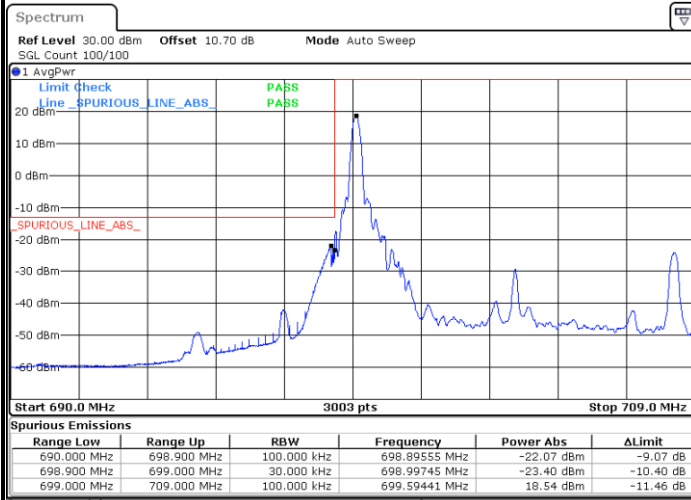


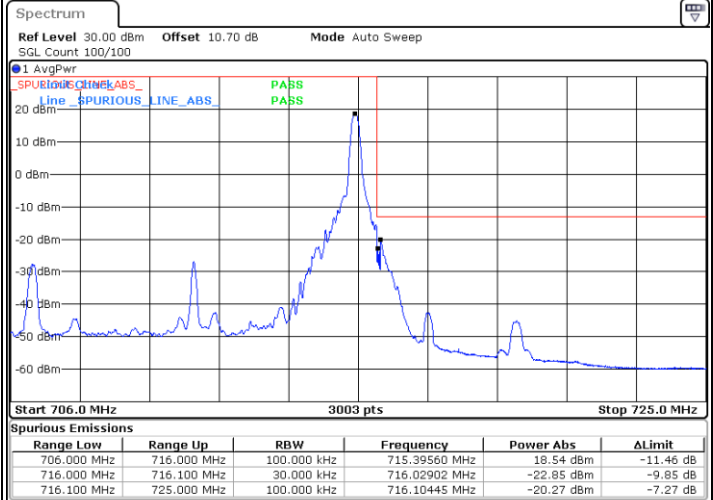


LTE Band 12 / 10MHz / 16QAM

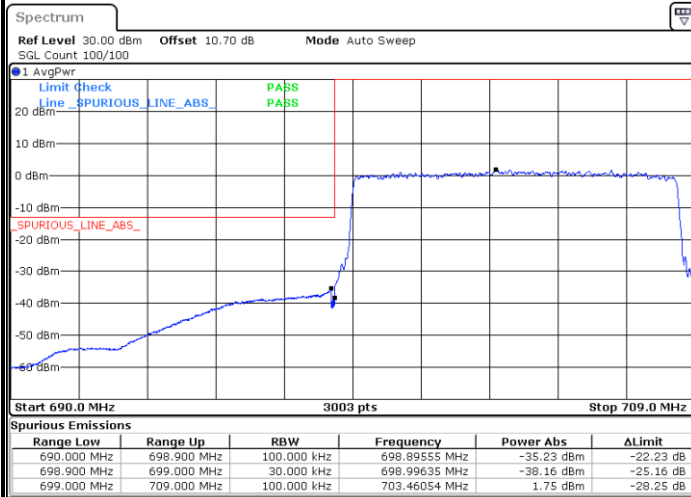
Lowest Band Edge / 1 RB



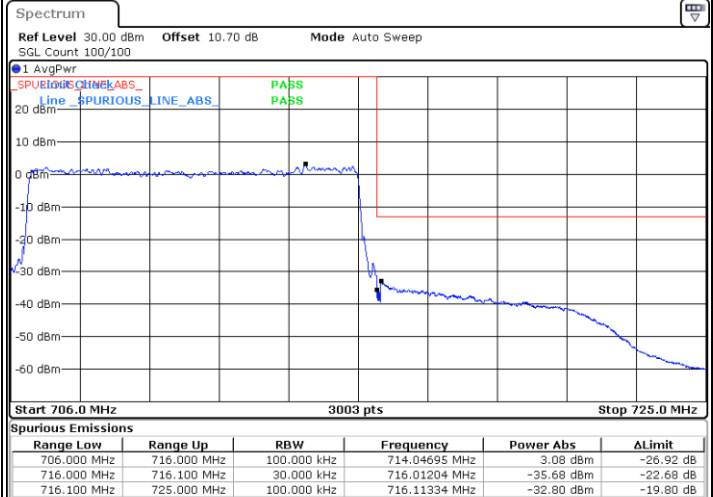
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



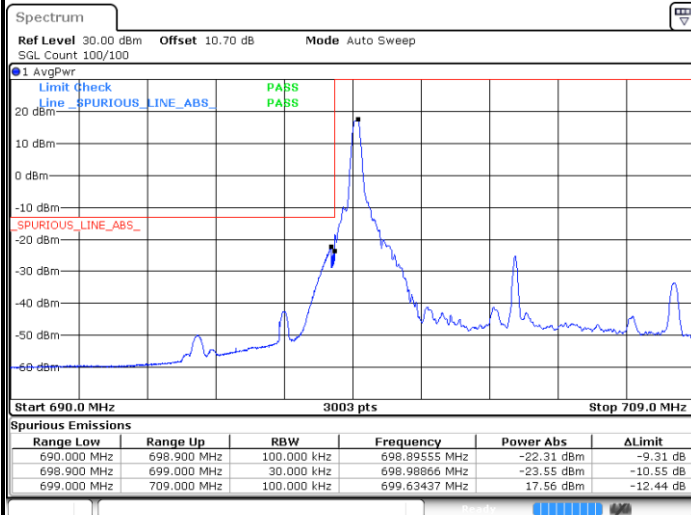
Highest Band Edge / Full RB



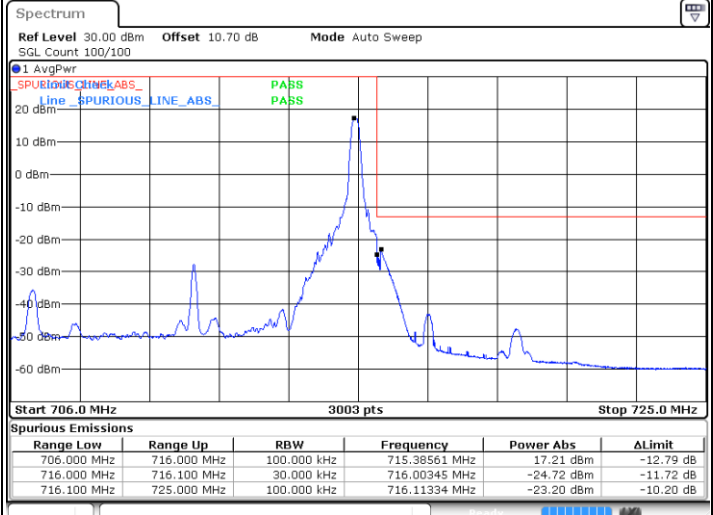


LTE Band 12 / 10MHz / 64QAM

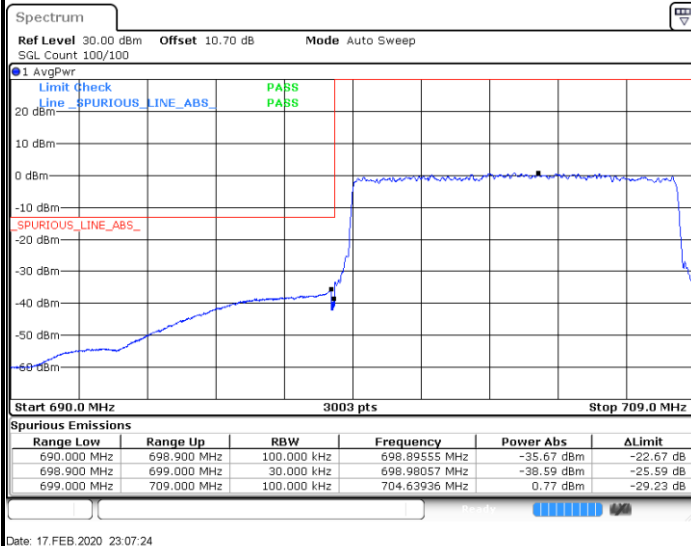
Lowest Band Edge / 1 RB



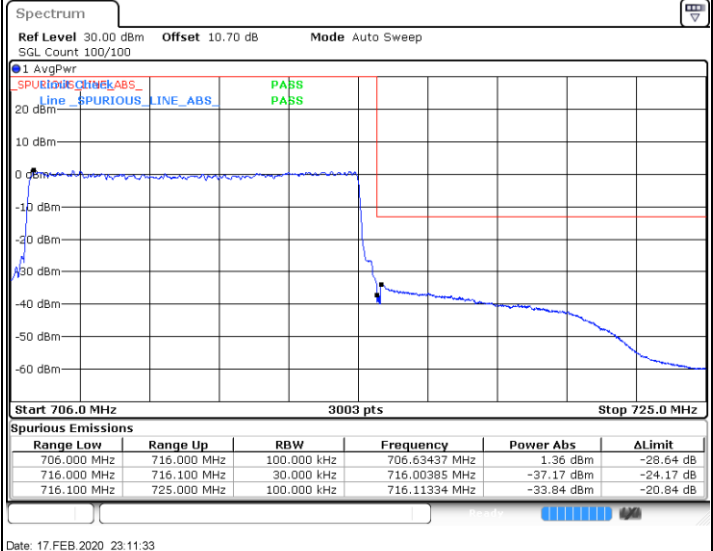
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

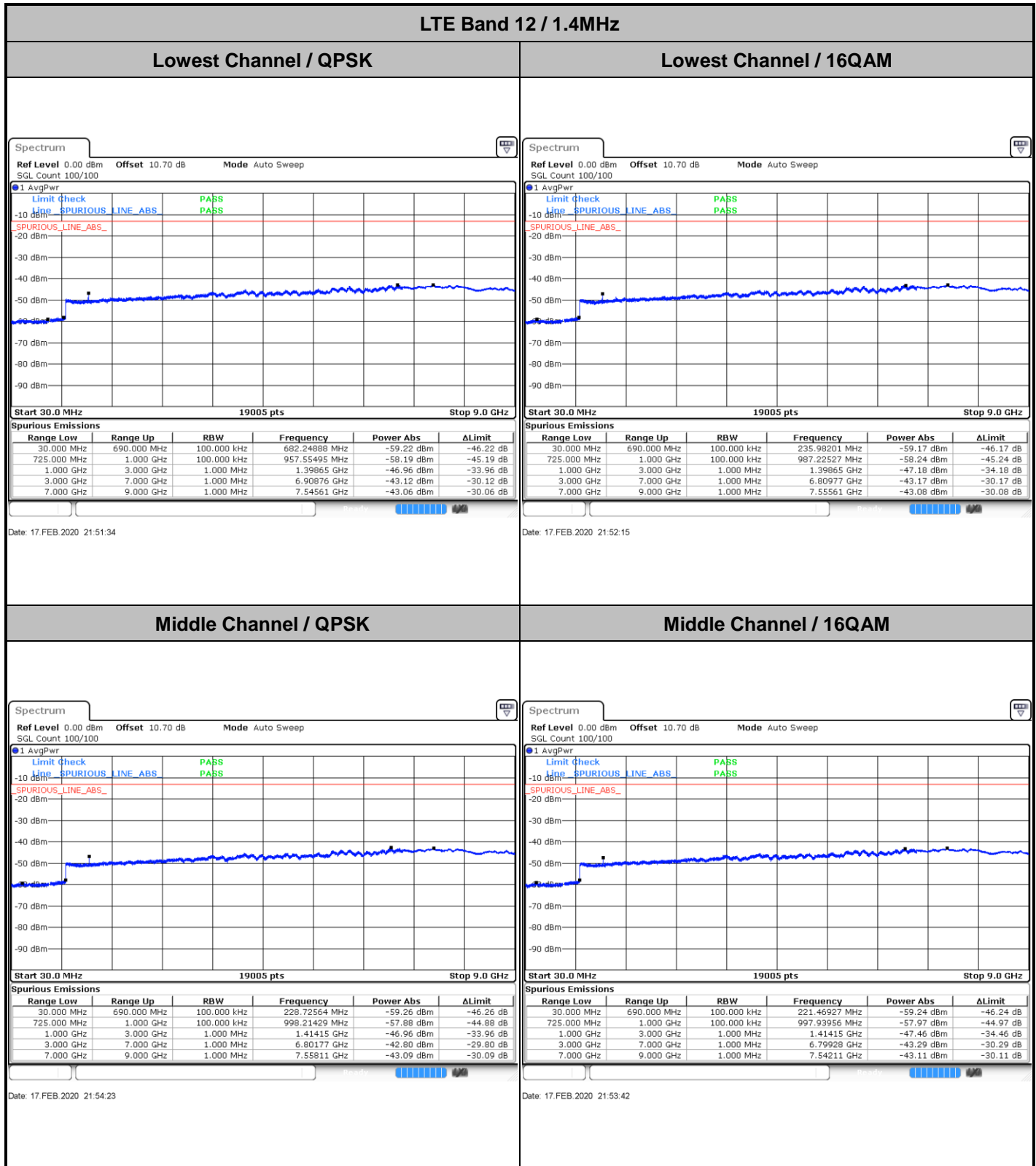


Highest Band Edge / Full RB





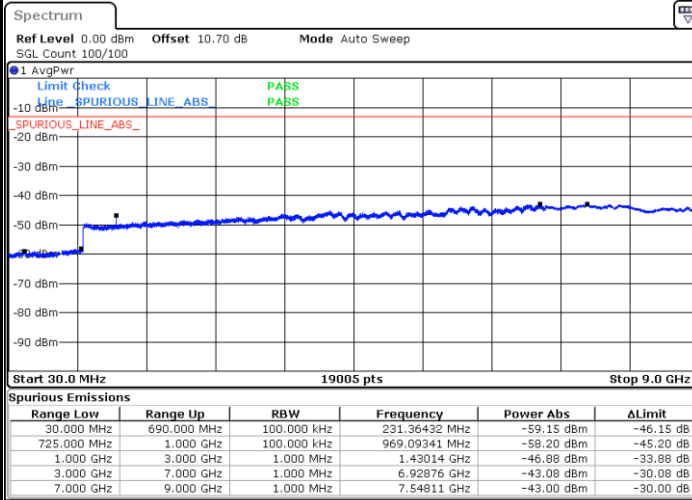
Conducted Spurious Emission





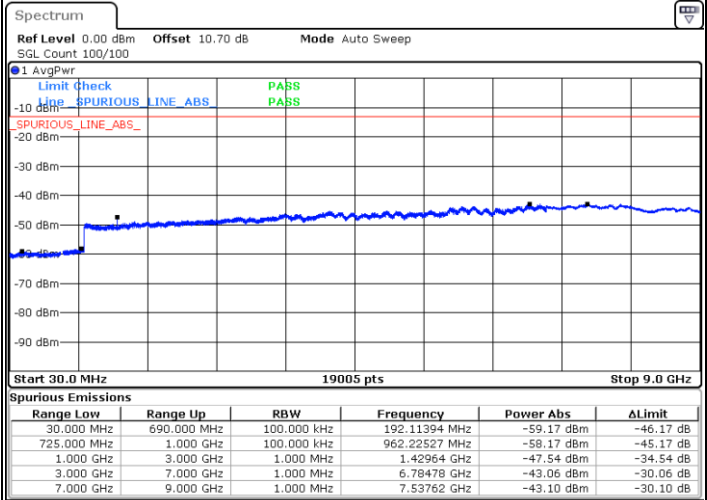
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 17.FEB.2020 21:59:55

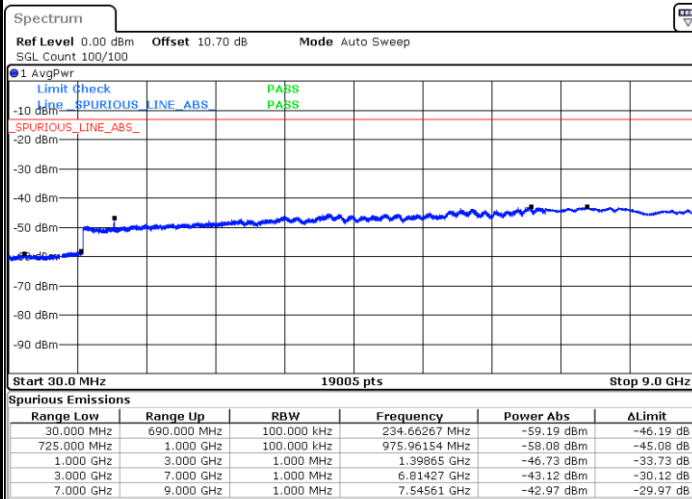
Highest Channel / 16QAM



Date: 17.FEB.2020 22:00:36

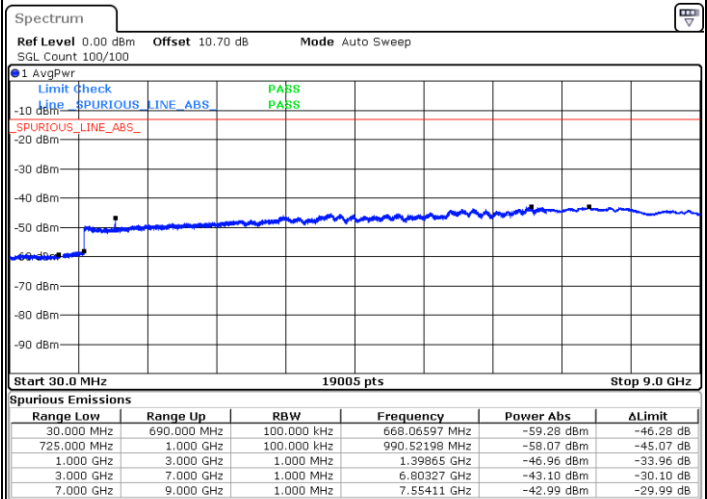
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 17.FEB.2020 22:13:26

Lowest Channel / 16QAM

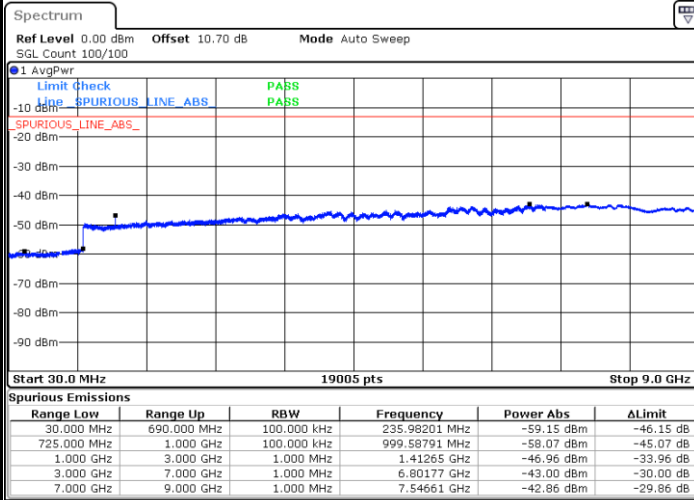


Date: 17.FEB.2020 22:14:06



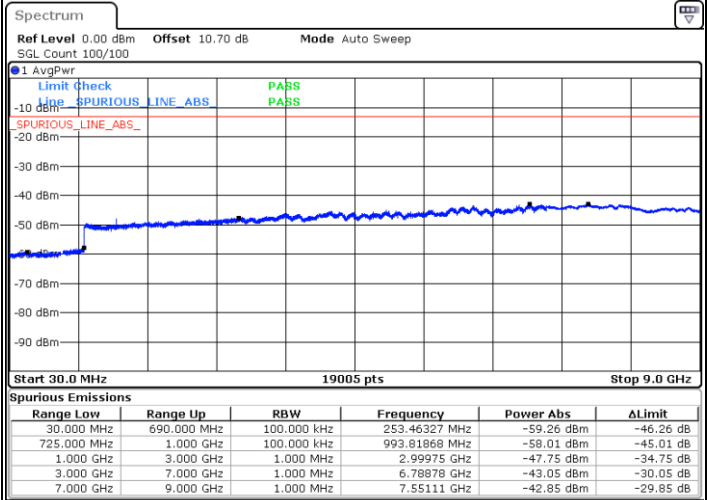
LTE Band 12 / 3MHz

Middle Channel / QPSK



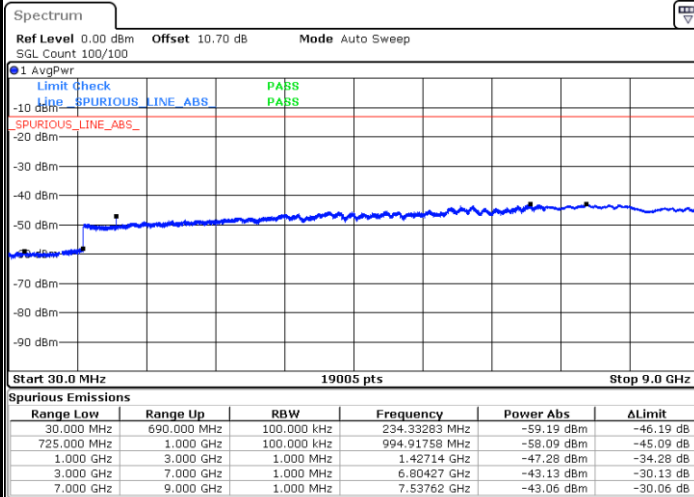
Date: 17.FEB.2020 22:16:14

Middle Channel / 16QAM



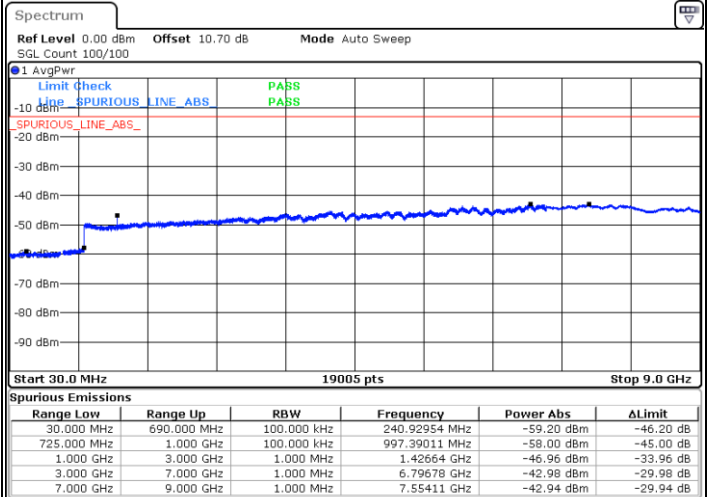
Date: 17.FEB.2020 22:15:34

Highest Channel / QPSK



Date: 17.FEB.2020 22:21:45

Highest Channel / 16QAM

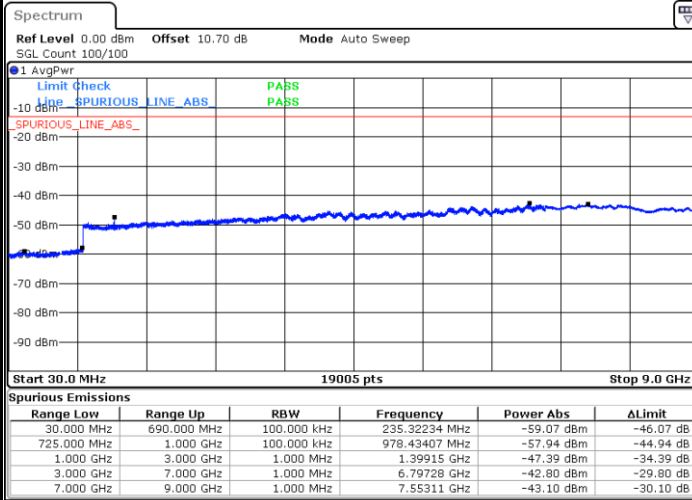


Date: 17.FEB.2020 22:22:26



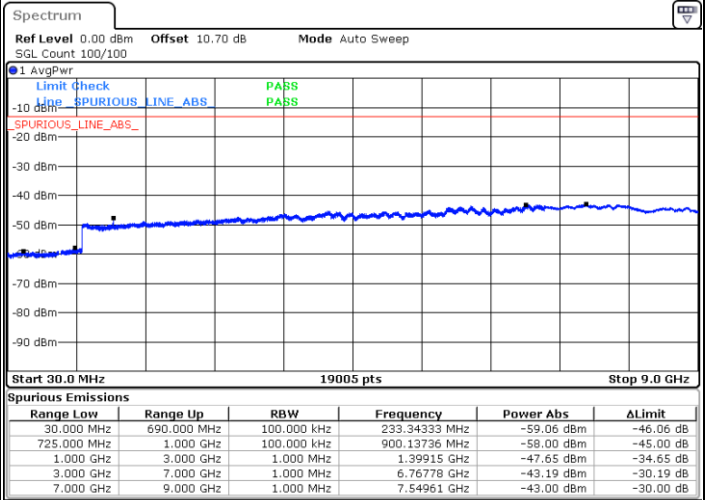
LTE Band 12 / 5MHz

Lowest Channel / QPSK



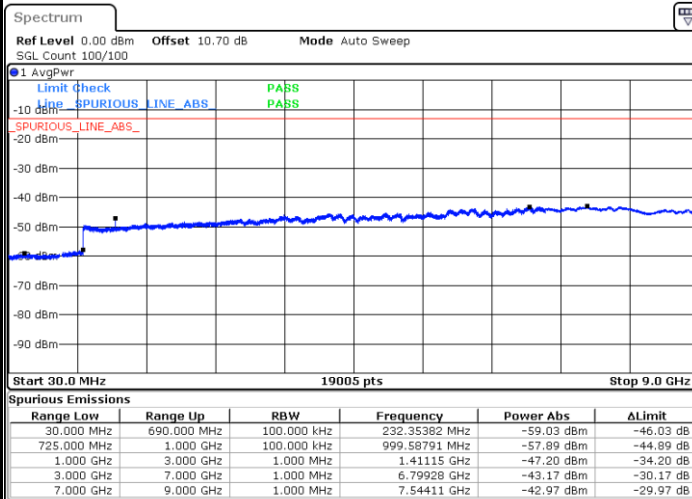
Date: 17.FEB.2020 22:42:28

Lowest Channel / 16QAM



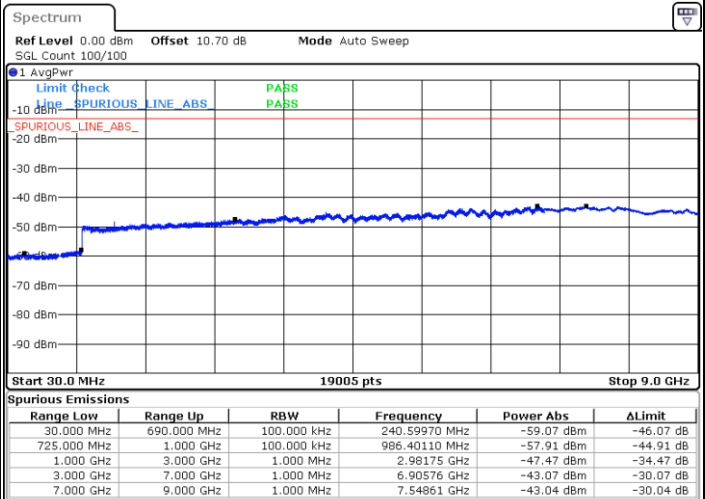
Date: 17.FEB.2020 22:43:09

Middle Channel / QPSK



Date: 17.FEB.2020 22:45:16

Middle Channel / 16QAM

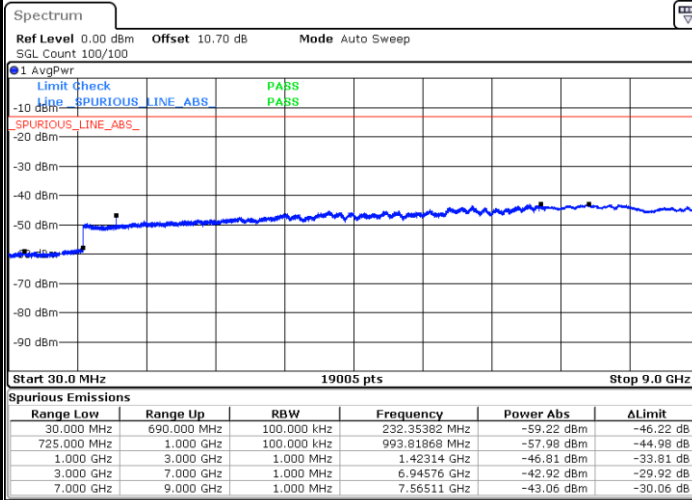


Date: 17.FEB.2020 22:44:35



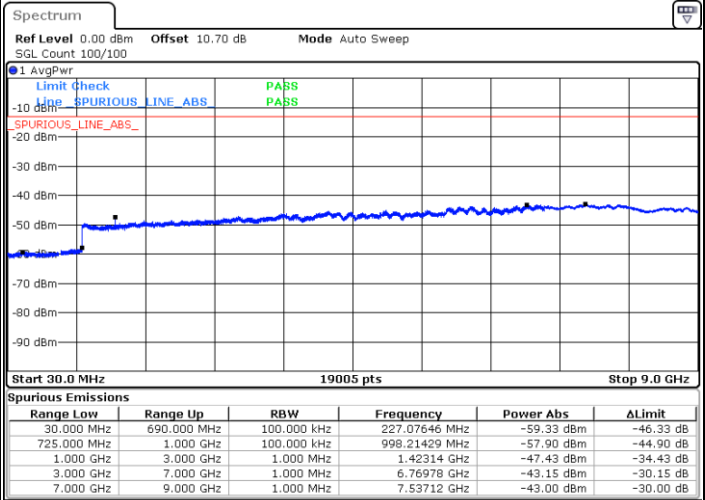
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 17.FEB.2020 22:51:28

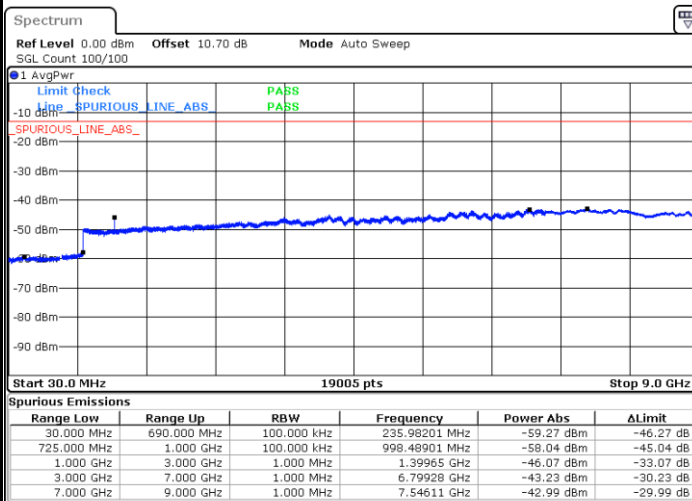
Highest Channel / 16QAM



Date: 17.FEB.2020 22:50:47

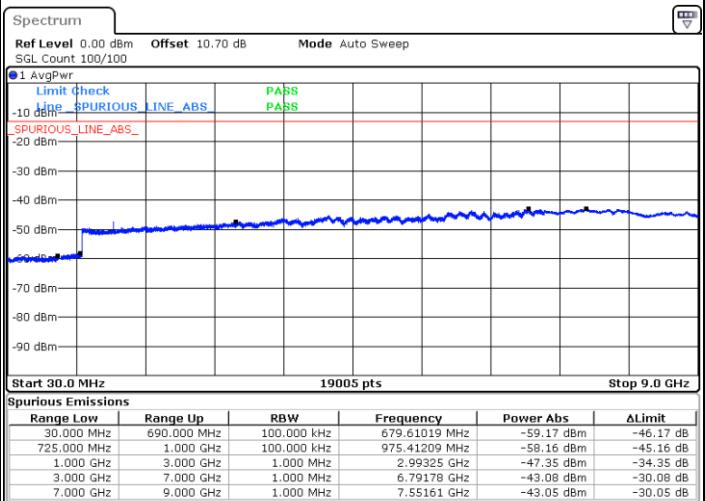
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 17.FEB.2020 22:57:00

Lowest Channel / 16QAM

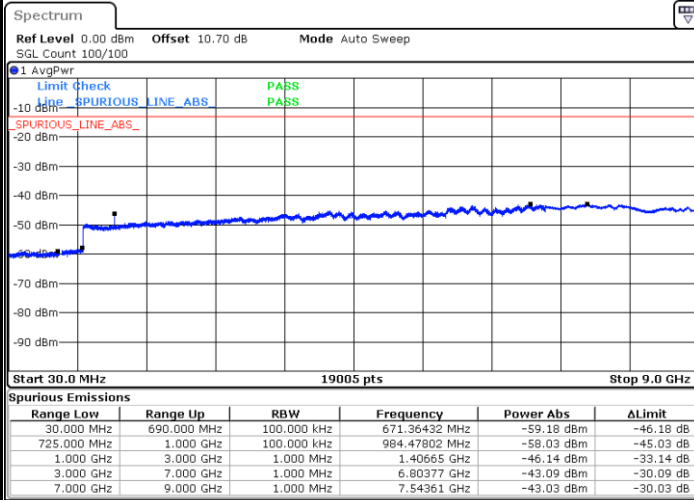


Date: 17.FEB.2020 22:57:41



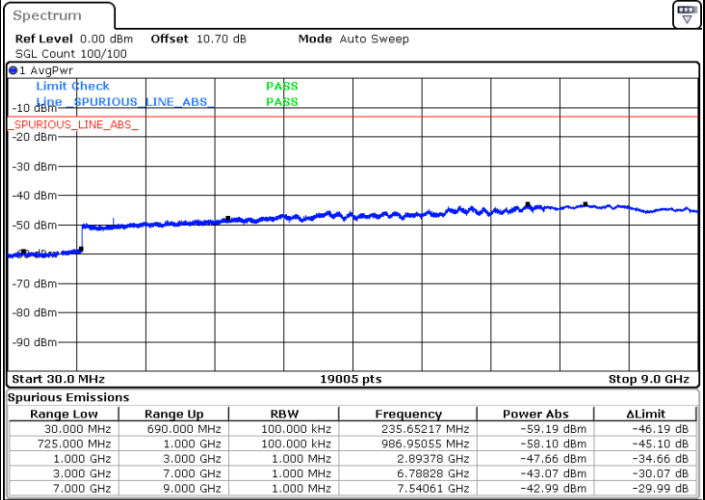
LTE Band 12 / 10MHz

Middle Channel / QPSK



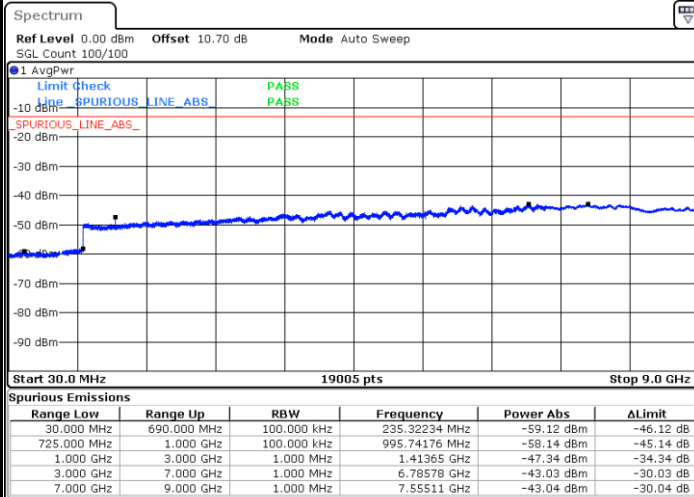
Date: 17.FEB.2020 22:59:48

Middle Channel / 16QAM



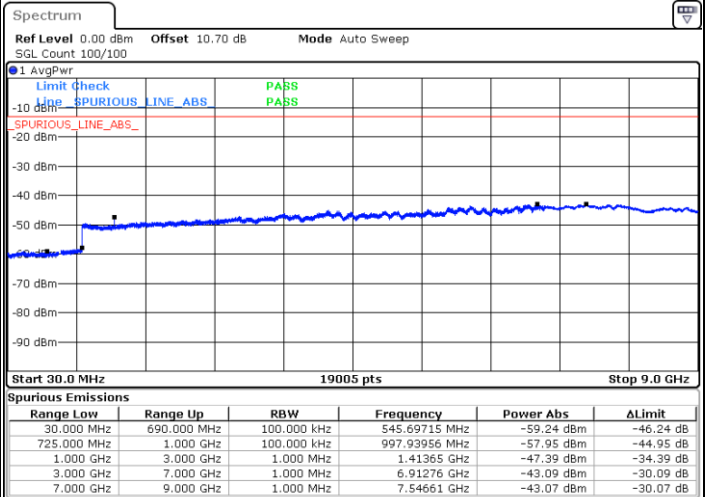
Date: 17.FEB.2020 22:59:08

Highest Channel / QPSK



Date: 17.FEB.2020 23:05:18

Highest Channel / 16QAM

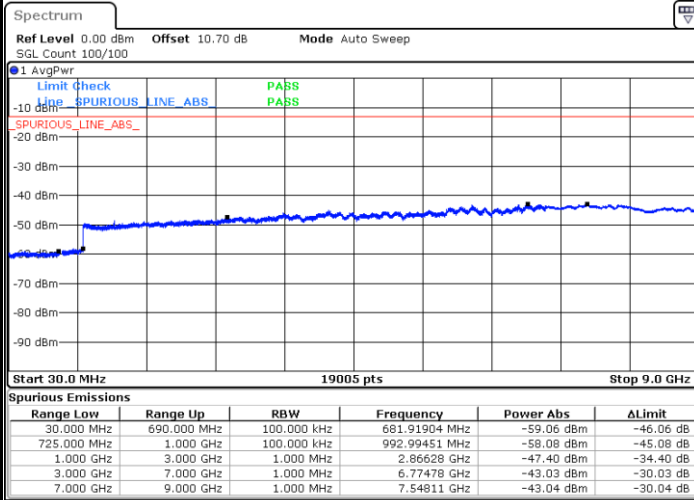


Date: 17.FEB.2020 23:05:59



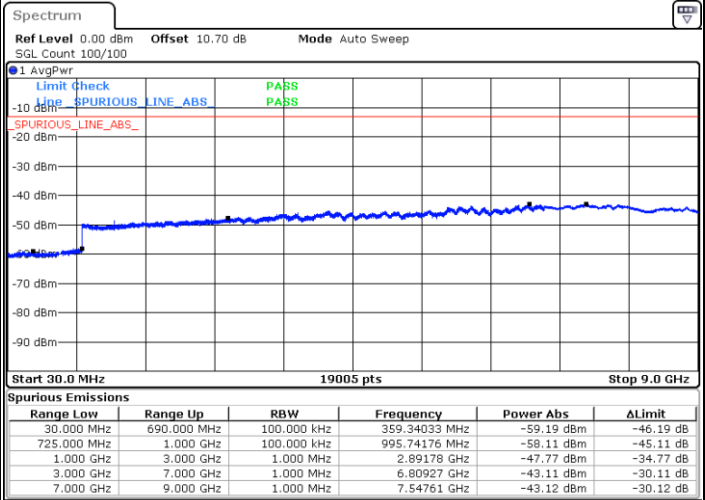
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



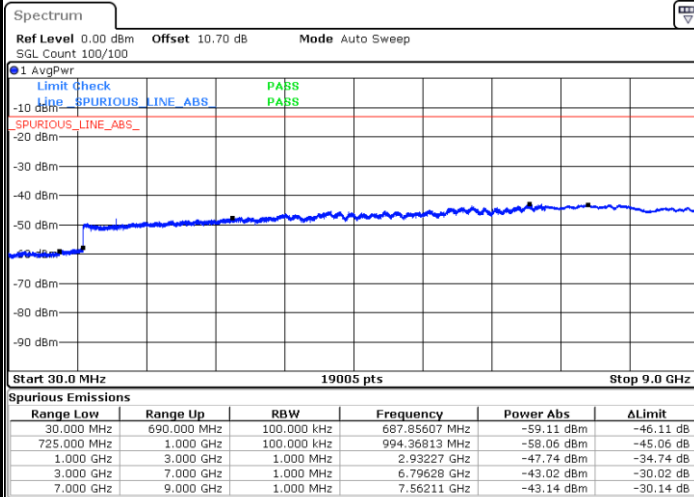
Date: 17.FEB.2020 22:03:43

Middle Channel / 64QAM



Date: 17.FEB.2020 22:04:47

Highest Channel / 64QAM

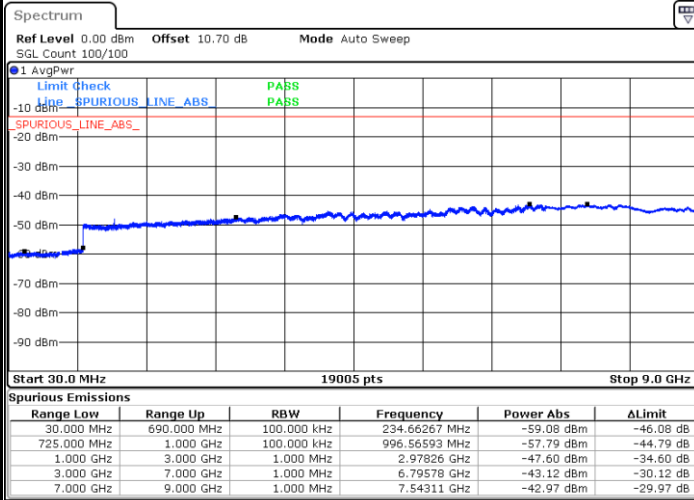


Date: 17.FEB.2020 22:07:53



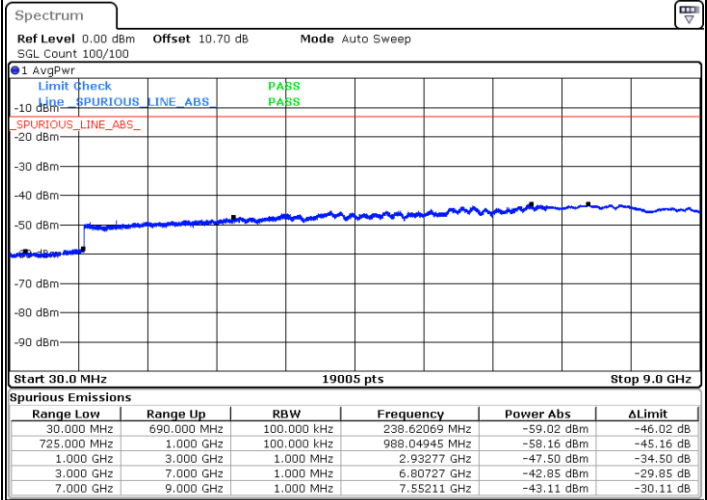
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



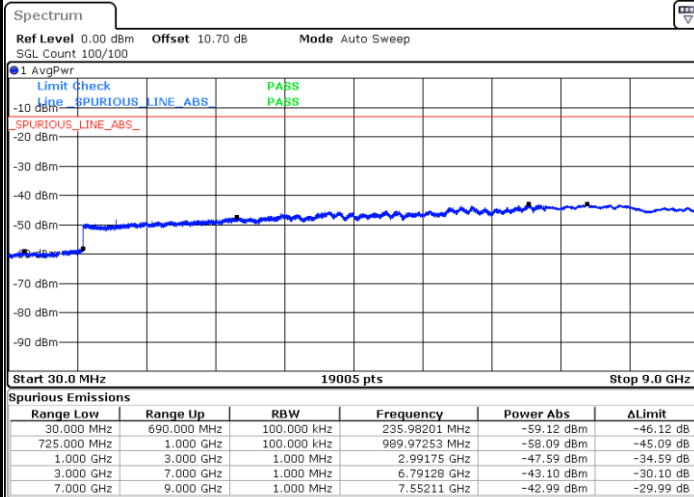
Date: 17.FEB.2020 22:25:31

Middle Channel / 64QAM



Date: 17.FEB.2020 22:26:35

Highest Channel / 64QAM

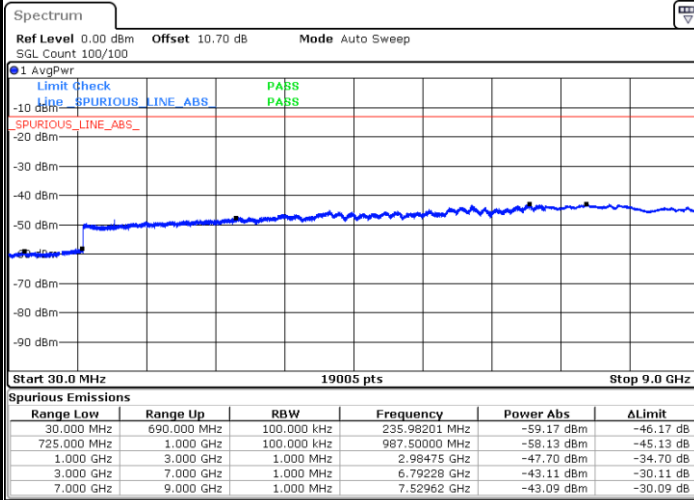


Date: 17.FEB.2020 22:29:41



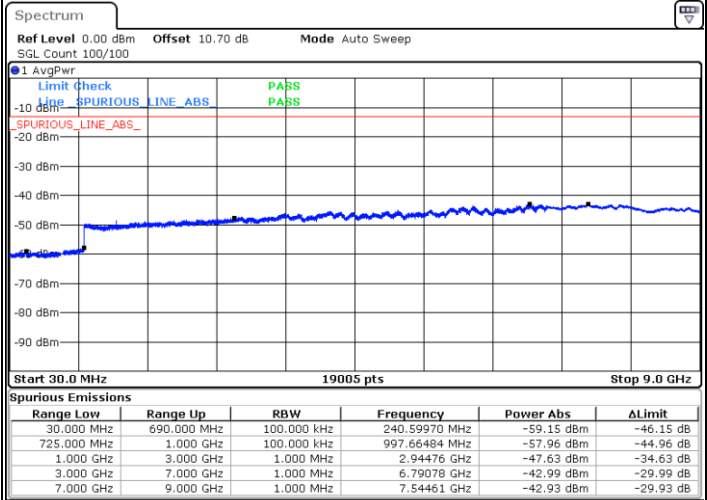
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



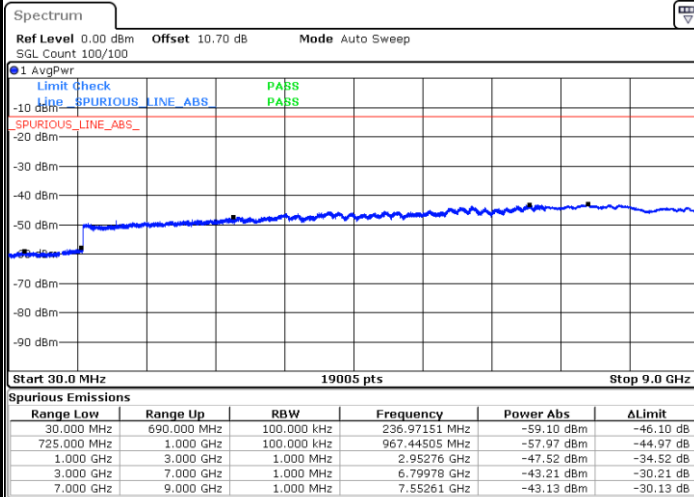
Date: 17.FEB 2020 22:32:47

Middle Channel / 64QAM



Date: 17.FEB 2020 22:33:51

Highest Channel / 64QAM

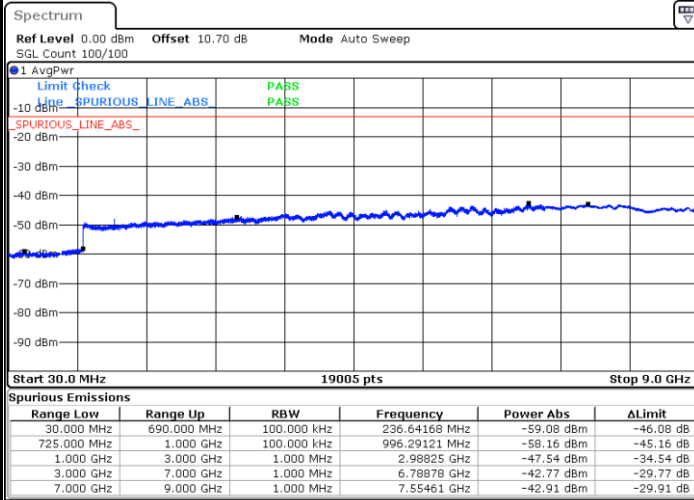


Date: 17.FEB 2020 22:38:56



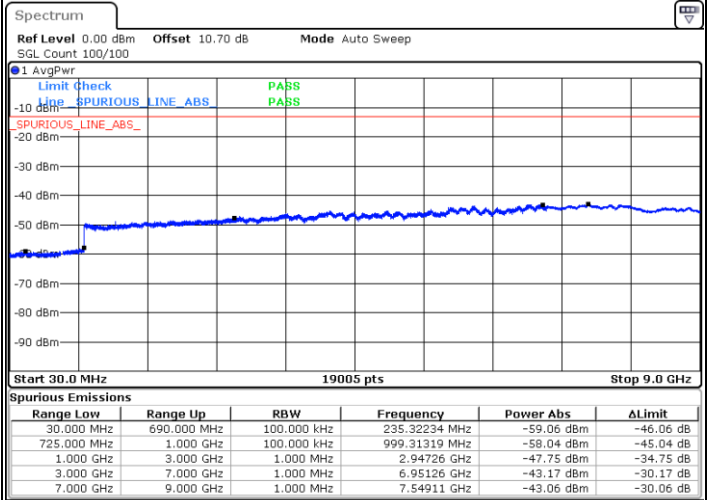
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



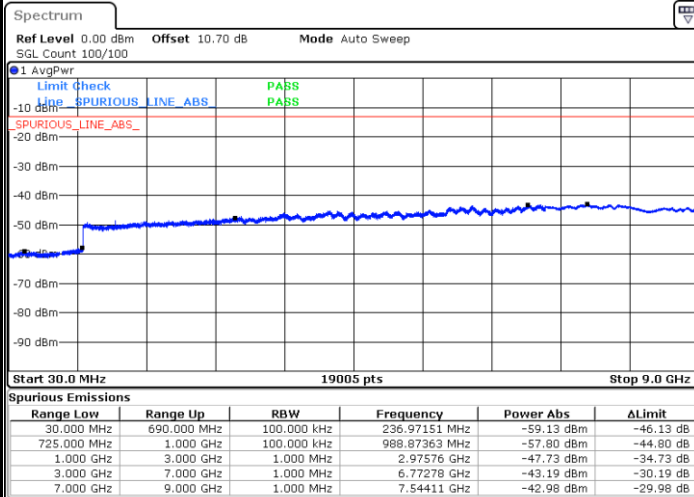
Date: 17.FEB.2020 23:09:05

Middle Channel / 64QAM



Date: 17.FEB.2020 23:10:09

Highest Channel / 64QAM



Date: 17.FEB.2020 23:13:14

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0100	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0083	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0264	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0079	
-20	Normal Voltage	0.0088	
-30	Normal Voltage	0.0229	
20	Maximum Voltage	0.0269	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0082	

Note:

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.7 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 66

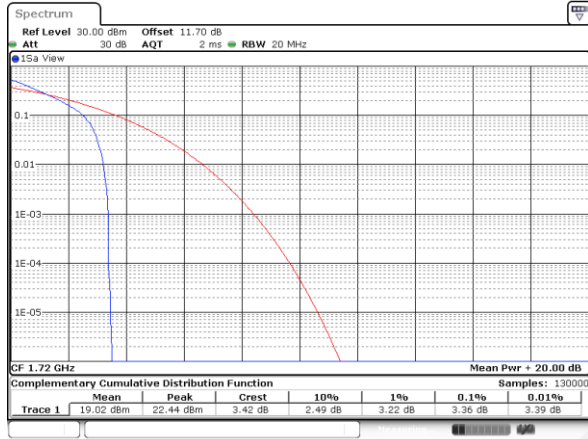
Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.36	5.10	4.32	6.03	PASS
Middle CH	4.46	4.93	5.28	5.86	
Highest CH	4.96	5.42	5.94	6.17	
Mode	LTE Band 66 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.28	6.49	-	-	PASS
Middle CH	5.88	6.23	-	-	
Highest CH	6.38	6.49	-	-	

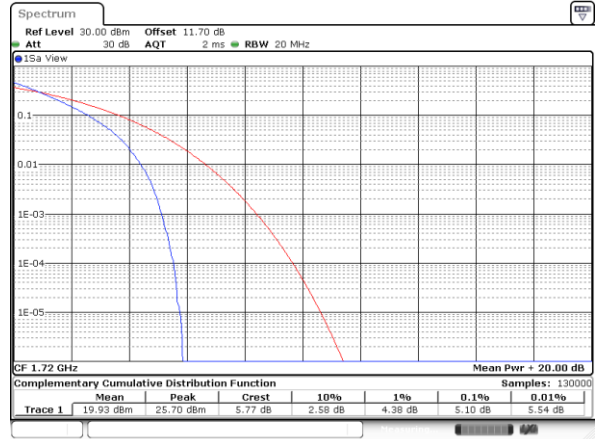


LTE Band 66 / 20MHz / QPSK

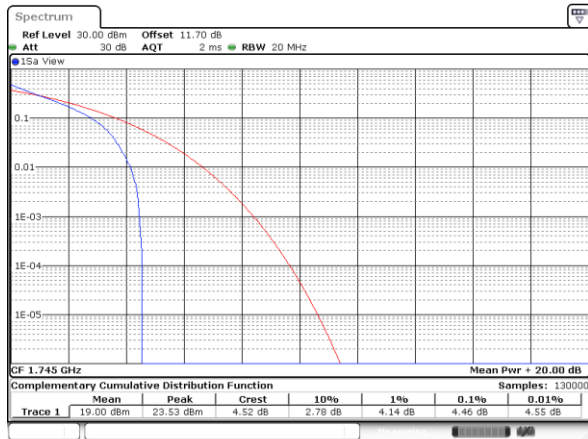
Lowest Channel / 1RB



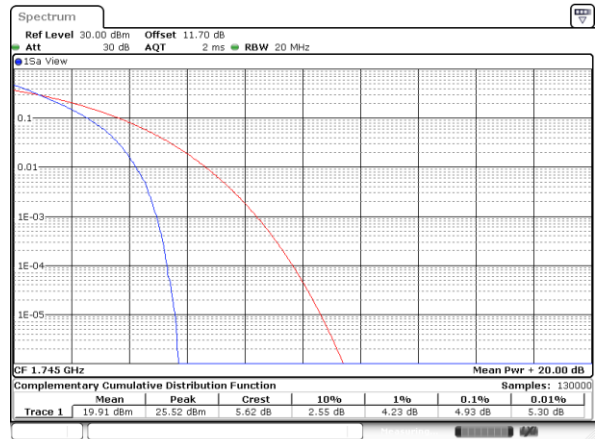
Lowest Channel / Full RB



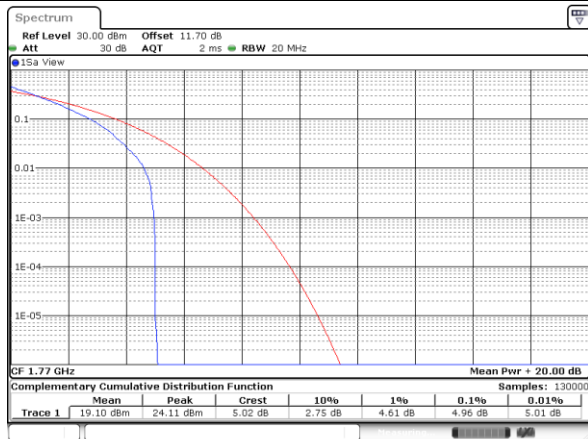
Middle Channel / 1RB



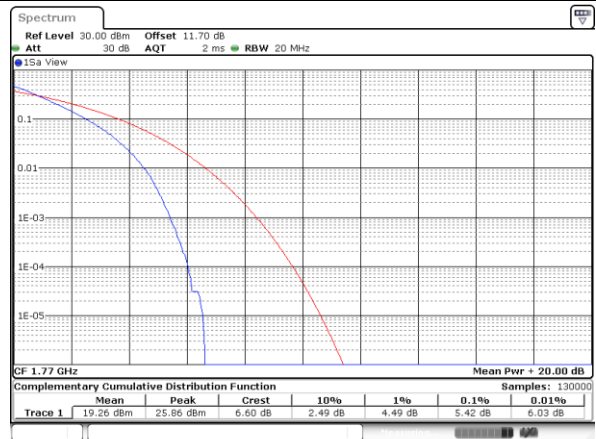
Middle Channel / Full RB



Highest Channel / 1RB



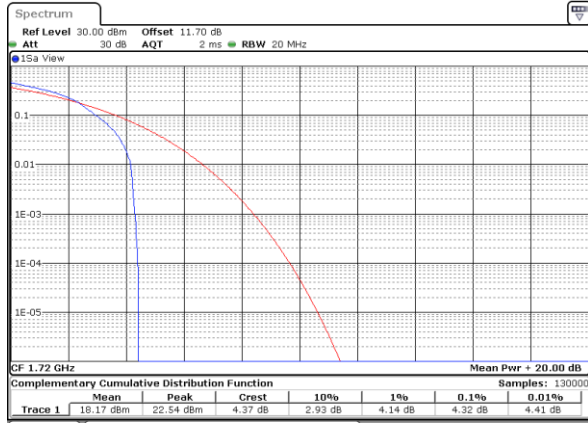
Highest Channel / Full RB



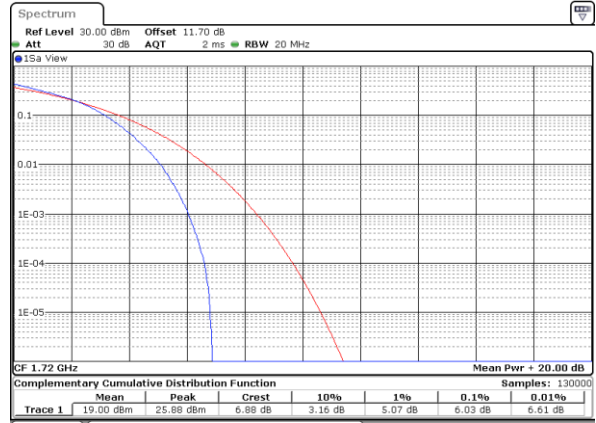


LTE Band 66 / 20MHz / 16QAM

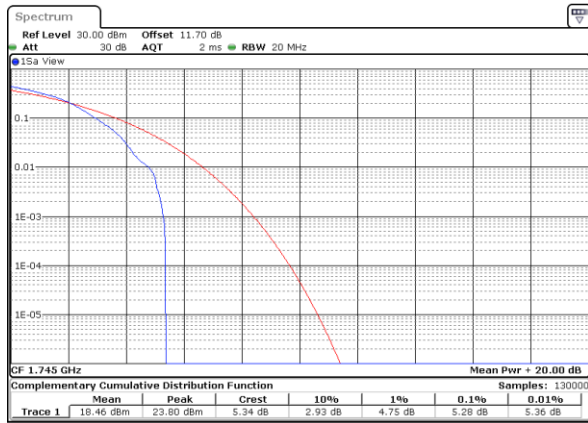
Lowest Channel / 1RB



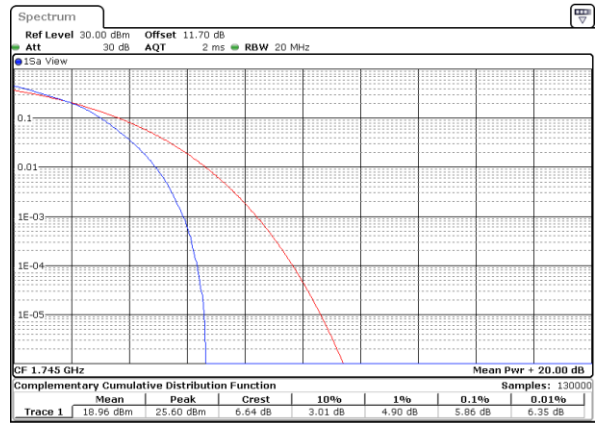
Lowest Channel / Full RB



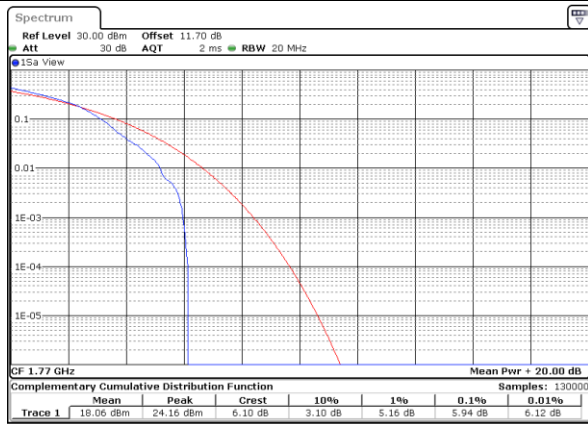
Middle Channel / 1RB



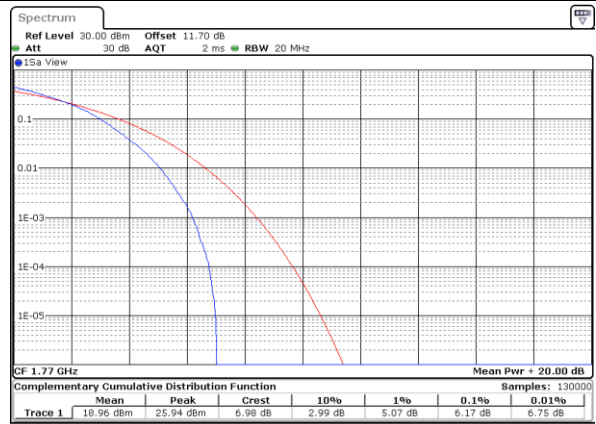
Middle Channel / Full RB



Highest Channel / 1RB



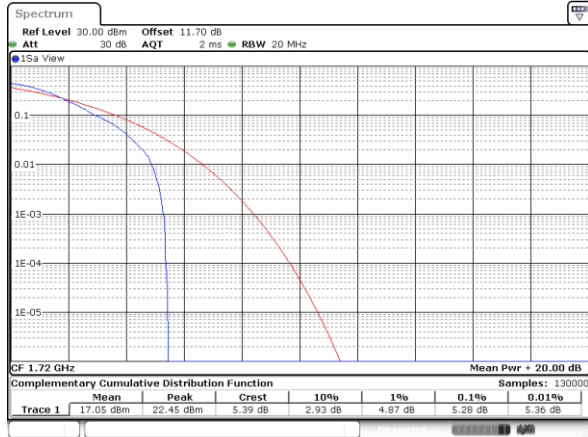
Highest Channel / Full RB



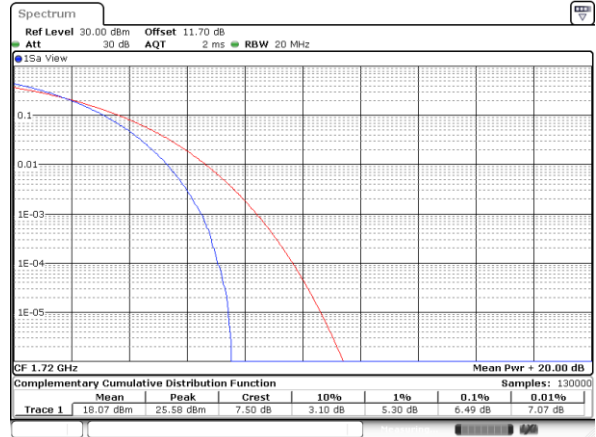


LTE Band 66 / 20MHz / 64QAM

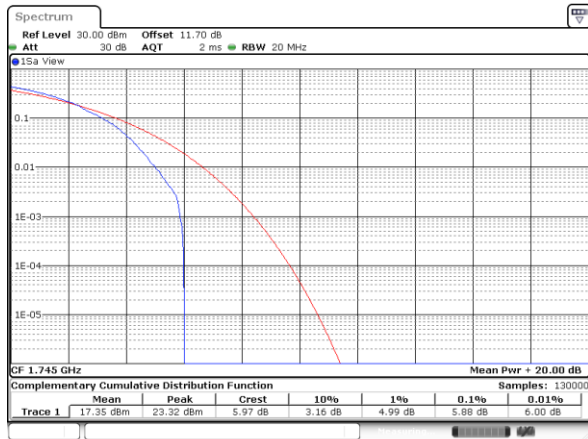
Lowest Channel / 1RB



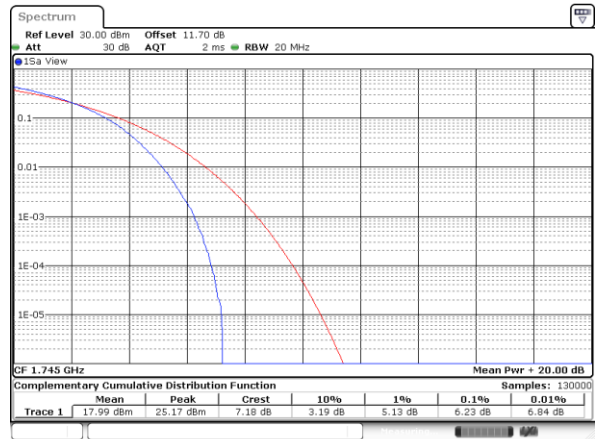
Lowest Channel / Full RB



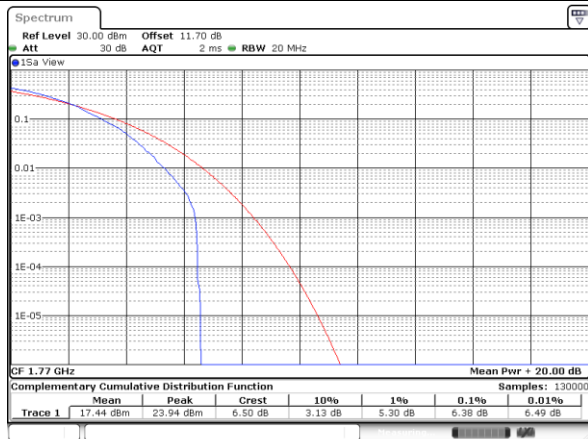
Middle Channel / 1RB



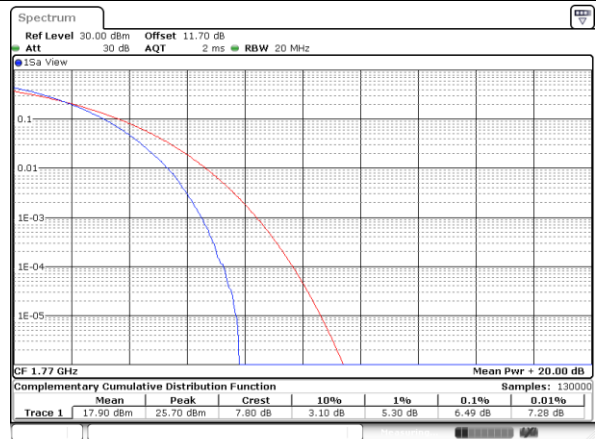
Middle Channel / Full RB



Highest Channel / 1RB

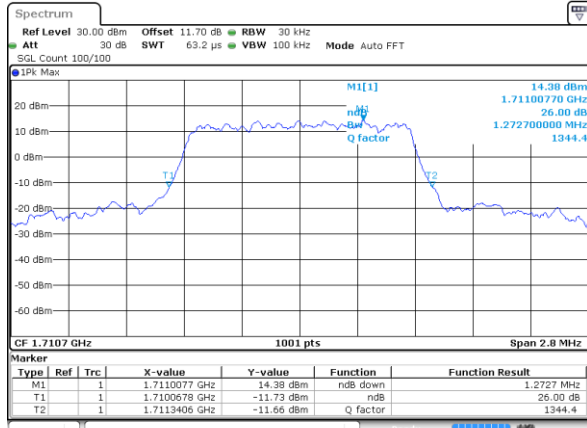
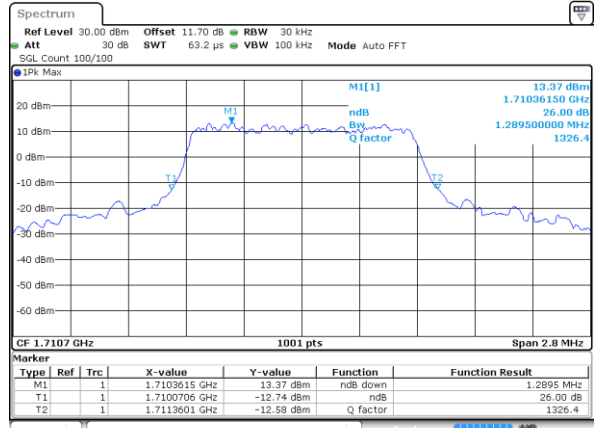
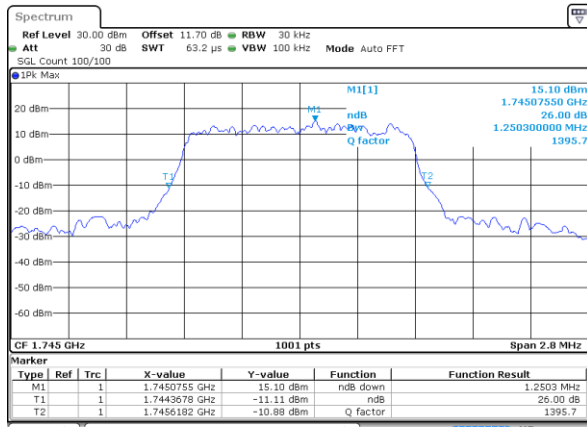
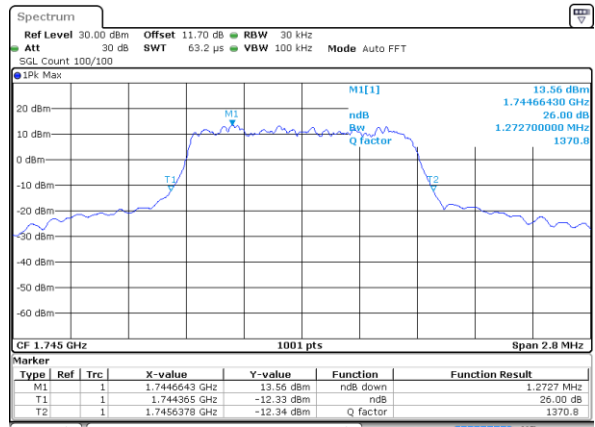
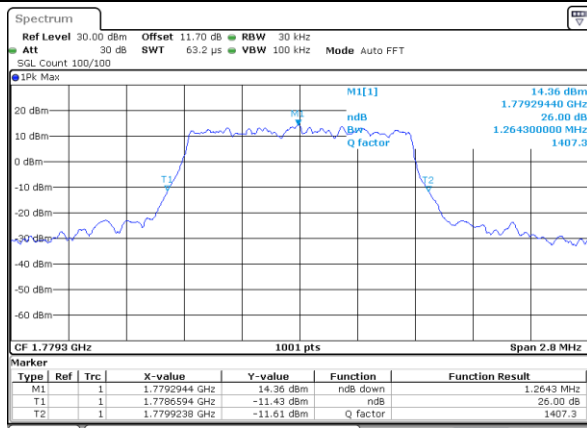
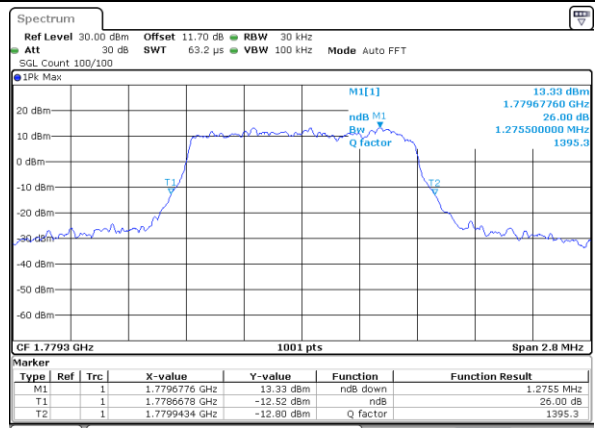


Highest Channel / Full RB



**26dB Bandwidth**

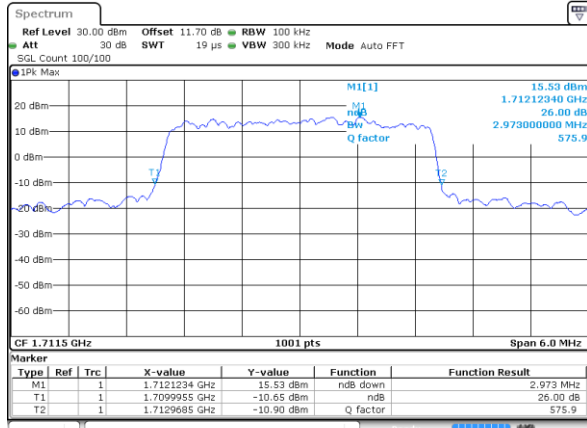
Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.27	1.29	2.97	2.97	4.97	5.08	9.87	9.89	14.36	14.81	18.78	18.62
Middle CH	1.25	1.27	2.94	2.94	5.10	5.03	9.85	9.87	14.69	14.66	19.10	19.14
Highest CH	1.26	1.28	2.97	2.97	5.07	4.89	10.31	10.03	14.48	15.02	19.18	19.14
Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.28	-	2.94	-	5.17	-	9.95	-	15.08	-	19.02	-
Middle CH	1.29	-	2.96	-	5.03	-	9.89	-	14.42	-	18.74	-
Highest CH	1.28	-	2.94	-	5.18	-	9.75	-	14.69	-	19.06	-

**LTE Band 66****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**



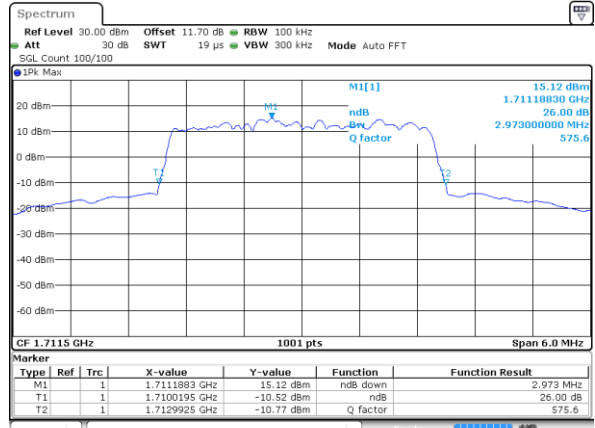
LTE Band 66

Lowest Channel / 3MHz / QPSK



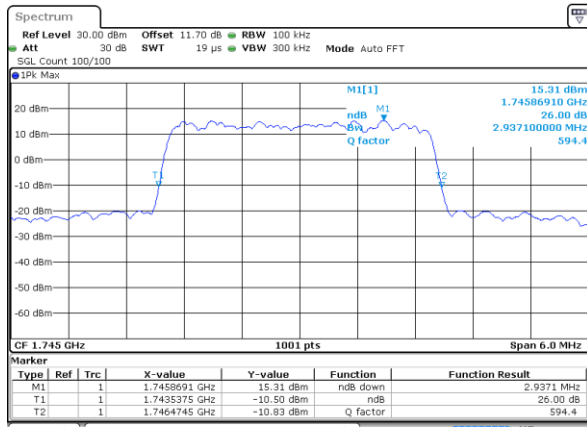
Date: 17 FEB 2020 19:33:56

Lowest Channel / 3MHz / 16QAM



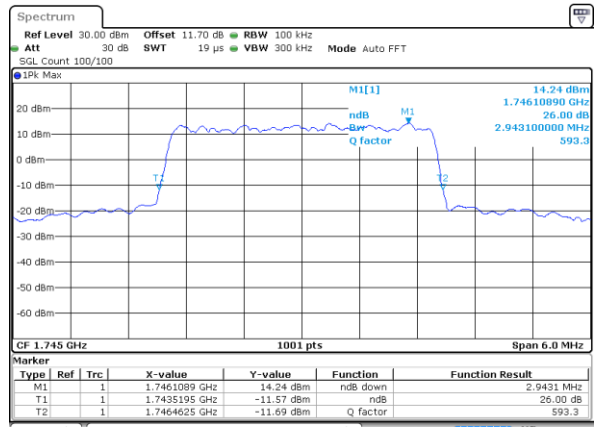
Date: 17 FEB 2020 19:34:08

Middle Channel / 3MHz / QPSK



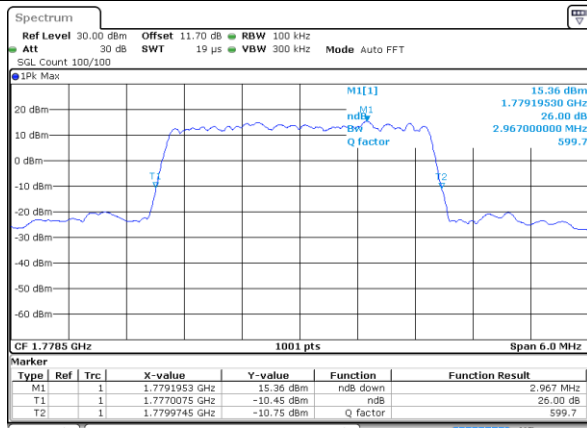
Date: 17 FEB 2020 19:40:11

Middle Channel / 3MHz / 16QAM



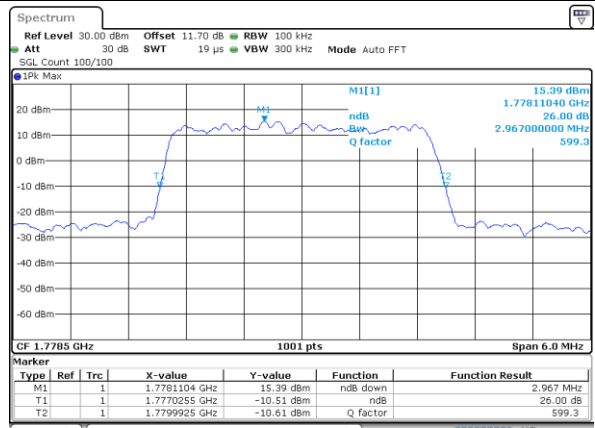
Date: 17 FEB 2020 19:40:23

Highest Channel / 3MHz / QPSK



Date: 17 FEB 2020 19:44:19

Highest Channel / 3MHz / 16QAM

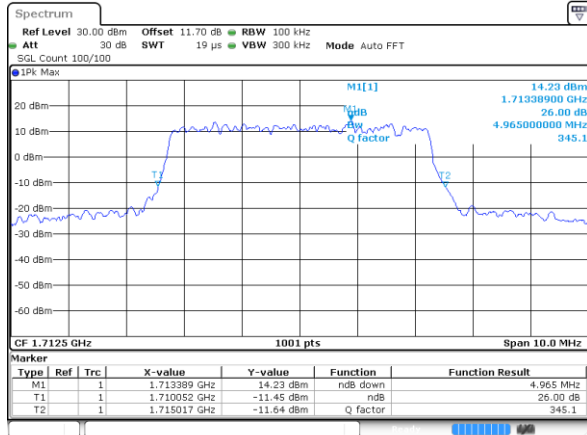


Date: 17 FEB 2020 19:44:31



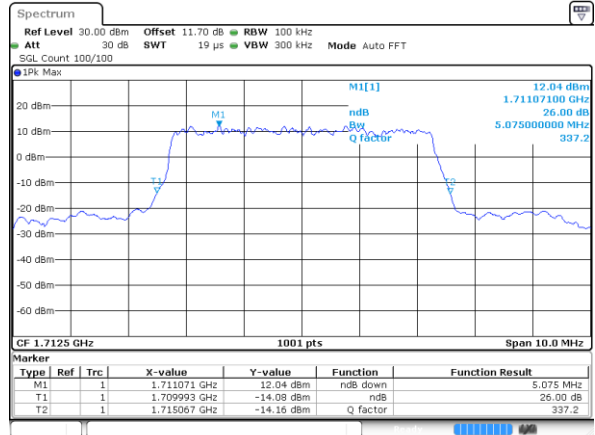
LTE Band 66

Lowest Channel / 5MHz / QPSK



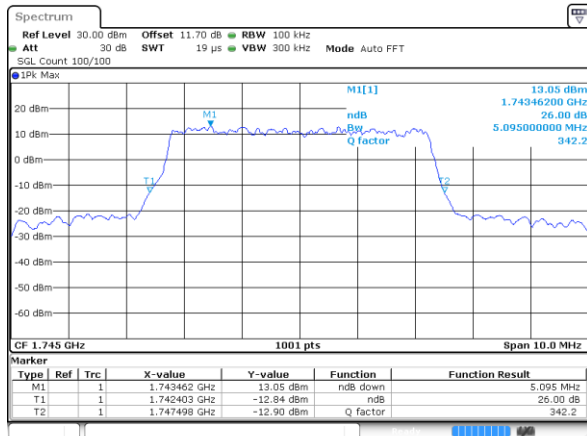
Date: 17 FEB 2020 20:01:14

Lowest Channel / 5MHz / 16QAM



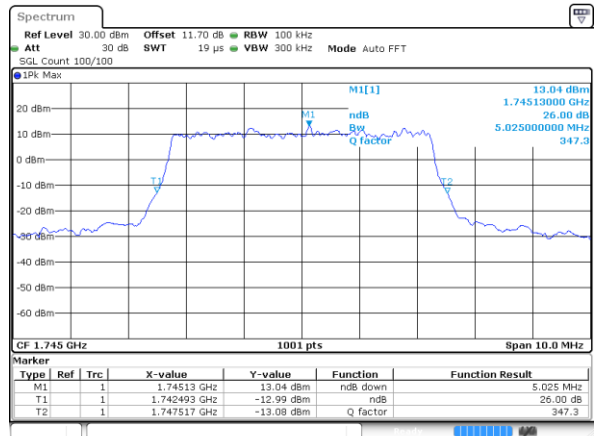
Date: 17 FEB 2020 20:01:26

Middle Channel / 5MHz / QPSK



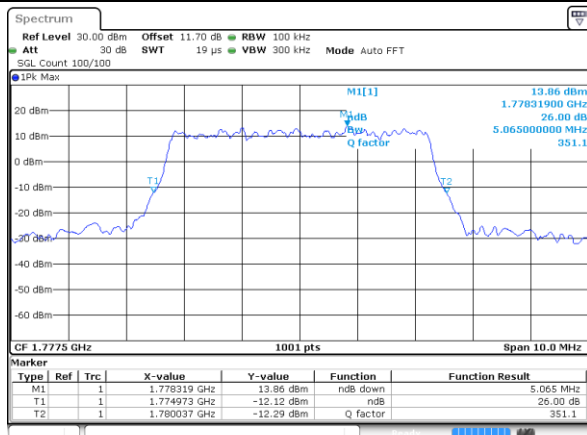
Date: 17 FEB 2020 20:06:08

Middle Channel / 5MHz / 16QAM



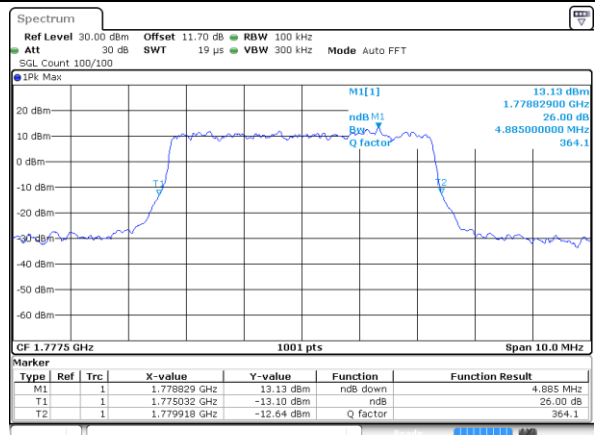
Date: 17 FEB 2020 20:06:20

Highest Channel / 5MHz / QPSK



Date: 17 FEB 2020 20:08:20

Highest Channel / 5MHz / 16QAM

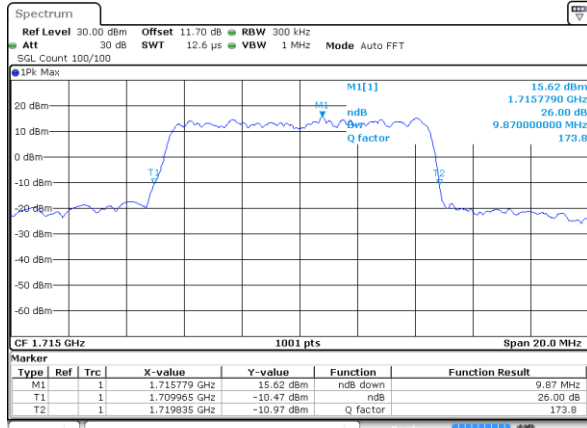


Date: 17 FEB 2020 20:08:32



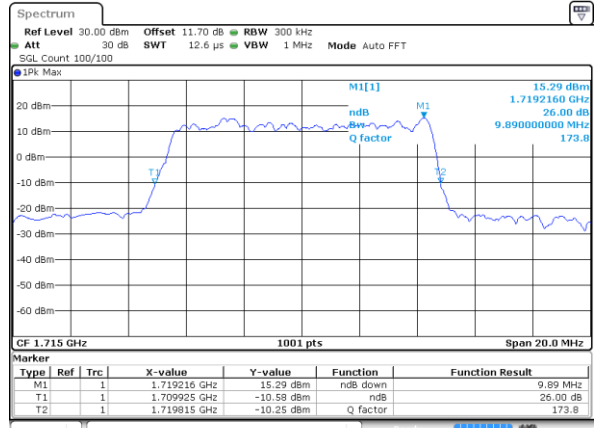
LTE Band 66

Lowest Channel / 10MHz / QPSK



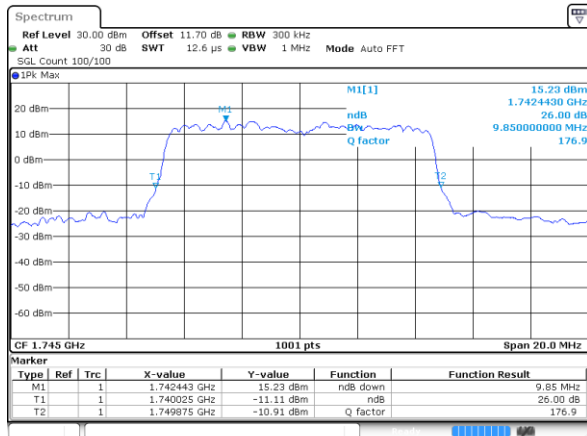
Date: 17 FEB 2020 20:13:15

Lowest Channel / 10MHz / 16QAM



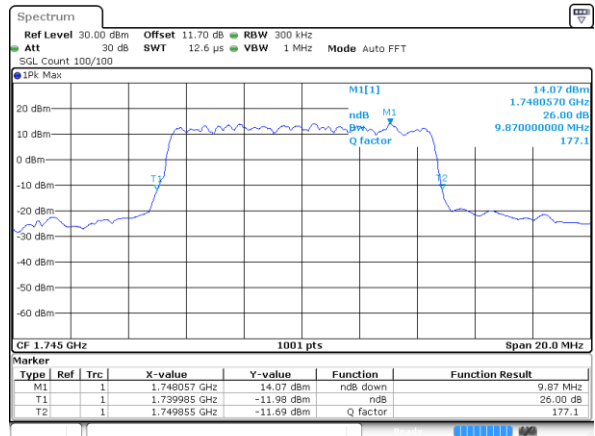
Date: 17 FEB 2020 20:13:27

Middle Channel / 10MHz / QPSK



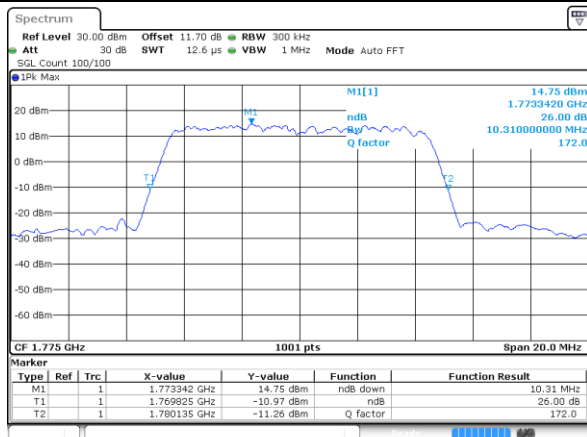
Date: 17 FEB 2020 20:18:09

Middle Channel / 10MHz / 16QAM



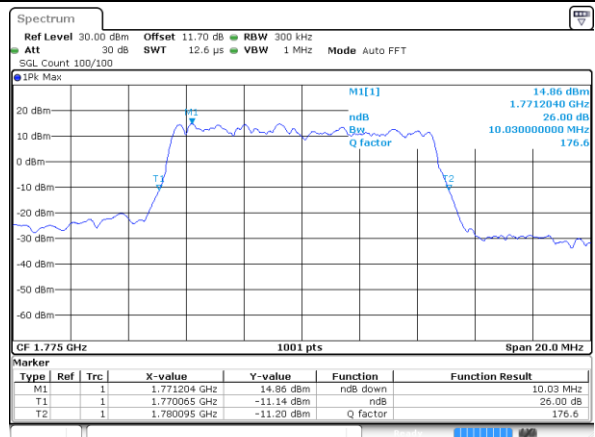
Date: 17 FEB 2020 20:18:21

Highest Channel / 10MHz / QPSK



Date: 17 FEB 2020 20:20:21

Highest Channel / 10MHz / 16QAM

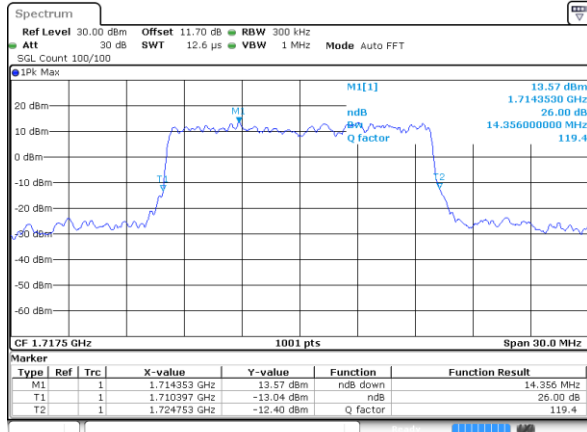


Date: 17 FEB 2020 20:20:33



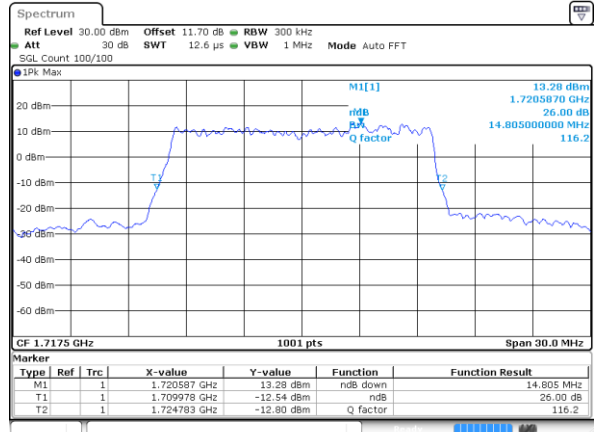
LTE Band 66

Lowest Channel / 15MHz / QPSK



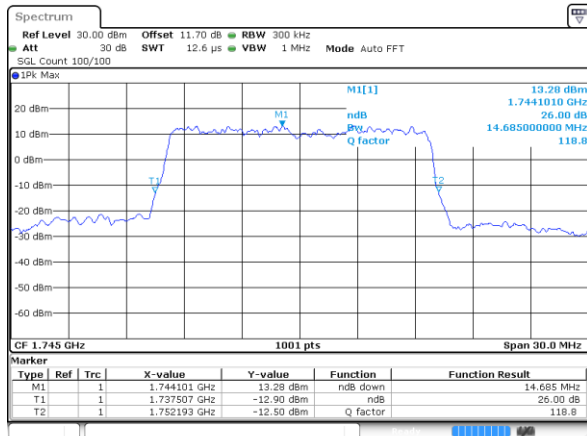
Date: 17 FEB 2020 20:37:15

Lowest Channel / 15MHz / 16QAM



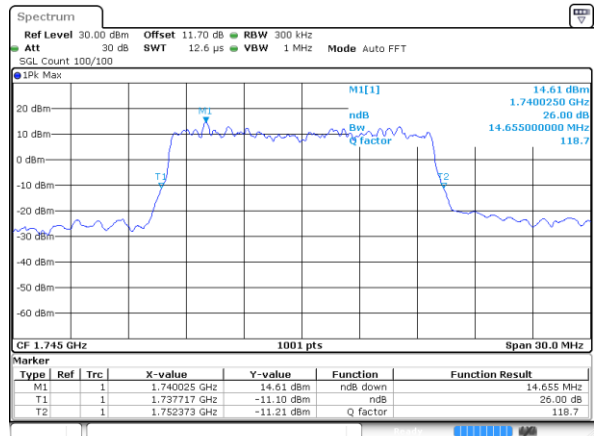
Date: 17 FEB 2020 20:37:27

Middle Channel / 15MHz / QPSK



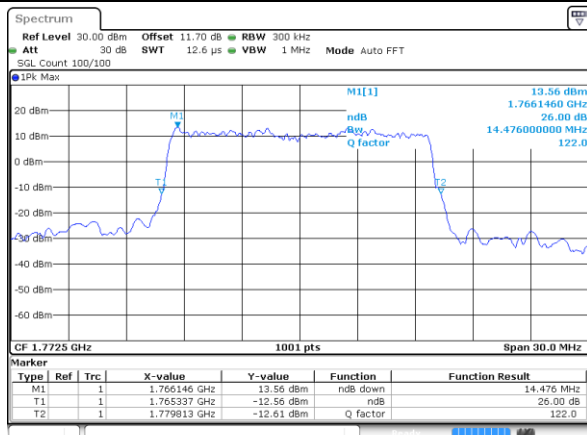
Date: 17 FEB 2020 20:42:09

Middle Channel / 15MHz / 16QAM



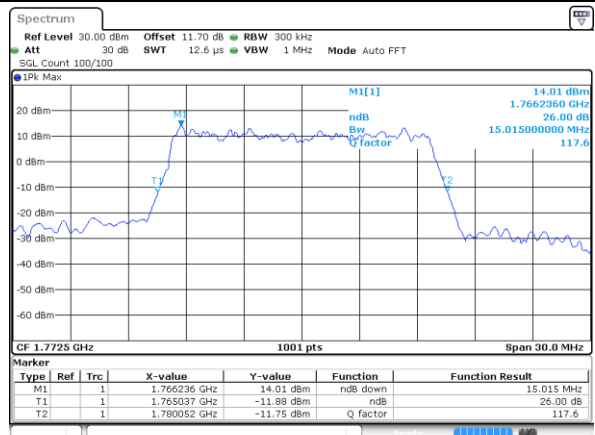
Date: 17 FEB 2020 20:42:21

Highest Channel / 15MHz / QPSK



Date: 17 FEB 2020 20:44:21

Highest Channel / 15MHz / 16QAM

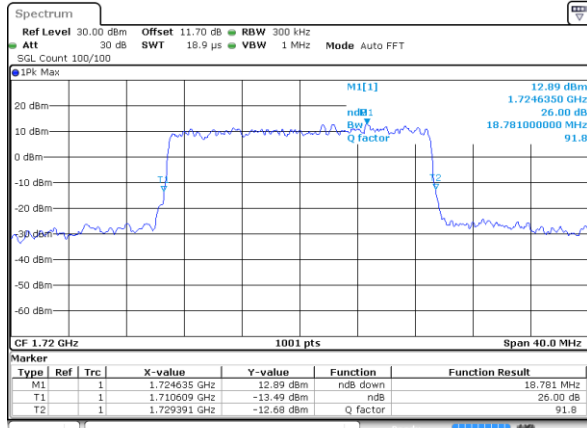


Date: 17 FEB 2020 20:44:33



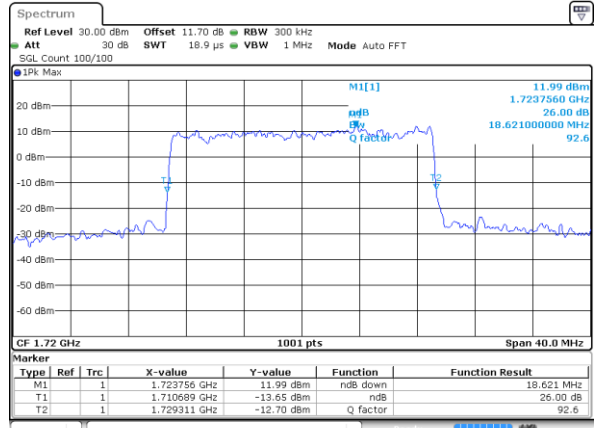
LTE Band 66

Lowest Channel / 20MHz / QPSK



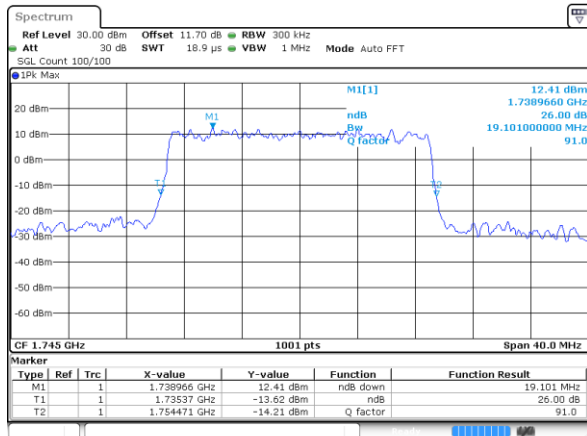
Date: 17 FEB 2020 20:49:15

Lowest Channel / 20MHz / 16QAM



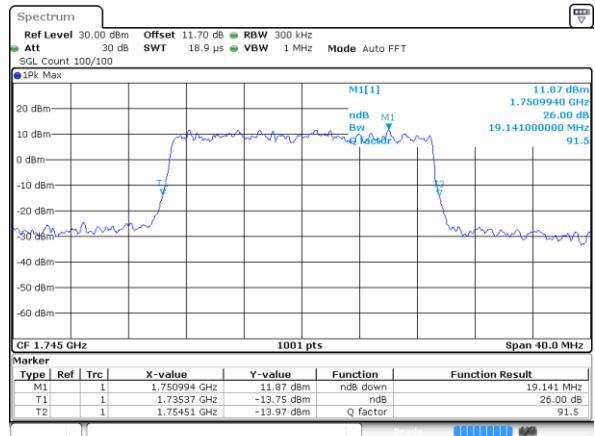
Date: 17 FEB 2020 20:49:27

Middle Channel / 20MHz / QPSK



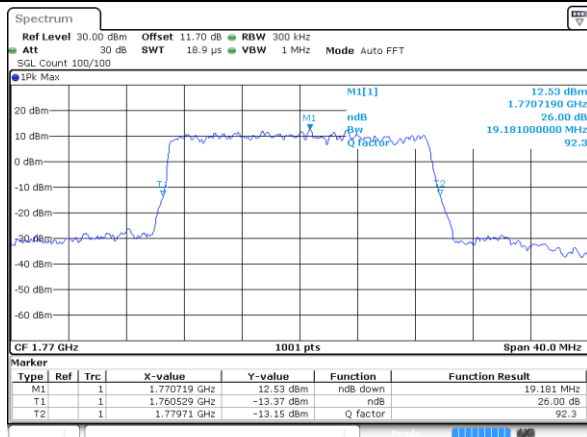
Date: 17 FEB 2020 20:54:09

Middle Channel / 20MHz / 16QAM



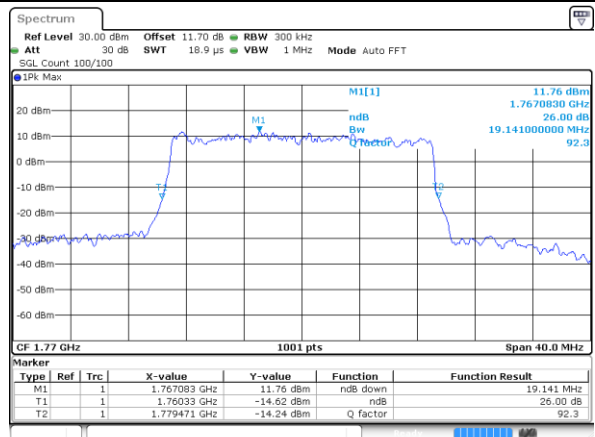
Date: 17 FEB 2020 20:54:22

Highest Channel / 20MHz / QPSK



Date: 17 FEB 2020 20:56:21

Highest Channel / 20MHz / 16QAM

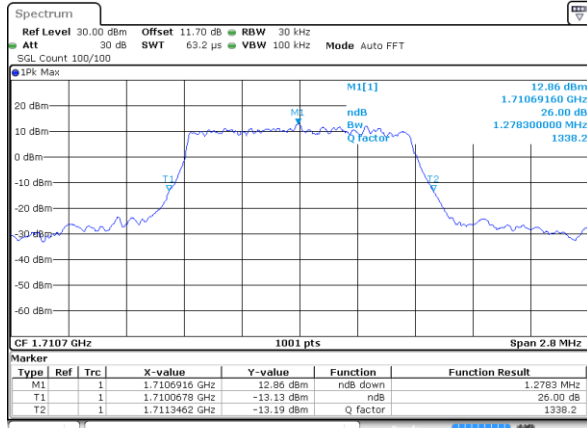


Date: 17 FEB 2020 20:56:33



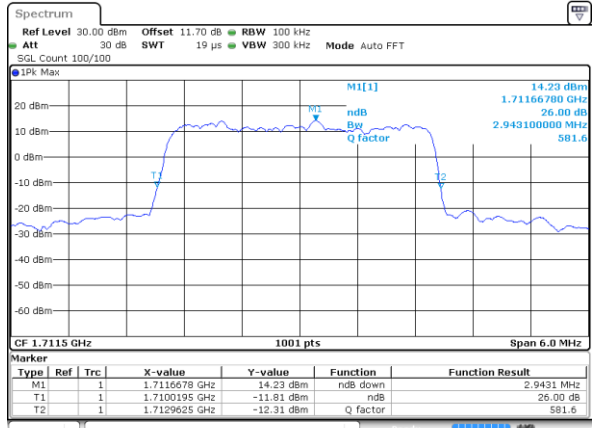
LTE Band 66

Lowest Channel / 1.4MHz / 64QAM



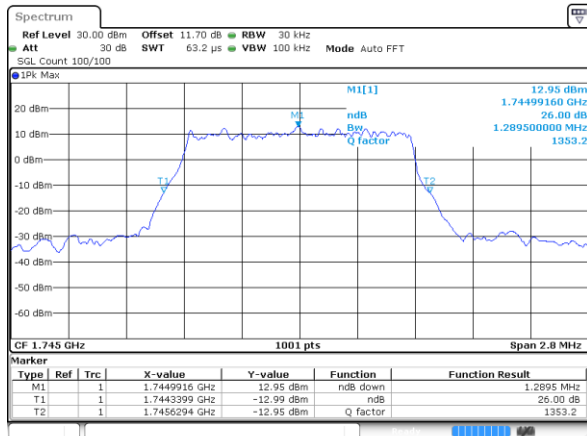
Date: 17 FEB 2020 19:26:12

Lowest Channel / 3MHz / 64QAM



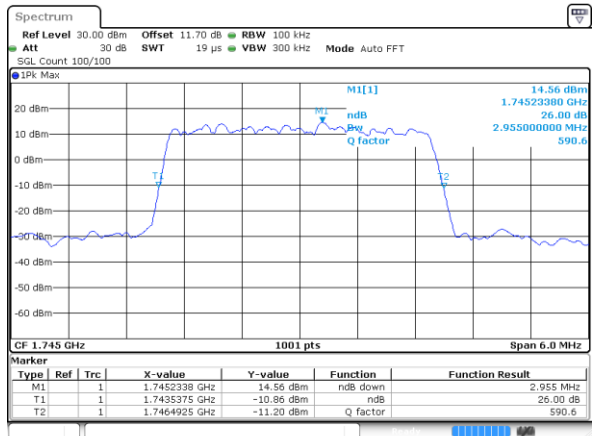
Date: 17 FEB 2020 19:49:01

Middle Channel / 20MHz / 64QAM



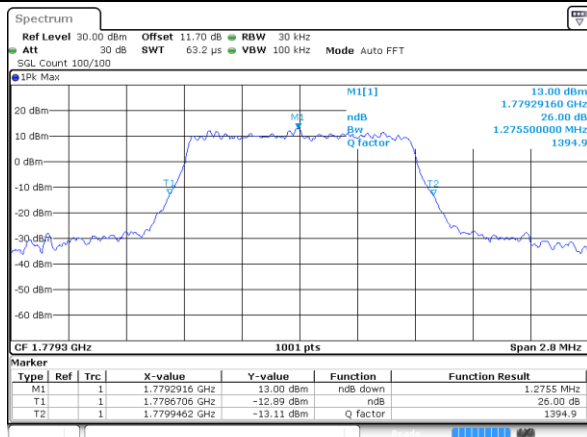
Date: 17 FEB 2020 19:29:25

Middle Channel / 3MHz / 64QAM



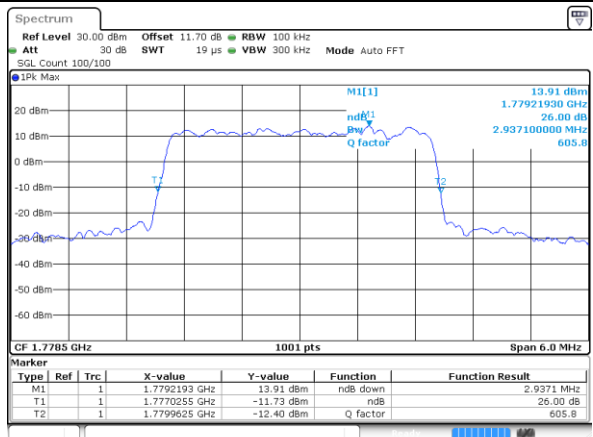
Date: 17 FEB 2020 19:51:28

Highest Channel / 20MHz / 64QAM



Date: 17 FEB 2020 19:30:31

Highest Channel / 3MHz / 64QAM

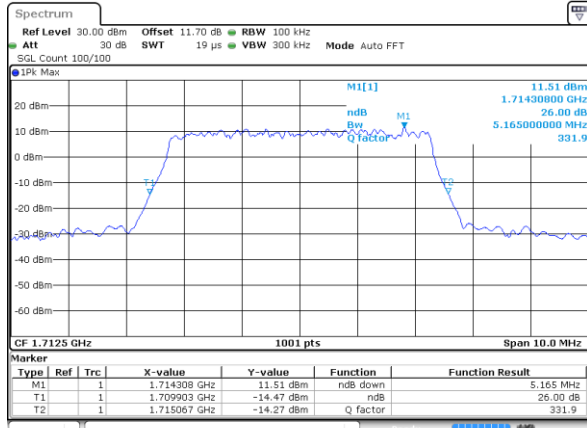


Date: 17 FEB 2020 19:52:34



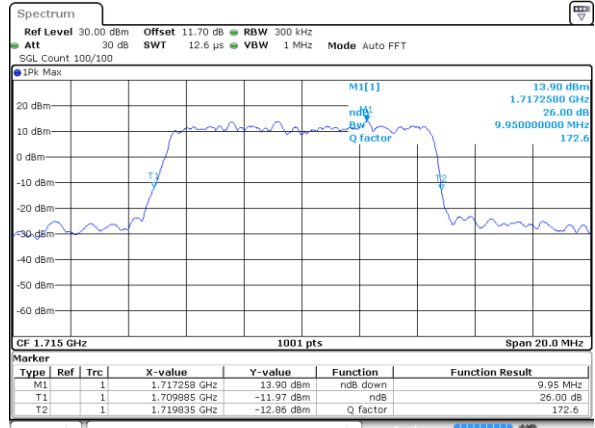
LTE Band 66

Lowest Channel / 5MHz / 64QAM



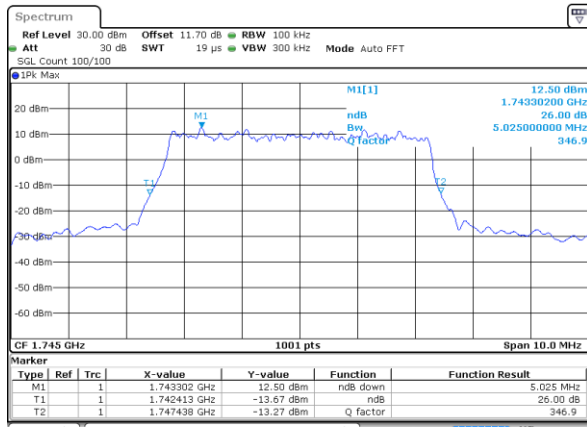
Date: 17 FEB 2020 19:55:02

Lowest Channel / 10MHz / 64QAM



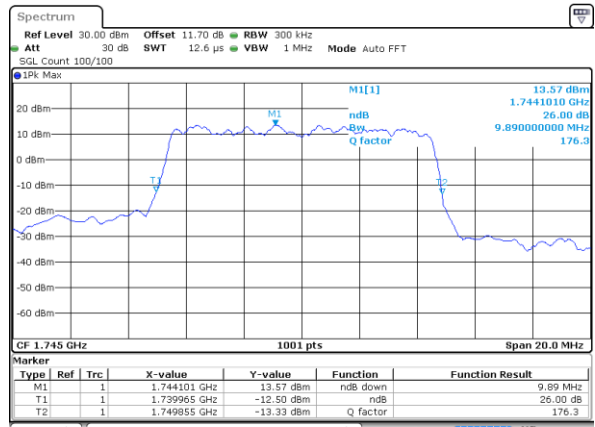
Date: 17 FEB 2020 20:25:03

Middle Channel / 5MHz / 64QAM



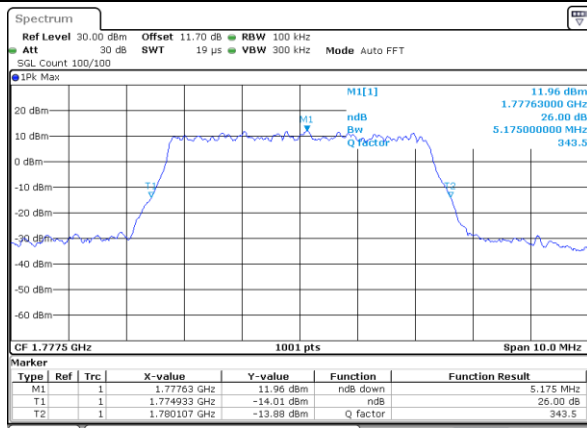
Date: 17 FEB 2020 19:57:29

Middle Channel / 10MHz / 64QAM



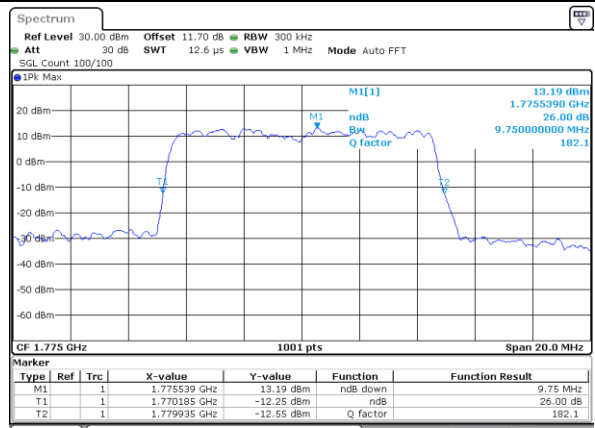
Date: 17 FEB 2020 20:27:30

Highest Channel / 5MHz / 64QAM



Date: 17 FEB 2020 19:58:35

Highest Channel / 10MHz / 64QAM

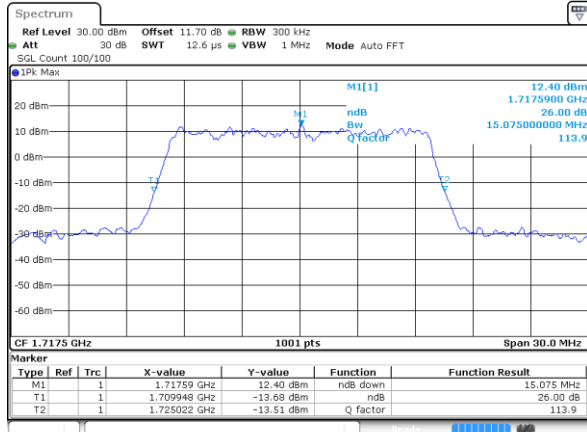


Date: 17 FEB 2020 20:28:35



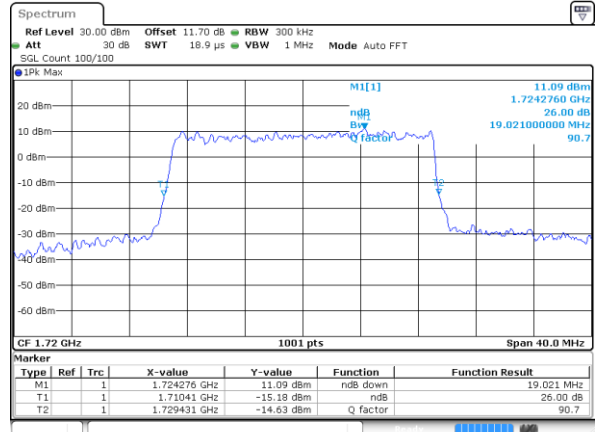
LTE Band 66

Lowest Channel / 15MHz / 64QAM



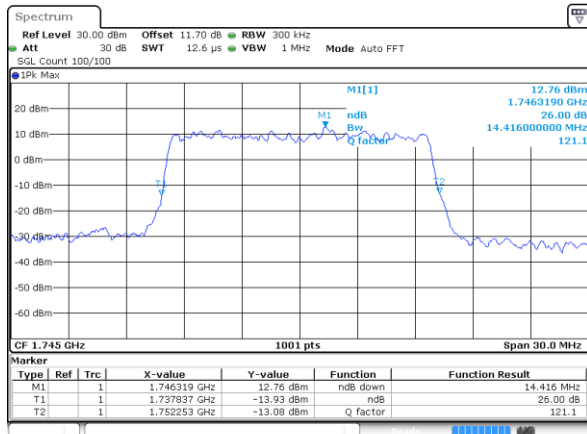
Date: 17 FEB 2020 20:31:02

Lowest Channel / 20MHz / 64QAM



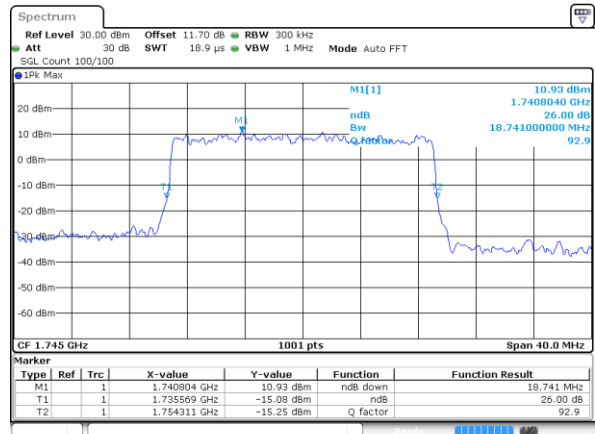
Date: 17 FEB 2020 21:01:02

Middle Channel / 15MHz / 64QAM



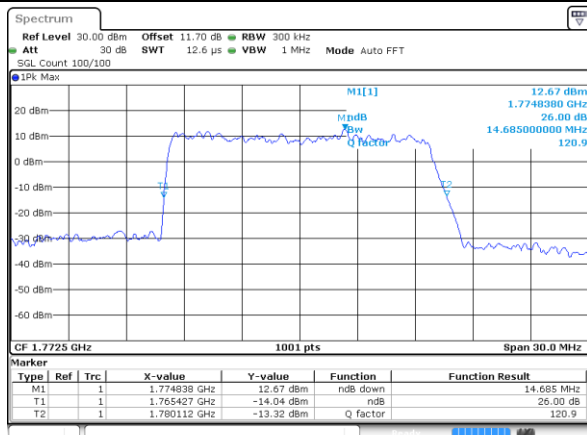
Date: 17 FEB 2020 20:33:29

Middle Channel / 20MHz / 64QAM



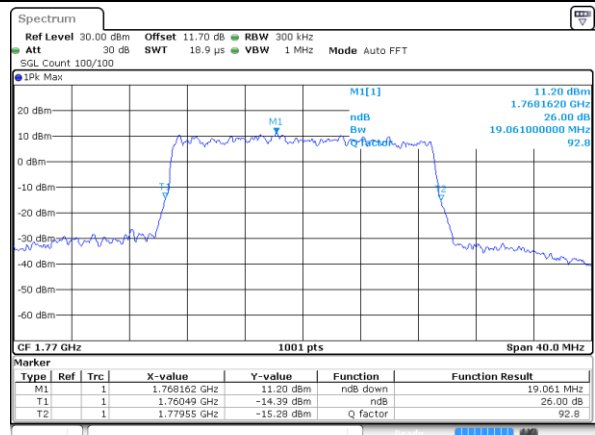
Date: 17 FEB 2020 21:03:29

Highest Channel / 15MHz / 64QAM



Date: 17 FEB 2020 20:34:35

Highest Channel / 20MHz / 64QAM



Date: 17 FEB 2020 21:04:35

**Occupied Bandwidth**

Mode	LTE Band 66 : 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	1.09	1.09	2.71	2.70	4.52	4.51	9.09	9.07	13.49	13.46	17.94	17.90
Middle CH	1.09	1.10	2.71	2.71	4.51	4.50	9.01	9.05	13.46	13.46	17.98	17.90
Highest CH	1.09	1.09	2.70	2.70	4.50	4.49	9.07	9.05	13.49	13.46	17.94	17.90
Mode	LTE Band 66 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09	-	2.73	-	4.52	-	9.01	-	13.46	-	17.94	-
Middle CH	1.09	-	2.71	-	4.51	-	9.05	-	13.52	-	17.86	-
Highest CH	1.10	-	2.72	-	4.50	-	9.07	-	13.49	-	17.98	-