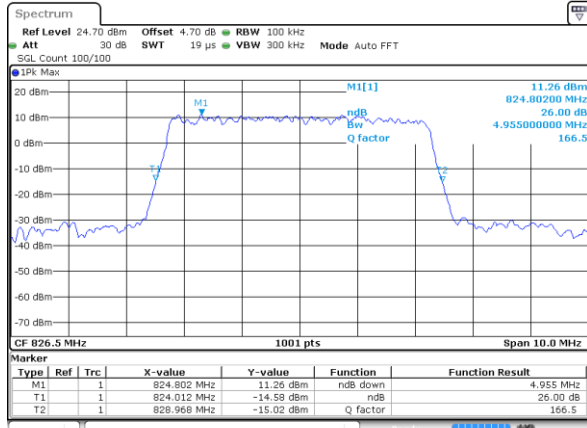


Date: 1 MAY 2020 12:48:35



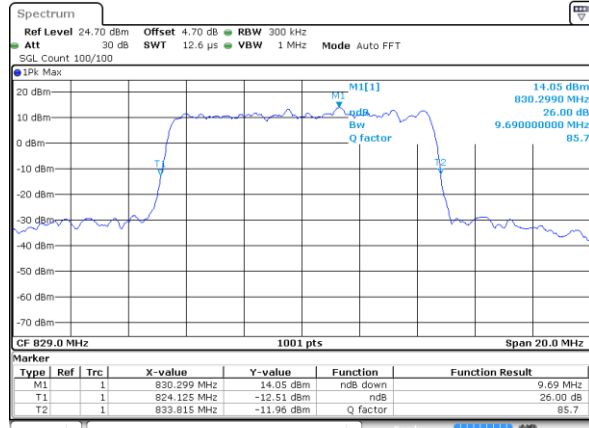
LTE Band 5

Lowest Channel / 5MHz / 64QAM



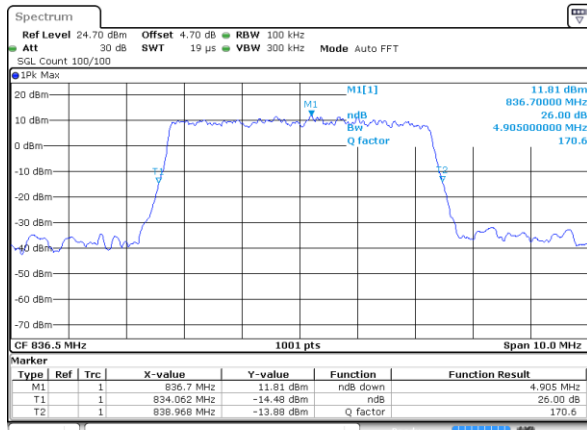
Date: 1 MAY 2020 12:55:47

Lowest Channel / 10MHz / 64QAM



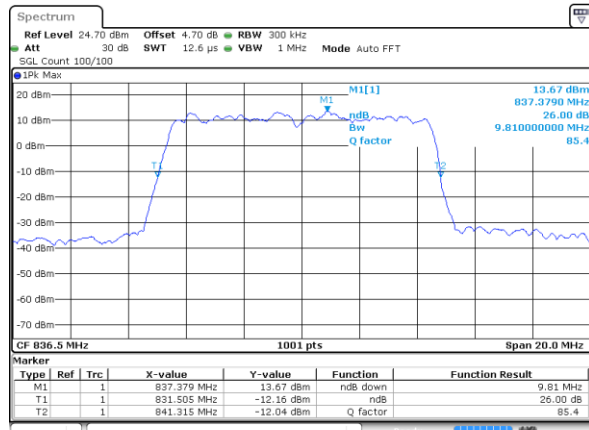
Date: 1 MAY 2020 13:07:28

Middle Channel / 5MHz / 64QAM



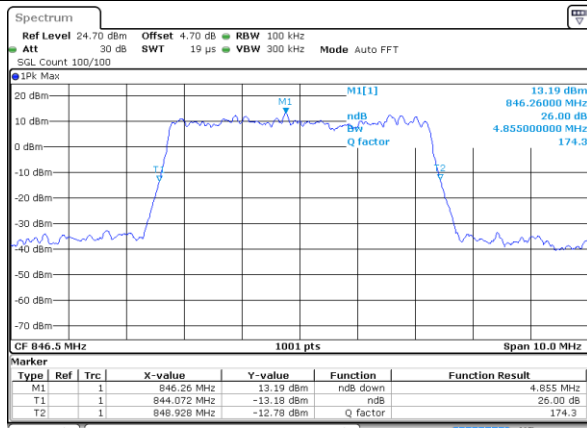
Date: 1 MAY 2020 13:01:12

Middle Channel / 10MHz / 64QAM



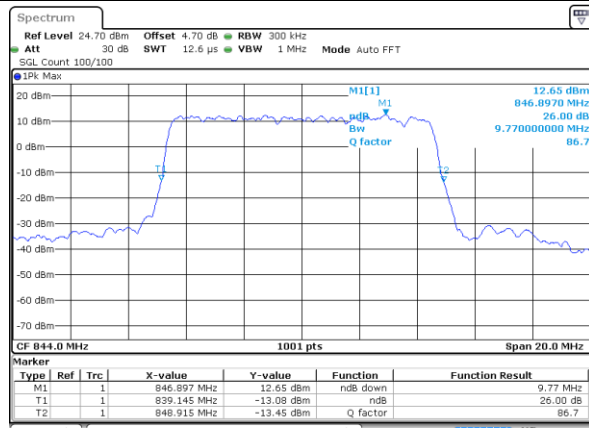
Date: 1 MAY 2020 13:12:53

Highest Channel / 5MHz / 64QAM



Date: 1 MAY 2020 13:02:59

Highest Channel / 10MHz / 64QAM



Date: 1 MAY 2020 13:13:13

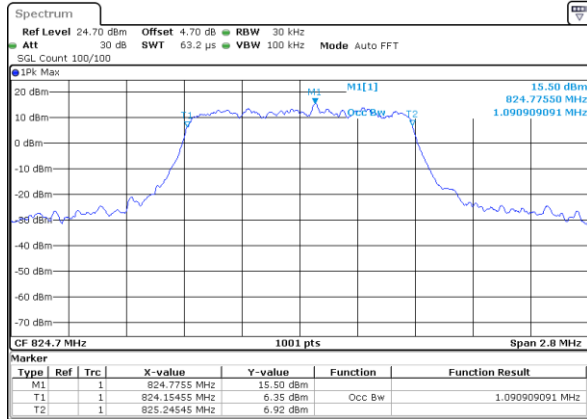
**Occupied Bandwidth**

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	2.72	2.73	4.49	4.50	9.03	8.95
Middle CH	1.09	1.09	2.71	2.72	4.50	4.50	8.99	9.01
Highest CH	1.10	1.09	2.71	2.73	4.51	4.51	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		2.73		4.48		9.01	
Middle CH	1.09		2.71		4.51		9.01	
Highest CH	1.10		2.72		4.51		9.01	

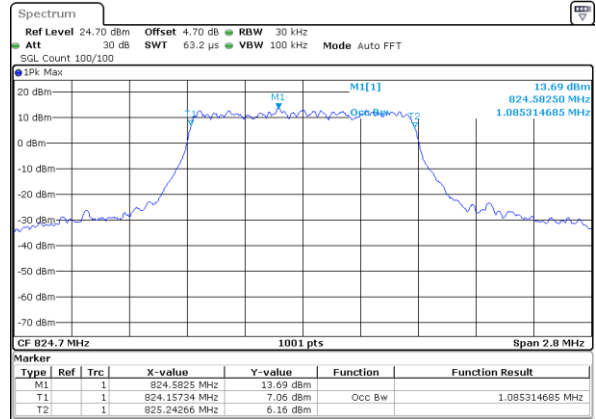


LTE Band 5

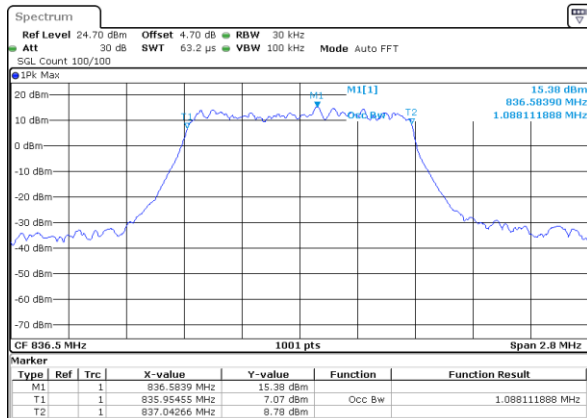
Lowest Channel / 1.4MHz / QPSK



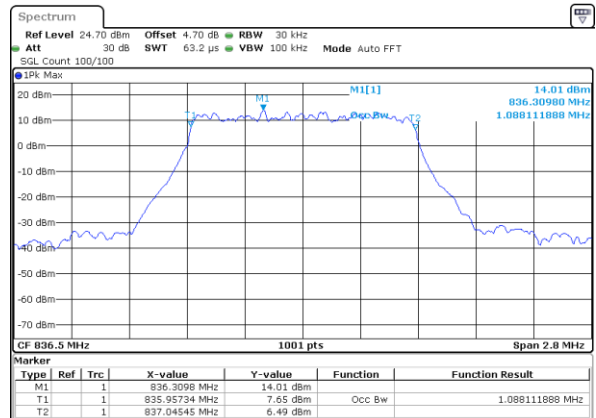
Lowest Channel / 1.4MHz / 16QAM



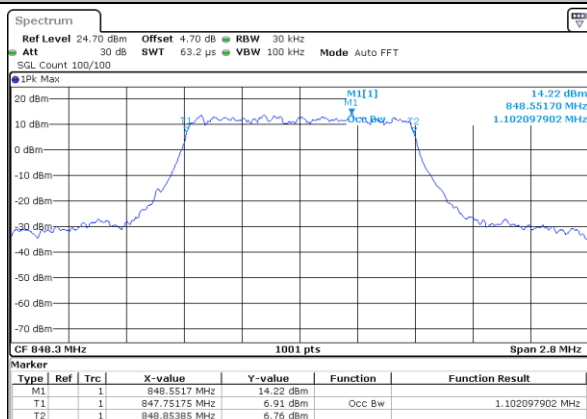
Middle Channel / 1.4MHz / QPSK



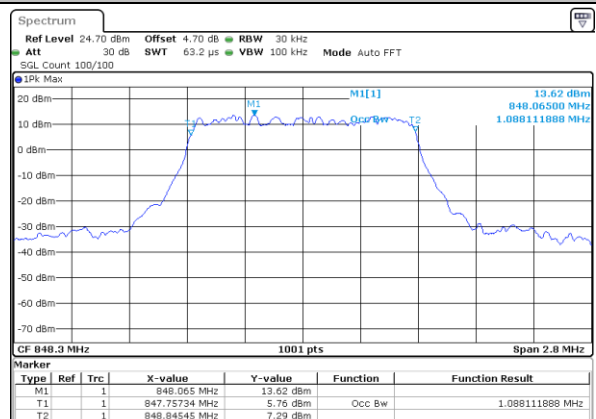
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



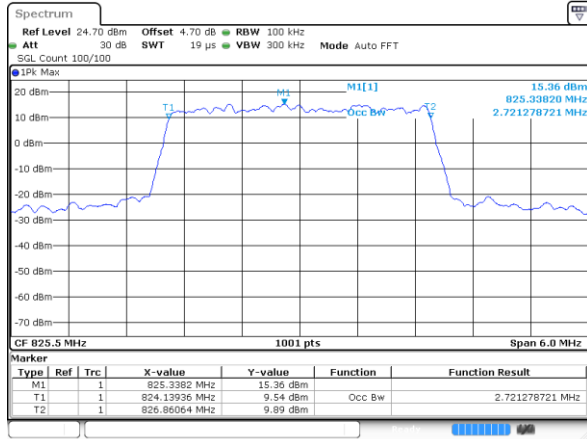
Highest Channel / 1.4MHz / 16QAM



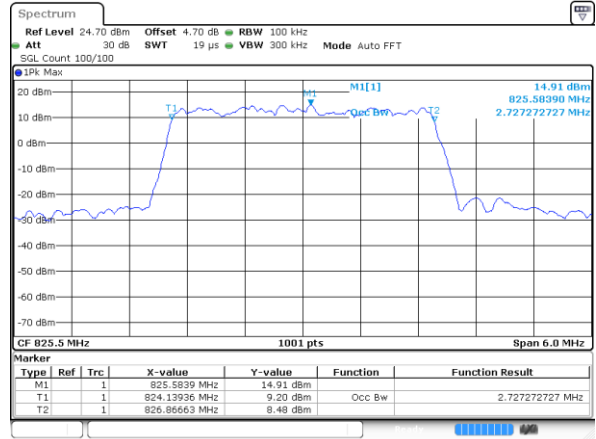


LTE Band 5

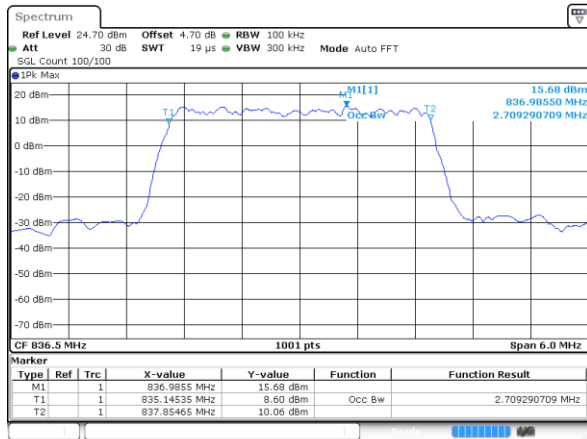
Lowest Channel / 3MHz / QPSK



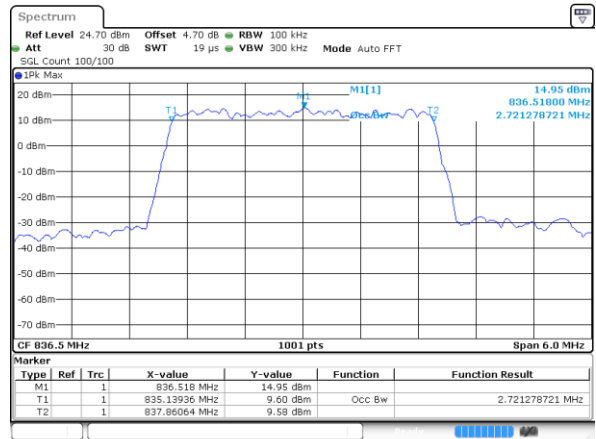
Lowest Channel / 3MHz / 16QAM



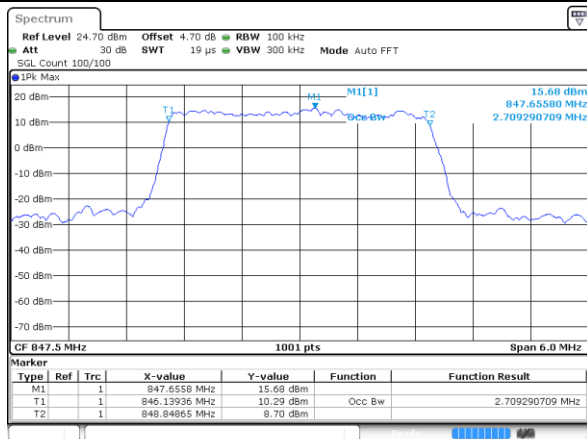
Middle Channel / 3MHz / QPSK



Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



Highest Channel / 3MHz / 16QAM

