



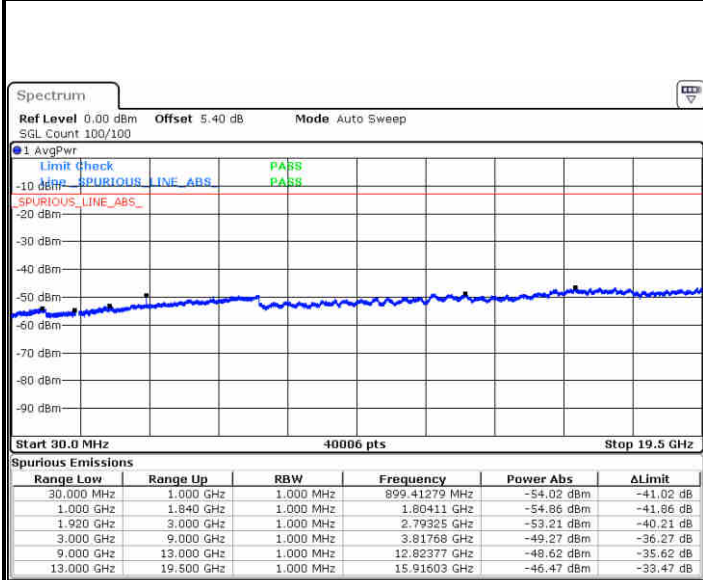
# Conducted Spurious Emission





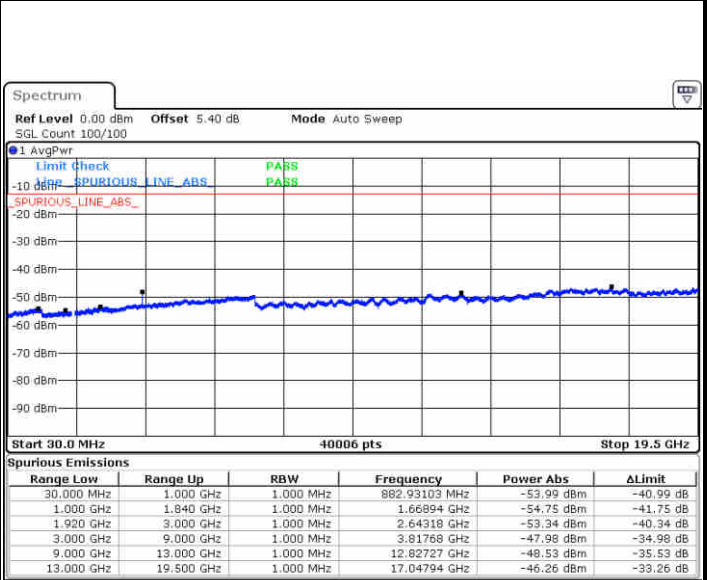
LTE Band 2 / 1.4MHz

Highest Channel / QPSK



Date: 16 MAY 2020 23:14:09

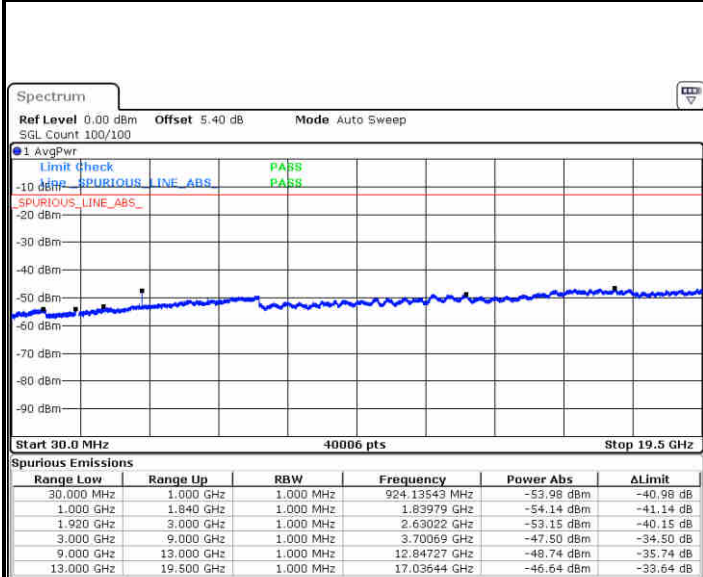
Highest Channel / 16QAM



Date: 16 MAY 2020 23:15:04

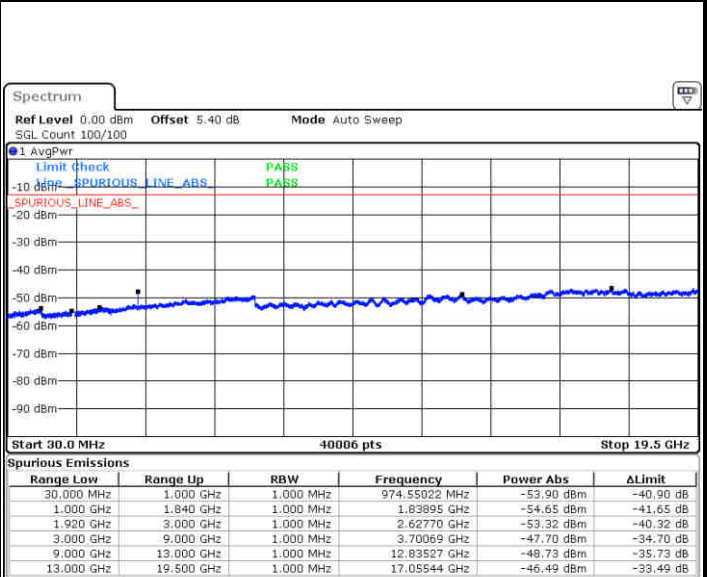
LTE Band 2 / 3MHz

Lowest Channel / QPSK



Date: 16 MAY 2020 23:21:09

Lowest Channel / 16QAM

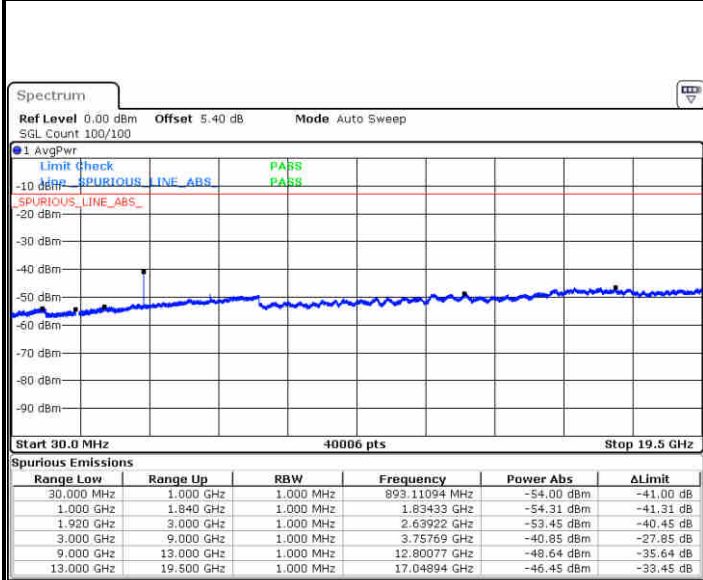


Date: 16 MAY 2020 23:22:04



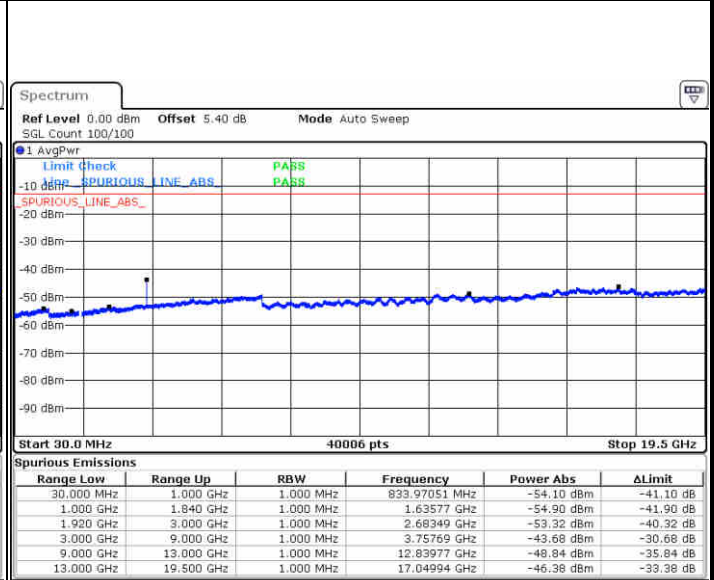
LTE Band 2 / 3MHz

Middle Channel / QPSK



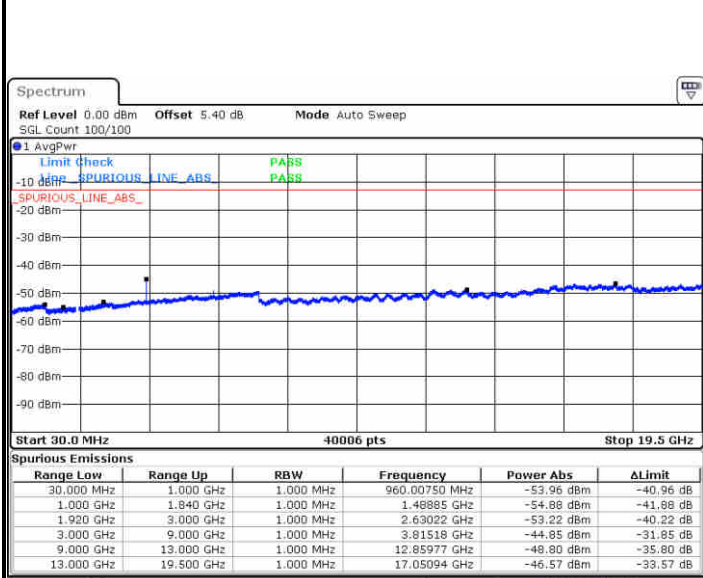
Date: 16 MAY 2020 23:23:39

Middle Channel / 16QAM



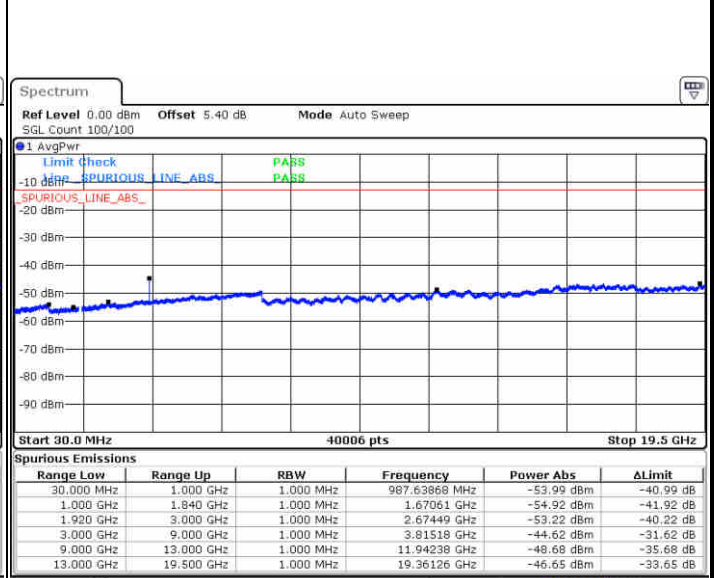
Date: 16 MAY 2020 23:24:34

Highest Channel / QPSK



Date: 16 MAY 2020 23:30:38

Highest Channel / 16QAM

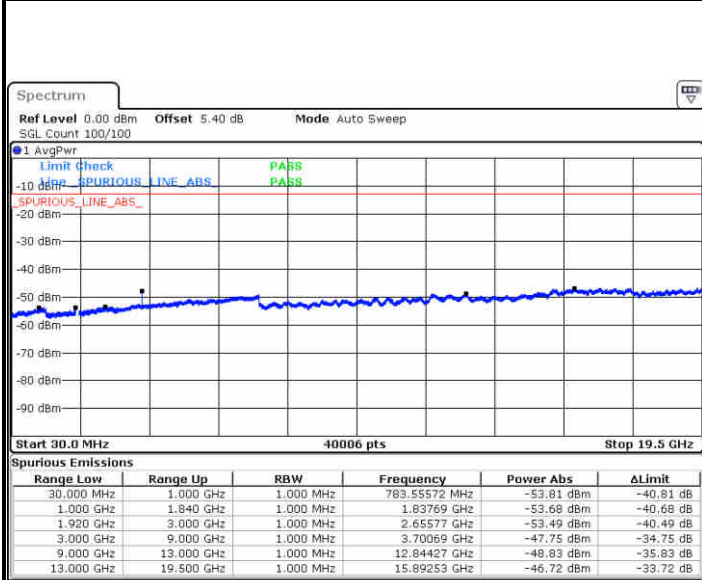


Date: 16 MAY 2020 23:31:33



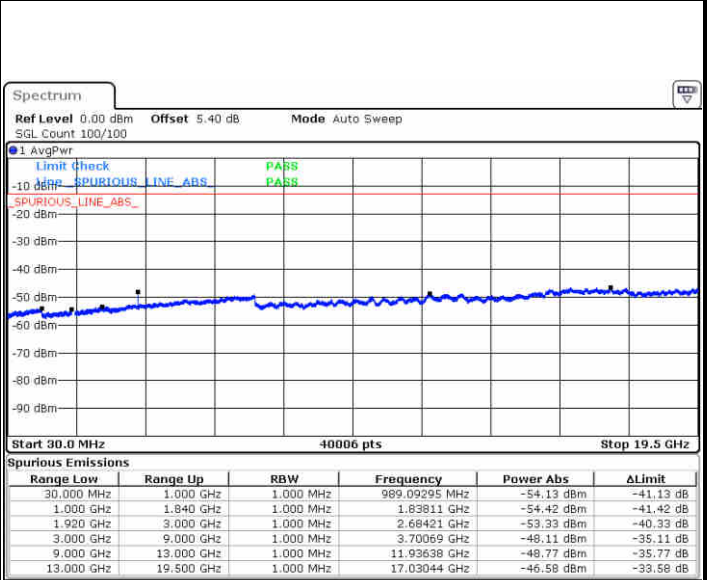
LTE Band 2 / 5MHz

Lowest Channel / QPSK



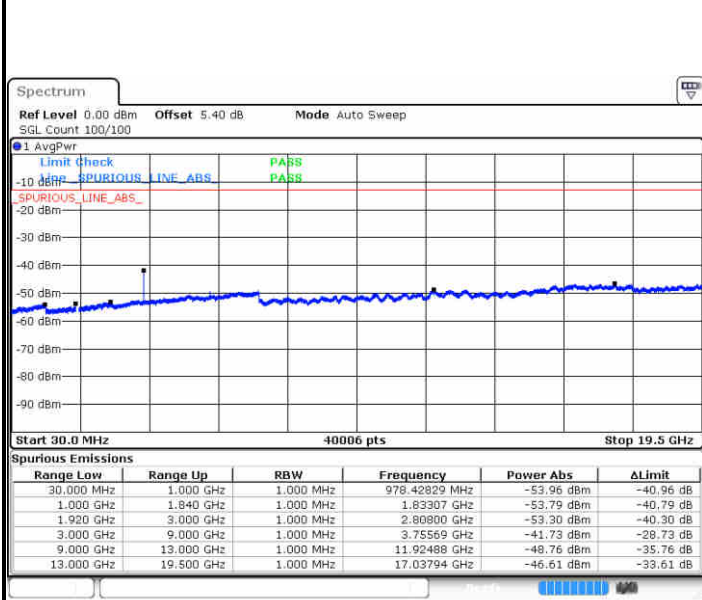
Date: 16 MAY 2020 23:37:38

Lowest Channel / 16QAM



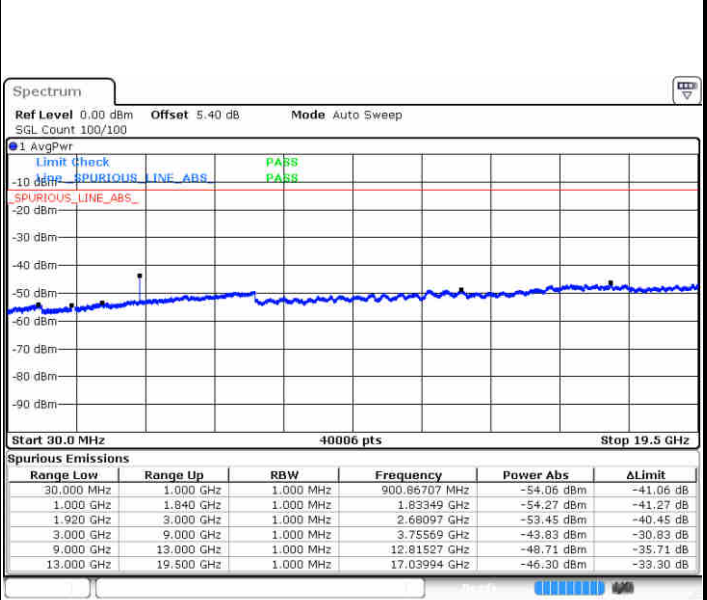
Date: 16 MAY 2020 23:38:33

Middle Channel / QPSK



Date: 16 MAY 2020 23:40:08

Middle Channel / 16QAM

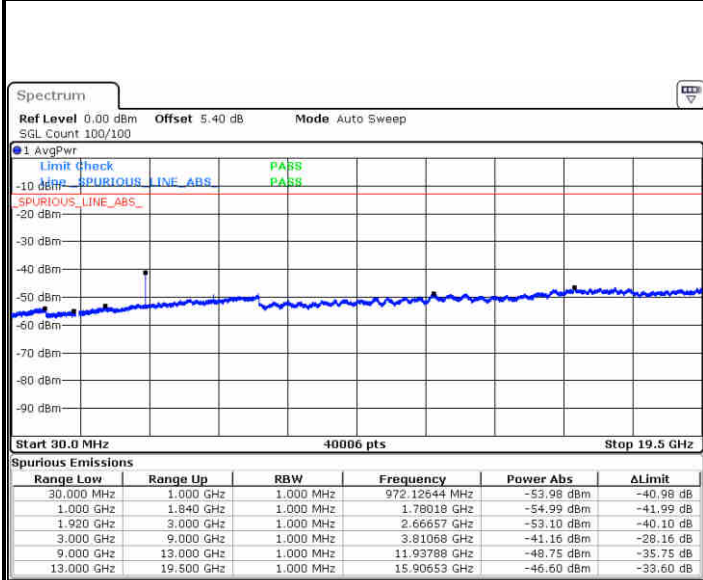


Date: 16 MAY 2020 23:41:03



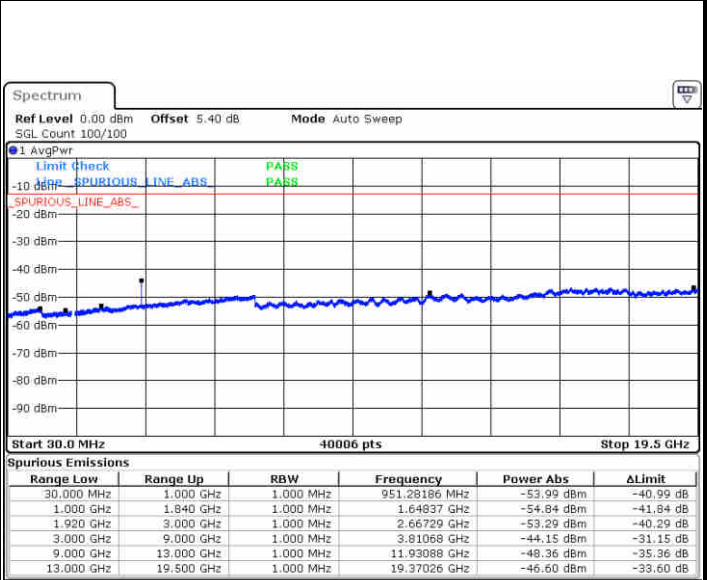
LTE Band 2 / 5MHz

Highest Channel / QPSK



Date: 16 MAY 2020 23:47:08

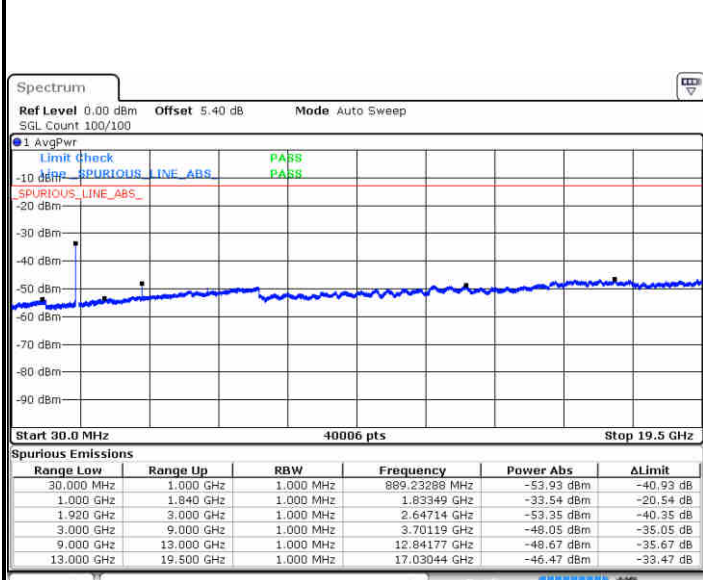
Highest Channel / 16QAM



Date: 16 MAY 2020 23:48:03

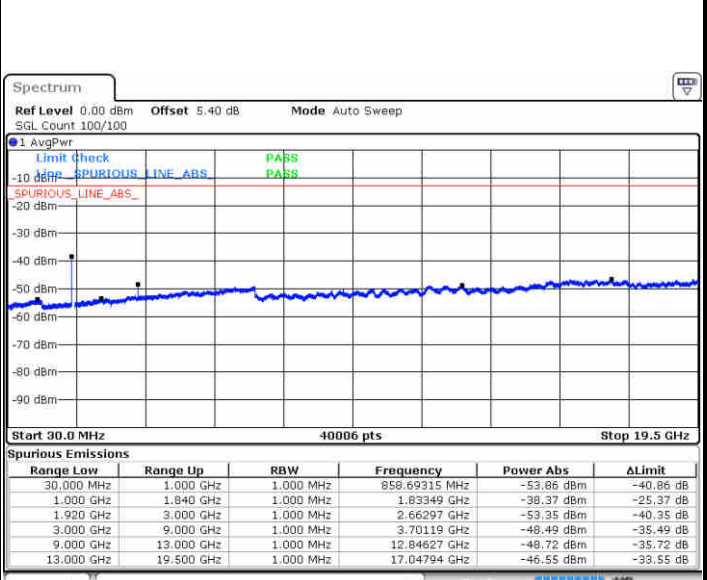
LTE Band 2 / 10MHz

Lowest Channel / QPSK



Date: 16 MAY 2020 23:54:08

Lowest Channel / 16QAM

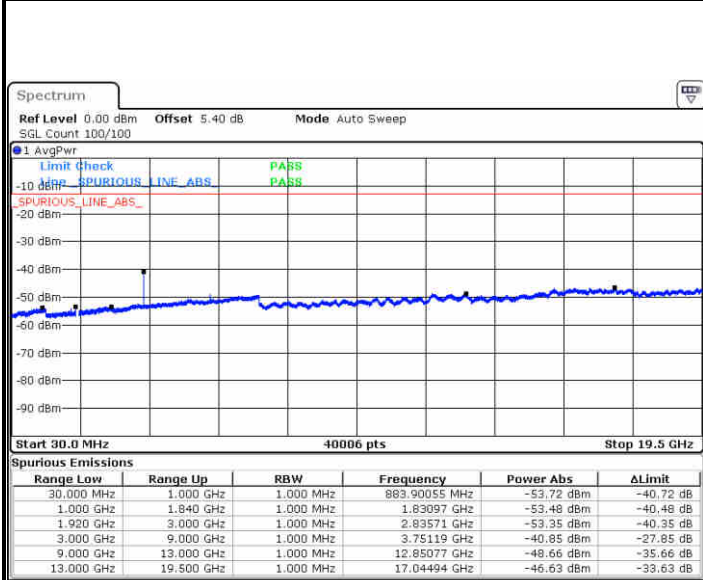


Date: 16 MAY 2020 23:55:03



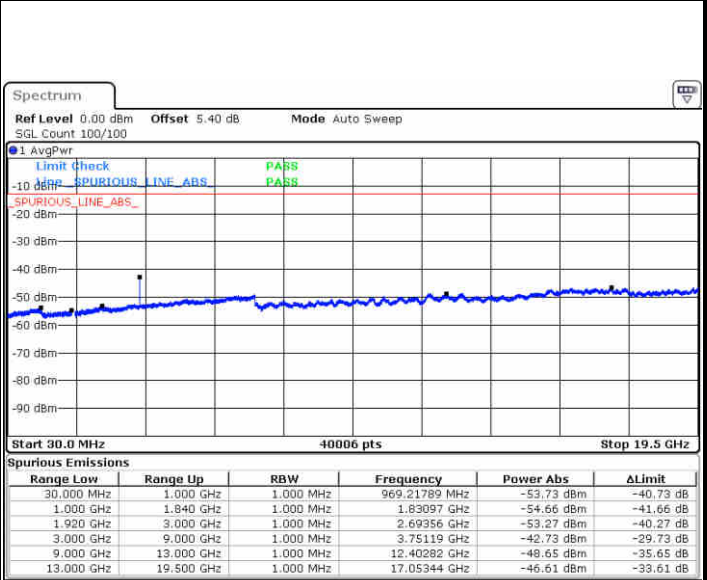
LTE Band 2 / 10MHz

Middle Channel / QPSK



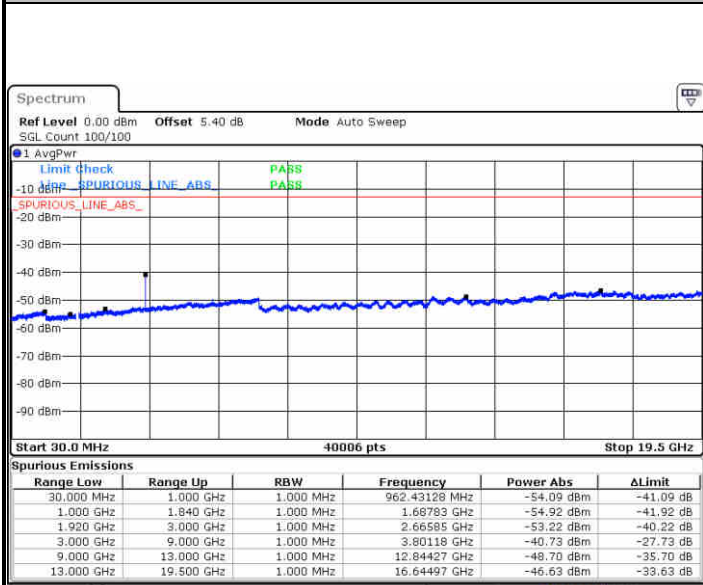
Date: 16 MAY 2020 23:56:38

Middle Channel / 16QAM



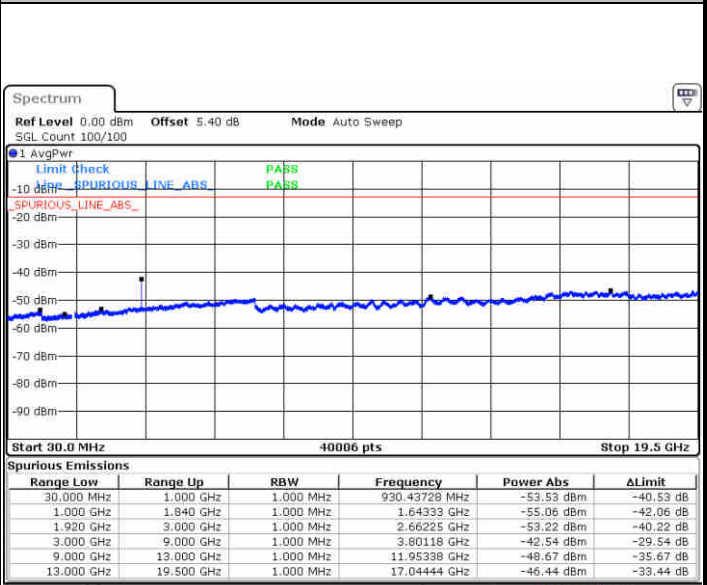
Date: 16 MAY 2020 23:57:33

Highest Channel / QPSK



Date: 17 MAY 2020 00:03:38

Highest Channel / 16QAM



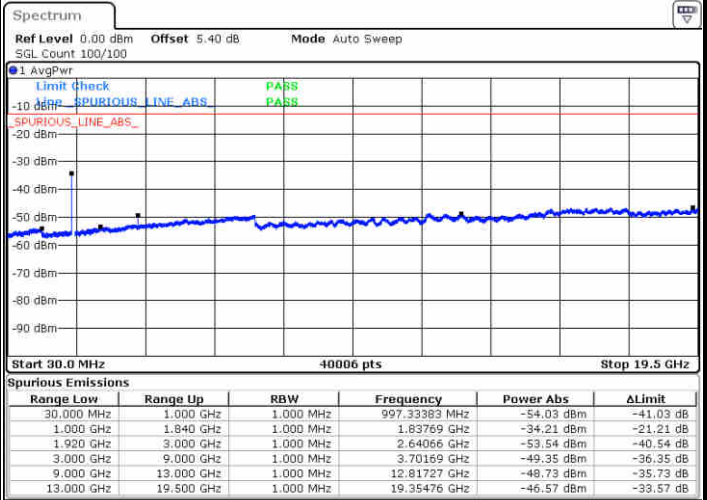
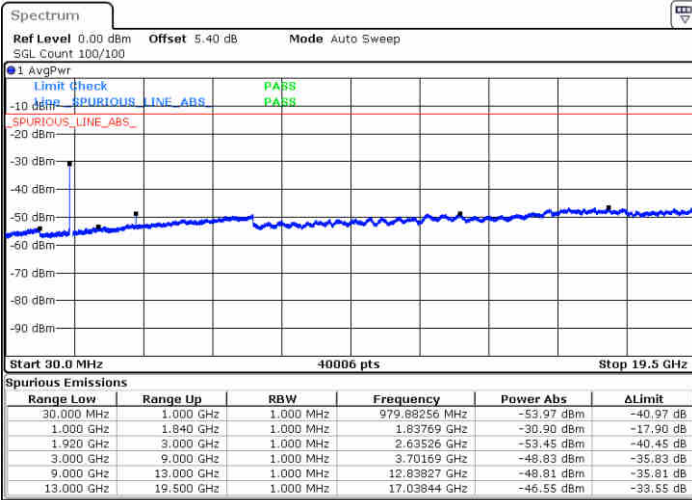
Date: 17 MAY 2020 00:04:33



LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

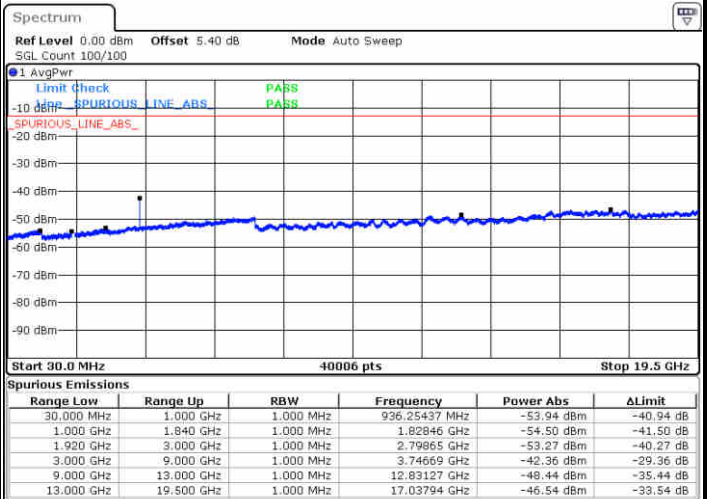
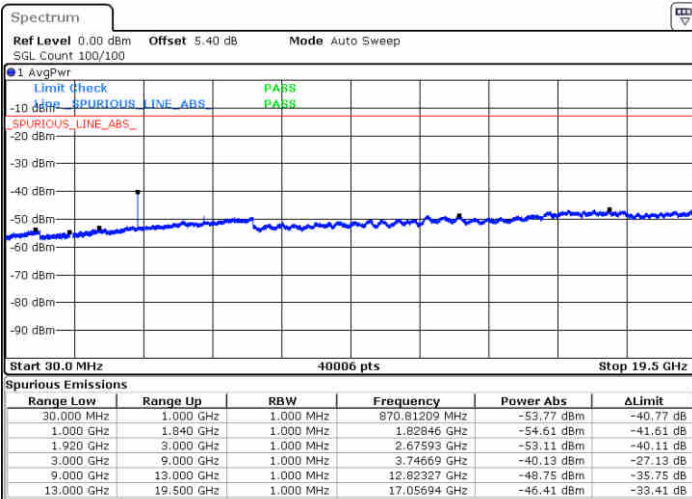


Date: 17.MAY.2020 00:10:38

Date: 17.MAY.2020 00:11:33

Middle Channel / QPSK

Middle Channel / 16QAM



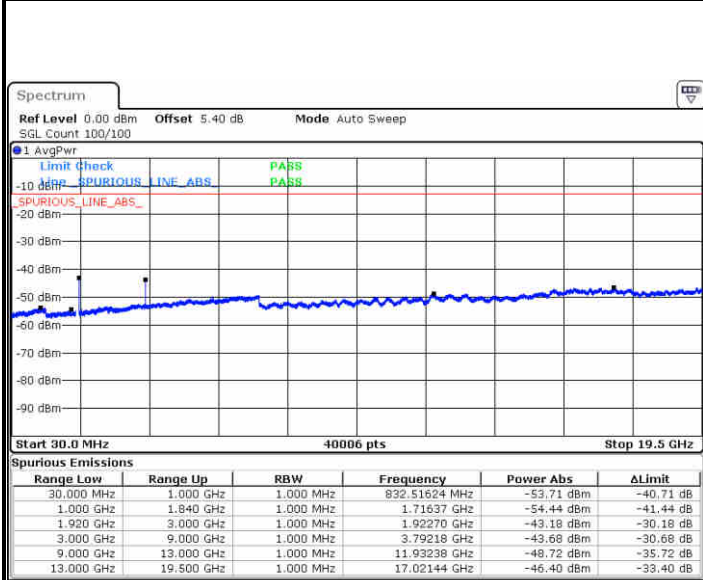
Date: 17.MAY.2020 00:13:08

Date: 17.MAY.2020 00:14:02



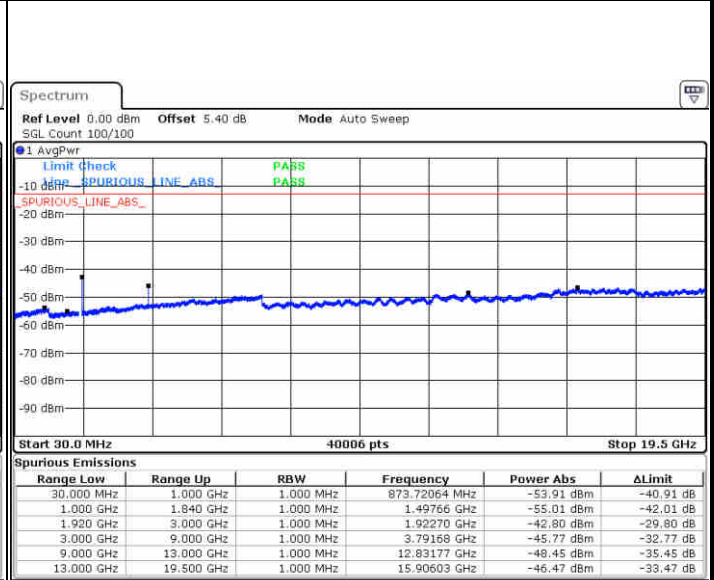
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 17.MAY.2020 00:20:07

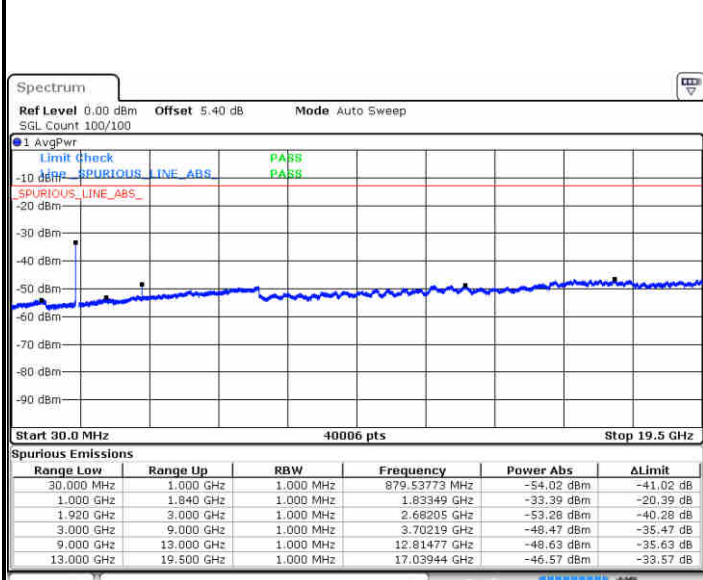
Highest Channel / 16QAM



Date: 17.MAY.2020 00:21:02

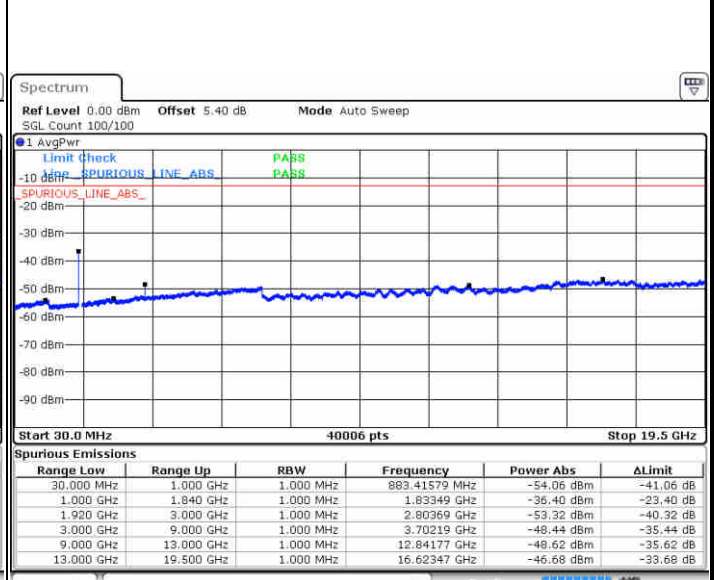
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 17.MAY.2020 00:27:07

Lowest Channel / 16QAM



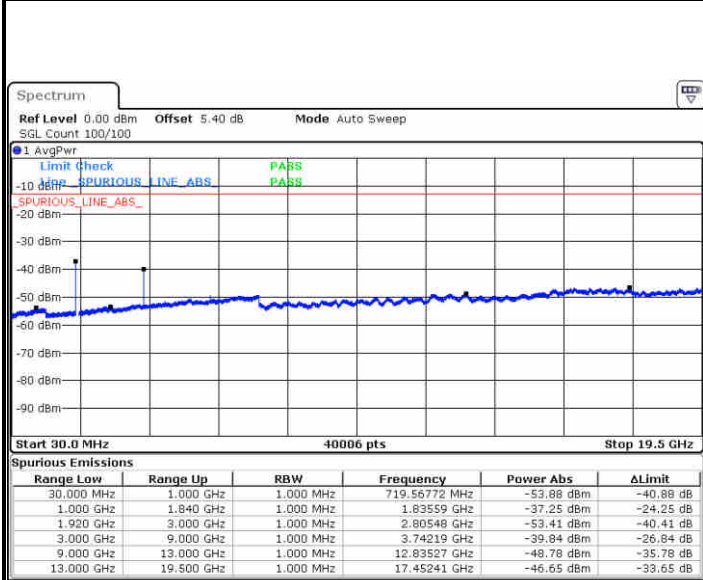
Date: 17.MAY.2020 00:28:02





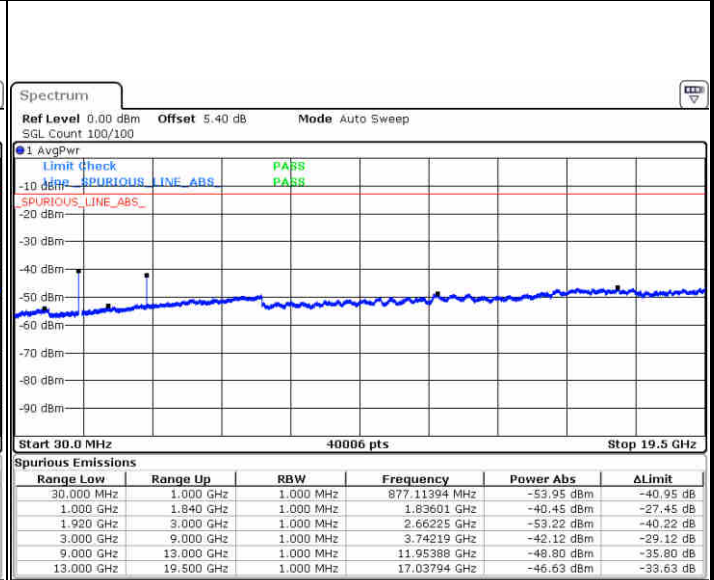
LTE Band 2 / 20MHz

Middle Channel / QPSK



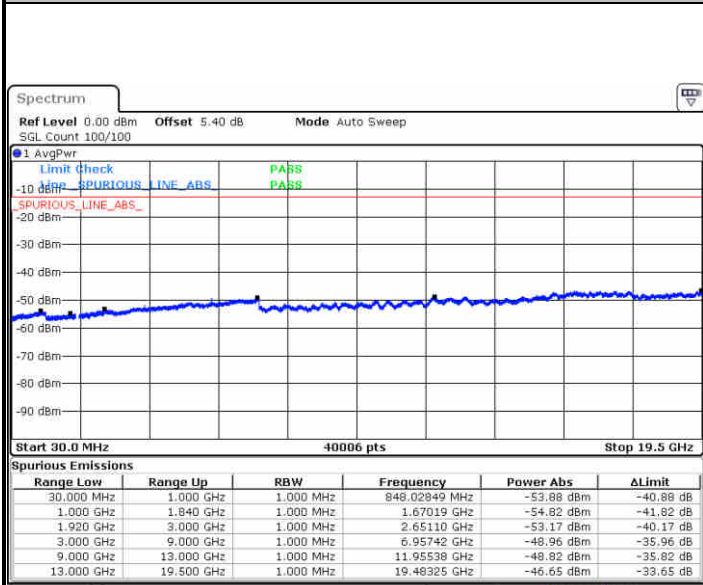
Date: 17.MAY.2020 00:28:37

Middle Channel / 16QAM



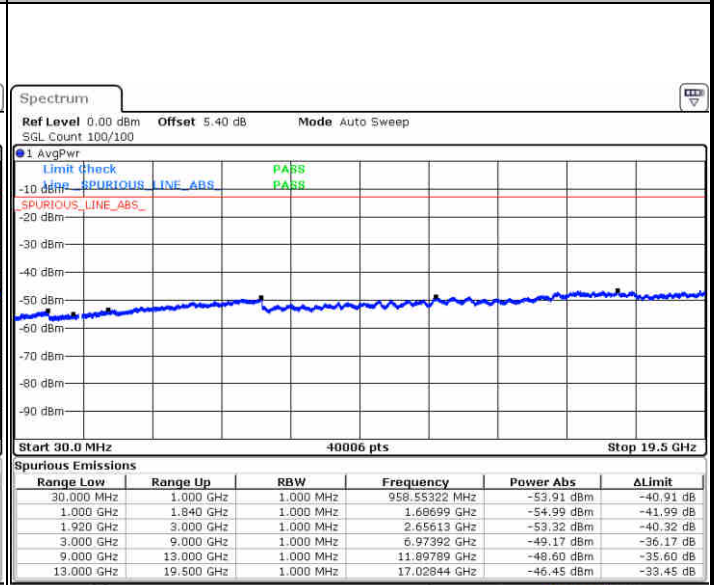
Date: 17.MAY.2020 00:30:32

Highest Channel / QPSK



Date: 17.MAY.2020 00:36:37

Highest Channel / 16QAM



Date: 17.MAY.2020 00:37:32



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	0.0005	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0032	

Note:

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

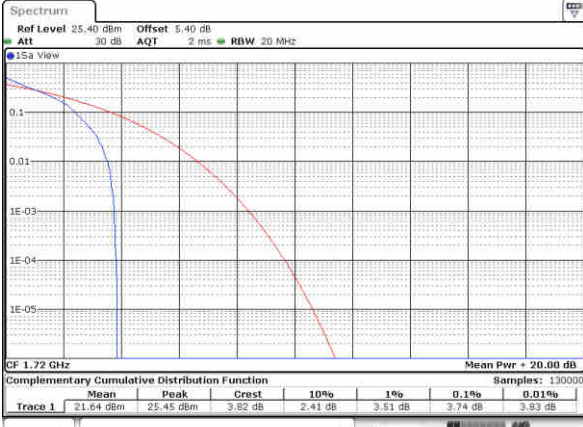
### Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.74	4.20	4.81	5.22	<b>PASS</b>
Middle CH	3.19	4.52	4.52	5.45	
Highest CH	4.03	4.46	5.25	5.54	



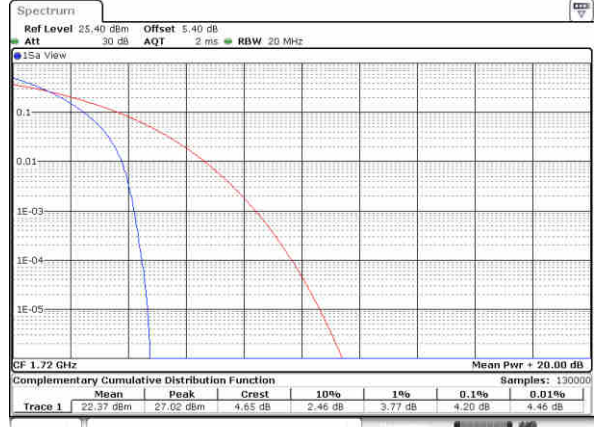
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



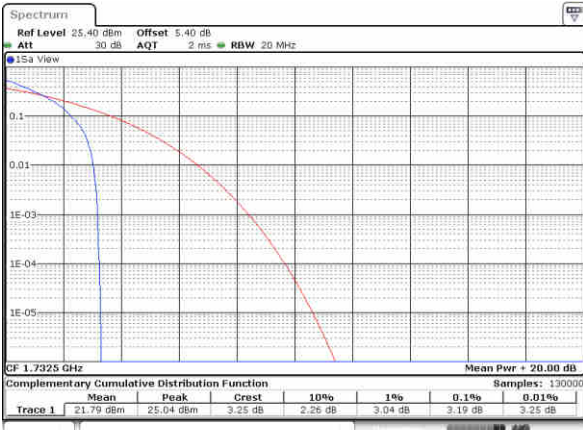
Date: 17 MAY 2020 03:21:00

Lowest Channel / Full RB



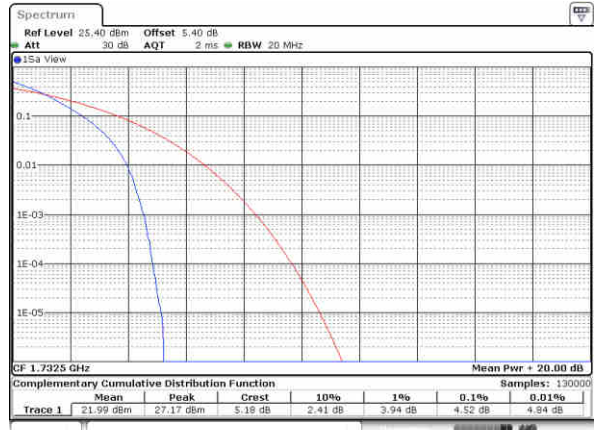
Date: 17 MAY 2020 03:20:49

Middle Channel / 1RB



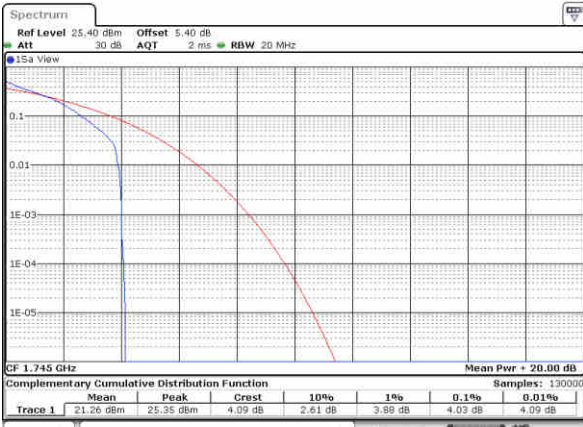
Date: 17 MAY 2020 03:21:10

Middle Channel / Full RB



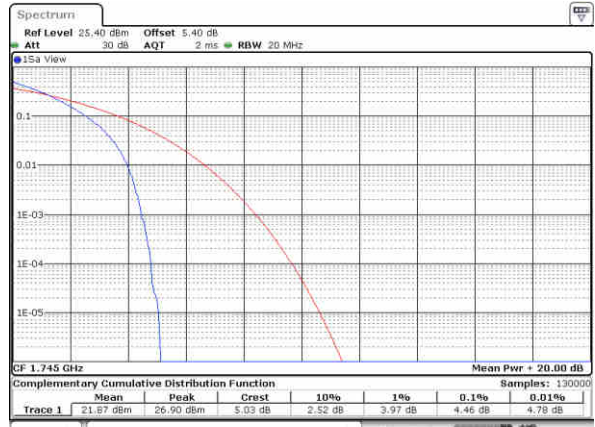
Date: 17 MAY 2020 03:20:39

Highest Channel / 1RB



Date: 17 MAY 2020 03:21:20

Highest Channel / Full RB

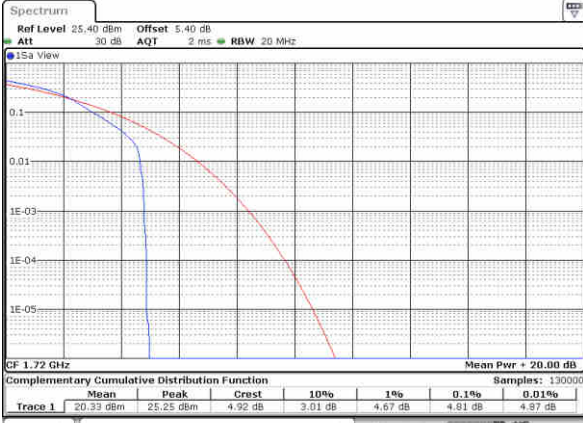


Date: 17 MAY 2020 03:20:28



LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



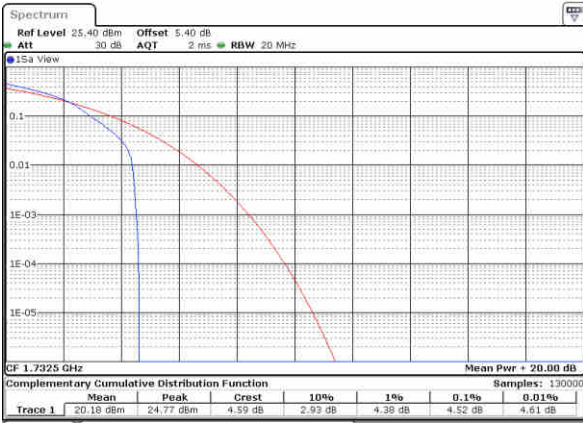
Date: 17 MAY 2020 03:19:32

Lowest Channel / Full RB



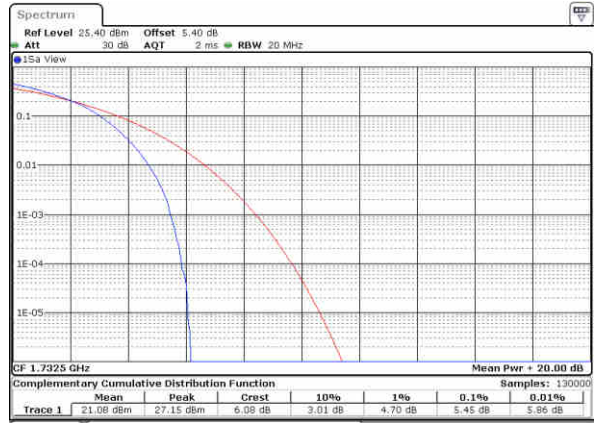
Date: 17 MAY 2020 03:19:42

Middle Channel / 1RB



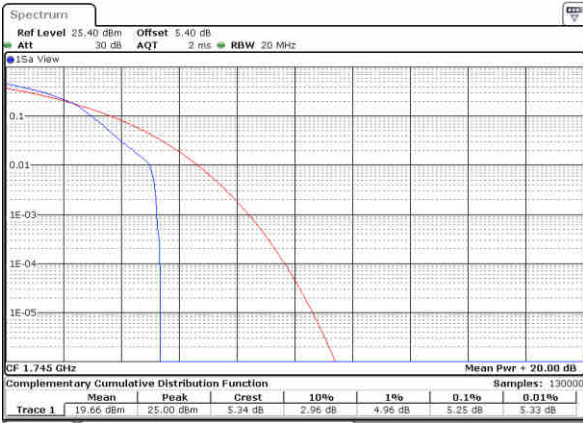
Date: 17 MAY 2020 03:19:50

Middle Channel / Full RB



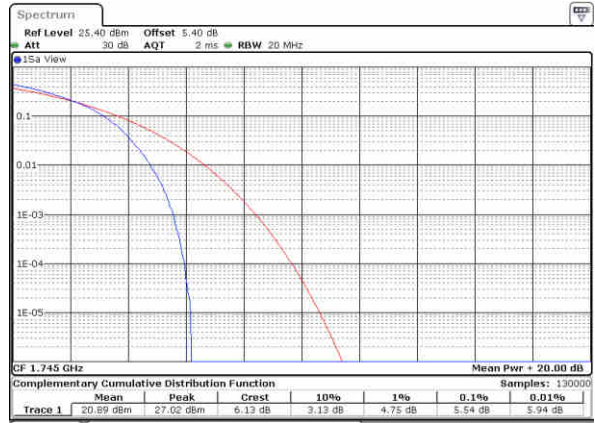
Date: 17 MAY 2020 03:19:59

Highest Channel / 1RB



Date: 17 MAY 2020 03:20:08

Highest Channel / Full RB



Date: 17 MAY 2020 03:20:17



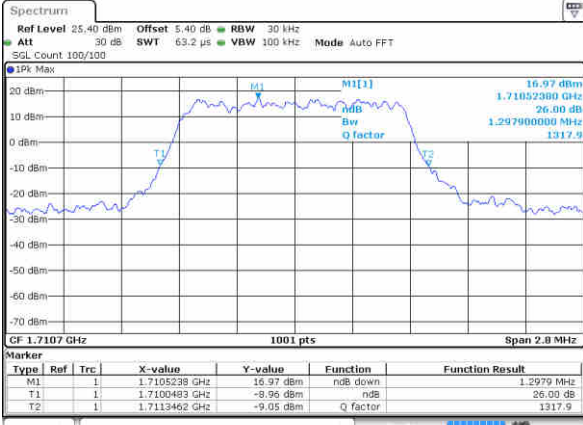
**26dB Bandwidth**

Mode	LTE Band 4 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.30	1.29	3.03	3.03	4.91	4.85	9.67	9.59	14.15	14.54	20.02	20.22
Middle CH	1.27	1.28	3.00	3.00	4.93	4.94	9.79	9.67	14.45	14.39	20.18	20.22
Highest CH	1.32	1.29	3.00	3.02	4.88	4.91	9.71	9.67	14.36	14.60	20.14	20.14



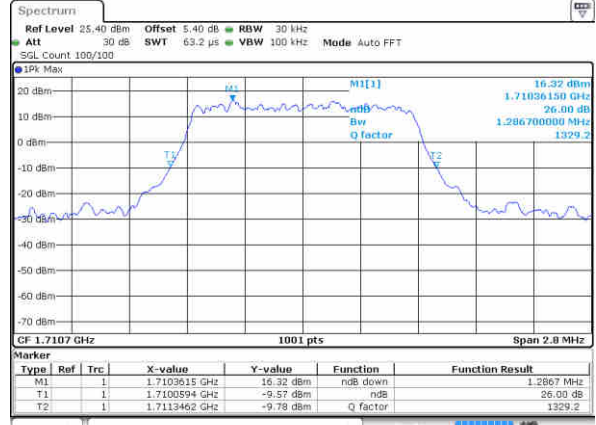
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



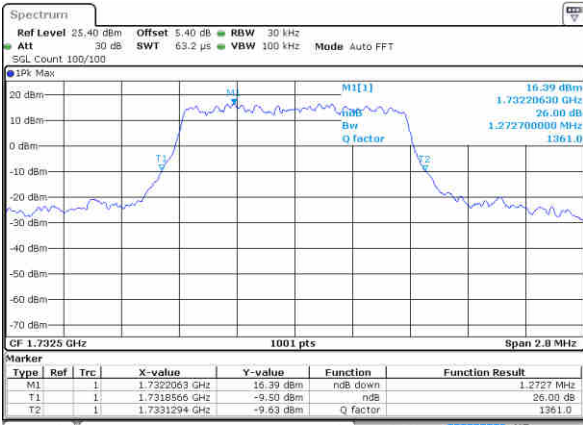
Date: 17 MAY 2020 00:58:43

Lowest Channel / 1.4MHz / 16QAM



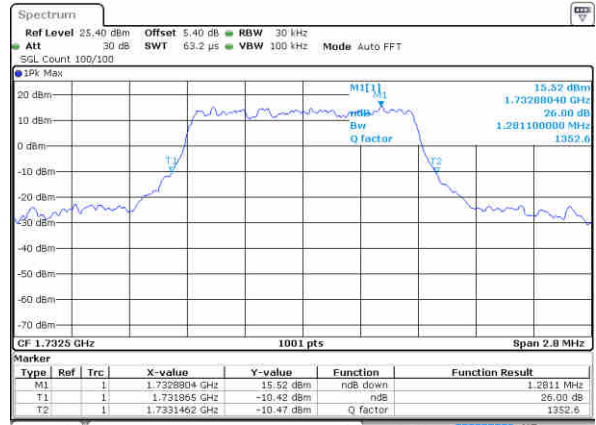
Date: 17 MAY 2020 00:58:53

Middle Channel / 1.4MHz / QPSK



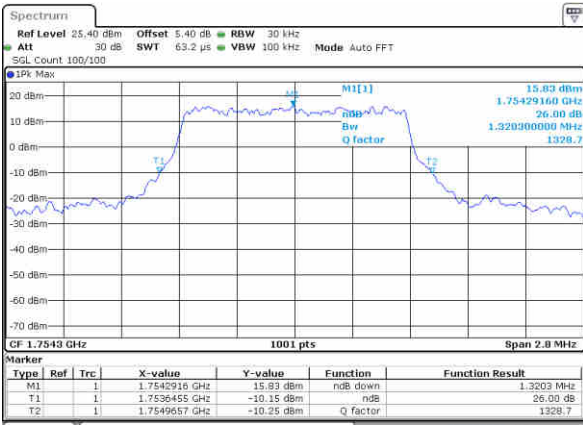
Date: 17 MAY 2020 01:05:43

Middle Channel / 1.4MHz / 16QAM



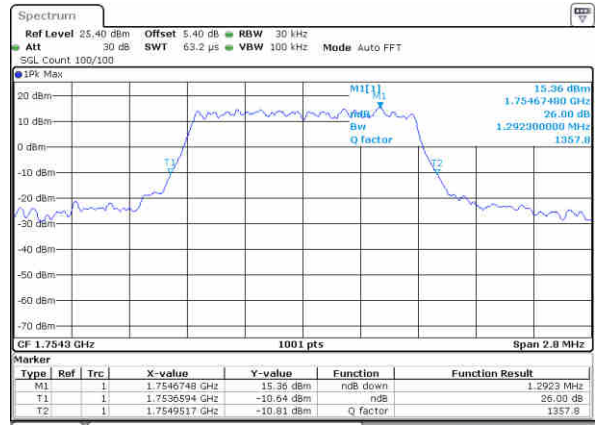
Date: 17 MAY 2020 01:05:53

Highest Channel / 1.4MHz / QPSK



Date: 17 MAY 2020 01:08:13

Highest Channel / 1.4MHz / 16QAM

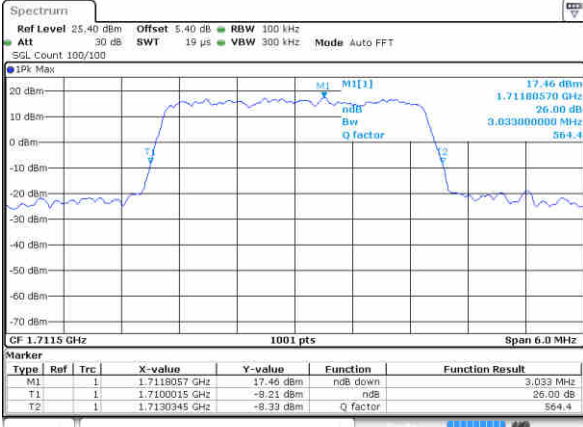


Date: 17 MAY 2020 01:08:23



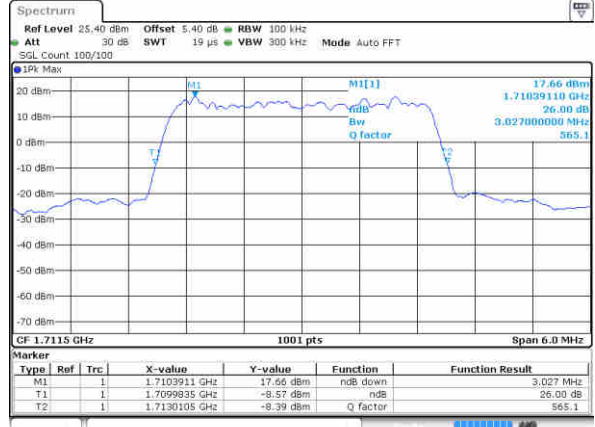
LTE Band 4

Lowest Channel / 3MHz / QPSK



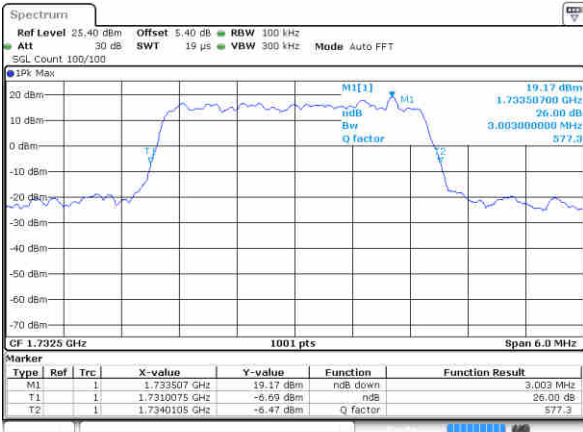
Date: 17 MAY 2020 01:15:13

Lowest Channel / 3MHz / 16QAM



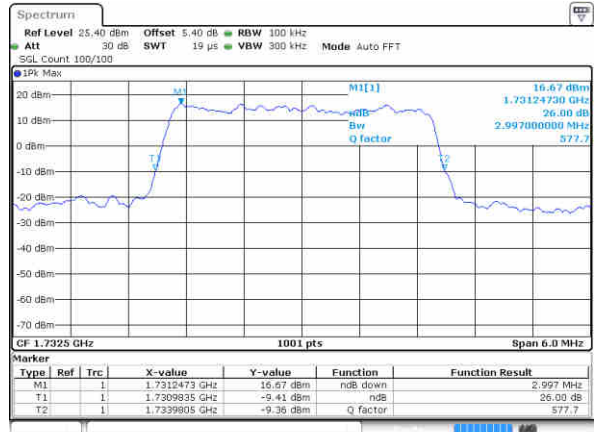
Date: 17 MAY 2020 01:15:23

Middle Channel / 3MHz / QPSK



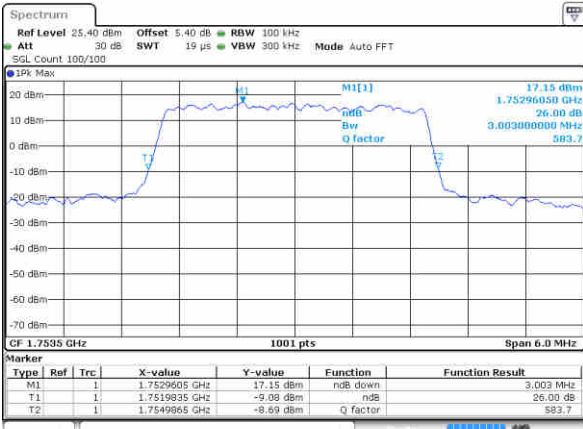
Date: 17 MAY 2020 01:22:12

Middle Channel / 3MHz / 16QAM



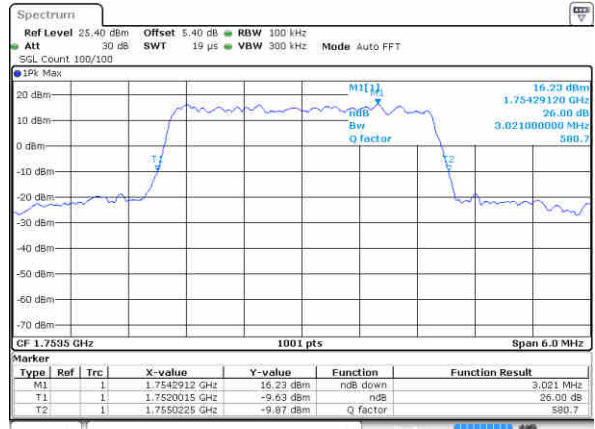
Date: 17 MAY 2020 01:22:22

Highest Channel / 3MHz / QPSK



Date: 17 MAY 2020 01:24:42

Highest Channel / 3MHz / 16QAM



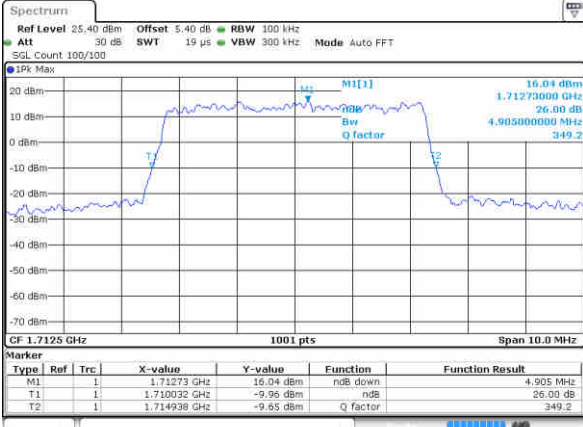
Date: 17 MAY 2020 01:24:52





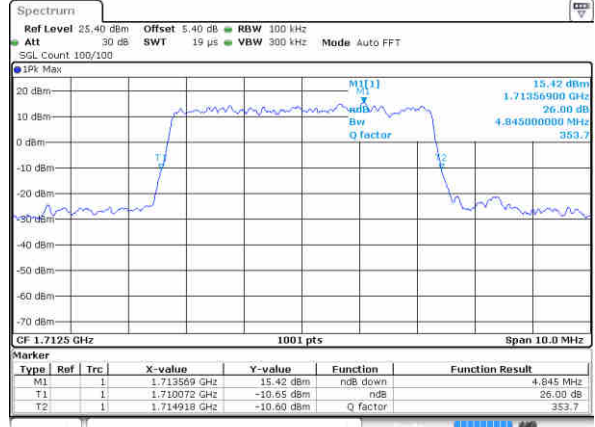
LTE Band 4

Lowest Channel / 5MHz / QPSK



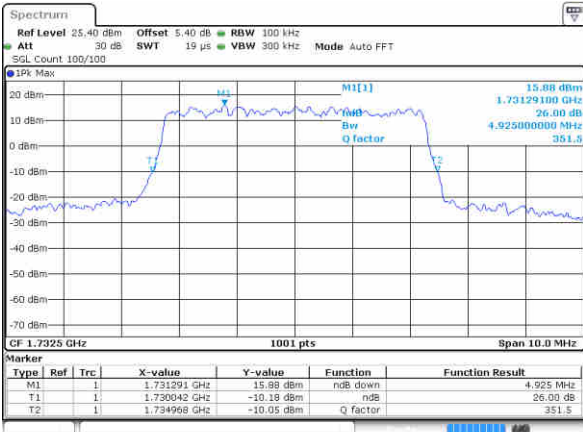
Date: 17 MAY 2020 01:31:42

Lowest Channel / 5MHz / 16QAM



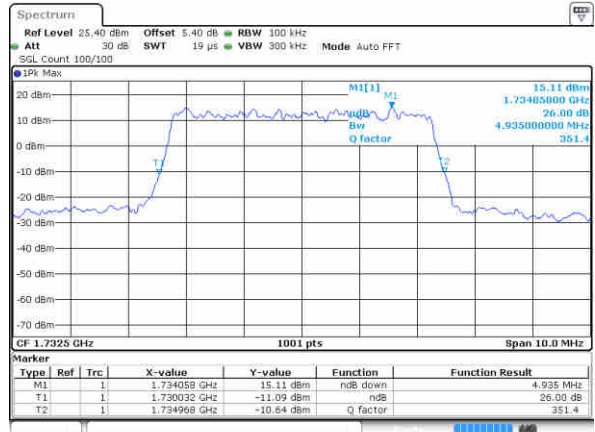
Date: 17 MAY 2020 01:31:52

Middle Channel / 5MHz / QPSK



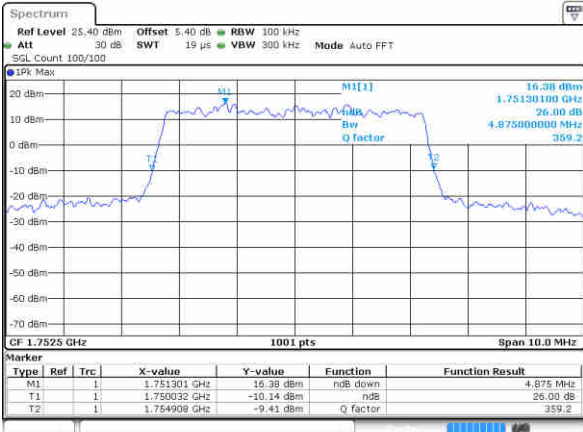
Date: 17 MAY 2020 01:38:42

Middle Channel / 5MHz / 16QAM



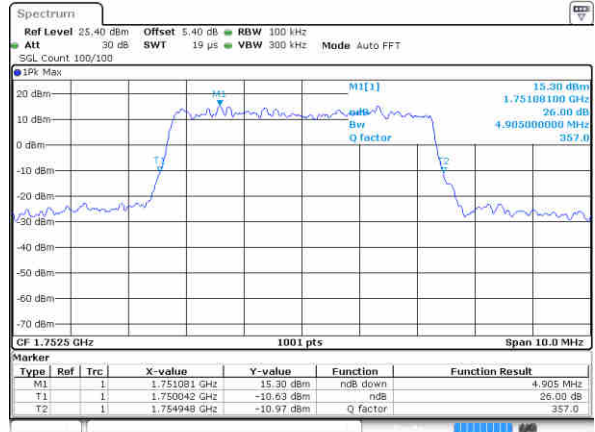
Date: 17 MAY 2020 01:38:52

Highest Channel / 5MHz / QPSK



Date: 17 MAY 2020 01:41:11

Highest Channel / 5MHz / 16QAM

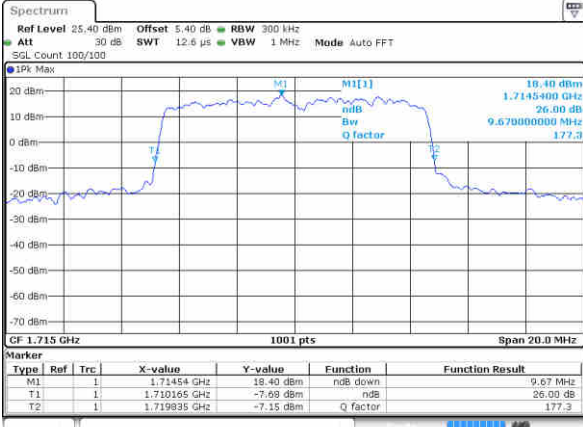


Date: 17 MAY 2020 01:41:21



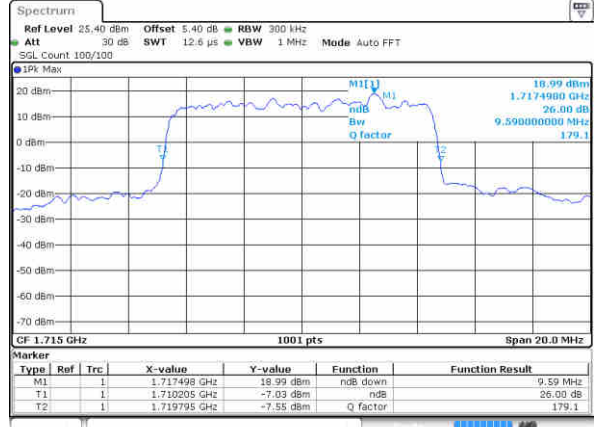
LTE Band 4

Lowest Channel / 10MHz / QPSK



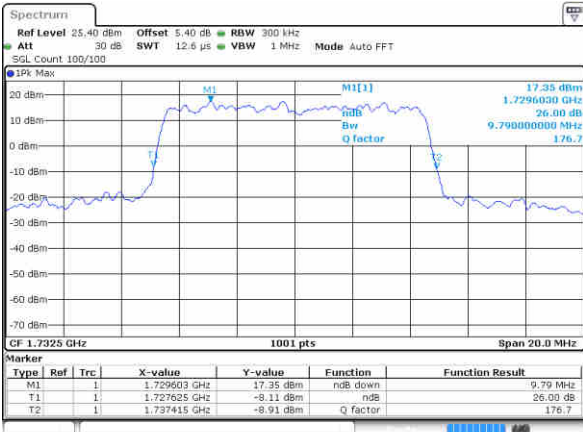
Date: 17 MAY 2020 01:48:11

Lowest Channel / 10MHz / 16QAM



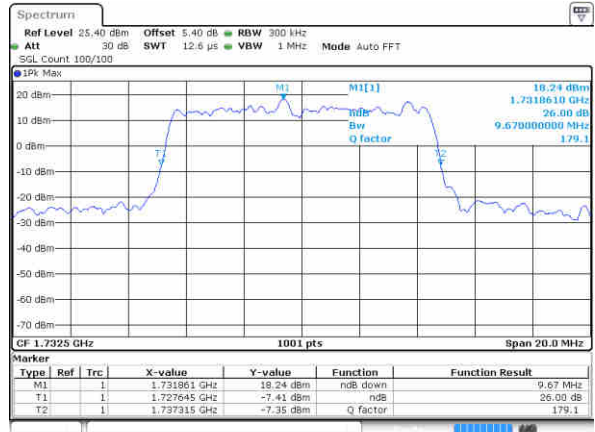
Date: 17 MAY 2020 01:48:21

Middle Channel / 10MHz / QPSK



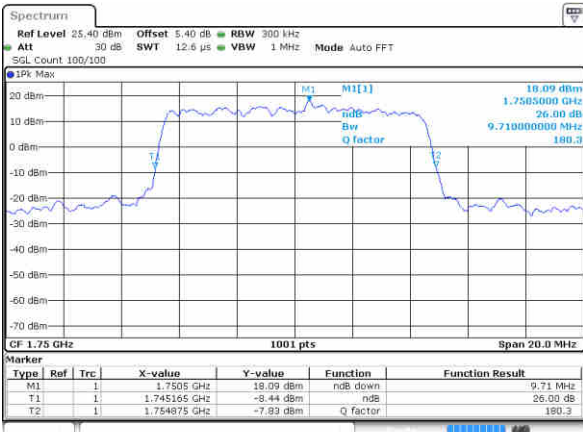
Date: 17 MAY 2020 02:23:40

Middle Channel / 10MHz / 16QAM



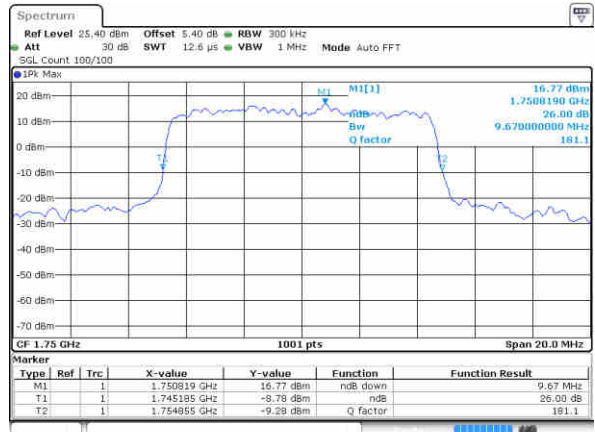
Date: 17 MAY 2020 02:23:50

Highest Channel / 10MHz / QPSK



Date: 17 MAY 2020 02:26:10

Highest Channel / 10MHz / 16QAM

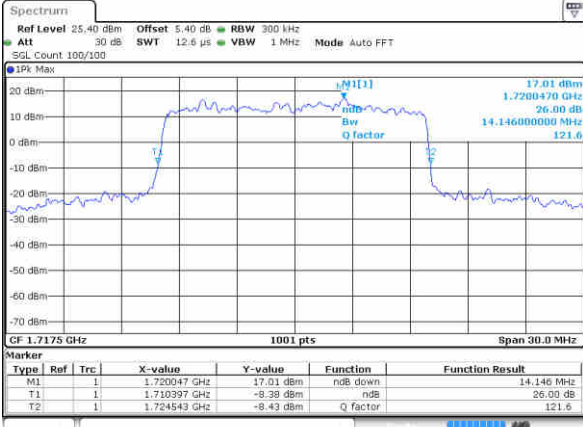


Date: 17 MAY 2020 02:26:20



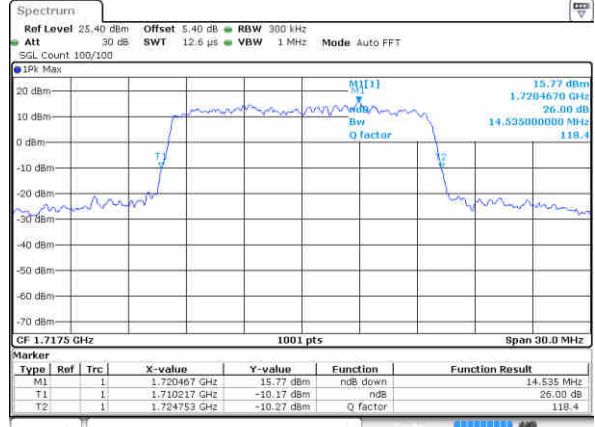
LTE Band 4

Lowest Channel / 15MHz / QPSK



Date: 17 MAY 2020 02:33:10

Lowest Channel / 15MHz / 16QAM



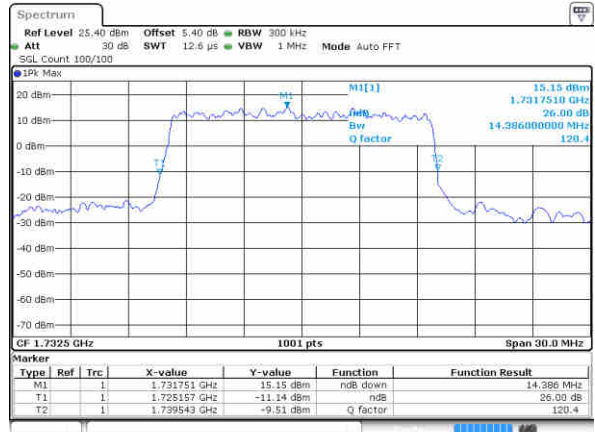
Date: 17 MAY 2020 02:33:20

Middle Channel / 15MHz / QPSK



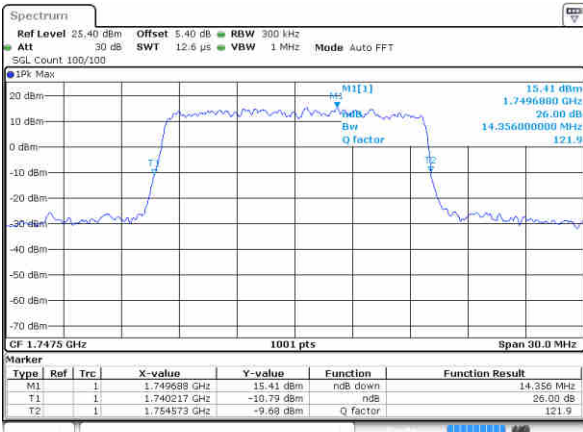
Date: 17 MAY 2020 02:40:10

Middle Channel / 15MHz / 16QAM



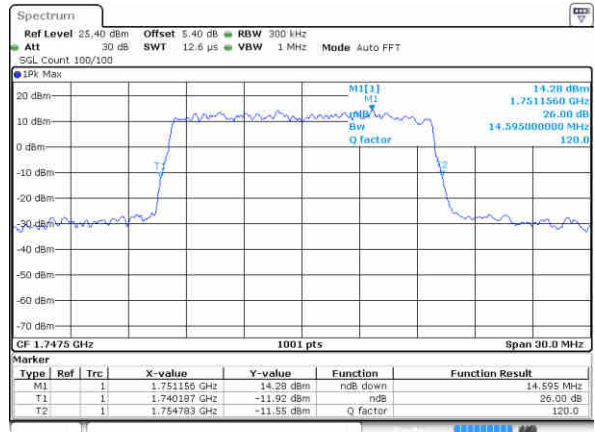
Date: 17 MAY 2020 02:40:20

Highest Channel / 15MHz / QPSK



Date: 17 MAY 2020 02:42:40

Highest Channel / 15MHz / 16QAM

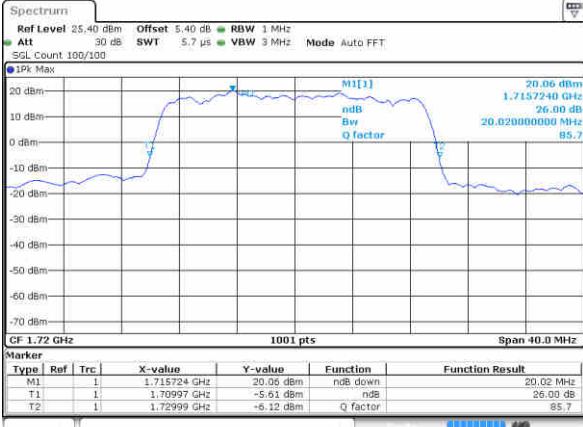


Date: 17 MAY 2020 02:42:50



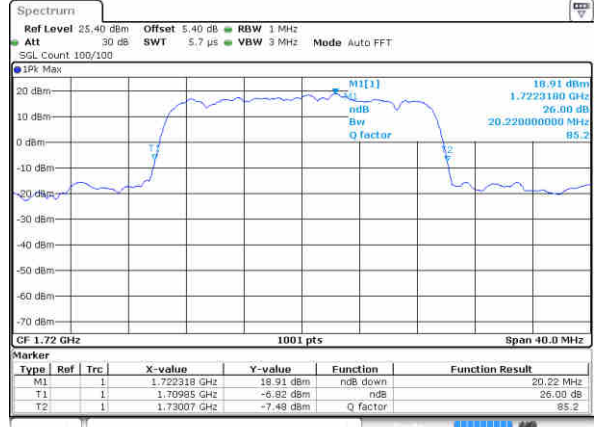
LTE Band 4

Lowest Channel / 20MHz / QPSK



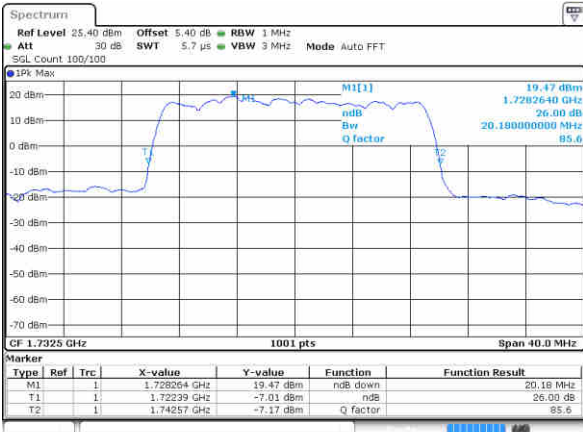
Date: 17 MAY 2020 02:48:39

Lowest Channel / 20MHz / 16QAM



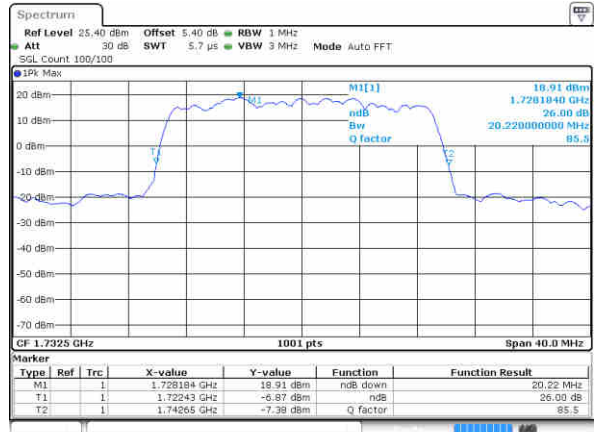
Date: 17 MAY 2020 02:48:49

Middle Channel / 20MHz / QPSK



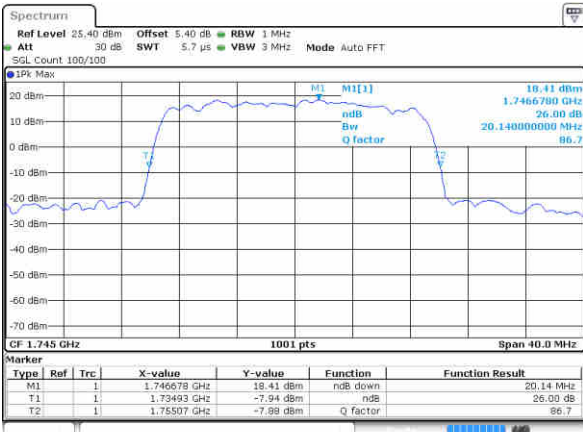
Date: 17 MAY 2020 02:56:39

Middle Channel / 20MHz / 16QAM



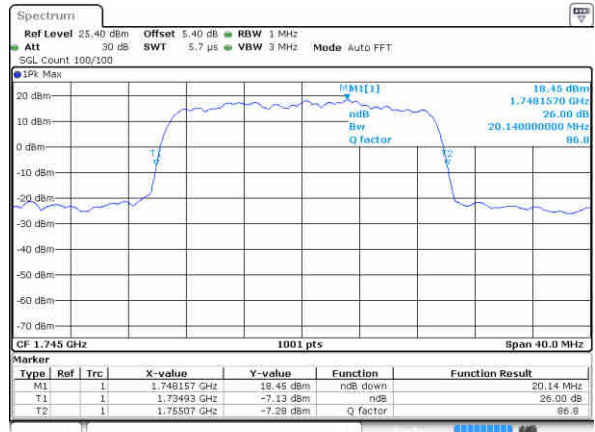
Date: 17 MAY 2020 02:56:49

Highest Channel / 20MHz / QPSK



Date: 17 MAY 2020 02:58:09

Highest Channel / 20MHz / 16QAM



Date: 17 MAY 2020 02:58:19



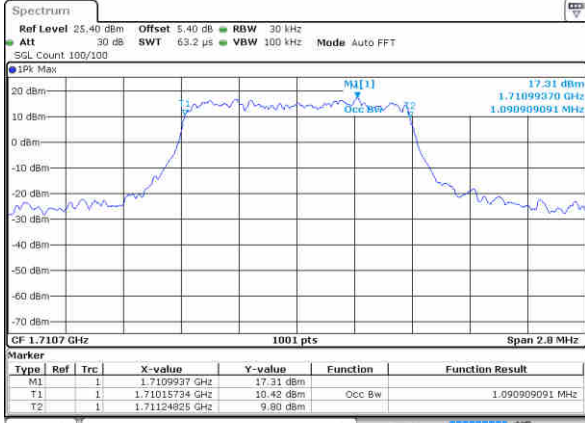
### Occupied Bandwidth

Mode	LTE Band 4 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.10	2.70	2.72	4.51	4.50	9.03	8.99	13.40	13.37	18.18	18.46
Middle CH	1.09	1.10	2.73	2.73	4.49	4.50	9.03	9.03	13.40	13.37	18.22	18.22
Highest CH	1.09	1.09	2.72	2.73	4.50	4.50	8.99	8.95	13.31	13.40	18.26	18.06



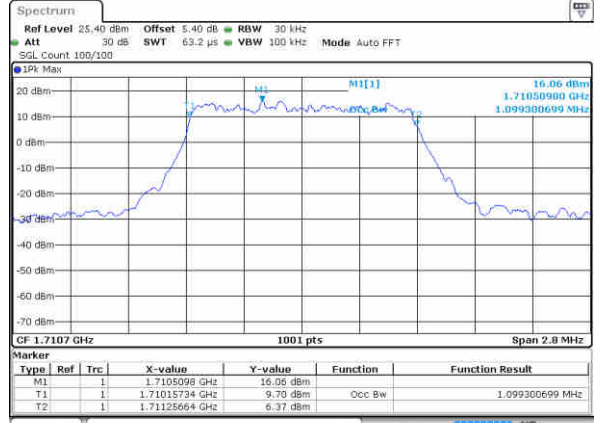
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



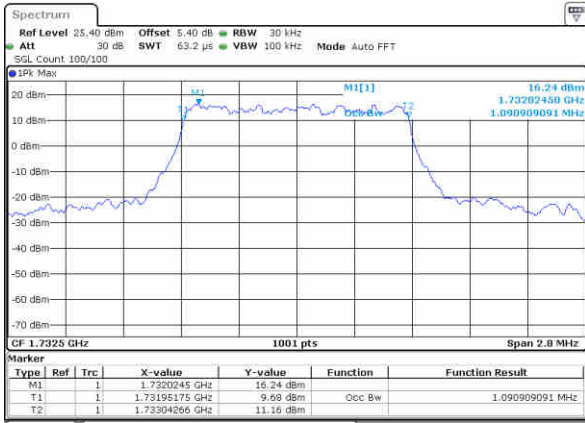
Date: 17 MAY 2020 00:58:23

Lowest Channel / 1.4MHz / 16QAM



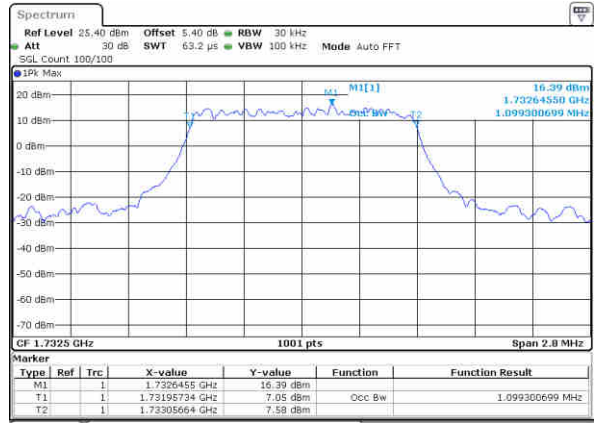
Date: 17 MAY 2020 00:58:33

Middle Channel / 1.4MHz / QPSK



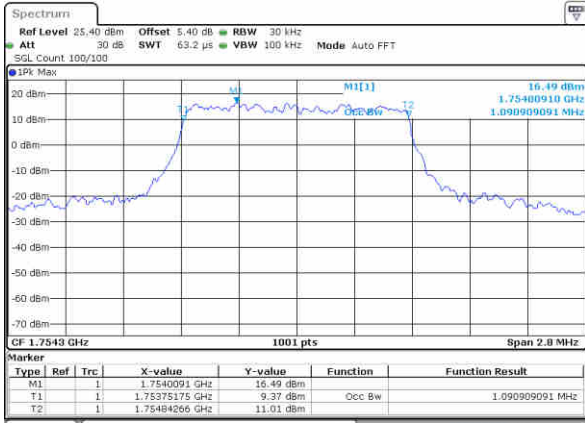
Date: 17 MAY 2020 01:05:23

Middle Channel / 1.4MHz / 16QAM



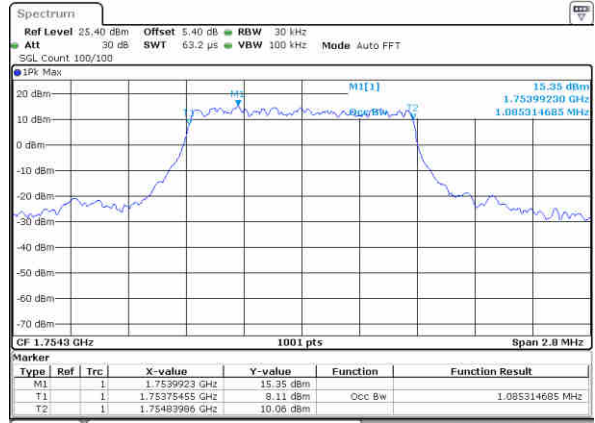
Date: 17 MAY 2020 01:05:33

Highest Channel / 1.4MHz / QPSK



Date: 17 MAY 2020 01:07:53

Highest Channel / 1.4MHz / 16QAM

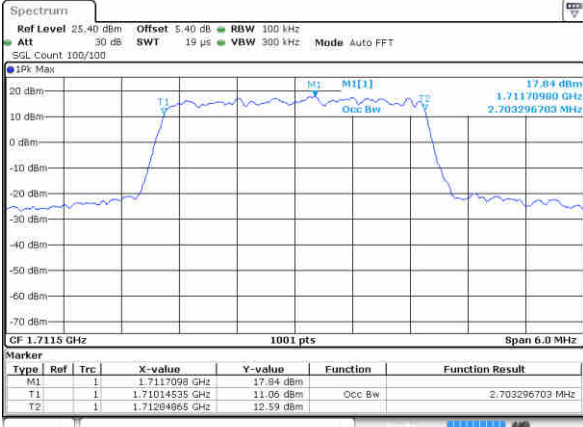


Date: 17 MAY 2020 01:08:03



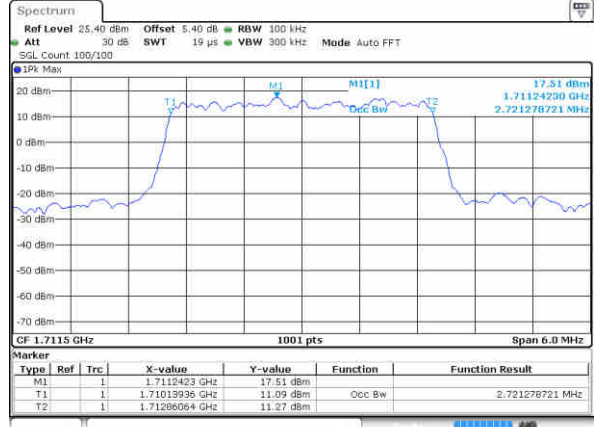
LTE Band 4

Lowest Channel / 3MHz / QPSK



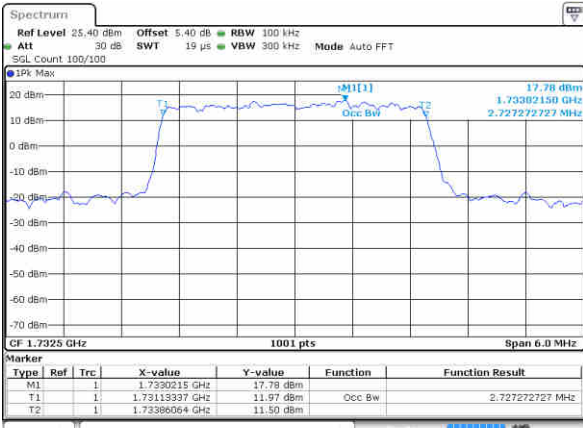
Date: 17 MAY 2020 01:14:53

Lowest Channel / 3MHz / 16QAM



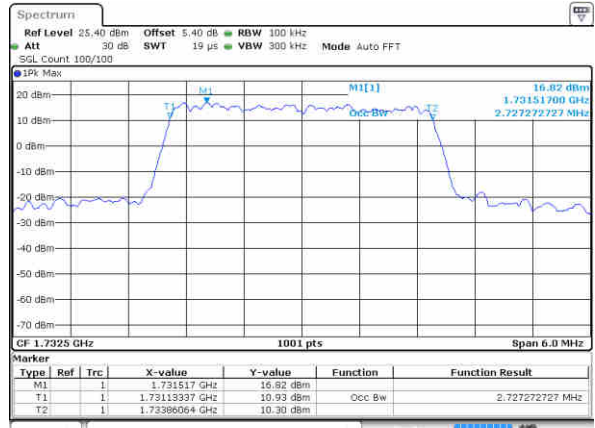
Date: 17 MAY 2020 01:15:03

Middle Channel / 3MHz / QPSK



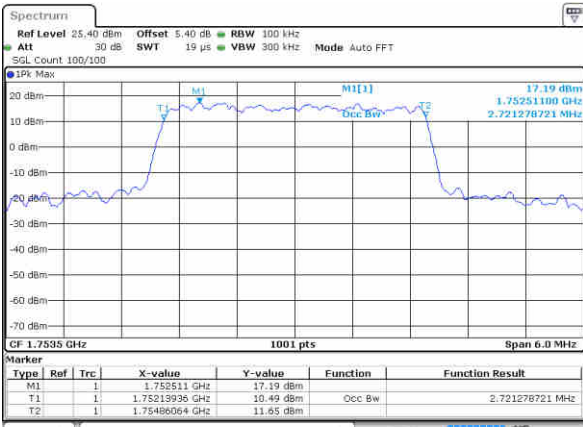
Date: 17 MAY 2020 01:21:52

Middle Channel / 3MHz / 16QAM



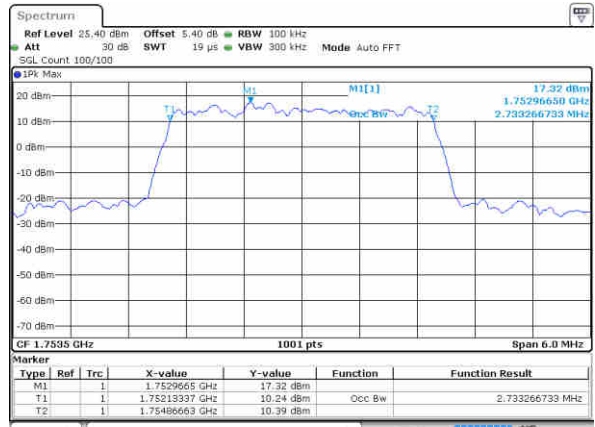
Date: 17 MAY 2020 01:22:02

Highest Channel / 3MHz / QPSK



Date: 17 MAY 2020 01:24:22

Highest Channel / 3MHz / 16QAM

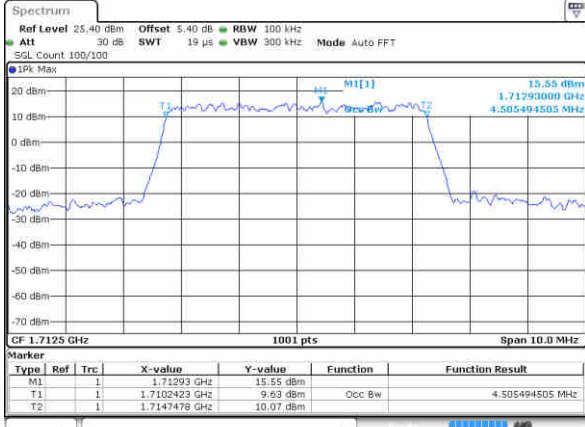


Date: 17 MAY 2020 01:24:32



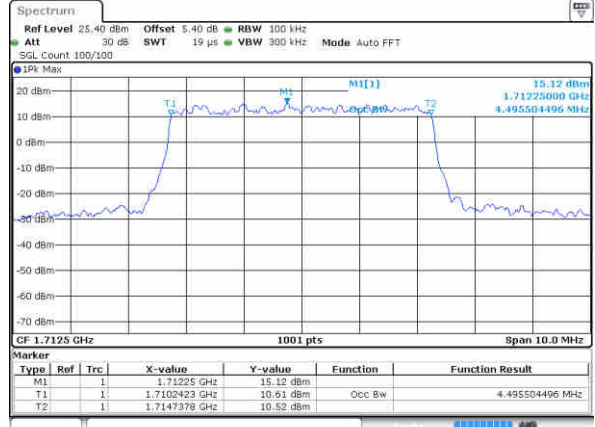
LTE Band 4

Lowest Channel / 5MHz / QPSK



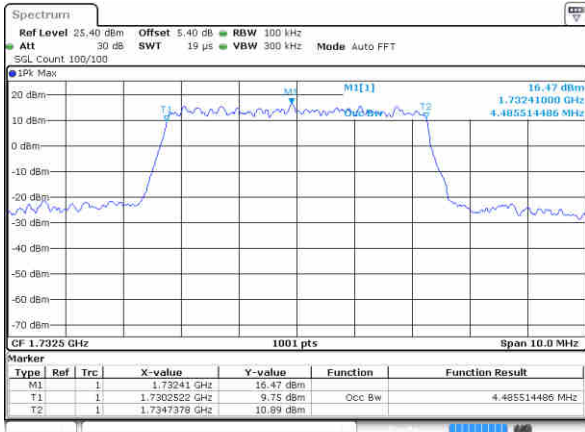
Date: 17 MAY 2020 01:31:22

Lowest Channel / 5MHz / 16QAM



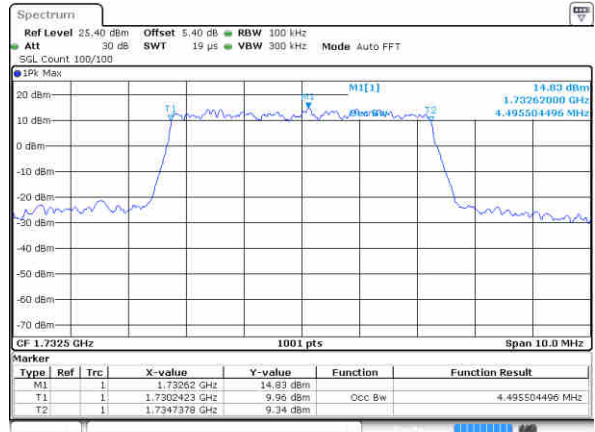
Date: 17 MAY 2020 01:31:32

Middle Channel / 5MHz / QPSK



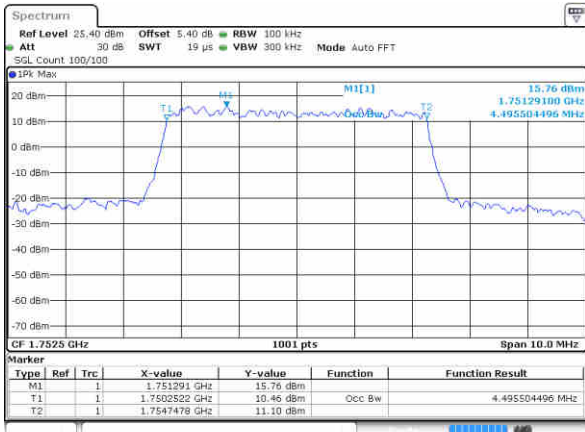
Date: 17 MAY 2020 01:38:22

Middle Channel / 5MHz / 16QAM



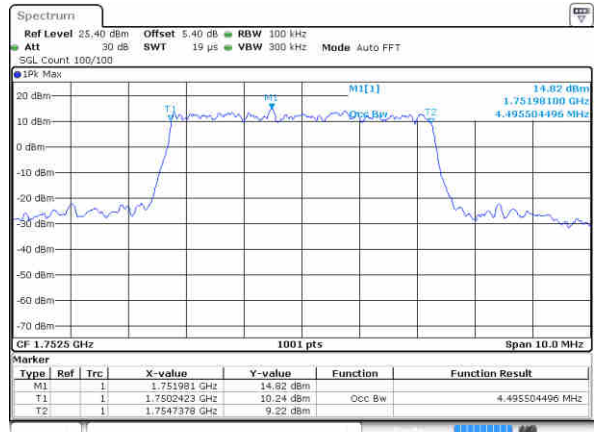
Date: 17 MAY 2020 01:38:32

Highest Channel / 5MHz / QPSK



Date: 17 MAY 2020 01:40:51

Highest Channel / 5MHz / 16QAM



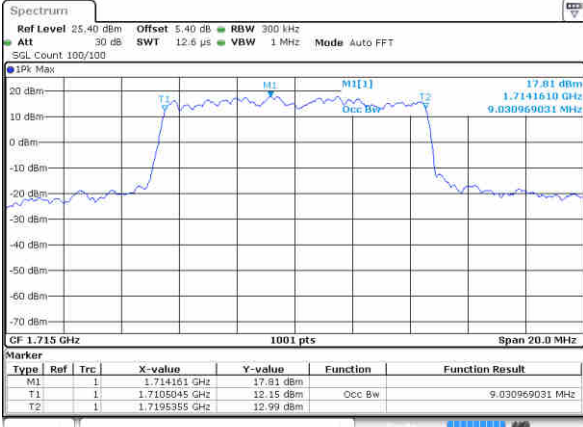
Date: 17 MAY 2020 01:41:01





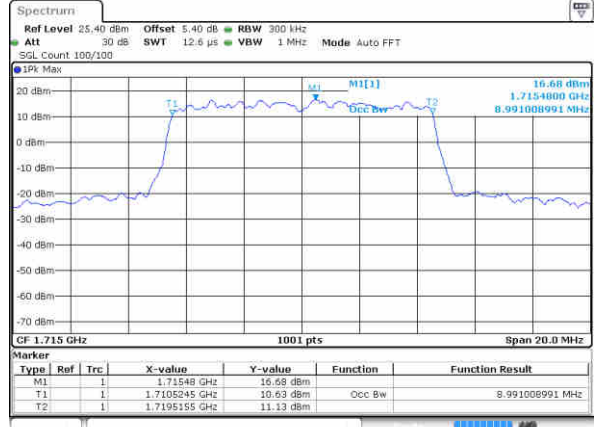
LTE Band 4

Lowest Channel / 10MHz / QPSK



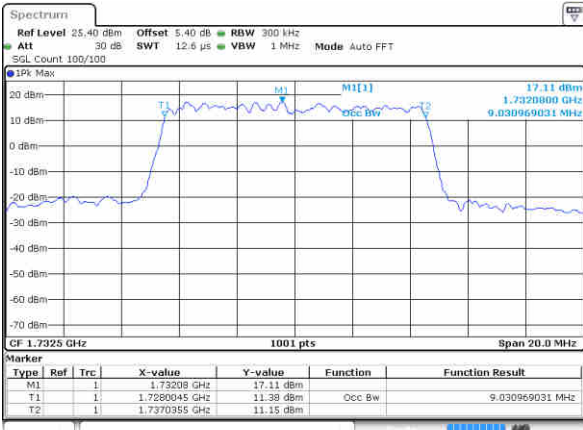
Date: 17 MAY 2020 01:47:51

Lowest Channel / 10MHz / 16QAM



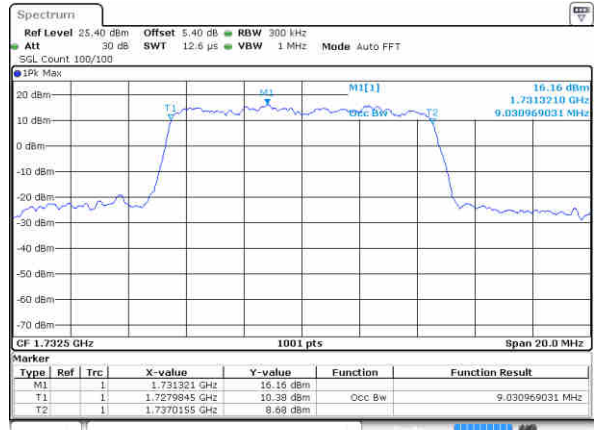
Date: 17 MAY 2020 01:48:01

Middle Channel / 10MHz / QPSK



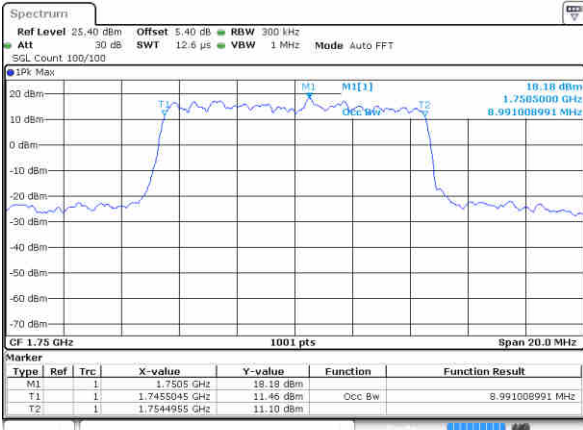
Date: 17 MAY 2020 02:23:20

Middle Channel / 10MHz / 16QAM



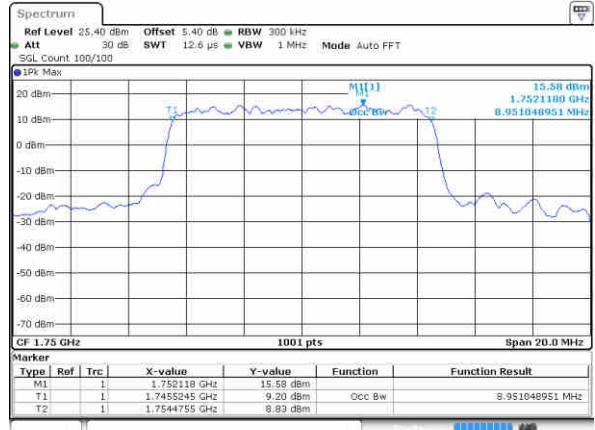
Date: 17 MAY 2020 02:23:30

Highest Channel / 10MHz / QPSK



Date: 17 MAY 2020 02:25:50

Highest Channel / 10MHz / 16QAM

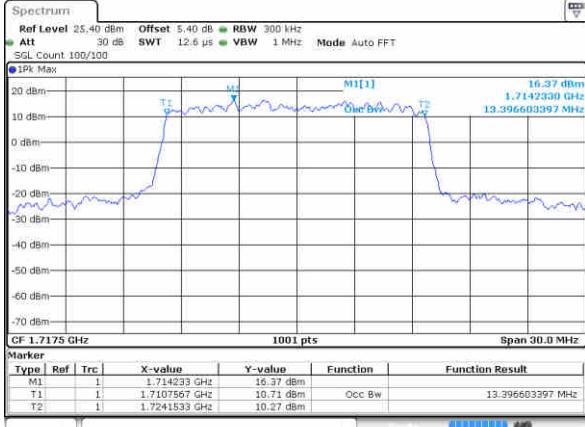


Date: 17 MAY 2020 02:26:00



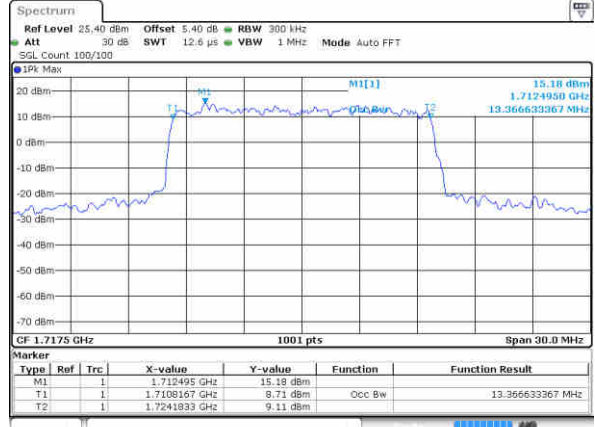
LTE Band 4

Lowest Channel / 15MHz / QPSK



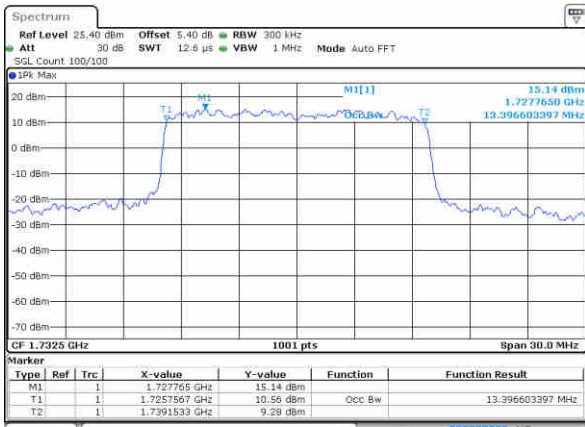
Date: 17 MAY 2020 02:32:50

Lowest Channel / 15MHz / 16QAM



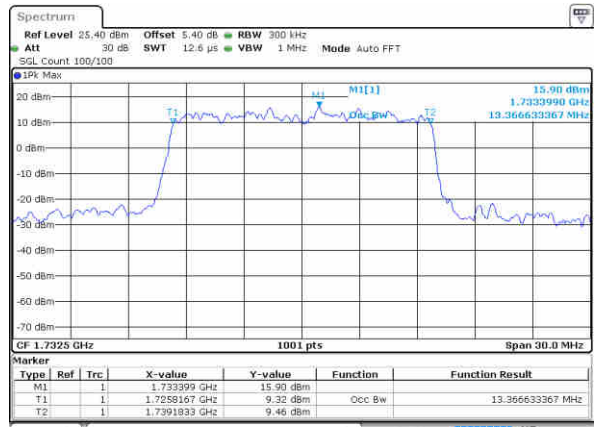
Date: 17 MAY 2020 02:33:00

Middle Channel / 15MHz / QPSK



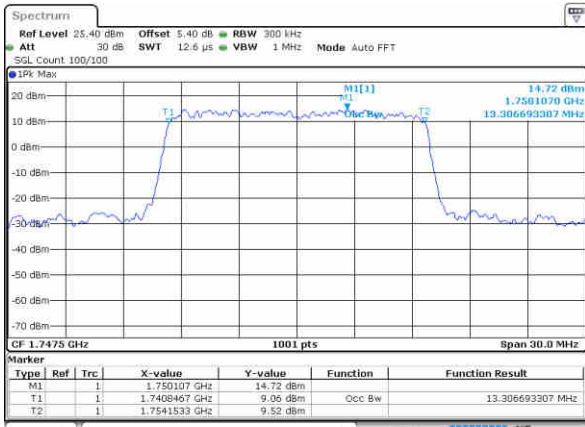
Date: 17 MAY 2020 02:38:50

Middle Channel / 15MHz / 16QAM



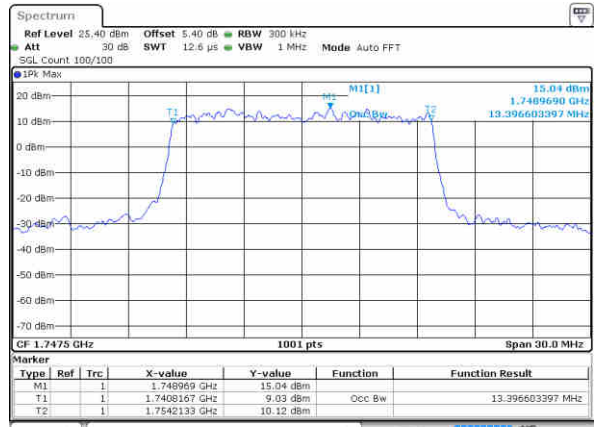
Date: 17 MAY 2020 02:40:00

Highest Channel / 15MHz / QPSK



Date: 17 MAY 2020 02:42:20

Highest Channel / 15MHz / 16QAM

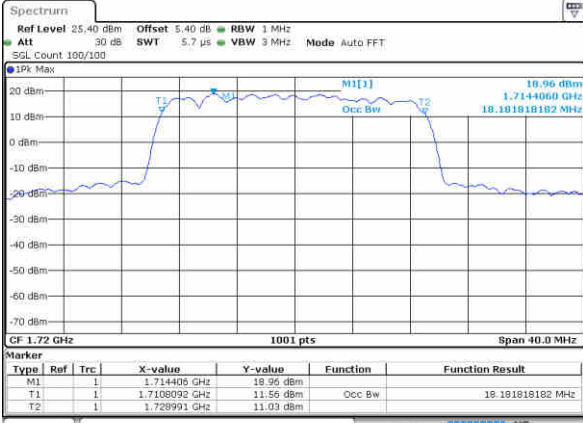


Date: 17 MAY 2020 02:42:30



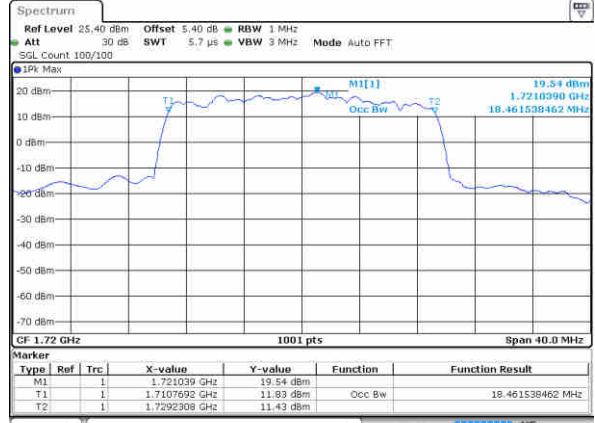
LTE Band 4

Lowest Channel / 20MHz / QPSK



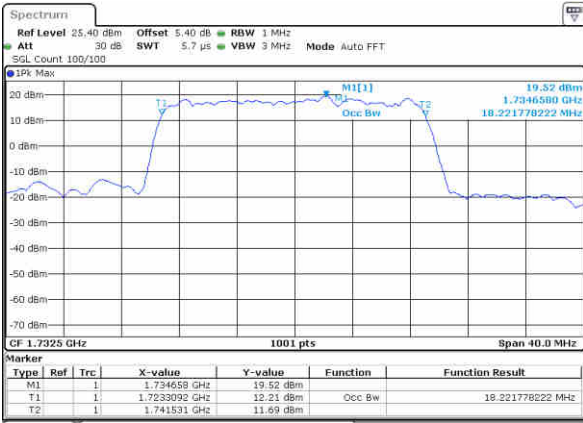
Date: 17 MAY 2020 02:49:19

Lowest Channel / 20MHz / 16QAM



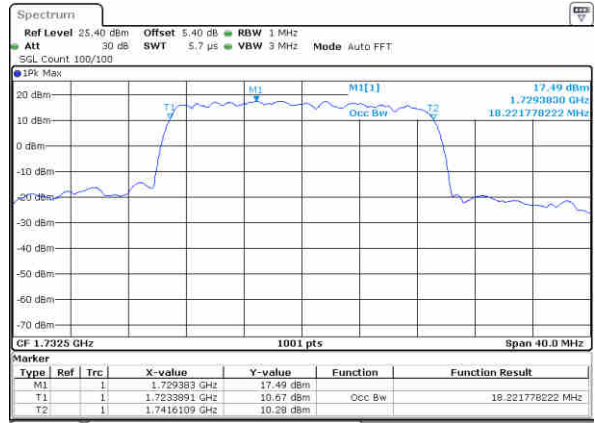
Date: 17 MAY 2020 02:49:29

Middle Channel / 20MHz / QPSK



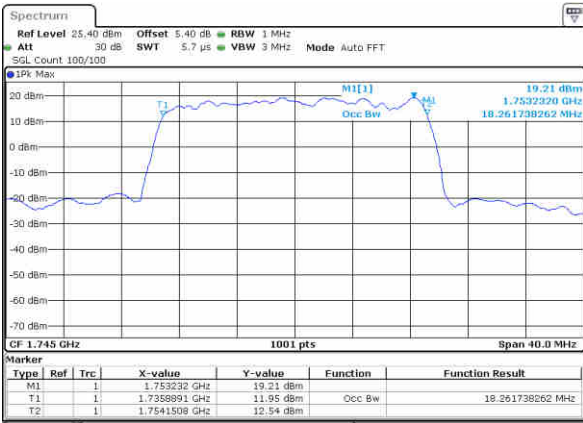
Date: 17 MAY 2020 02:56:19

Middle Channel / 20MHz / 16QAM



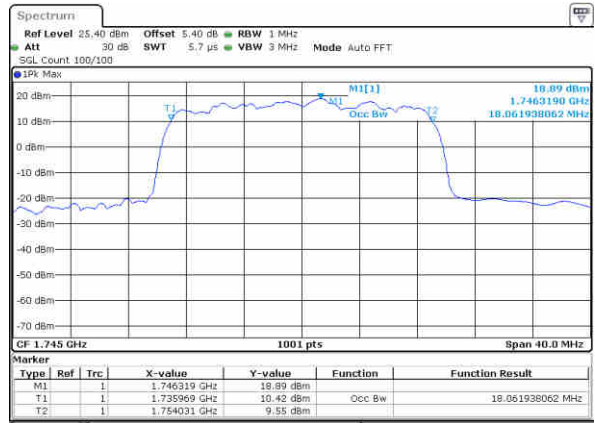
Date: 17 MAY 2020 02:56:29

Highest Channel / 20MHz / QPSK



Date: 17 MAY 2020 02:56:49

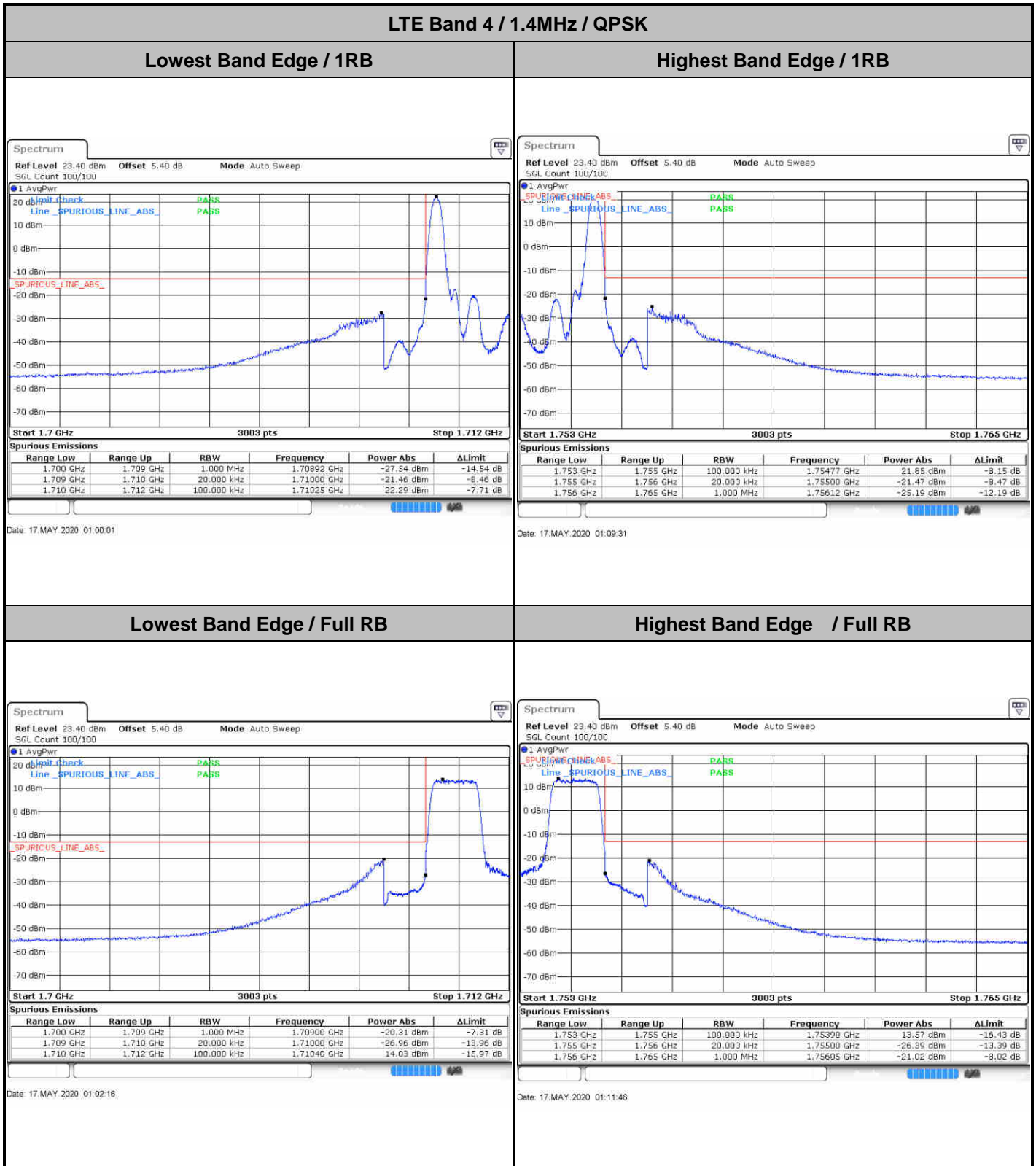
Highest Channel / 20MHz / 16QAM



Date: 17 MAY 2020 02:56:59



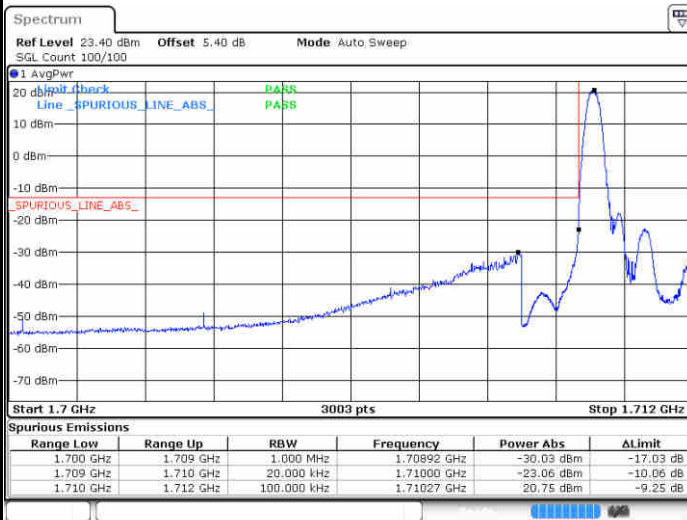
# Conducted Band Edge





LTE Band 4 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



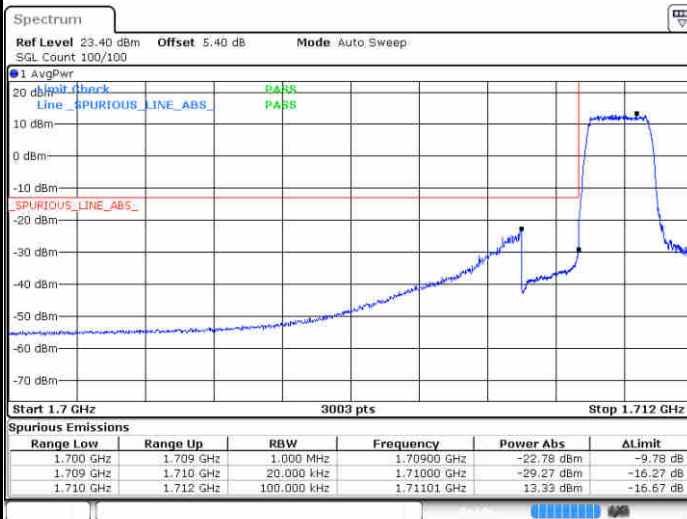
Date: 17.MAY.2020 01:01:09

Highest Band Edge / 1 RB



Date: 17.MAY.2020 01:10:38

Lowest Band Edge / Full RB



Date: 17.MAY.2020 01:03:24

Highest Band Edge / Full RB

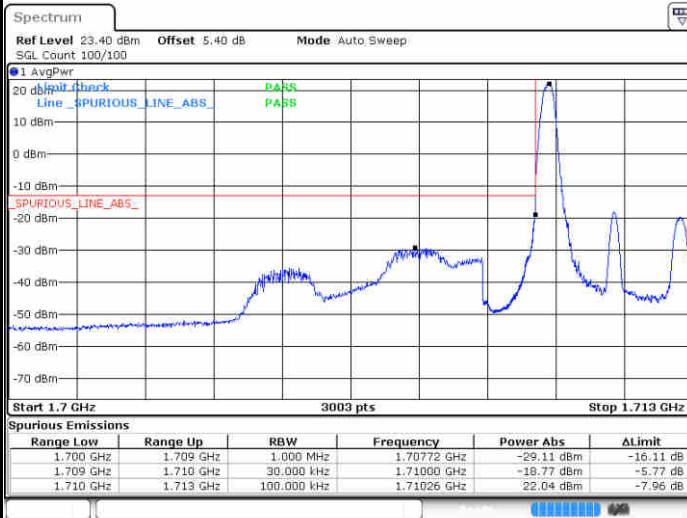


Date: 17.MAY.2020 01:12:54



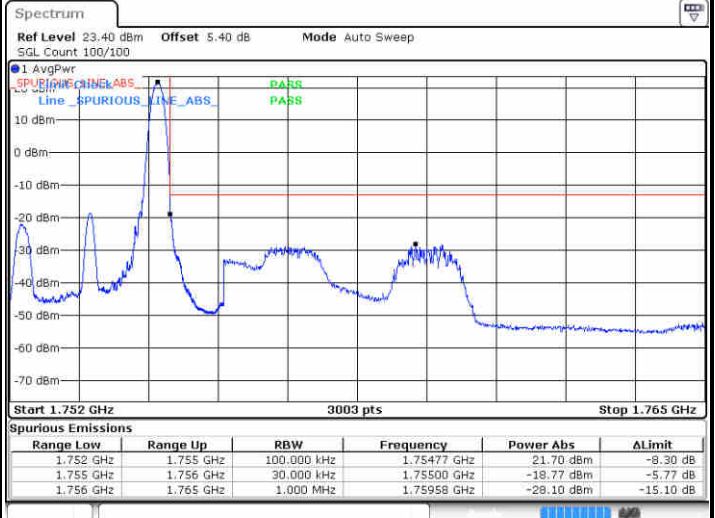
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



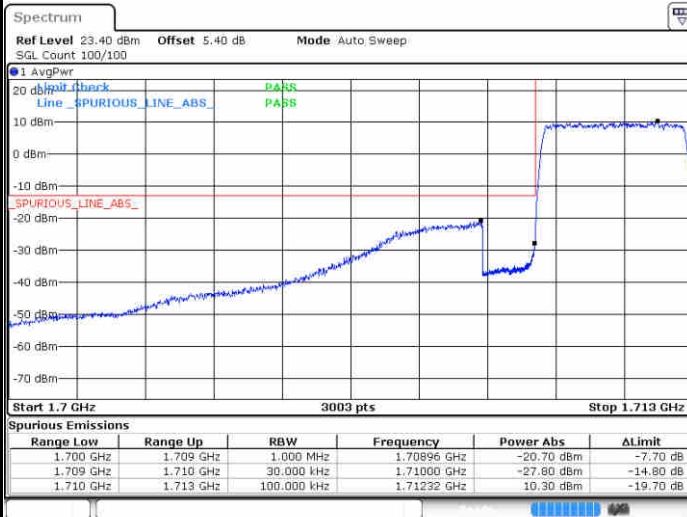
Date: 17.MAY.2020 01:16:31

Highest Band Edge / 1 RB



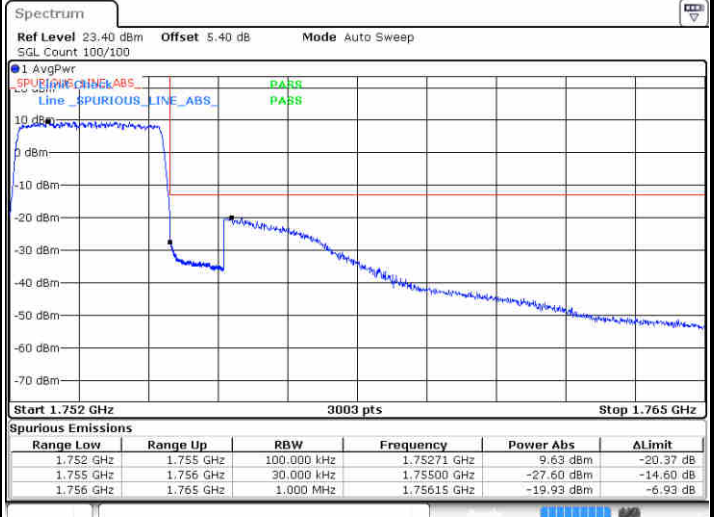
Date: 17.MAY.2020 01:28:00

Lowest Band Edge / Full RB



Date: 17.MAY.2020 01:18:46

Highest Band Edge / Full RB

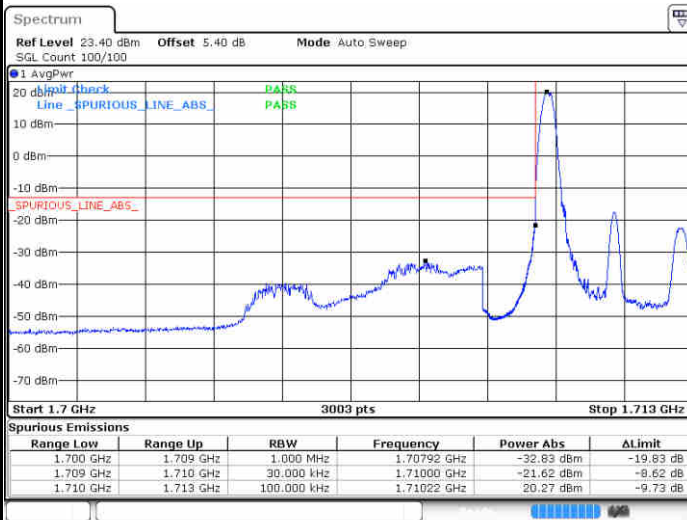


Date: 17.MAY.2020 01:28:15



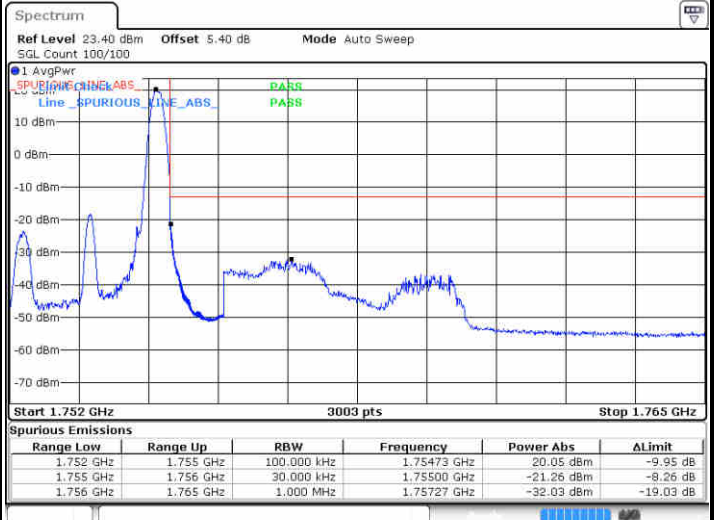
LTE Band 4 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



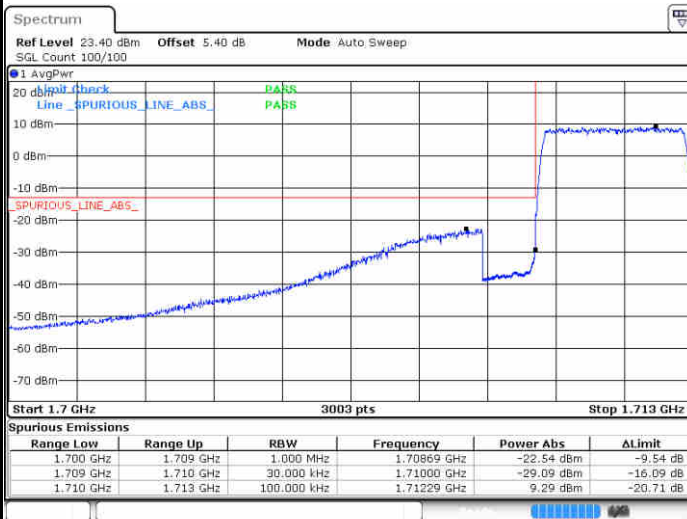
Date: 17.MAY.2020 01:17:38

Highest Band Edge / 1 RB



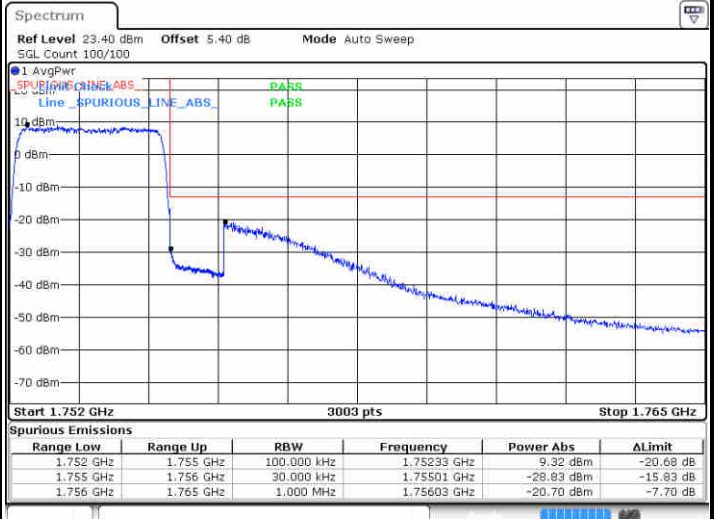
Date: 17.MAY.2020 01:27:07

Lowest Band Edge / Full RB



Date: 17.MAY.2020 01:19:53

Highest Band Edge / Full RB

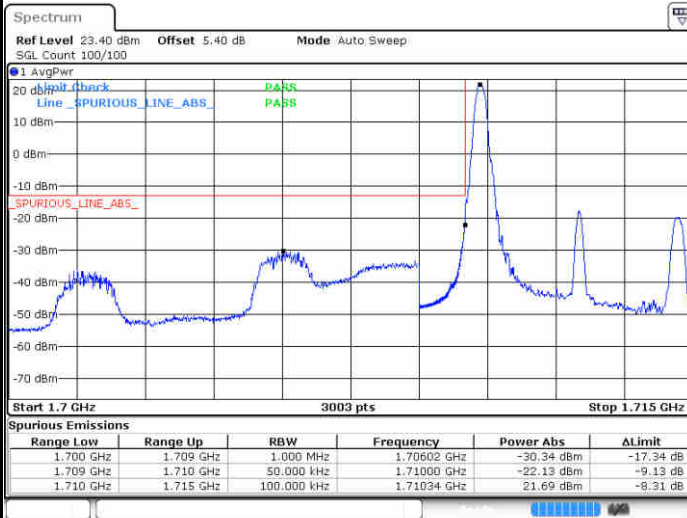


Date: 17.MAY.2020 01:29:23



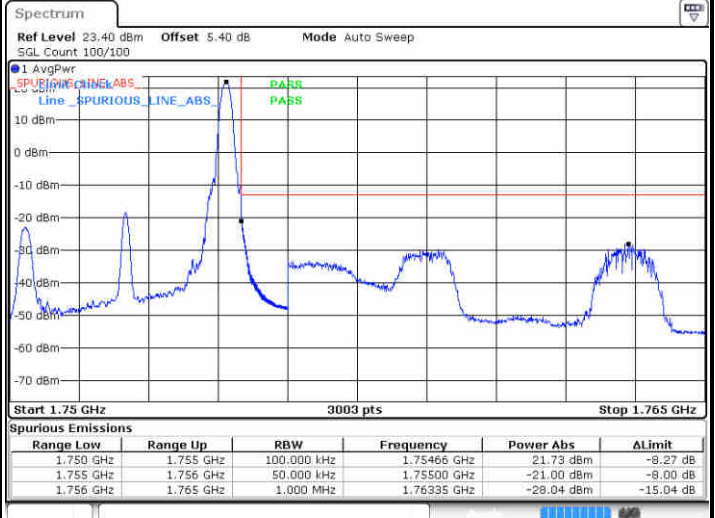
LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / 1 RB



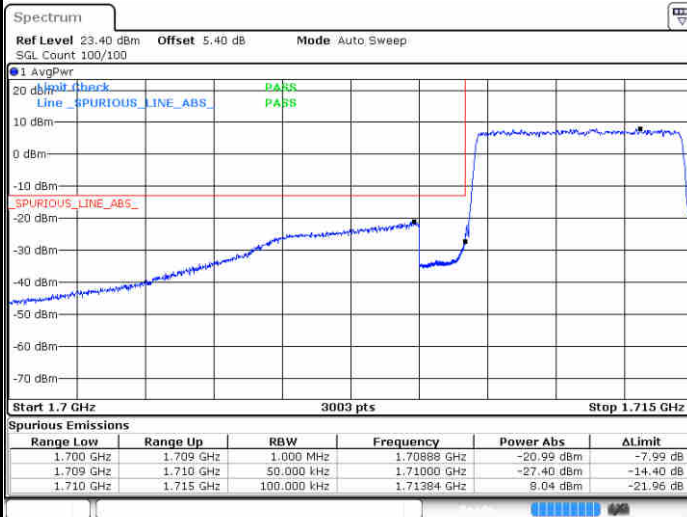
Date: 17.MAY.2020 01:33:00

Highest Band Edge / 1 RB



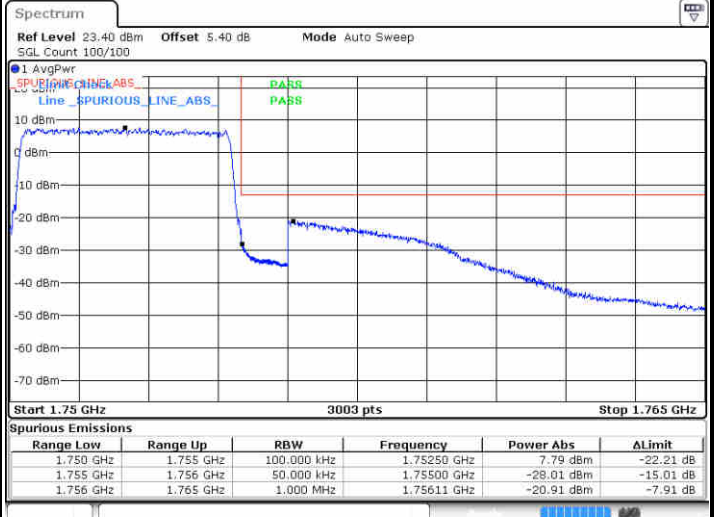
Date: 17.MAY.2020 01:42:29

Lowest Band Edge / Full RB



Date: 17.MAY.2020 01:35:15

Highest Band Edge / Full RB



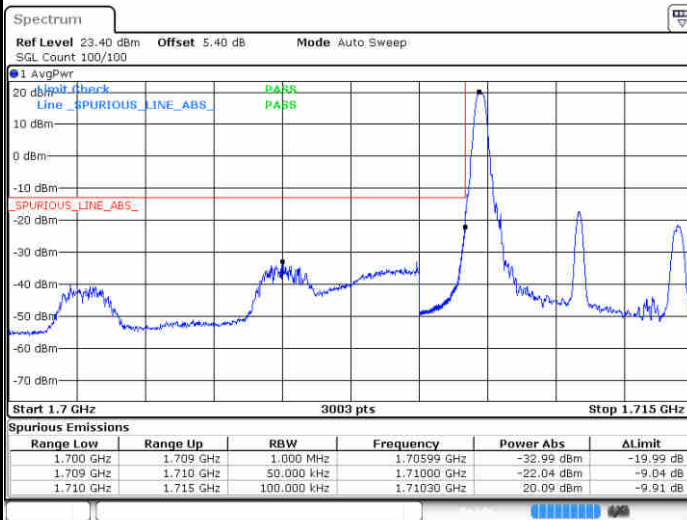
Date: 17.MAY.2020 01:44:44





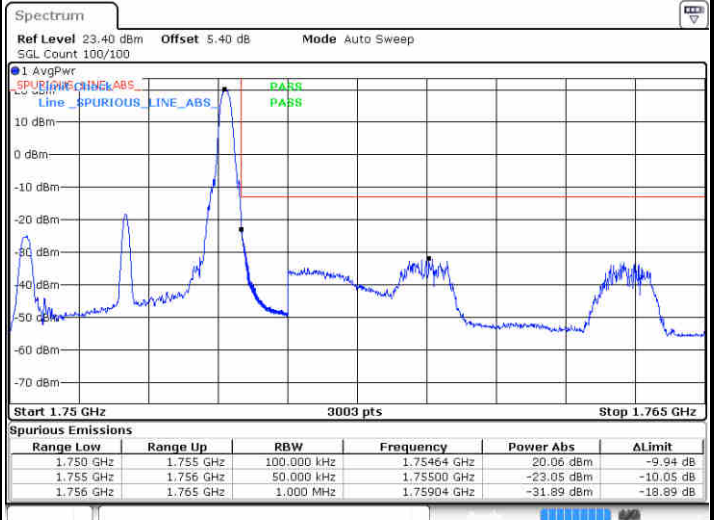
LTE Band 4 / 5MHz / 16QAM

Lowest Band Edge / 1RB



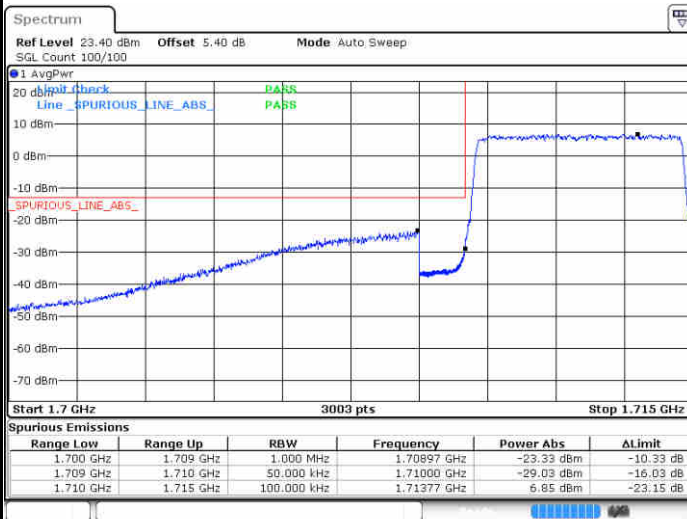
Date: 17.MAY.2020 01:34:07

Highest Band Edge / 1 RB



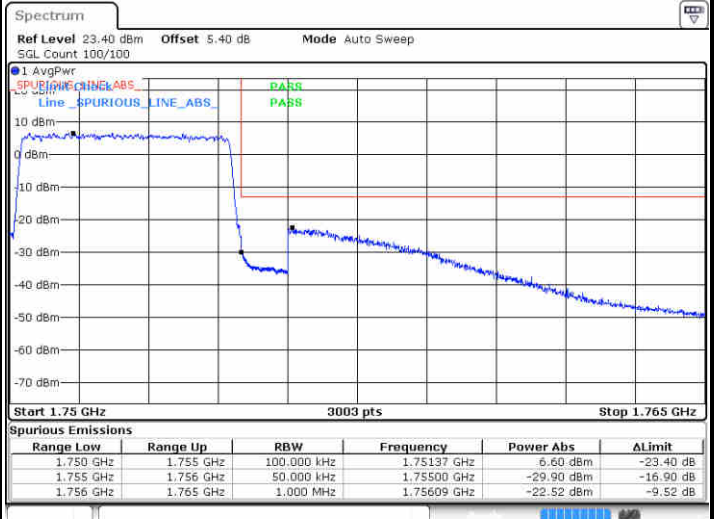
Date: 17.MAY.2020 01:43:37

Lowest Band Edge / Full RB



Date: 17.MAY.2020 01:36:22

Highest Band Edge / Full RB



Date: 17.MAY.2020 01:45:52