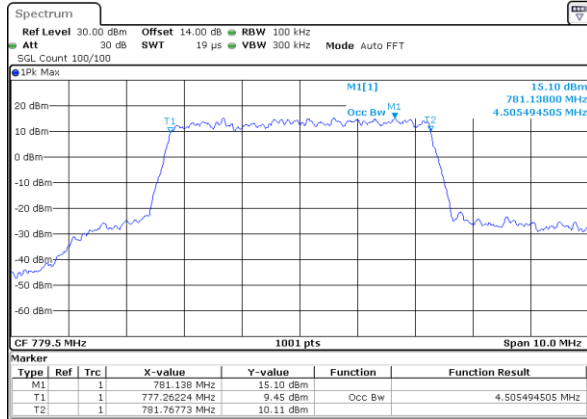




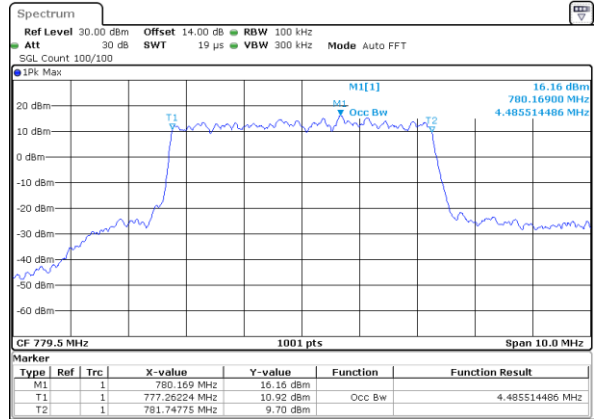
LTE Band 13

Lowest Channel / 5MHz / QPSK



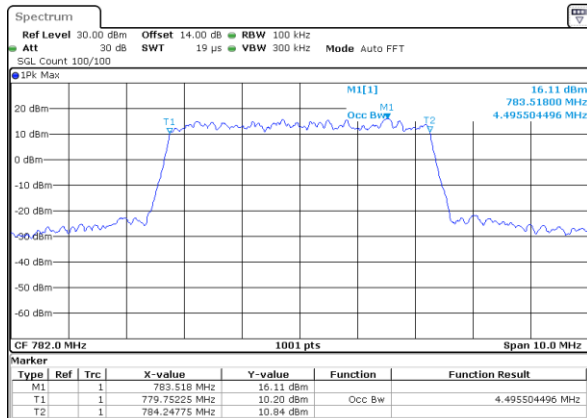
Date: 17_MAR_2020 19:25:27

Lowest Channel / 5MHz / 16QAM



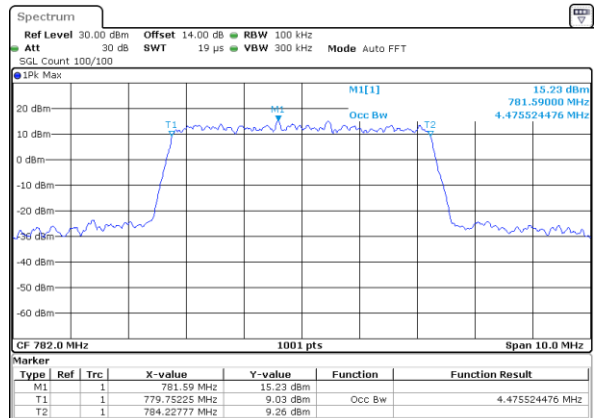
Date: 17_MAR_2020 19:25:138

Middle Channel / 5MHz / QPSK



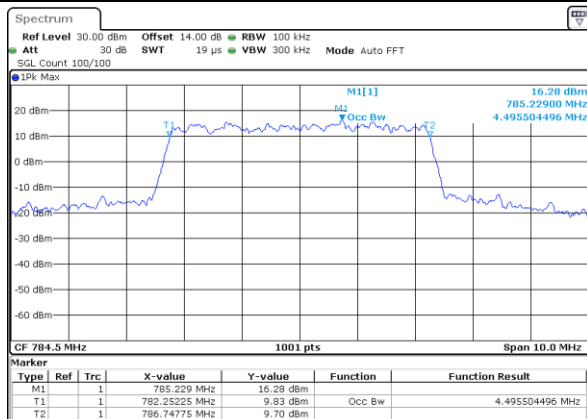
Date: 17_MAR_2020 19:36:02

Middle Channel / 5MHz / 16QAM



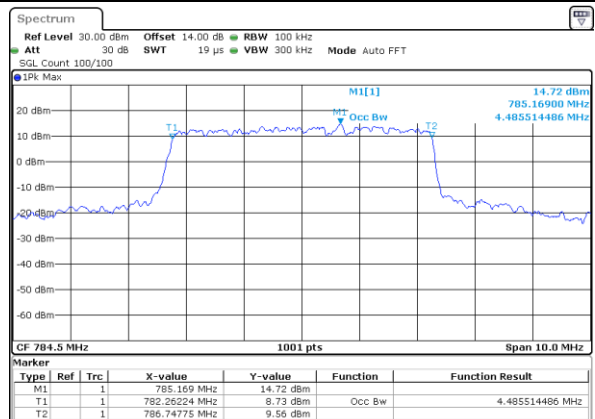
Date: 17_MAR_2020 19:35:51

Highest Channel / 5MHz / QPSK



Date: 17_MAR_2020 19:36:13

Highest Channel / 5MHz / 16QAM

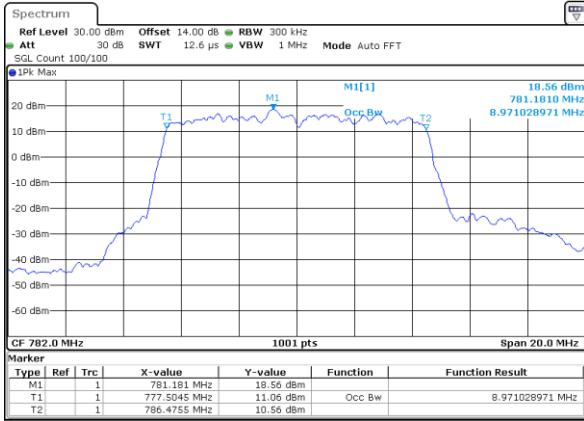


Date: 17_MAR_2020 19:36:124



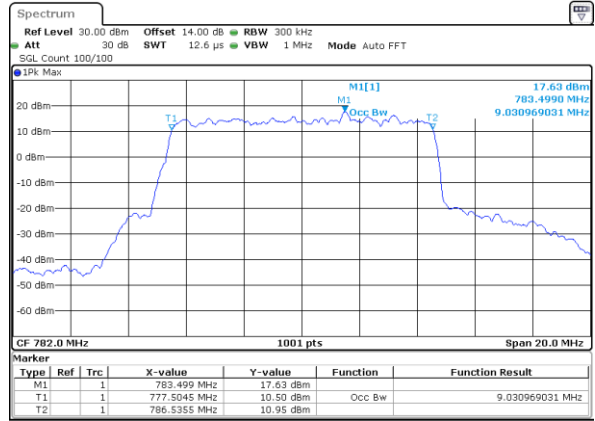
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 17.MAR.2020 19:44:56

Middle Channel / 10MHz / 16QAM

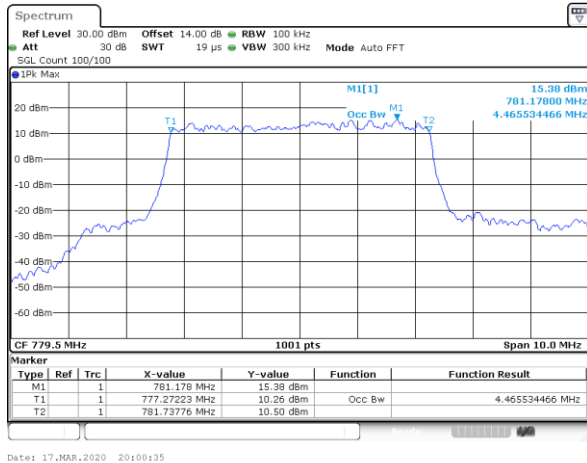


Date: 17.MAR.2020 19:45:07

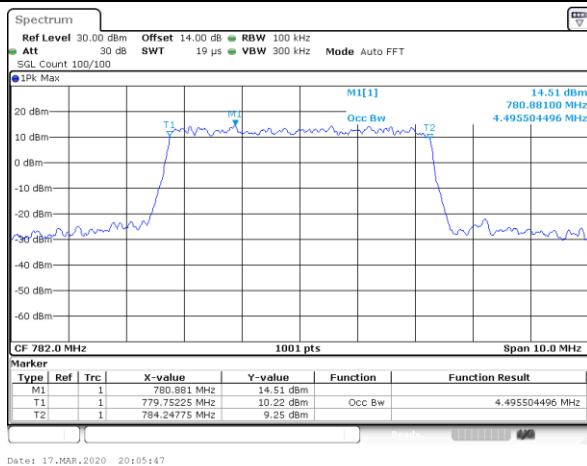


LTE Band 13

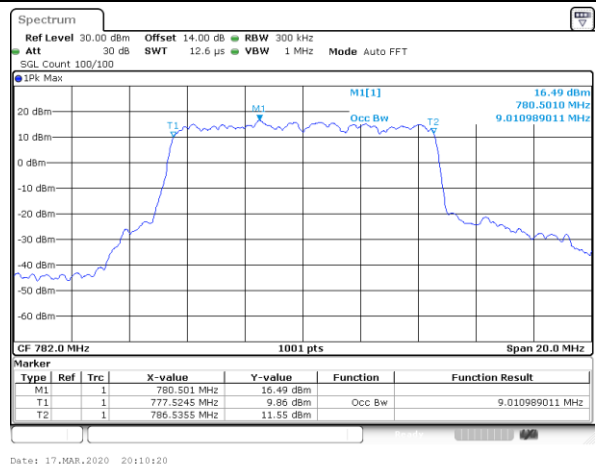
Lowest Channel / 5MHz / 64QAM



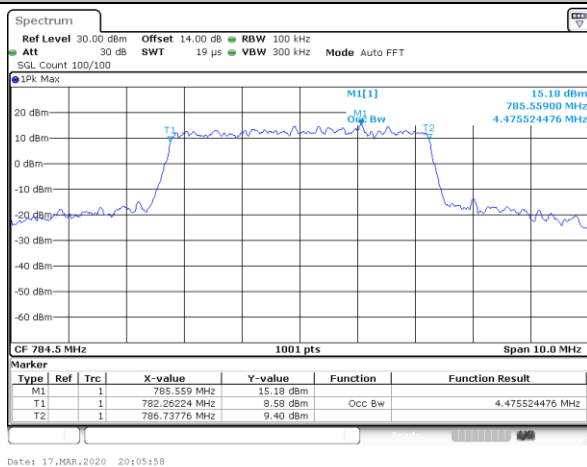
Middle Channel / 5MHz / 64QAM

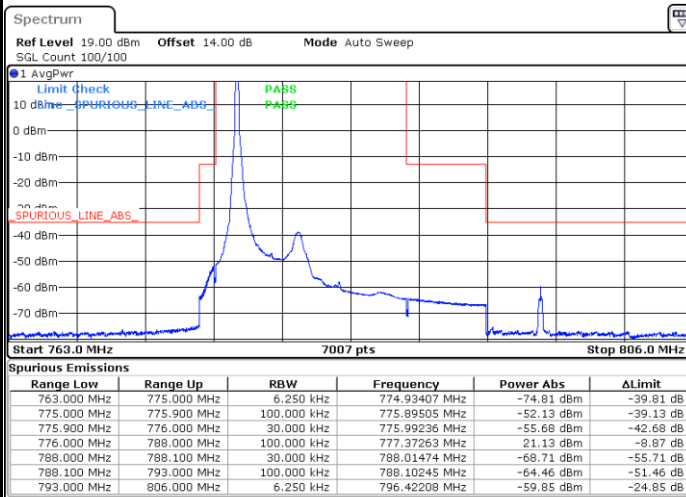
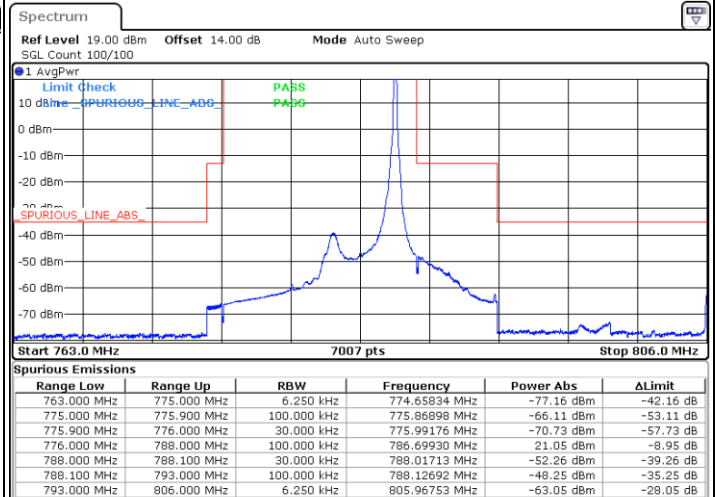
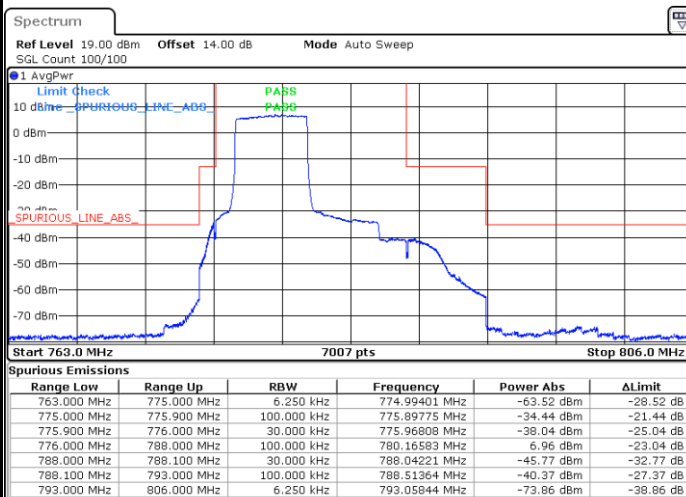
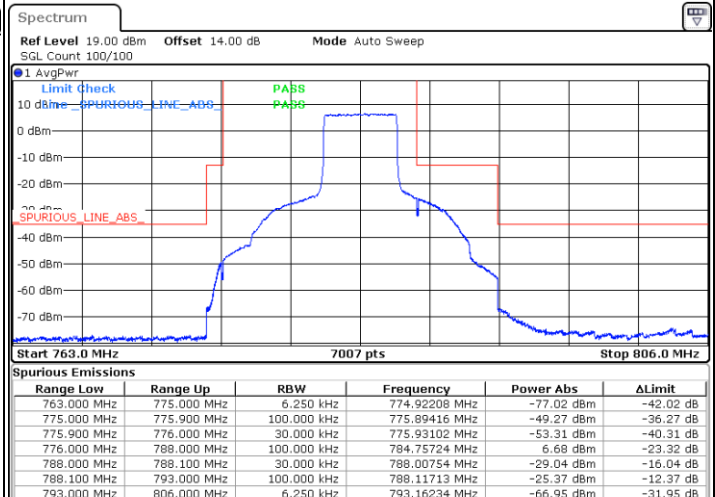


Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

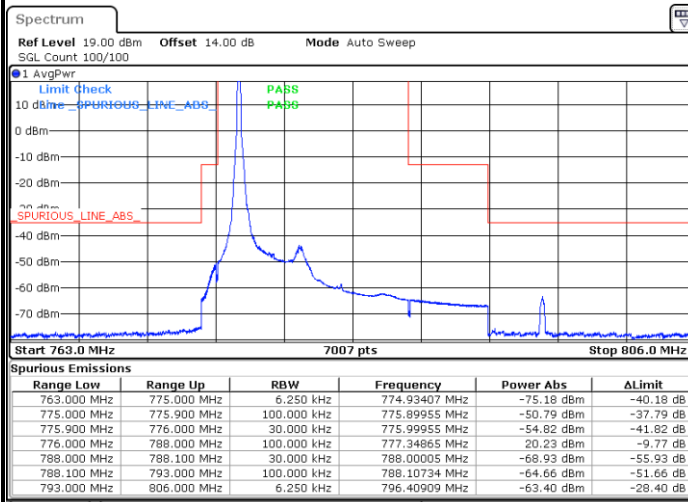


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



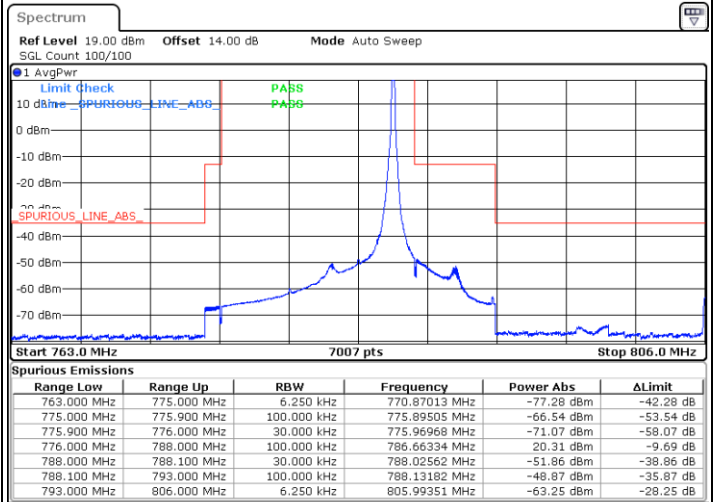
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



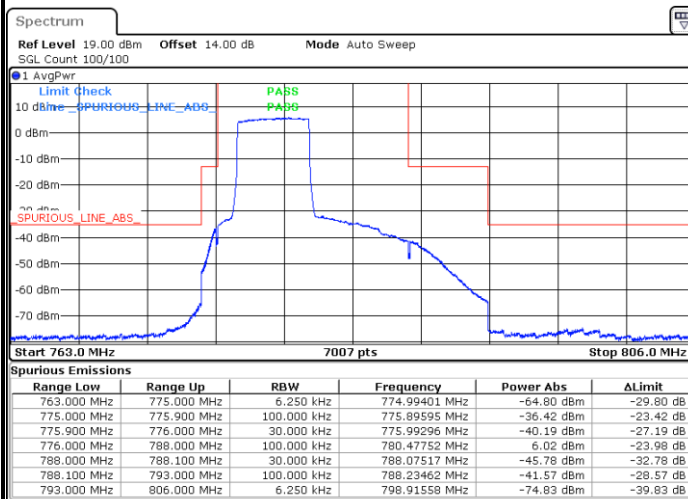
Date: 17.MAR.2020 19:31:00

Highest Band Edge / 1 RB



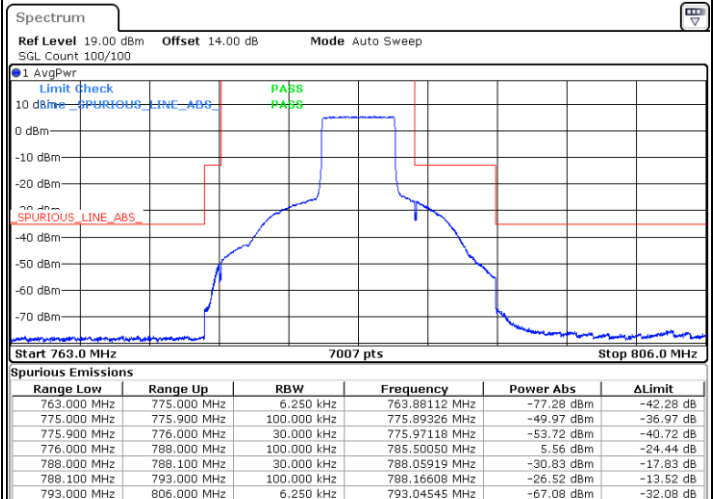
Date: 17.MAR.2020 19:41:46

Lowest Band Edge / Full RB



Date: 17.MAR.2020 19:29:20

Highest Band Edge / Full RB

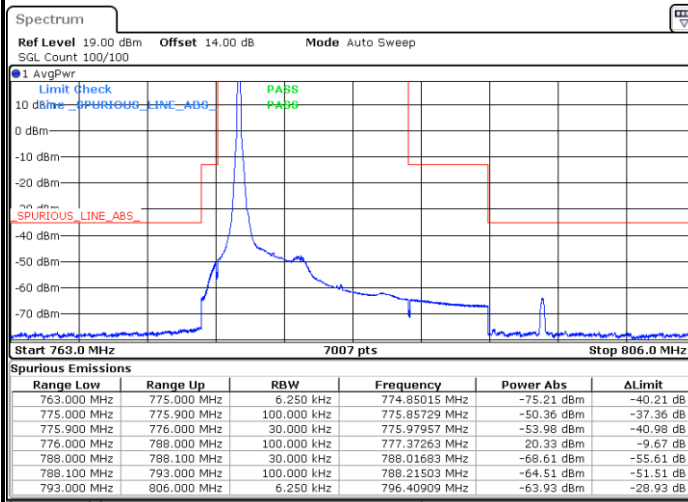


Date: 17.MAR.2020 19:40:06

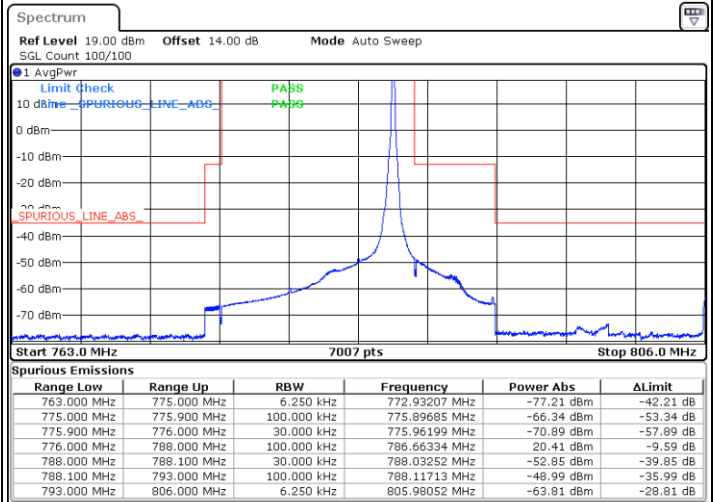


LTE Band 13 / 5MHz / 64QAM

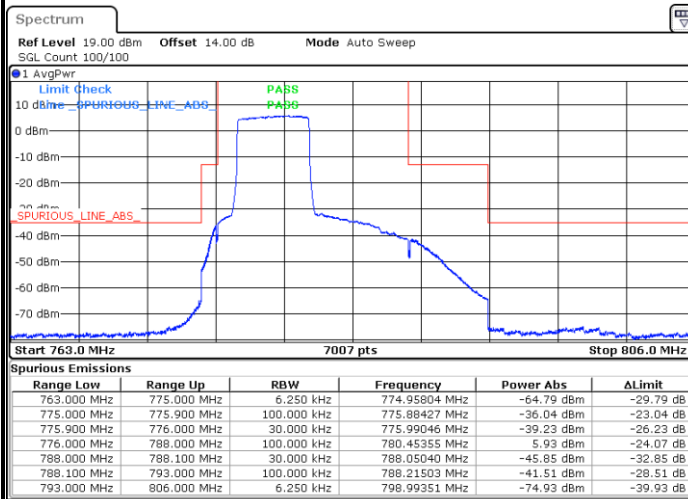
Lowest Band Edge / 1 RB



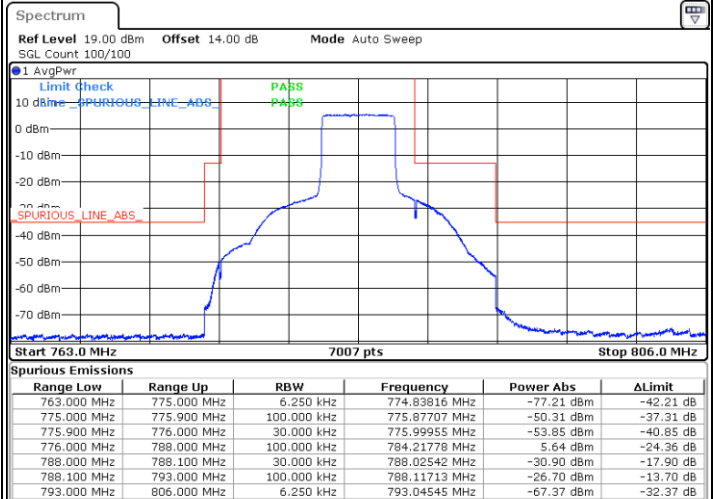
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



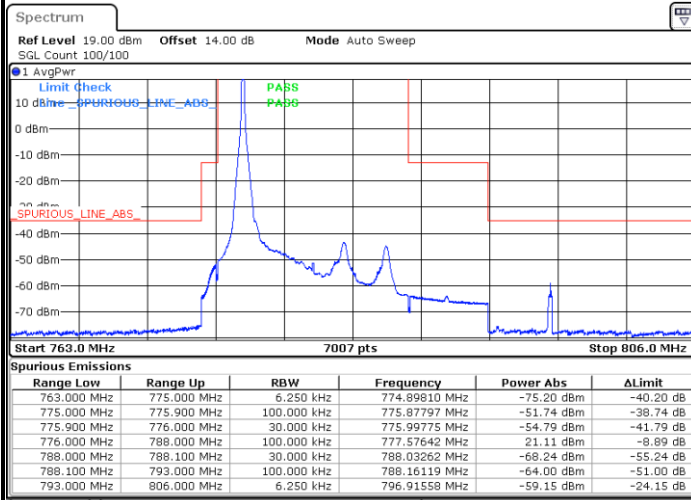
Highest Band Edge / Full RB





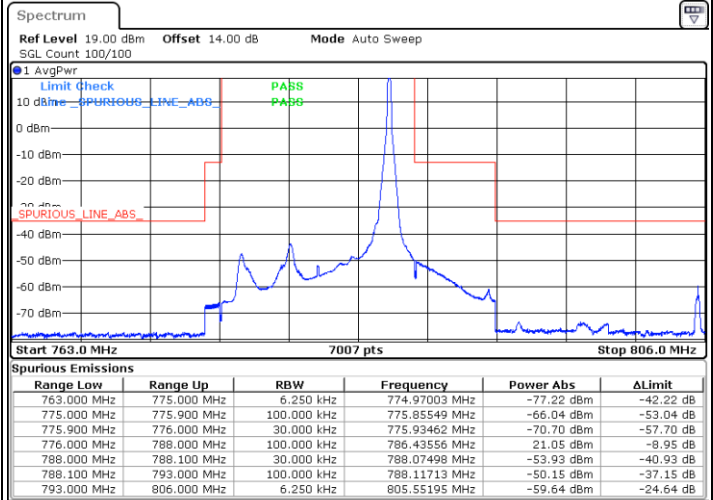
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



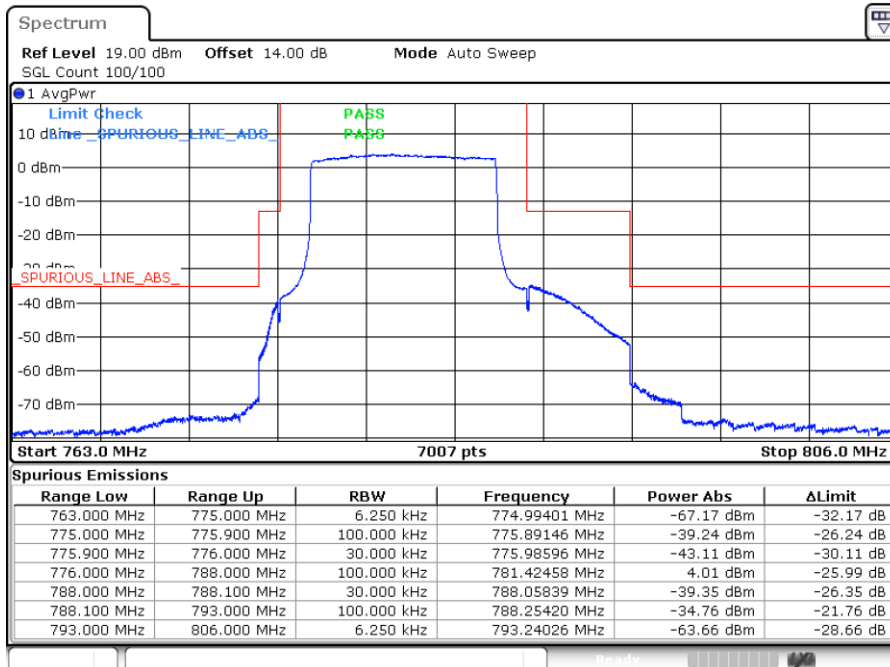
Date: 17.MAR.2020 19:52:09

Highest Band Edge / 1 RB



Date: 17.MAR.2020 19:53:49

Band Edge / Full RB

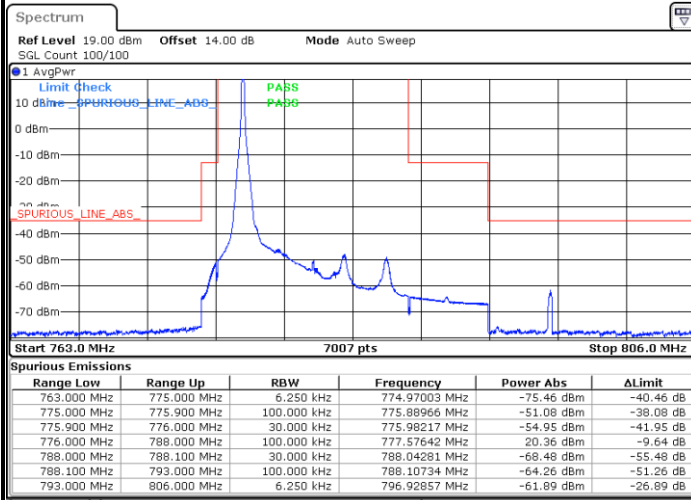


Date: 17.MAR.2020 19:47:09



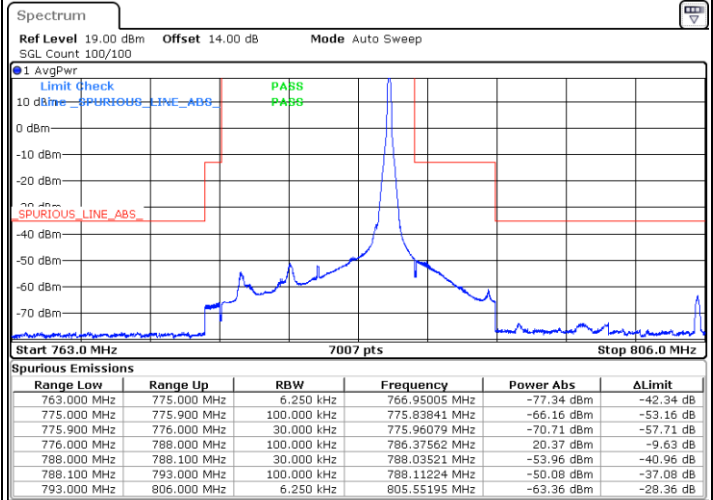
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



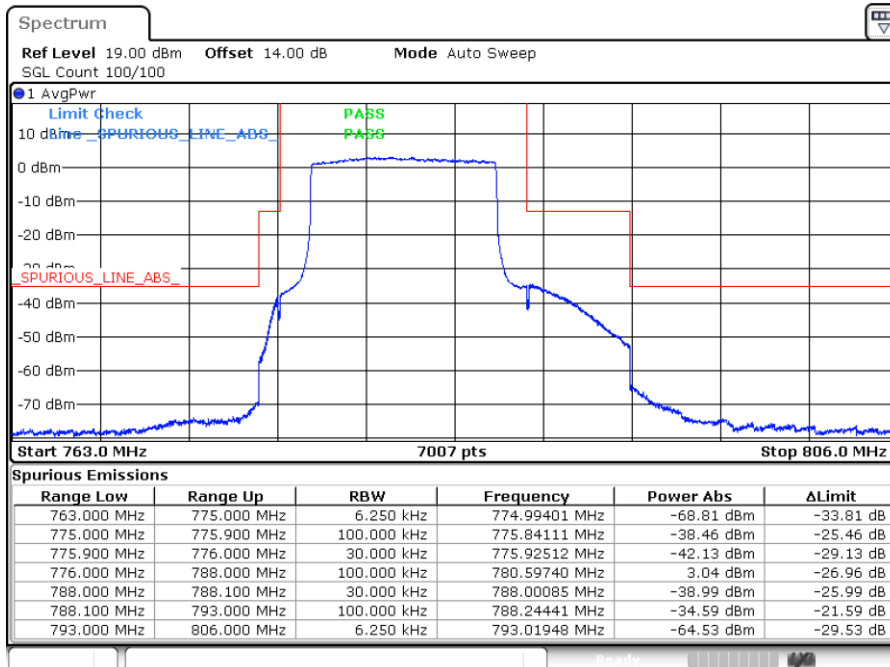
Date: 17.MAR.2020 19:50:29

Highest Band Edge / 1 RB



Date: 17.MAR.2020 19:55:29

Band Edge / Full RB

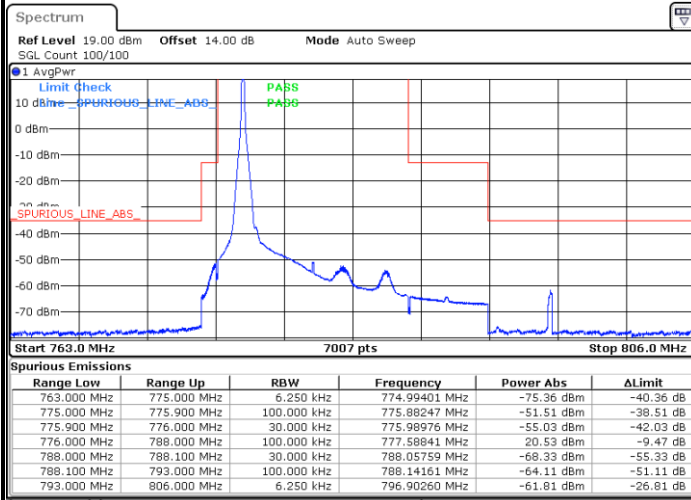


Date: 17.MAR.2020 19:48:49



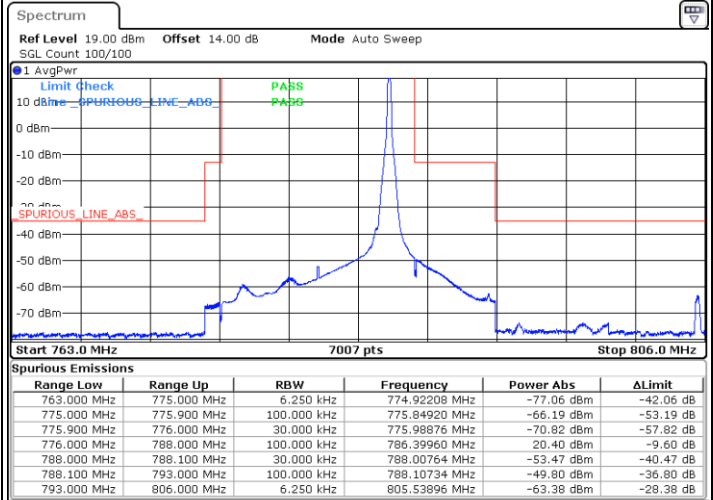
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



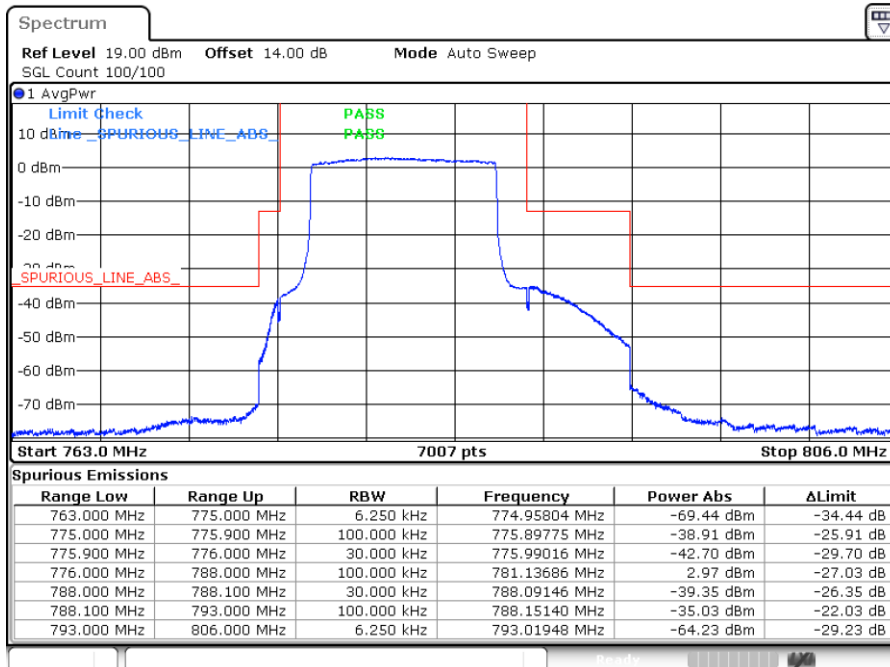
Date: 17.MAR.2020 20:13:50

Highest Band Edge / 1 RB



Date: 17.MAR.2020 20:15:30

Band Edge / Full RB



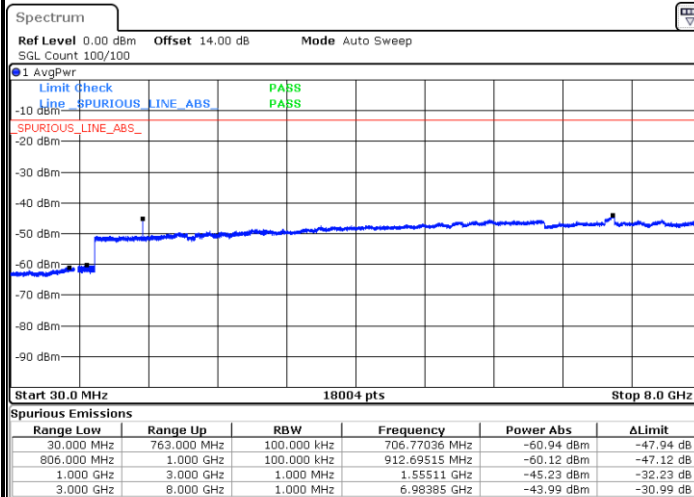
Date: 17.MAR.2020 20:12:10



Conducted Spurious Emission

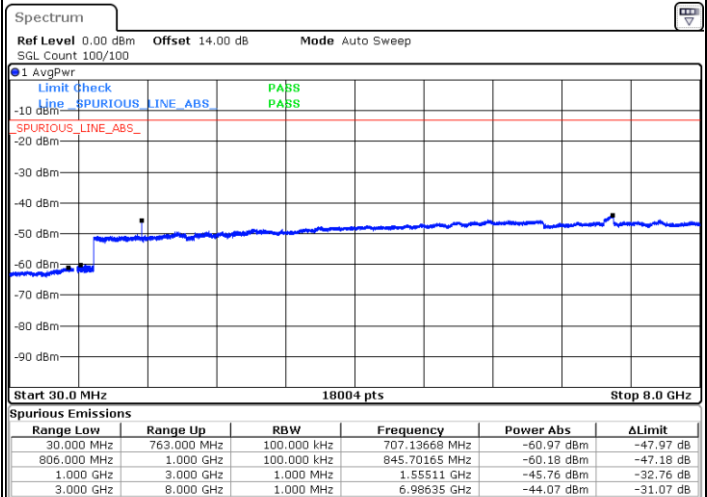
LTE Band 13 / 5MHz

Lowest Channel / QPSK



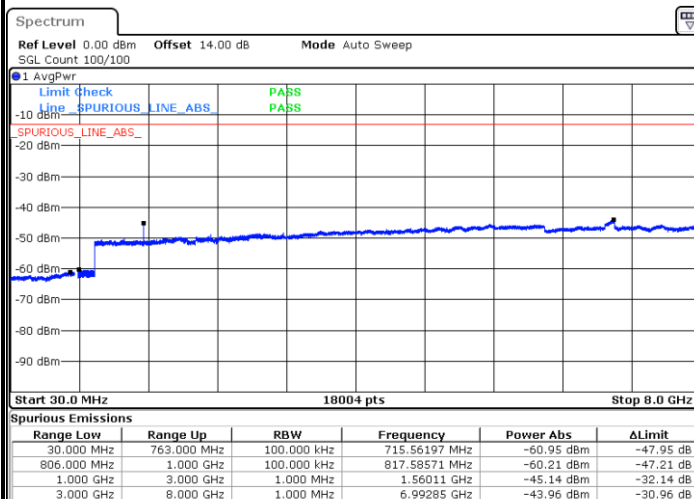
Date: 17.MAR.2020 19:33:20

Lowest Channel / 16QAM



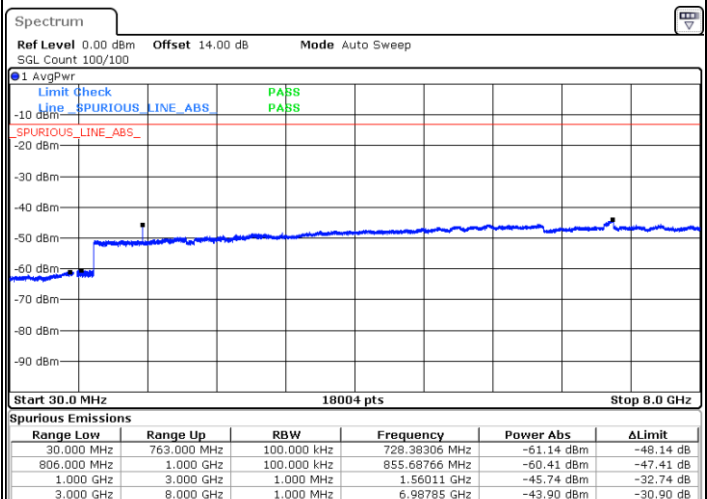
Date: 17.MAR.2020 19:33:59

Middle Channel / QPSK



Date: 17.MAR.2020 19:35:18

Middle Channel / 16QAM

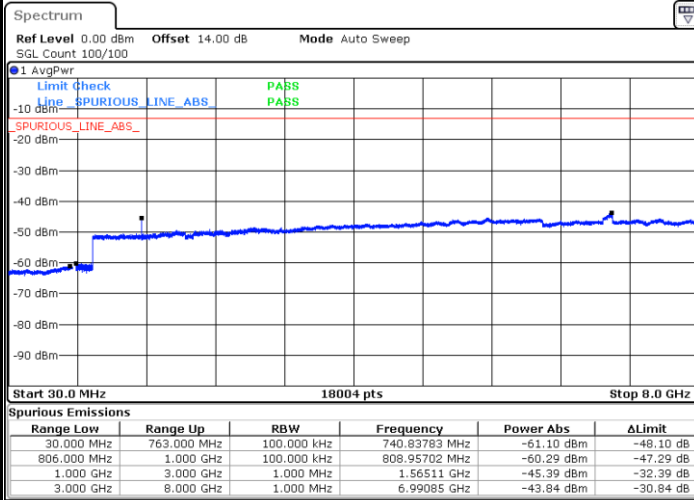


Date: 17.MAR.2020 19:34:39



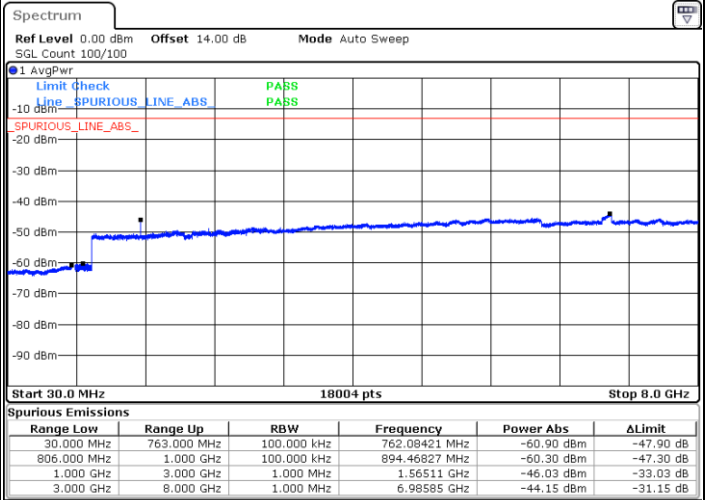
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 17.MAR.2020 19:44:06

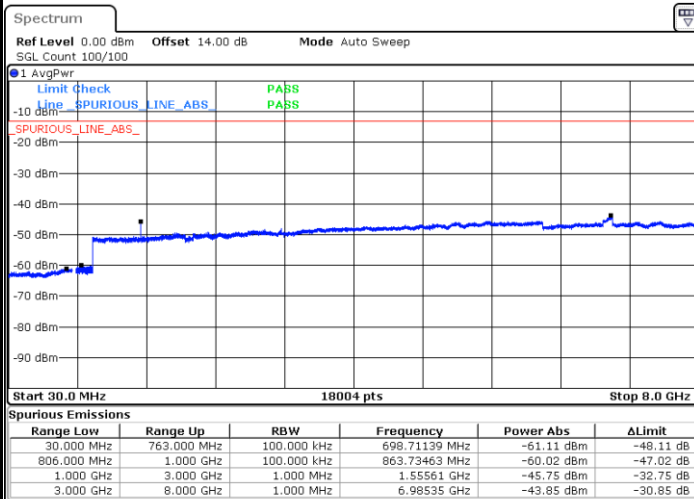
Highest Channel / 16QAM



Date: 17.MAR.2020 19:44:46

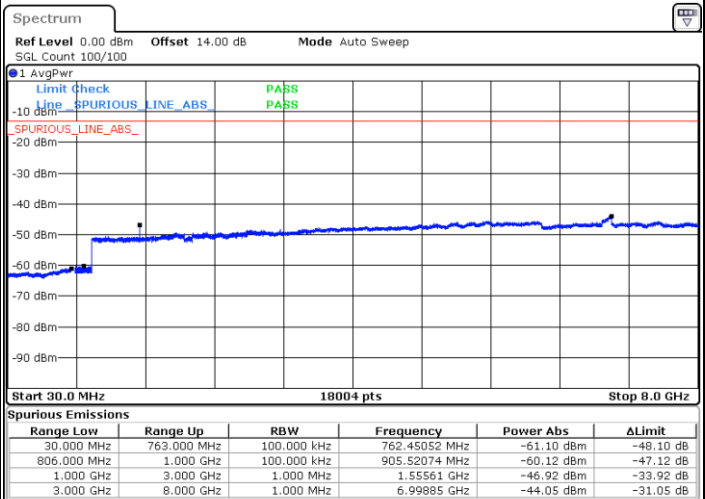
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 17.MAR.2020 19:56:49

Middle Channel / 16QAM

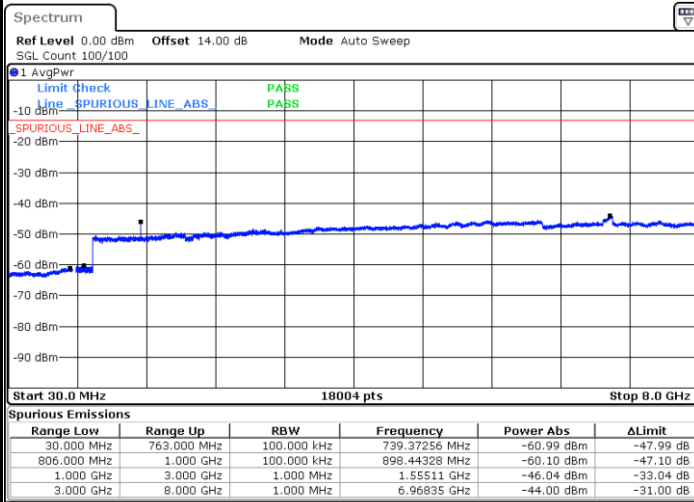


Date: 17.MAR.2020 19:56:09



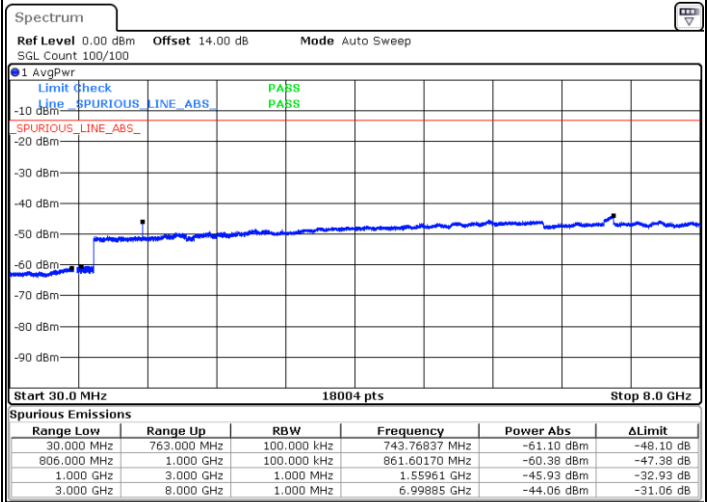
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



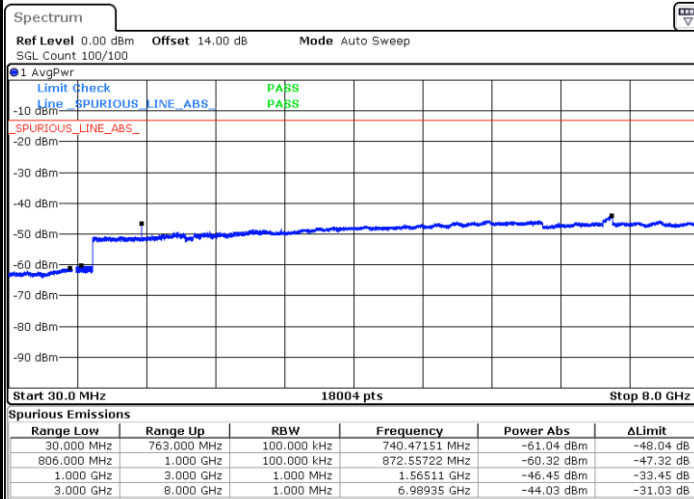
Date: 17.MAR.2020 20:04:45

Middle Channel / 64QAM



Date: 17.MAR.2020 20:05:25

Highest Channel / 64QAM

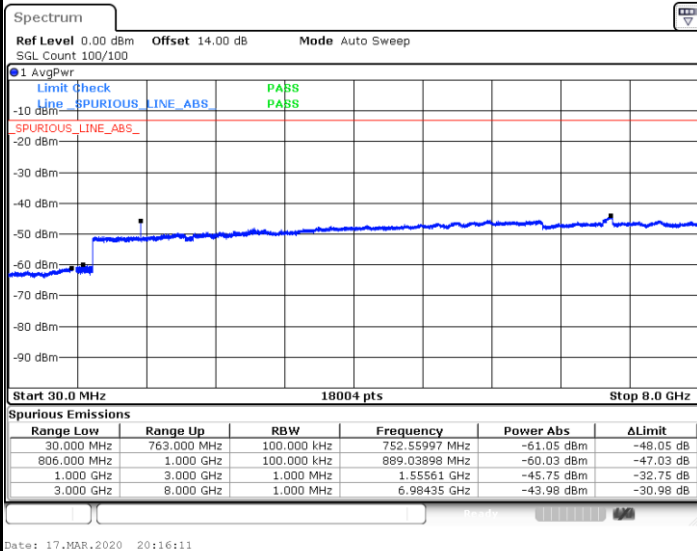


Date: 17.MAR.2020 20:10:09



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	0.0009	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

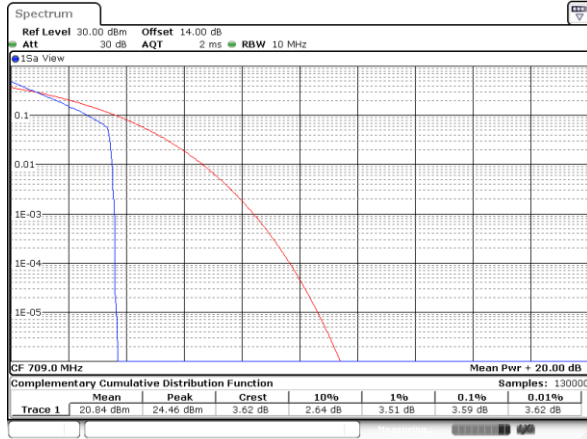
Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.59	5.07	5.19	5.83	PASS
Middle CH	3.62	5.01	5.51	5.83	
Highest CH	3.59	4.96	5.10	5.86	
Mode	LTE Band 17 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.45	5.91	-	-	PASS
Middle CH	5.45	5.88	-	-	
Highest CH	5.54	5.80	-	-	

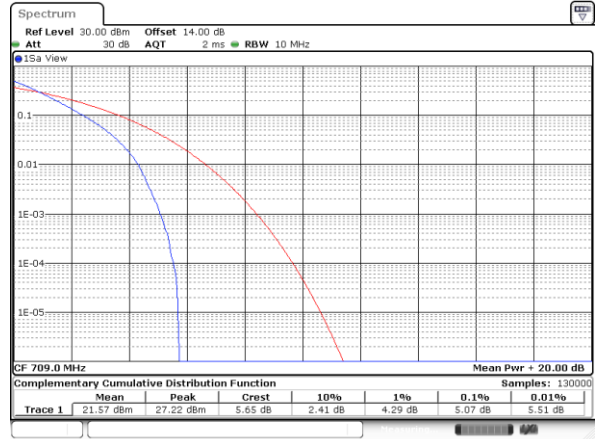


LTE Band 17 / 10MHz / QPSK

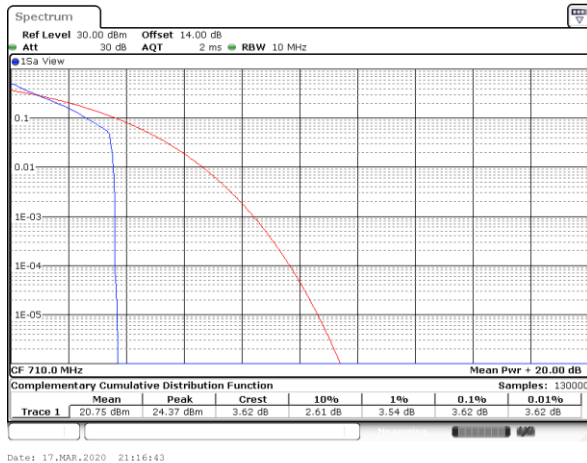
Lowest Channel / 1RB



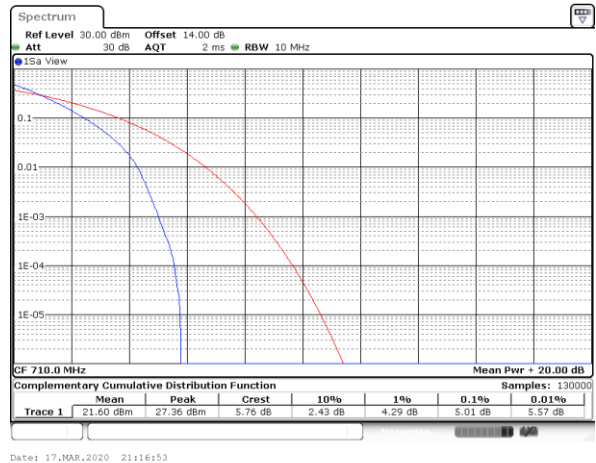
Lowest Channel / Full RB



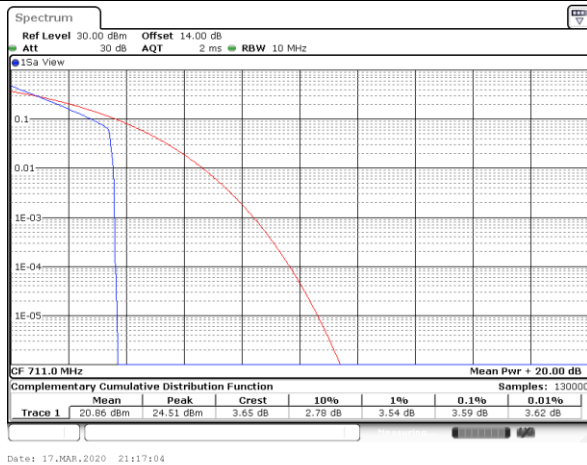
Middle Channel / 1RB



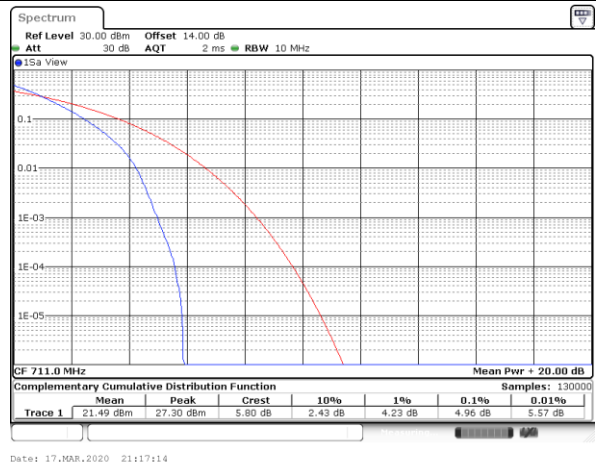
Middle Channel / Full RB



Highest Channel / 1RB



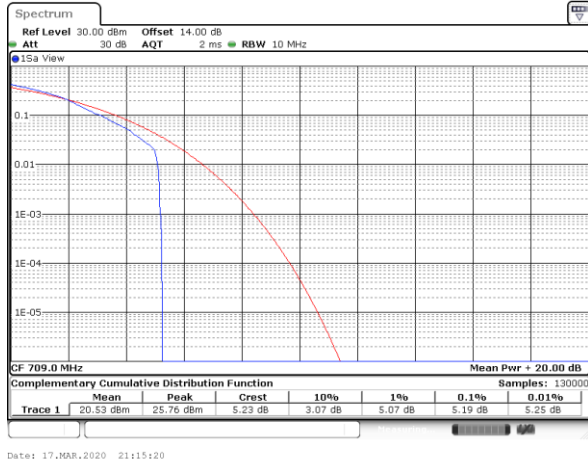
Highest Channel / Full RB



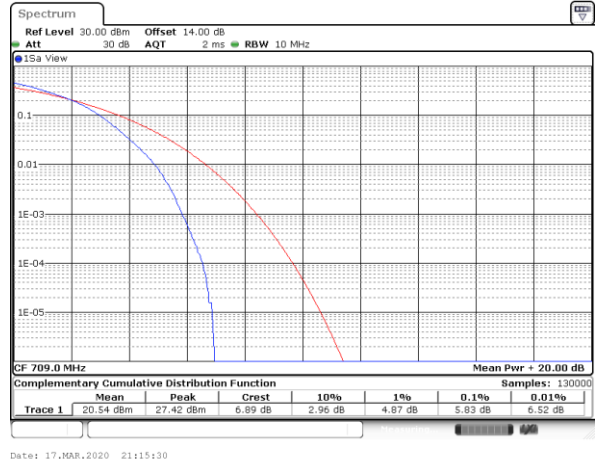


LTE Band 17 / 10MHz / 16QAM

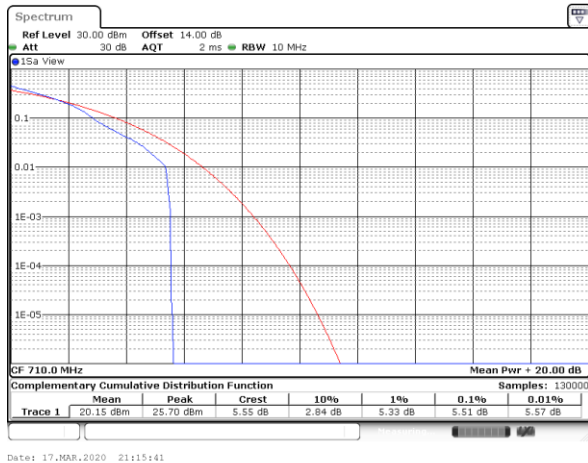
Lowest Channel / 1RB



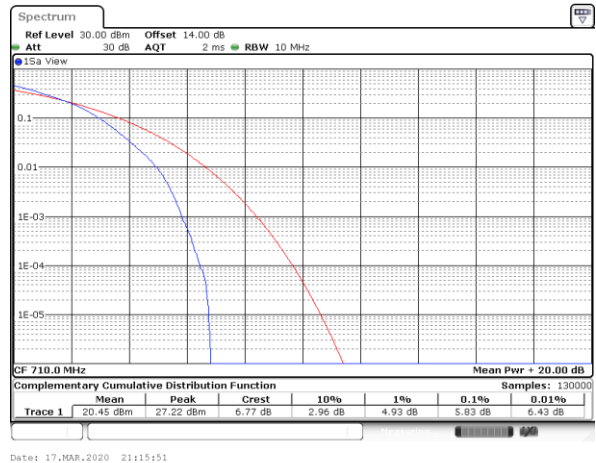
Lowest Channel / Full RB



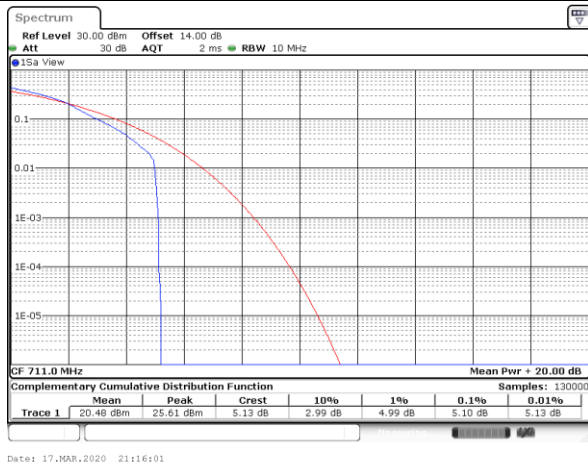
Middle Channel / 1RB



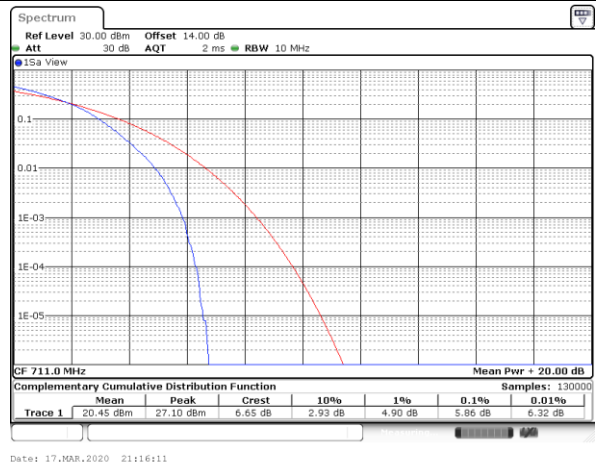
Middle Channel / Full RB

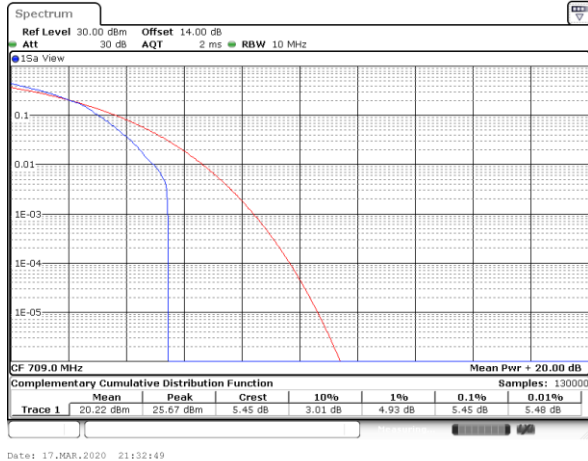
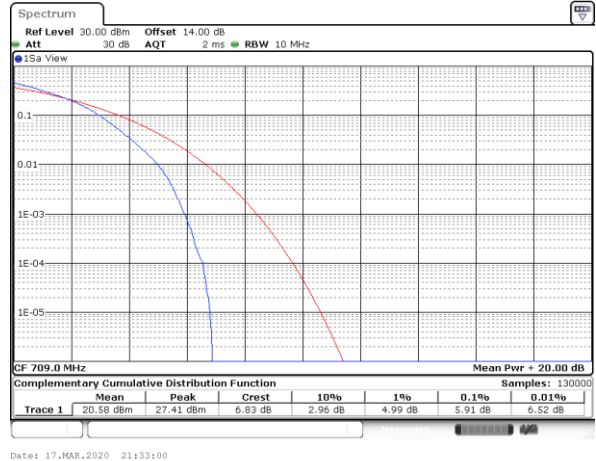
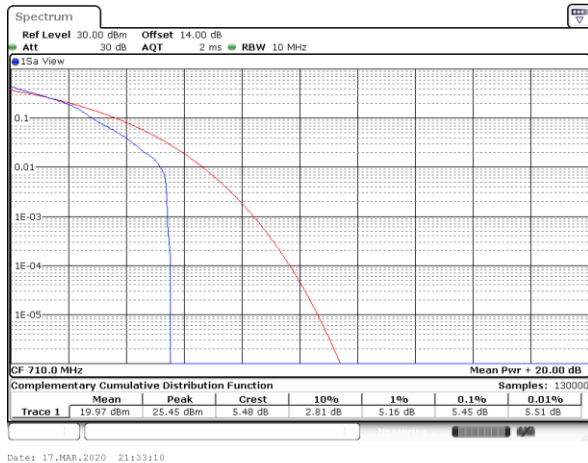
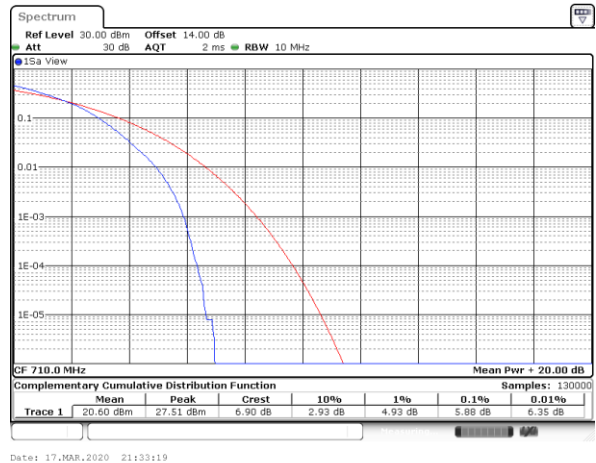
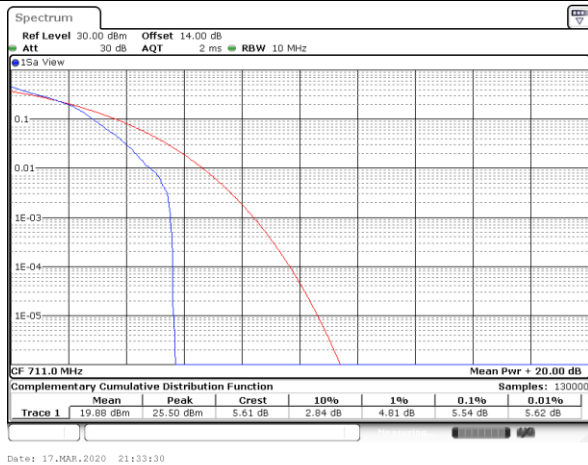
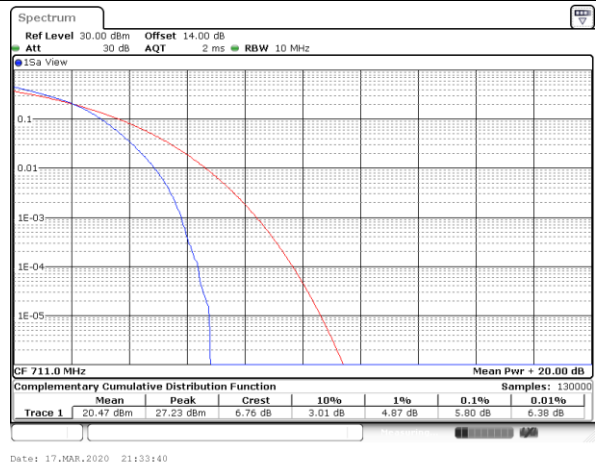


Highest Channel / 1RB



Highest Channel / Full RB



LTE Band 17 / 10MHz / 64QAM
Lowest Channel / 1RB

Lowest Channel / Full RB

Middle Channel / 1RB

Middle Channel / Full RB

Highest Channel / 1RB

Highest Channel / Full RB


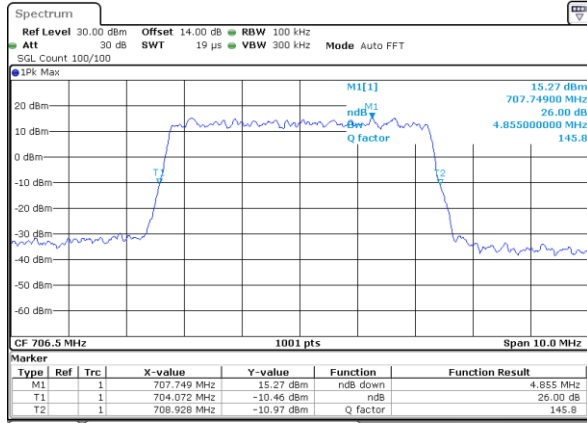
**26dB Bandwidth**

Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.86	4.86	9.73	9.81	-	-	-	-
Middle CH	-	-	-	-	4.92	4.90	9.87	9.69	-	-	-	-
Highest CH	-	-	-	-	4.81	4.90	9.67	9.77	-	-	-	-
Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.91	-	9.77	-	-	-	-	-
Middle CH	-	-	-	-	4.86	-	9.77	-	-	-	-	-
Highest CH	-	-	-	-	4.92	-	9.79	-	-	-	-	-



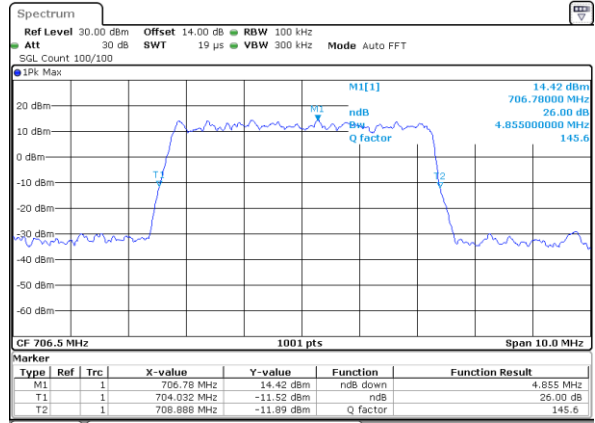
LTE Band 17

Lowest Channel / 5MHz / QPSK



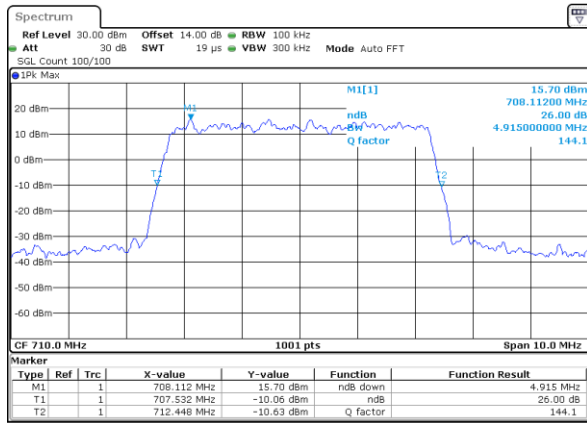
Date: 17, MAR, 2020 20:47:10

Lowest Channel / 5MHz / 16QAM



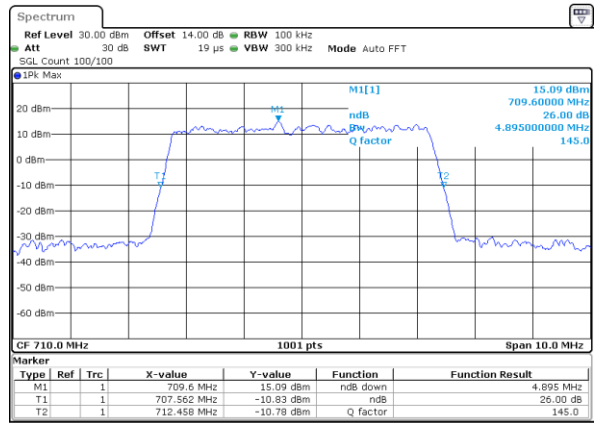
Date: 17, MAR, 2020 20:47:21

Middle Channel / 5MHz / QPSK



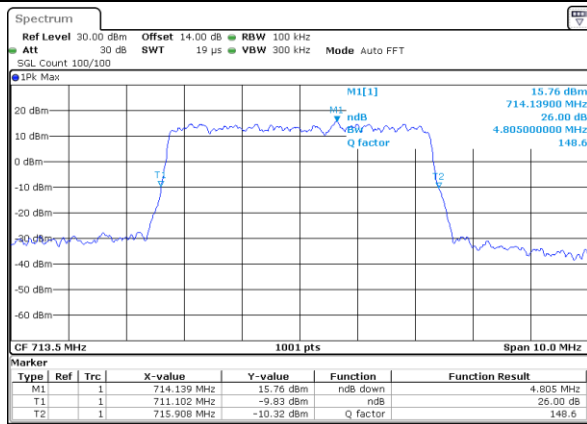
Date: 17, MAR, 2020 20:53:15

Middle Channel / 5MHz / 16QAM



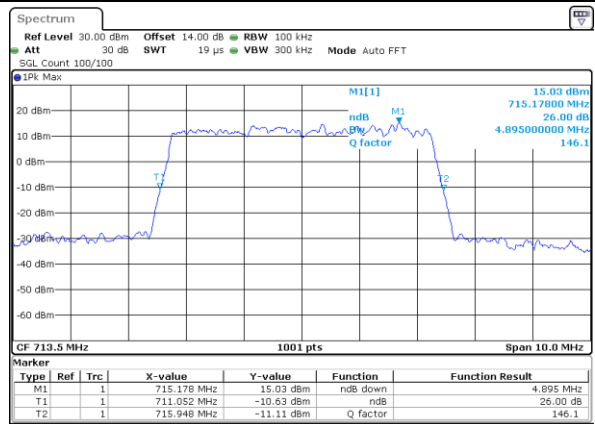
Date: 17, MAR, 2020 20:53:26

Highest Channel / 5MHz / QPSK



Date: 17, MAR, 2020 20:55:20

Highest Channel / 5MHz / 16QAM

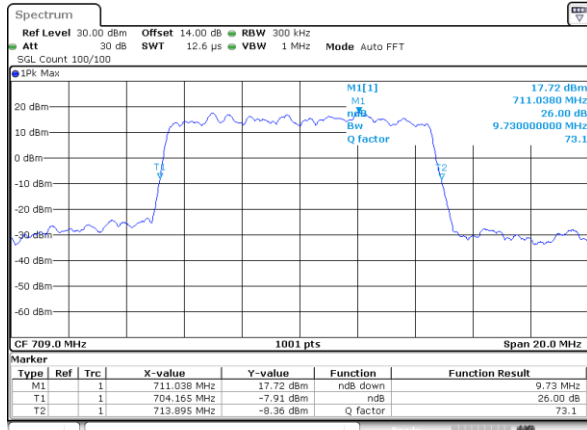


Date: 17, MAR, 2020 20:55:31

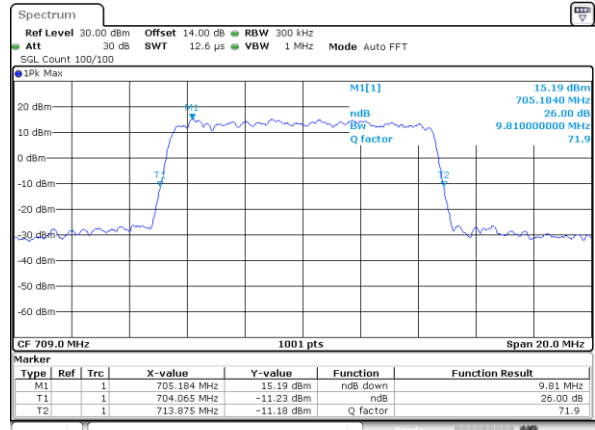


LTE Band 17

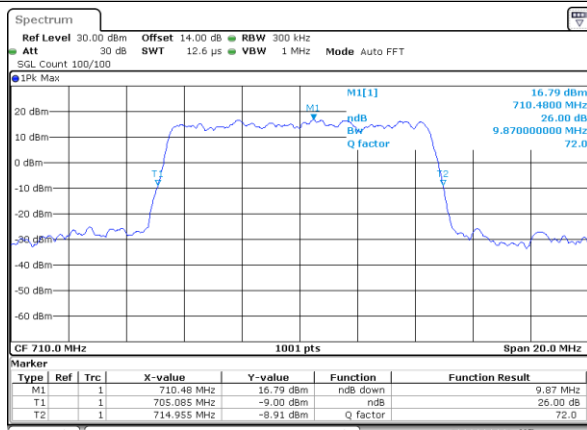
Lowest Channel / 10MHz / QPSK



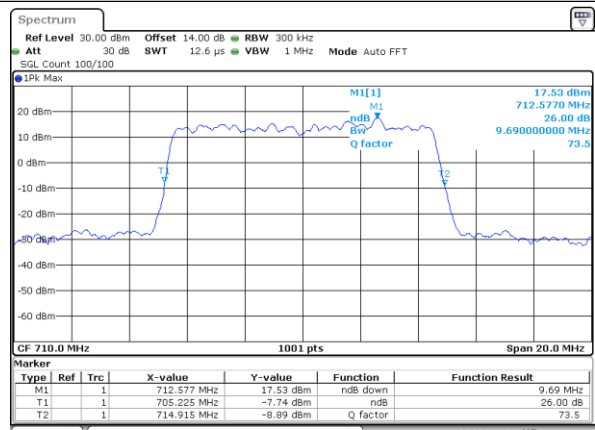
Lowest Channel / 10MHz / 16QAM



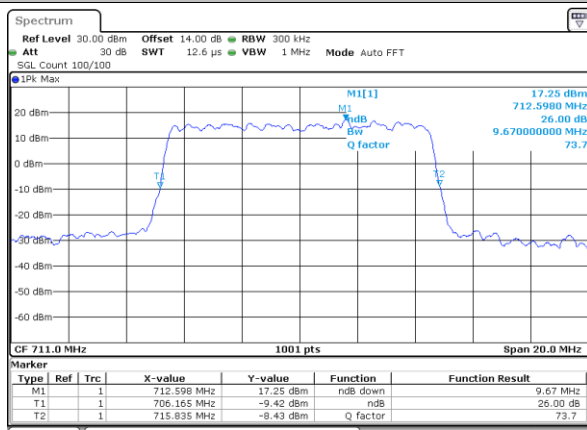
Middle Channel / 10MHz / QPSK



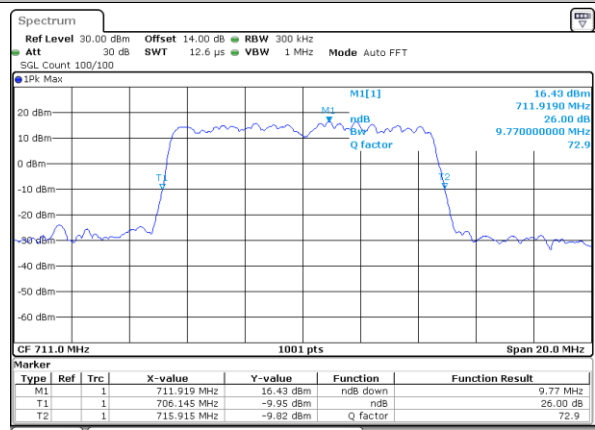
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



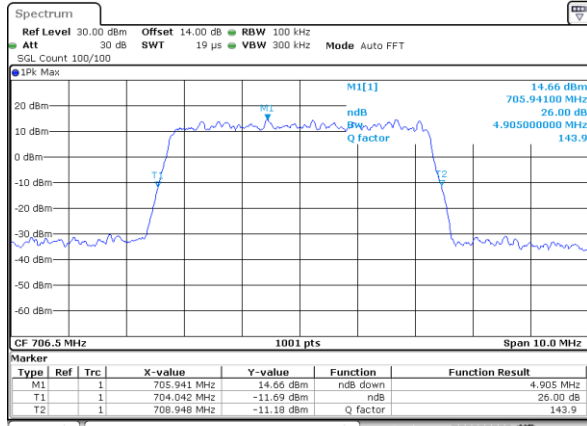
Highest Channel / 10MHz / 16QAM





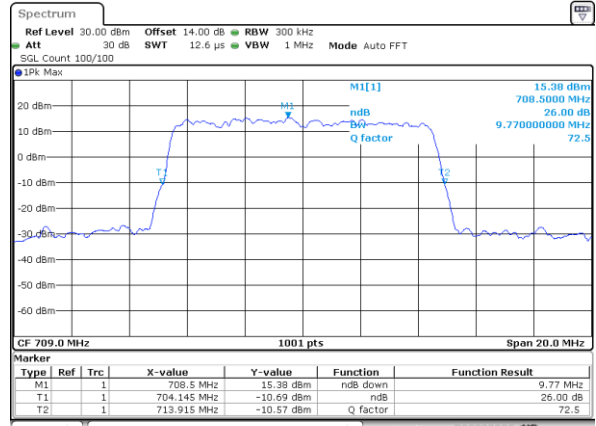
LTE Band 17

Lowest Channel / 5MHz / 64QAM



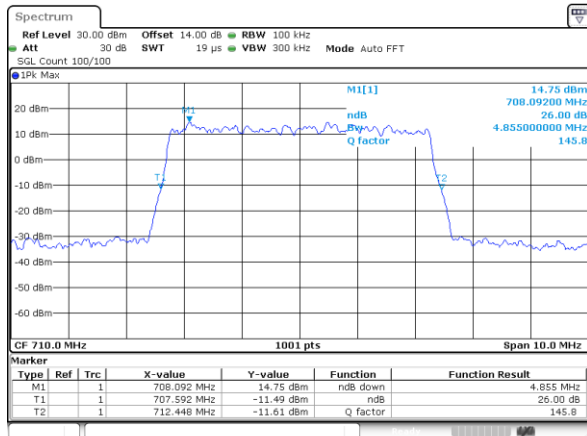
Date: 17.MAR.2020 21:18:46

Lowest Channel / 10MHz / 64QAM



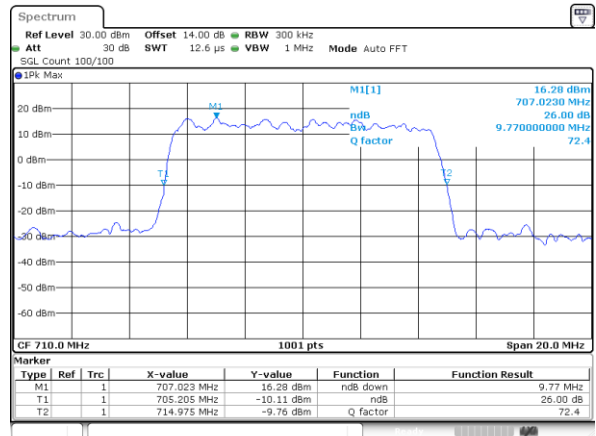
Date: 17.MAR.2020 21:25:52

Middle Channel / 5MHz / 64QAM



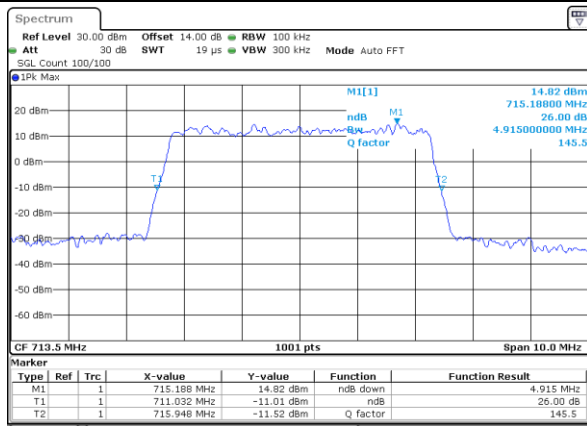
Date: 17.MAR.2020 21:21:47

Middle Channel / 10MHz / 64QAM



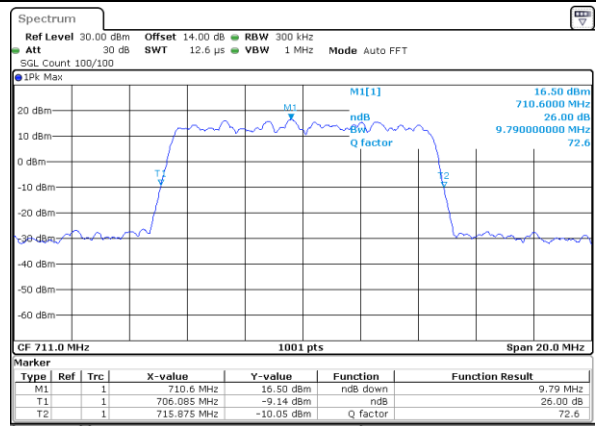
Date: 17.MAR.2020 21:28:54

Highest Channel / 5MHz / 64QAM



Date: 17.MAR.2020 21:22:50

Highest Channel / 10MHz / 64QAM



Date: 17.MAR.2020 21:29:56

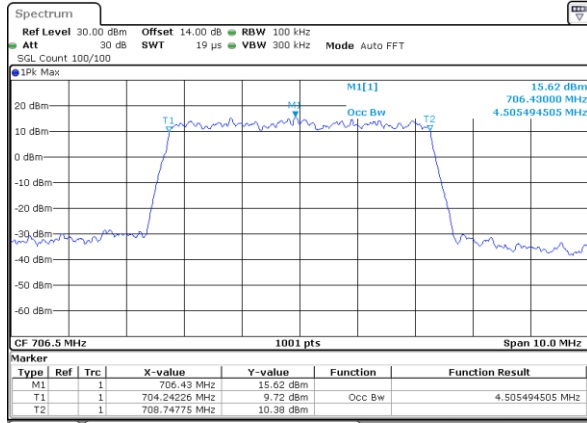
**Occupied Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	4.51	4.51	8.99	9.01	-	-	-	-
Middle CH	-	-	-	-	4.50	4.50	9.05	9.01	-	-	-	-
Highest CH	-	-	-	-	4.49	4.50	8.99	8.99	-	-	-	-
Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	9.03	-	-	-	-	-
Middle CH	-	-	-	-	4.51	-	8.99	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	9.03	-	-	-	-	-



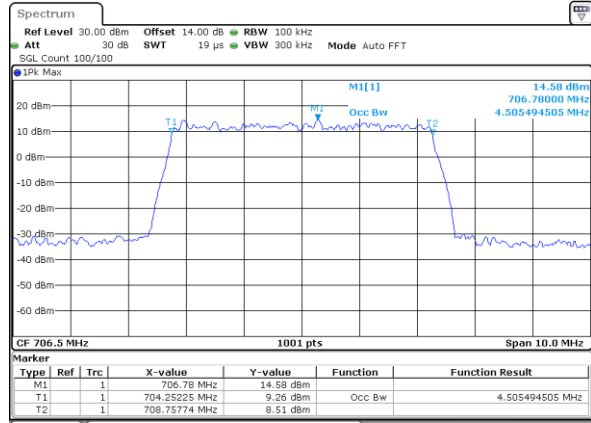
LTE Band 17

Lowest Channel / 5MHz / QPSK



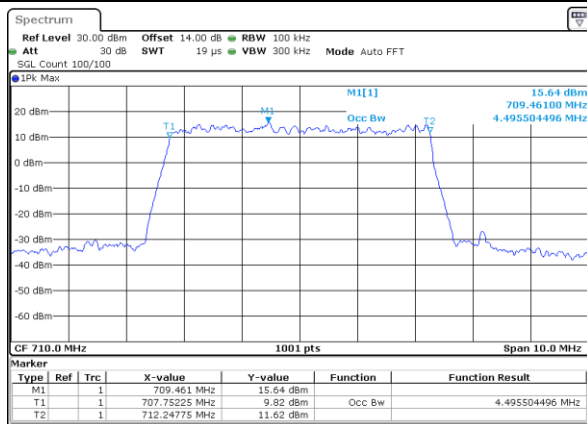
Date: 17, MAR, 2020 20:46:47

Lowest Channel / 5MHz / 16QAM



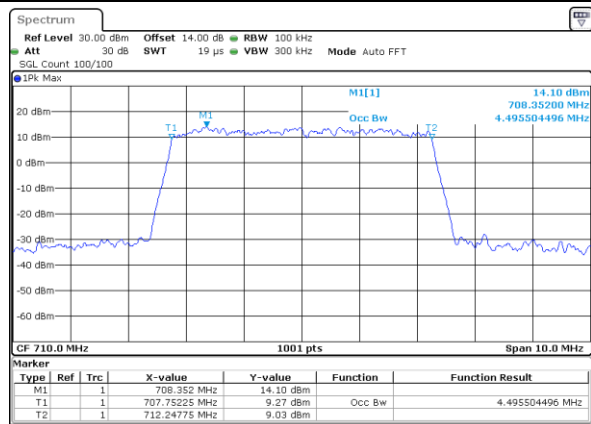
Date: 17, MAR, 2020 20:46:59

Middle Channel / 5MHz / QPSK



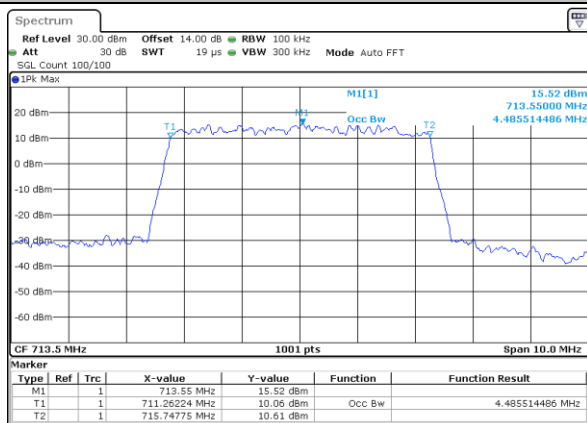
Date: 17, MAR, 2020 20:52:52

Middle Channel / 5MHz / 16QAM



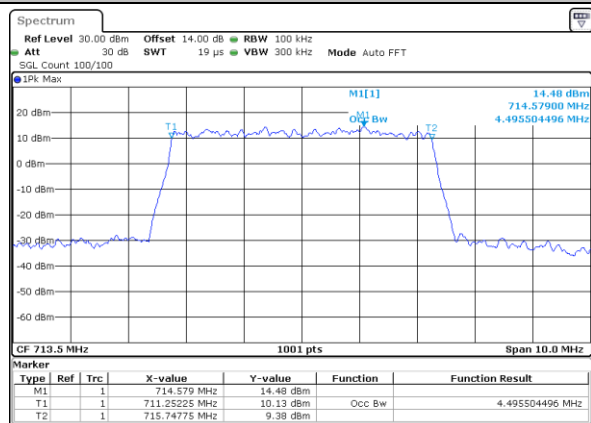
Date: 17, MAR, 2020 20:53:04

Highest Channel / 5MHz / QPSK



Date: 17, MAR, 2020 20:54:58

Highest Channel / 5MHz / 16QAM

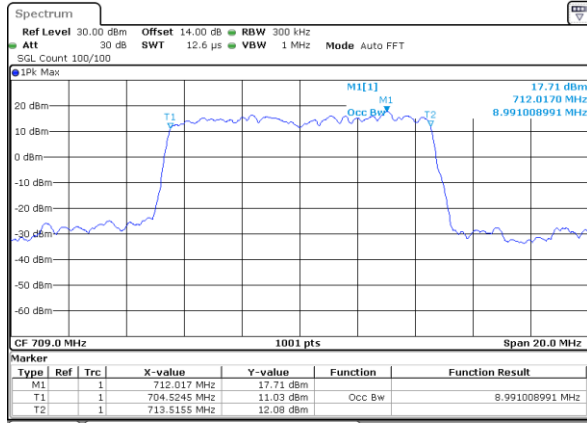


Date: 17, MAR, 2020 20:55:09



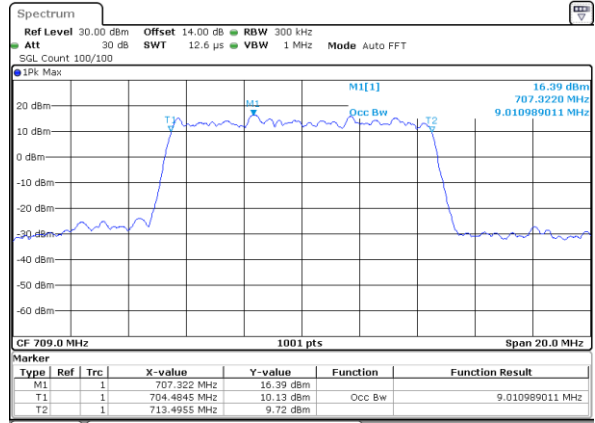
LTE Band 17

Lowest Channel / 10MHz / QPSK



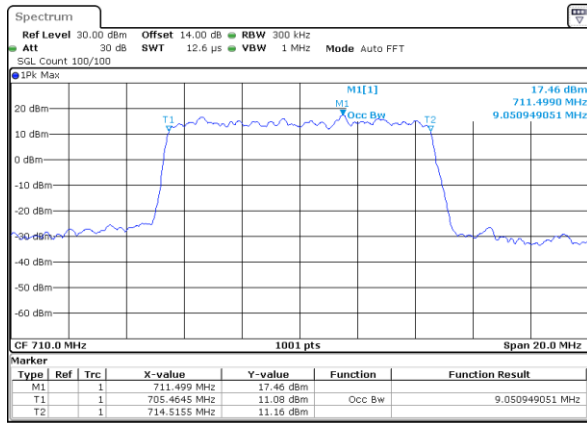
Date: 17.MAR.2020 21:01:03

Lowest Channel / 10MHz / 16QAM



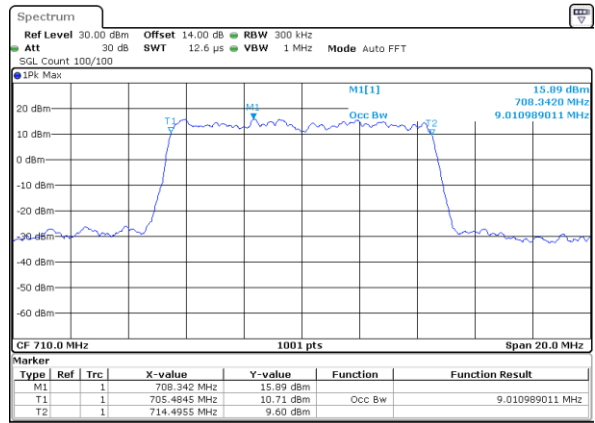
Date: 17.MAR.2020 21:01:14

Middle Channel / 10MHz / QPSK



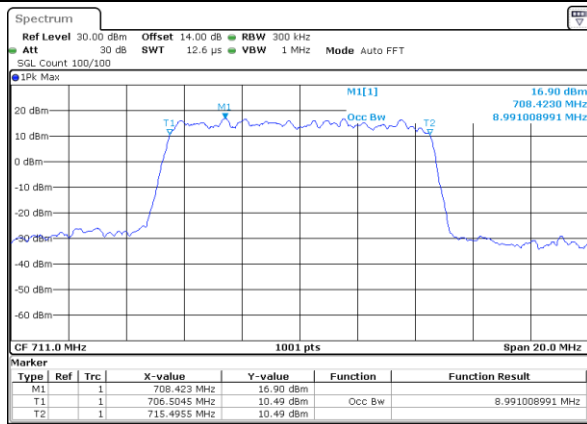
Date: 17.MAR.2020 21:07:08

Middle Channel / 10MHz / 16QAM



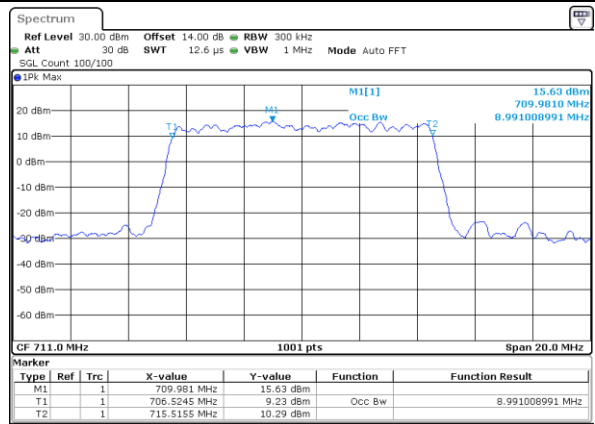
Date: 17.MAR.2020 21:07:19

Highest Channel / 10MHz / QPSK



Date: 17.MAR.2020 21:09:13

Highest Channel / 10MHz / 16QAM

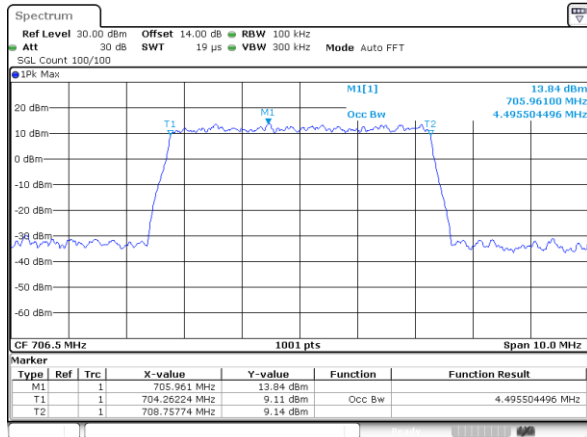


Date: 17.MAR.2020 21:09:24

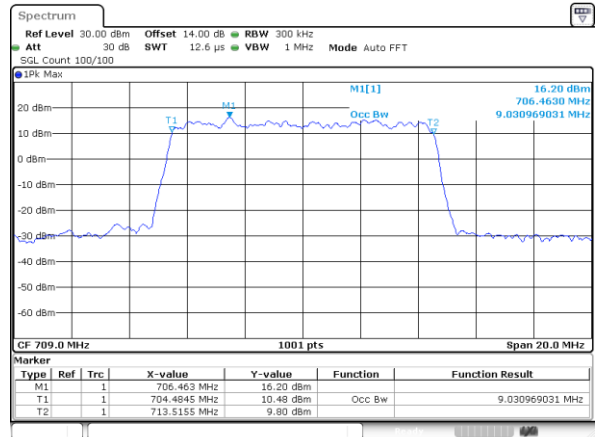


LTE Band 17

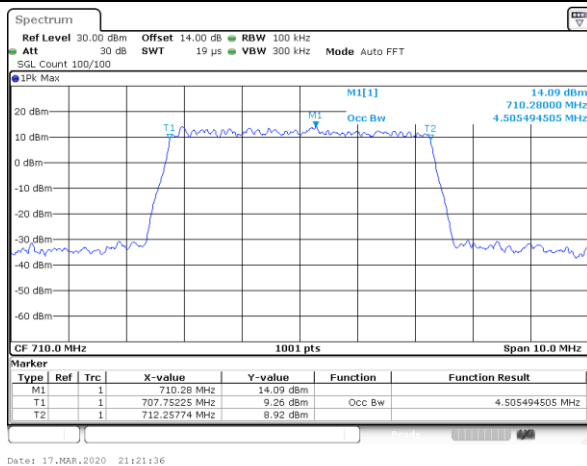
Lowest Channel / 5MHz / 64QAM



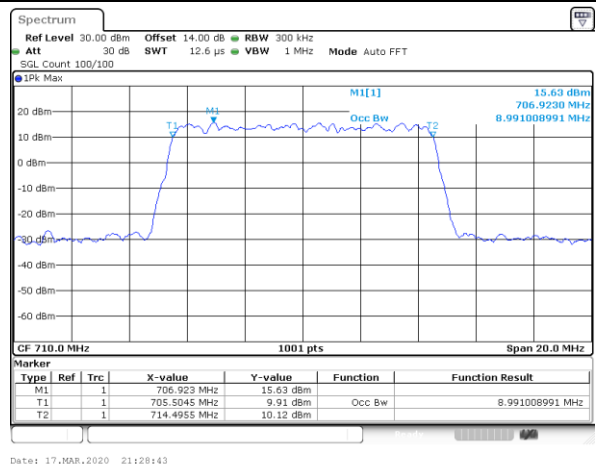
Lowest Channel / 10MHz / 64QAM



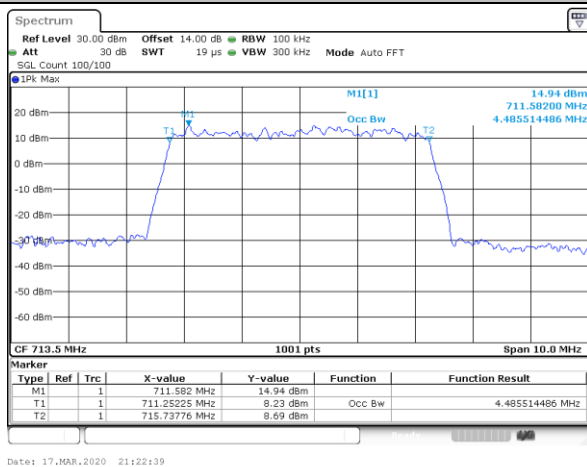
Middle Channel / 5MHz / 64QAM



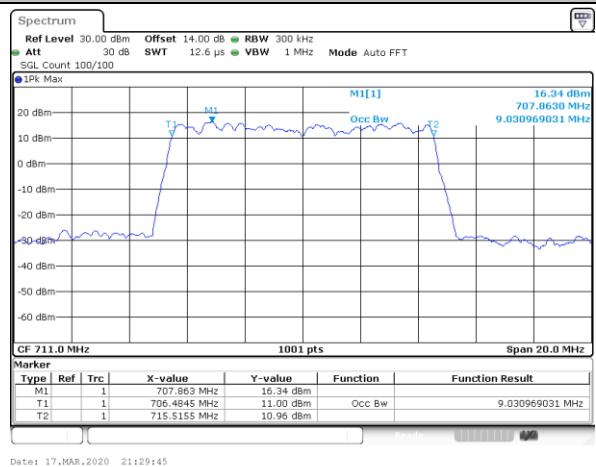
Middle Channel / 10MHz / 64QAM

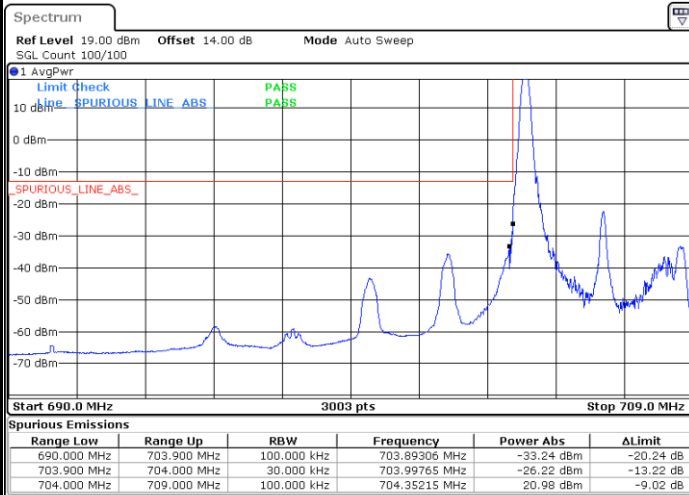
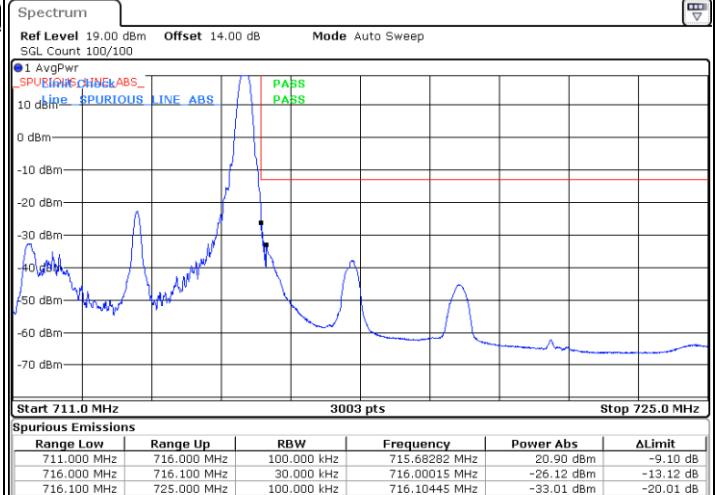
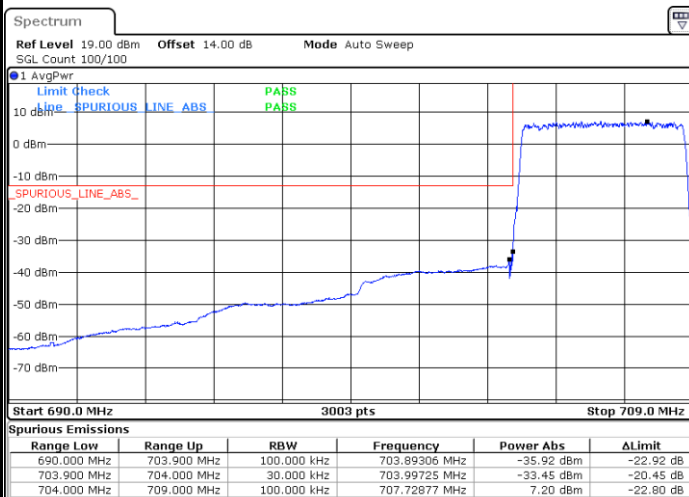


Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM



**Conducted Band Edge****LTE Band 17 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**