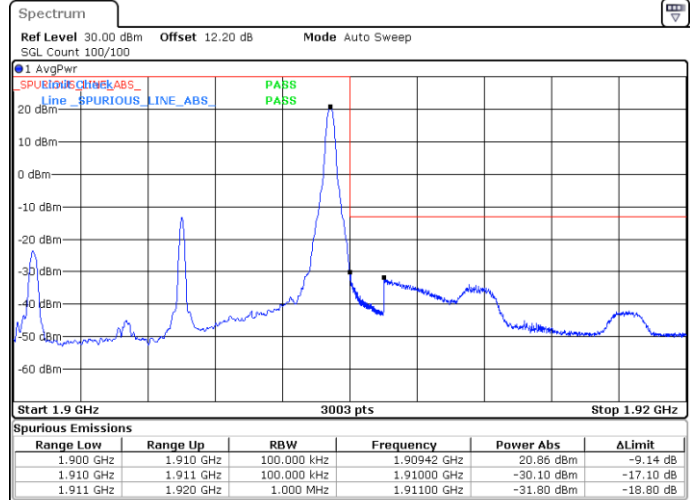
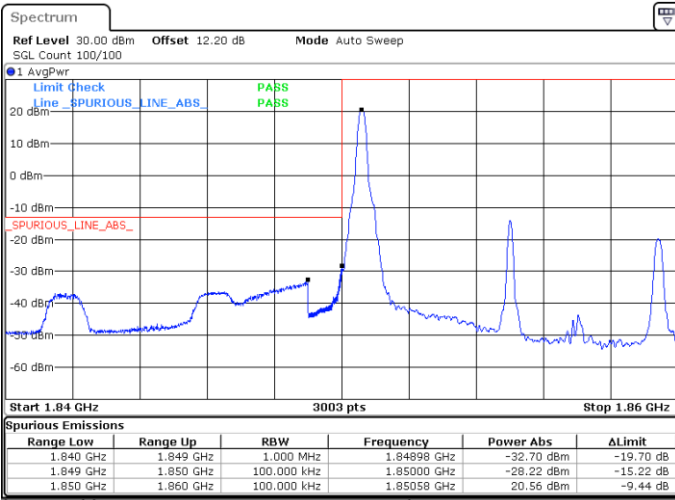




LTE Band 2 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

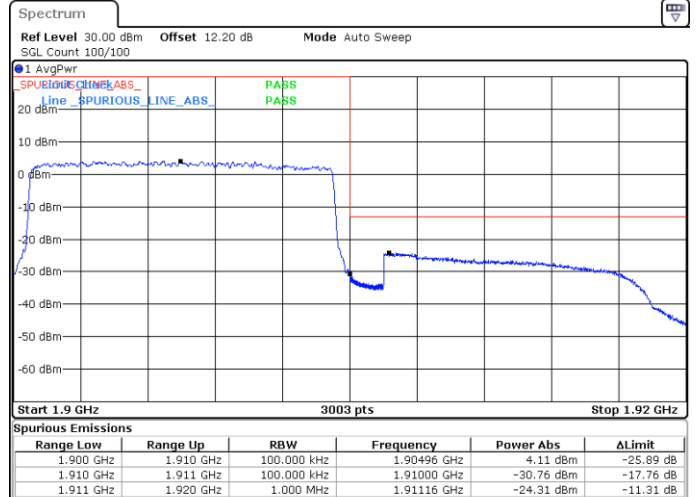
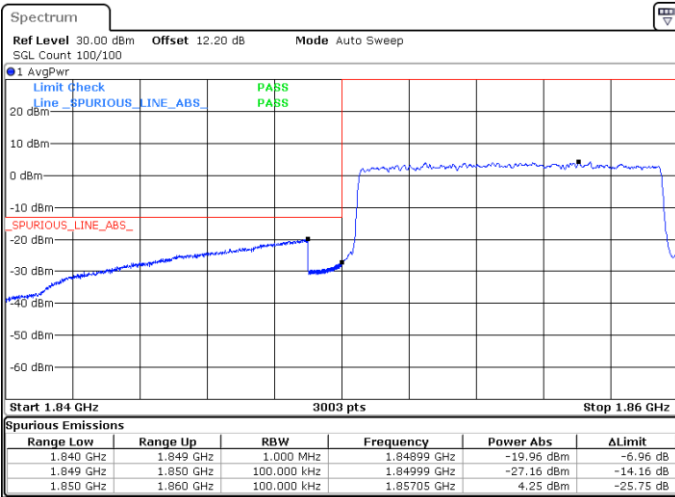


Date: 17.MAY.2020 16:15:34

Date: 17.MAY.2020 16:23:39

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



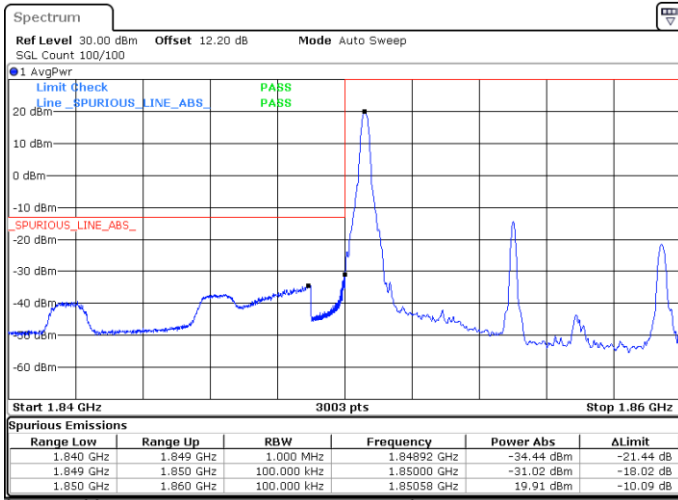
Date: 17.MAY.2020 16:16:34

Date: 17.MAY.2020 16:25:38



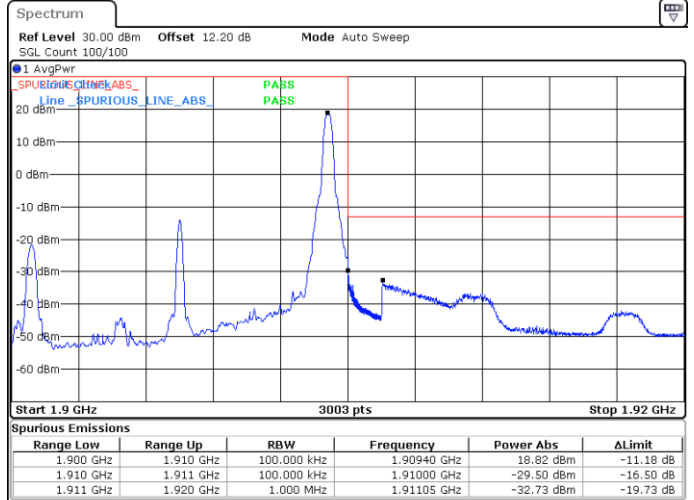
LTE Band 2 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



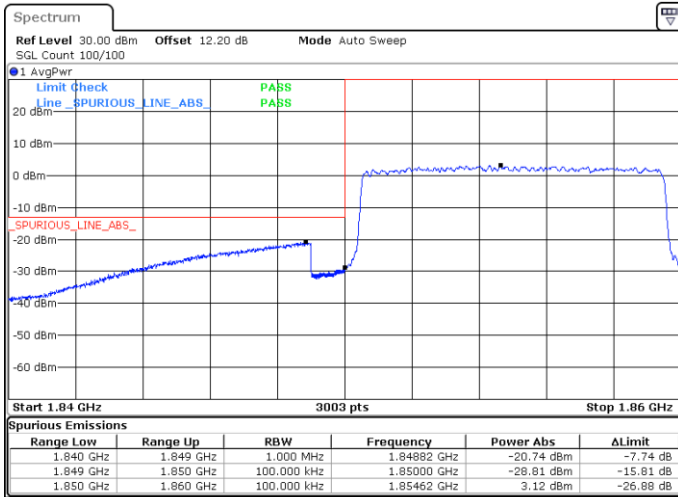
Date: 17.MAY.2020 16:01:14

Highest Band Edge / 1 RB



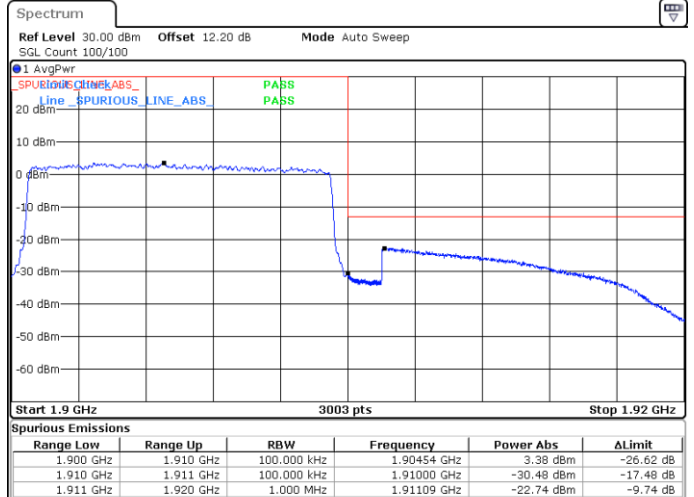
Date: 17.MAY.2020 16:24:38

Lowest Band Edge / Full RB



Date: 17.MAY.2020 16:17:34

Highest Band Edge / Full RB



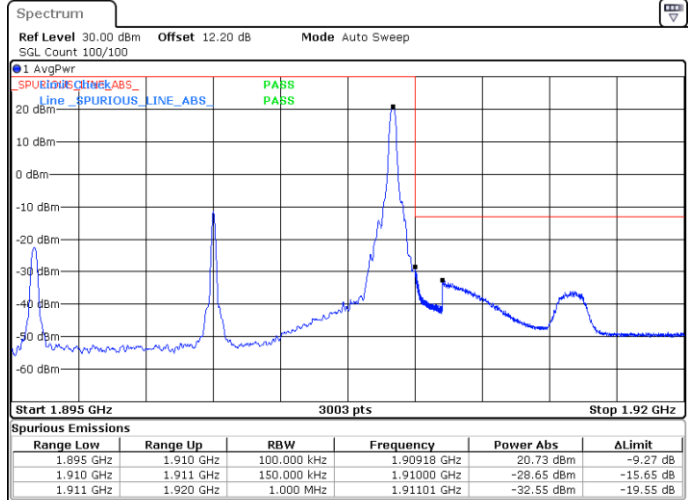
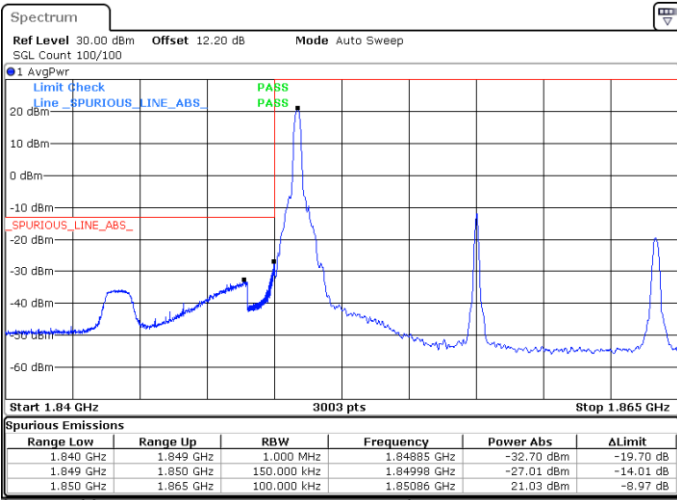
Date: 17.MAY.2020 16:49:18



LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

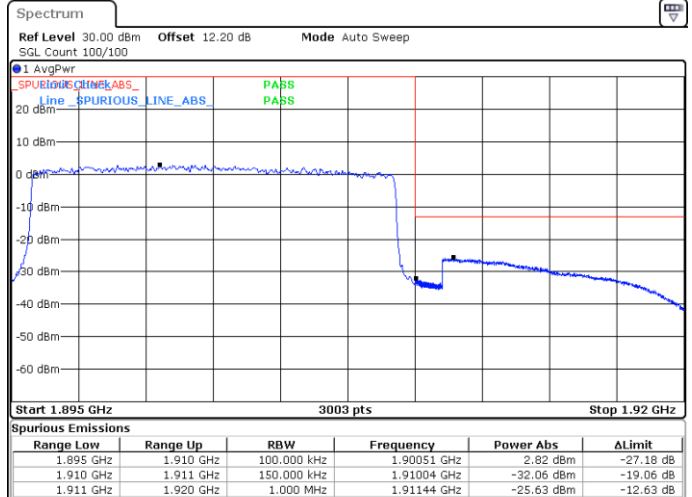
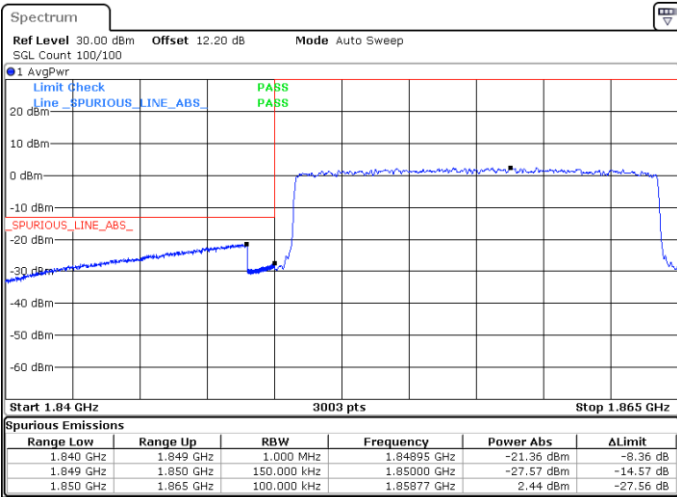


Date: 17.MAY.2020 16:34:46

Date: 17.MAY.2020 16:40:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 17.MAY.2020 16:36:46

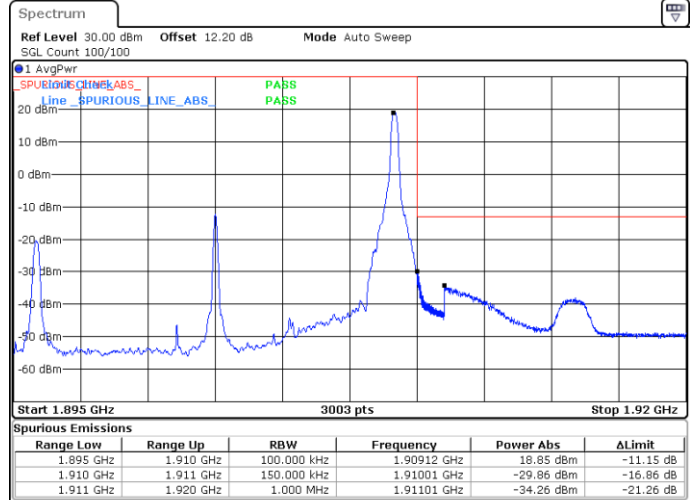
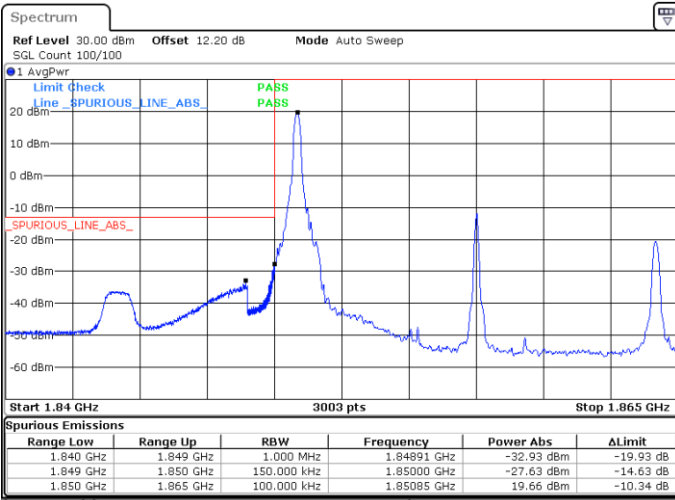
Date: 17.MAY.2020 16:42:21



LTE Band 2 / 15MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

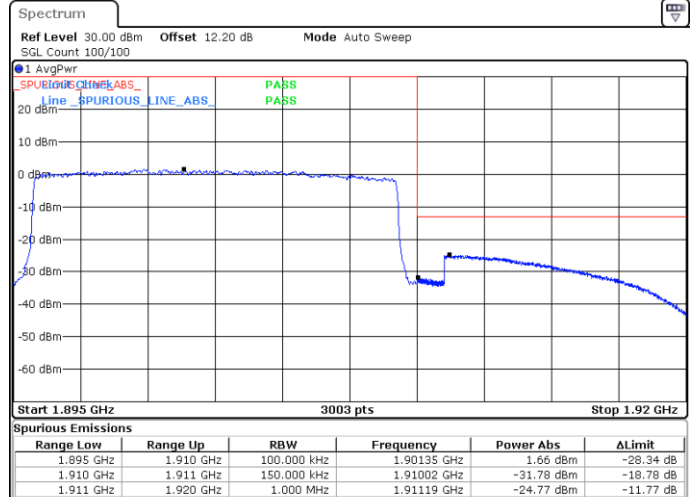
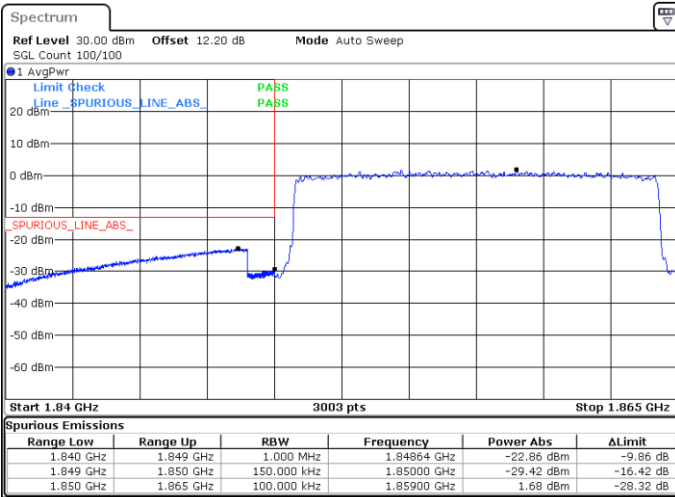


Date: 17.MAY.2020 16:35:46

Date: 17.MAY.2020 16:41:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 17.MAY.2020 16:37:46

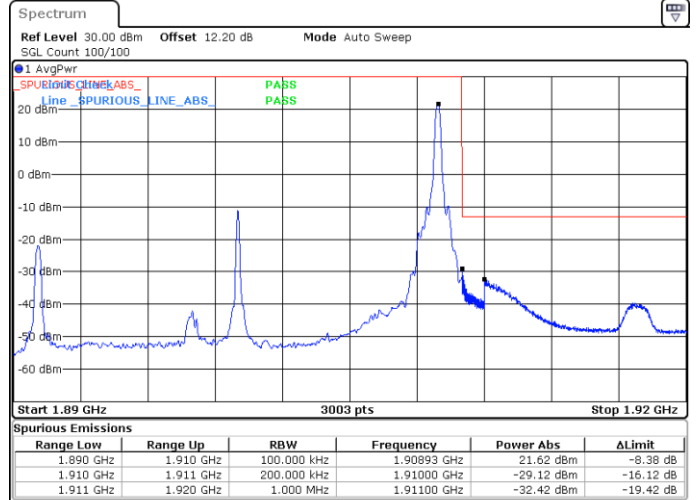
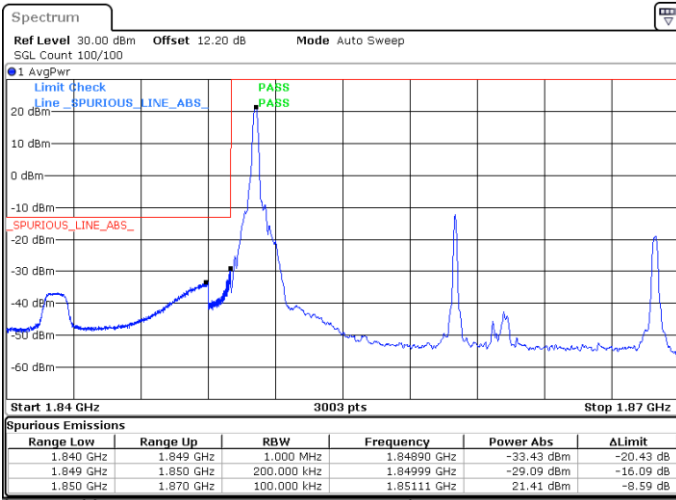
Date: 17.MAY.2020 16:43:21



LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

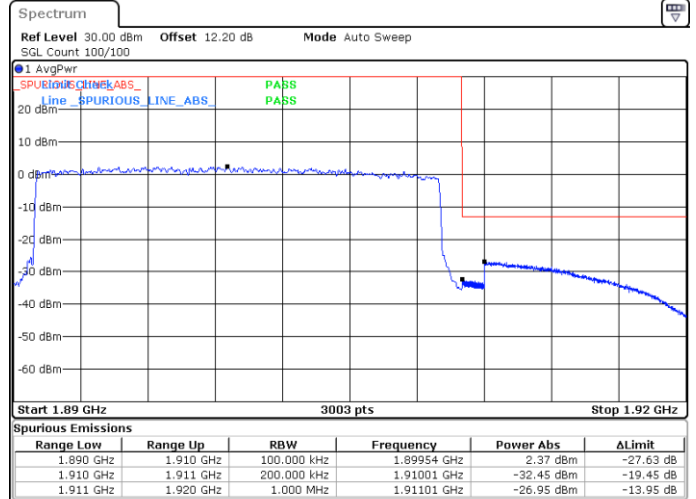
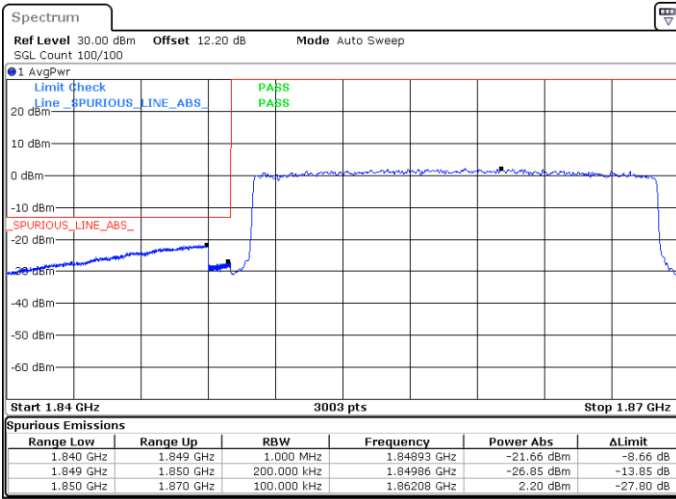


Date: 15.MAY.2020 17:30:13

Date: 15.MAY.2020 17:38:26

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.MAY.2020 17:32:13

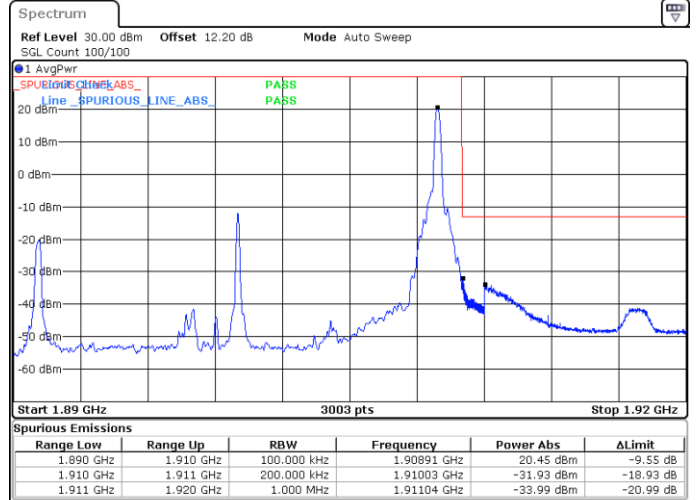
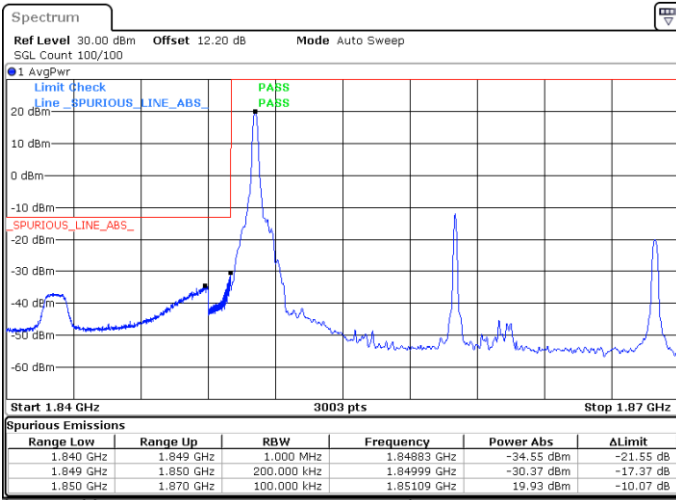
Date: 15.MAY.2020 17:40:26



LTE Band 2 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

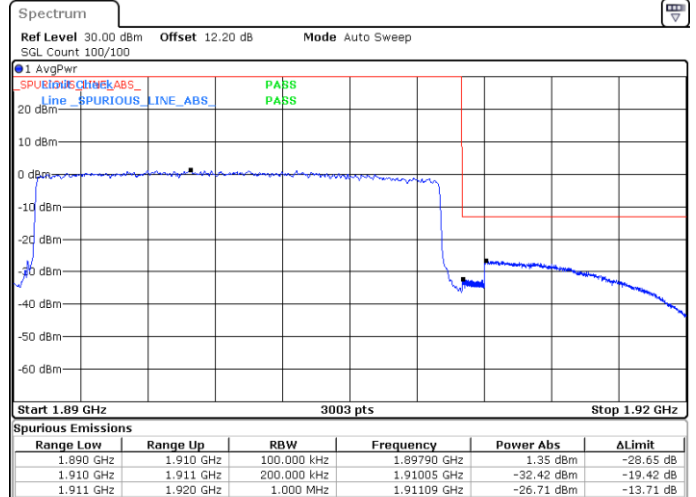
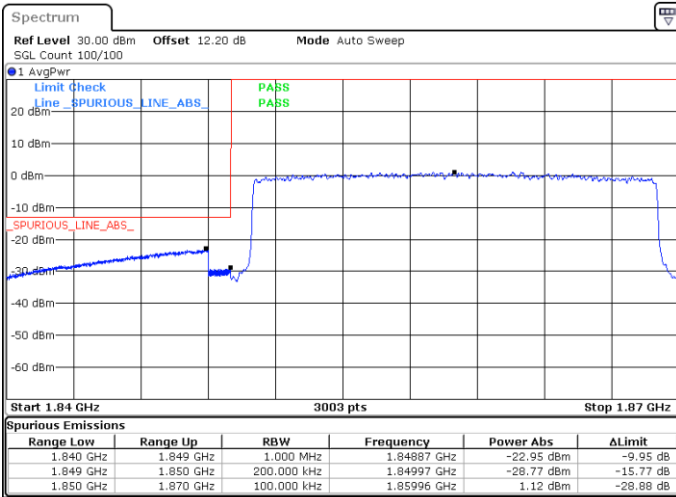


Date: 15.MAY.2020 17:31:13

Date: 15.MAY.2020 17:39:26

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.MAY.2020 17:33:13

Date: 15.MAY.2020 17:41:26

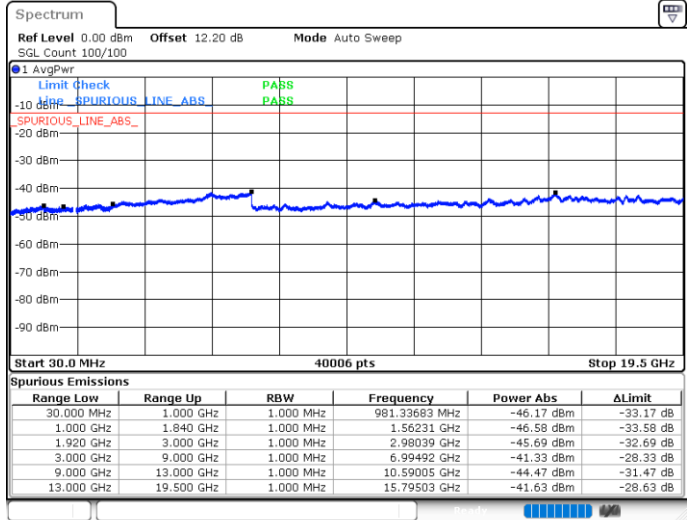
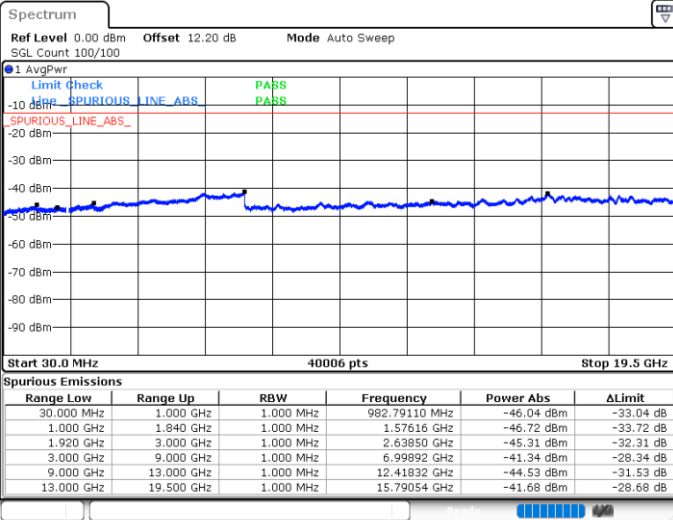


Conducted Spurious Emission

LTE Band 2 / 1.4MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

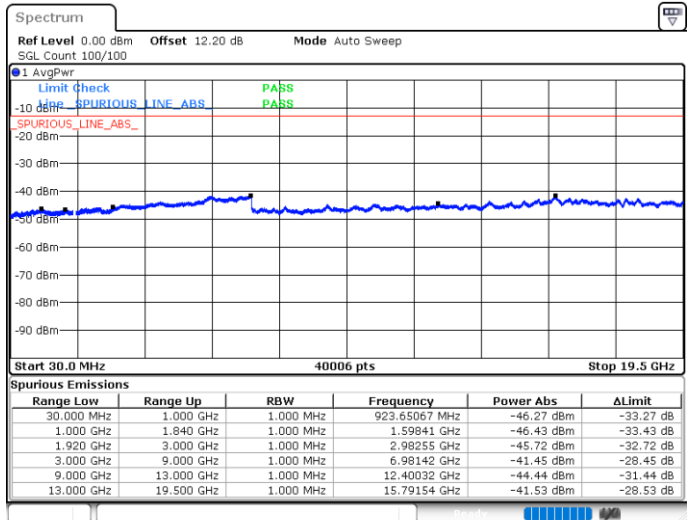
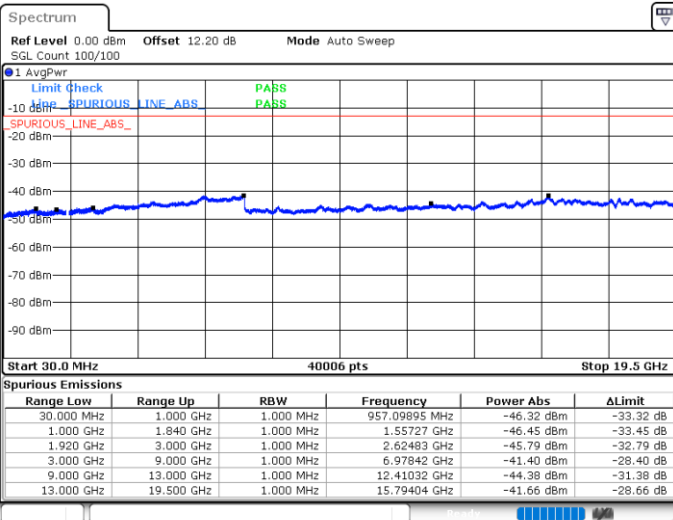


Date: 15.MAY.2020 17:49:11

Date: 15.MAY.2020 17:49:51

Middle Channel / QPSK

Middle Channel / 16QAM



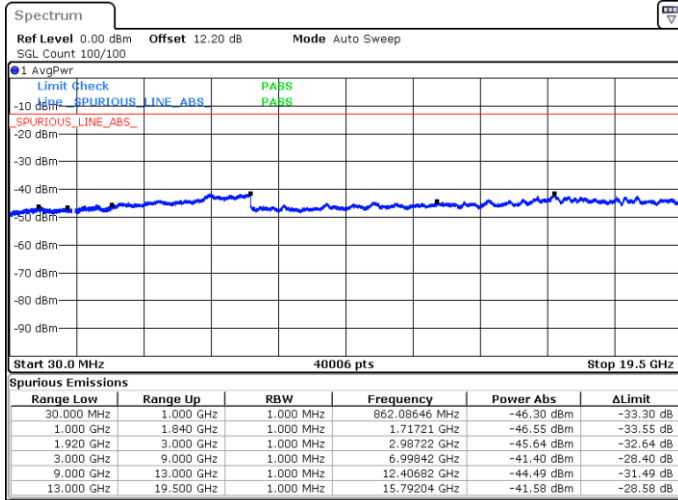
Date: 15.MAY.2020 17:51:17

Date: 15.MAY.2020 17:51:56



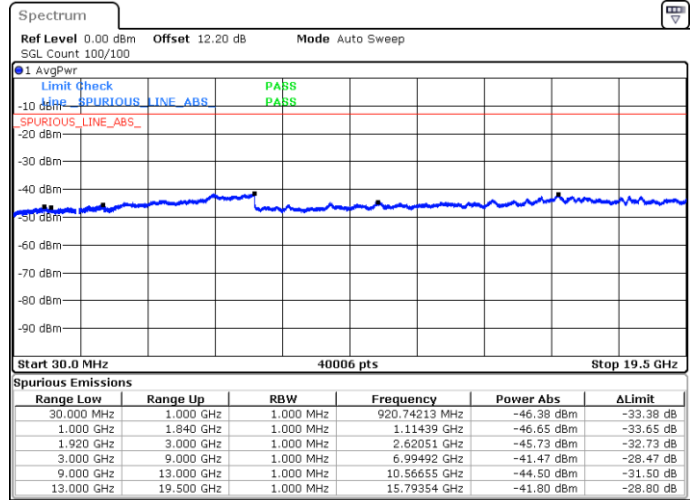
LTE Band 2 / 1.4MHz

Highest Channel / QPSK



Date: 15.MAY.2020 17:57:37

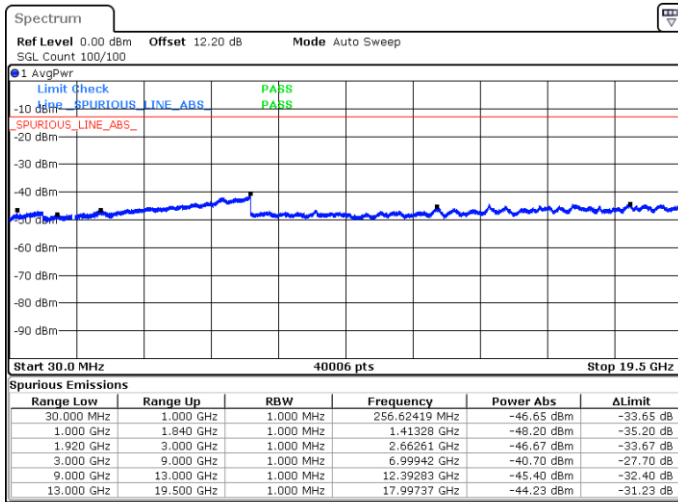
Highest Channel / 16QAM



Date: 15.MAY.2020 17:58:17

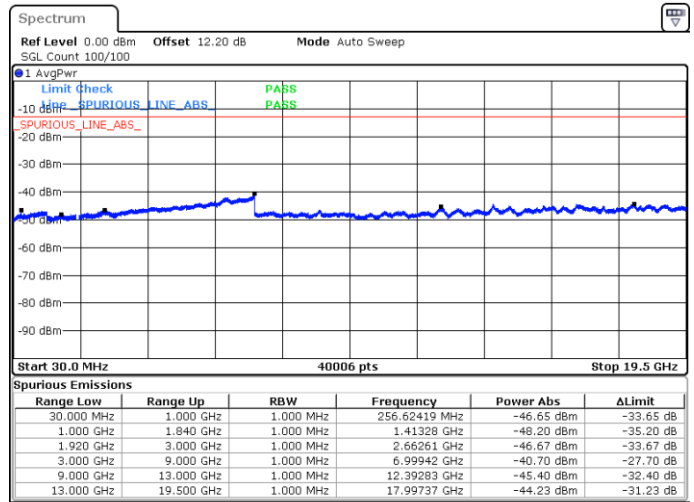
LTE Band 2 / 3MHz

Lowest Channel / QPSK



Date: 17.MAY.2020 16:03:05

Lowest Channel / 16QAM



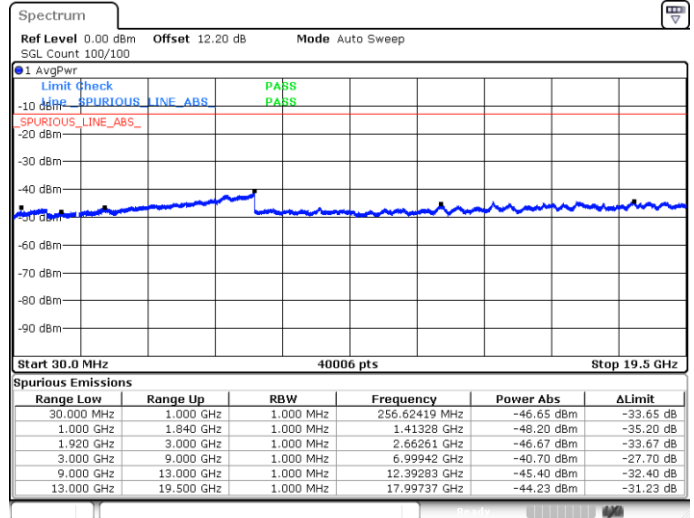
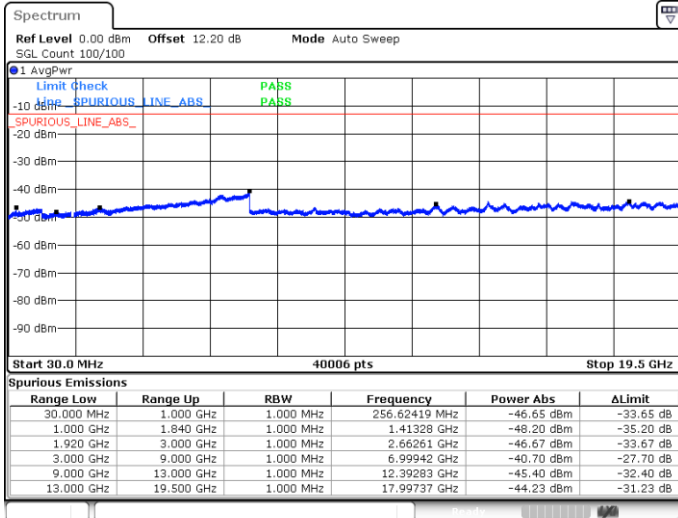
Date: 17.MAY.2020 16:03:05



LTE Band 2 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

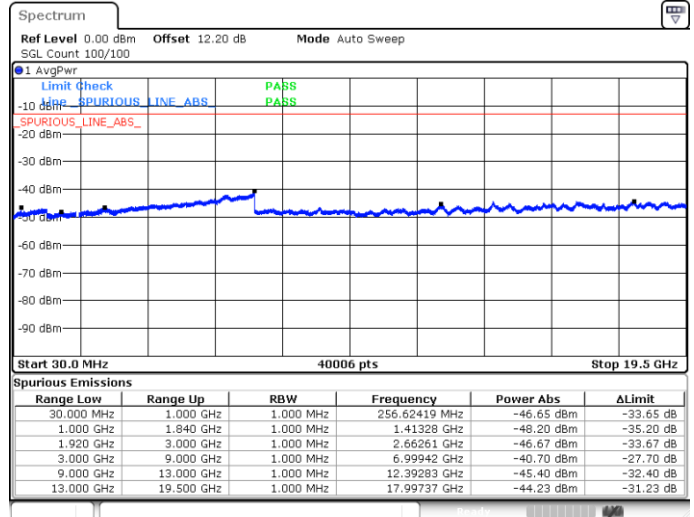
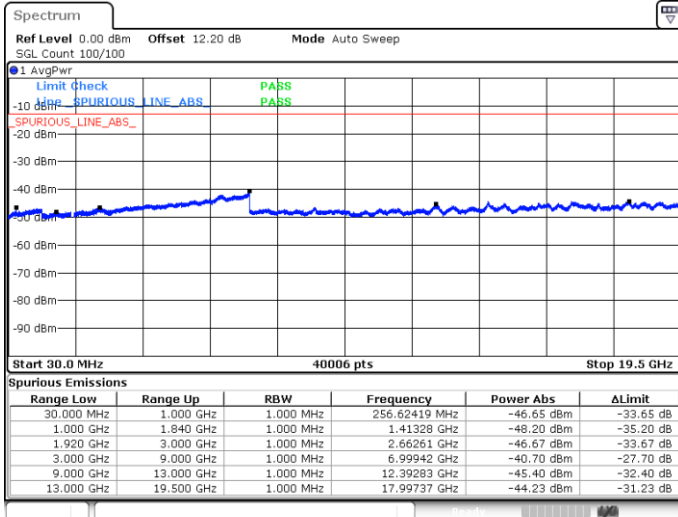


Date: 17.MAY.2020 16:03:05

Date: 17.MAY.2020 16:03:05

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 17.MAY.2020 16:03:05

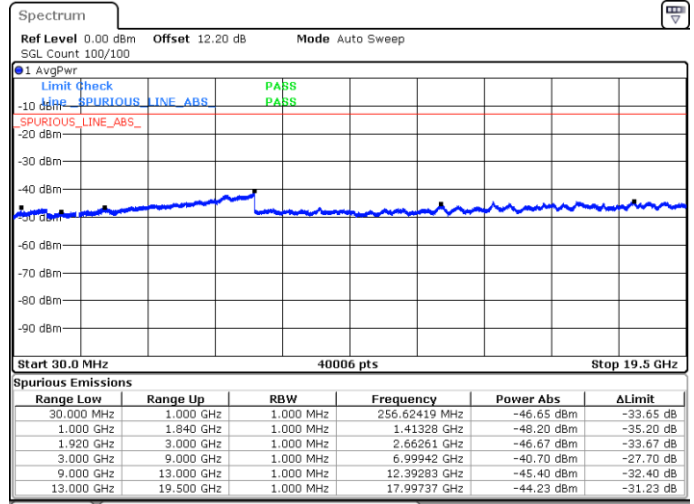
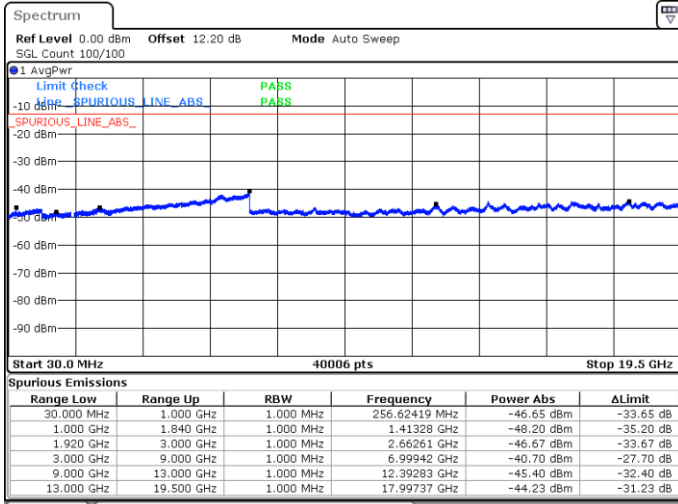
Date: 17.MAY.2020 16:03:05



LTE Band 2 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

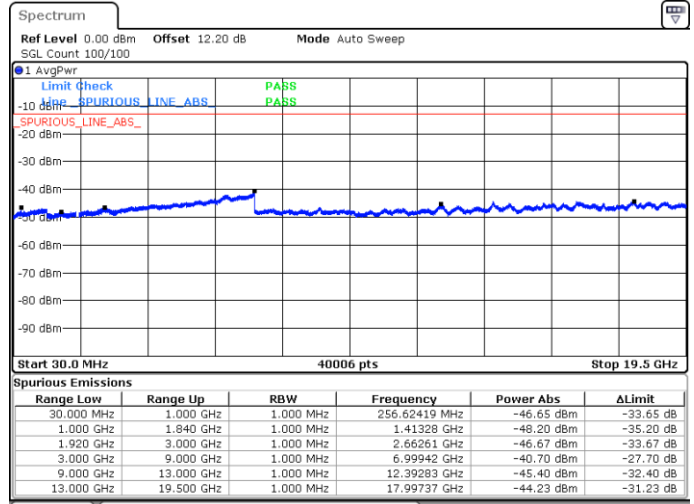
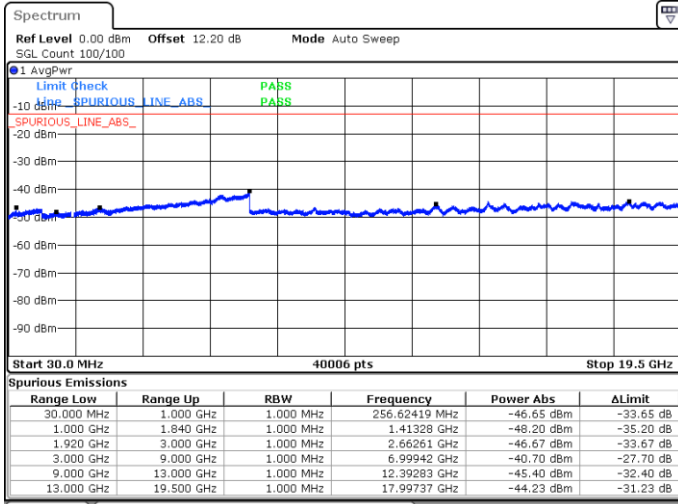


Date: 17.MAY.2020 16:03:05

Date: 17.MAY.2020 16:03:05

Middle Channel / QPSK

Middle Channel / 16QAM



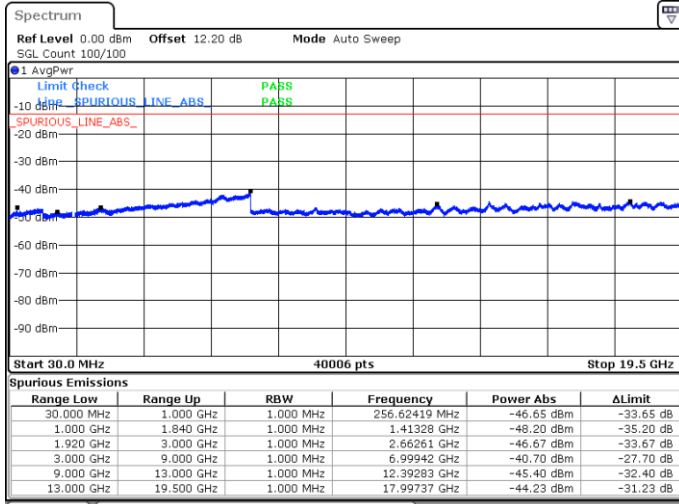
Date: 17.MAY.2020 16:03:05

Date: 17.MAY.2020 16:03:05



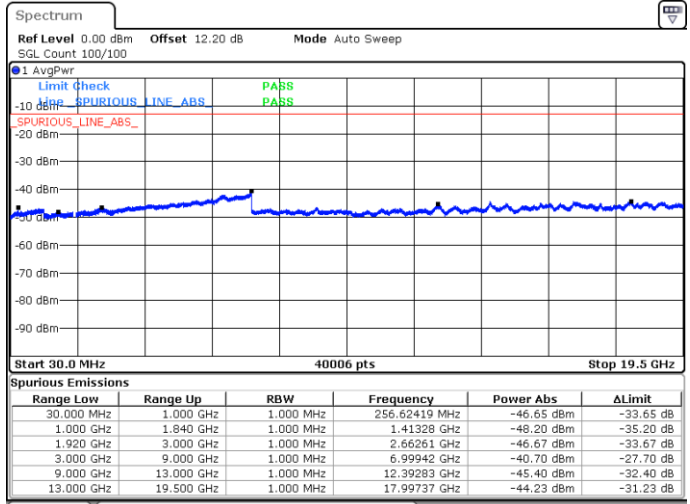
LTE Band 2 / 5MHz

Highest Channel / QPSK



Date: 17.MAY.2020 16:03:05

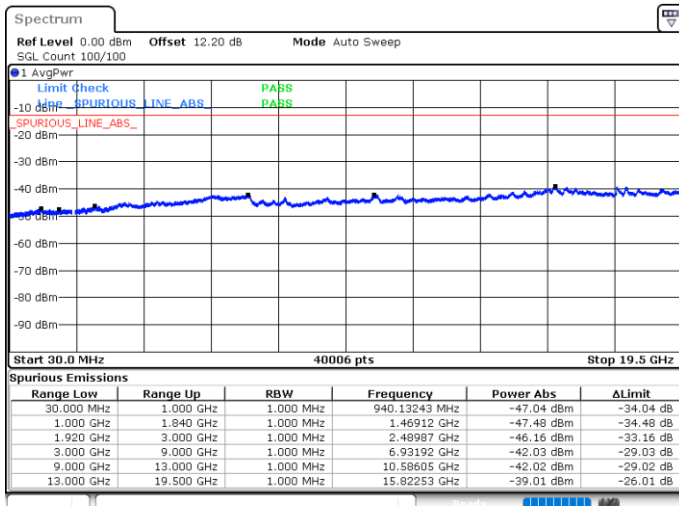
Highest Channel / 16QAM



Date: 17.MAY.2020 16:03:05

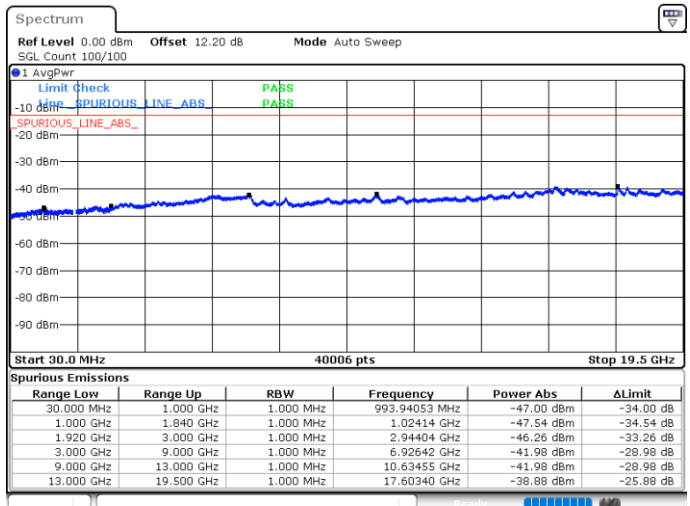
LTE Band 2 / 10MHz

Lowest Channel / QPSK



Date: 1.JUN.2020 09:39:49

Lowest Channel / 16QAM



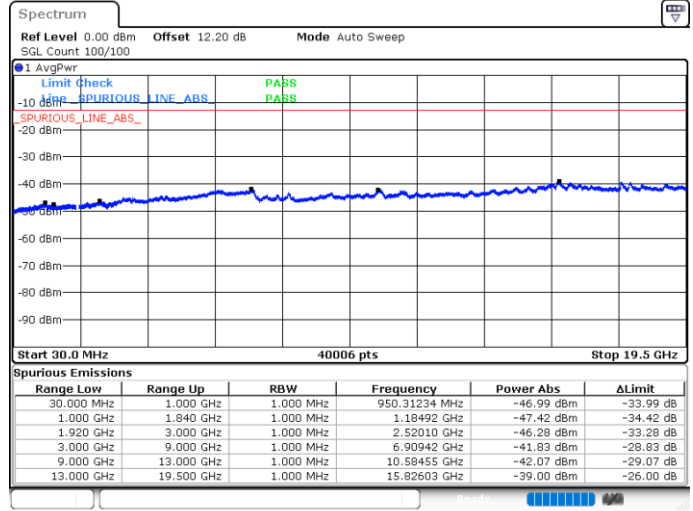
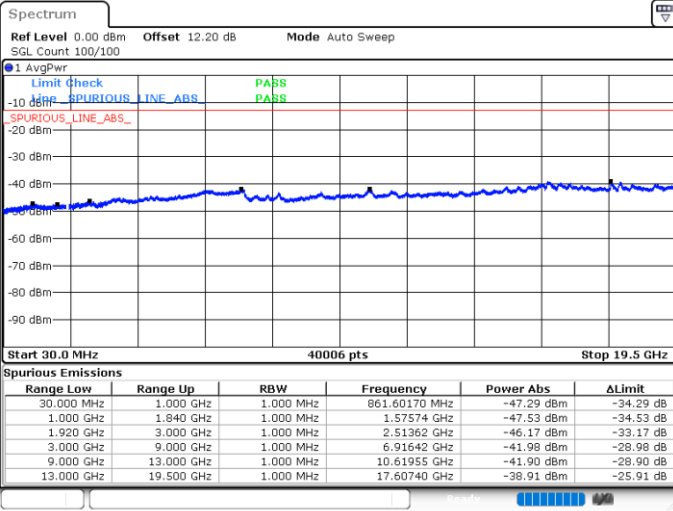
Date: 1.JUN.2020 09:40:39



LTE Band 2 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

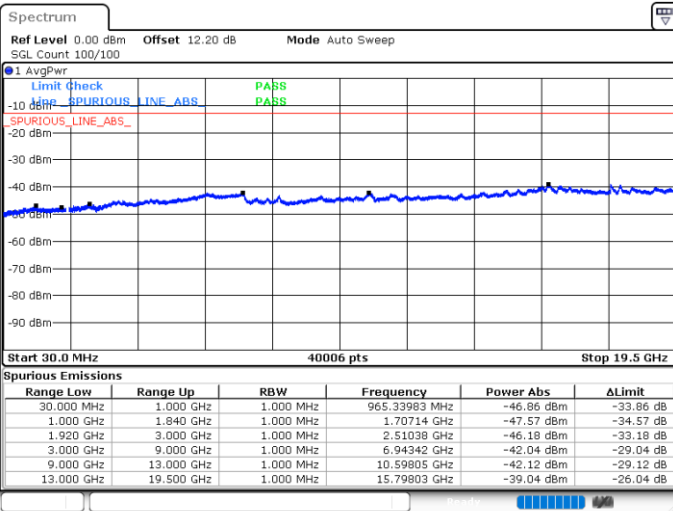


Date: 1.JUN.2020 09:41:29

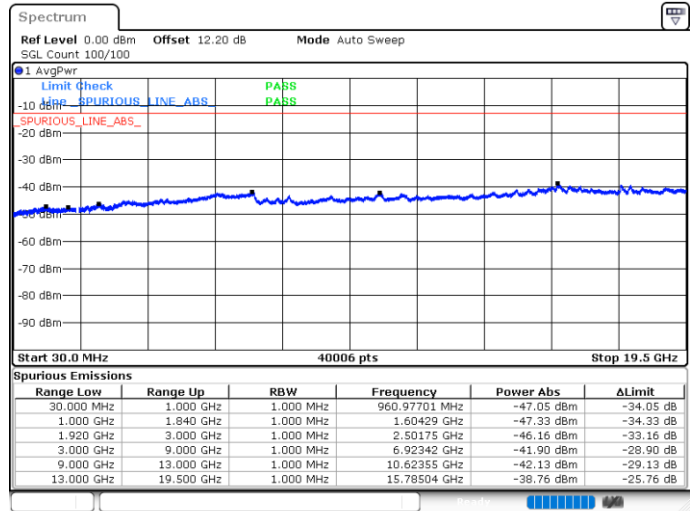
Date: 1.JUN.2020 09:42:19

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.JUN.2020 09:43:09



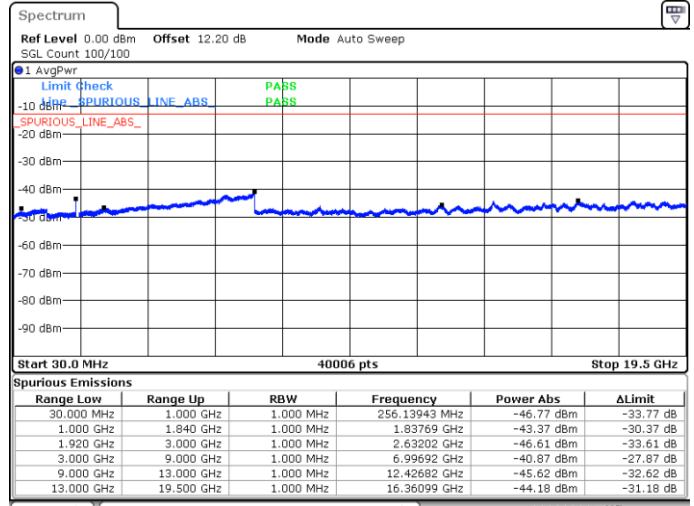
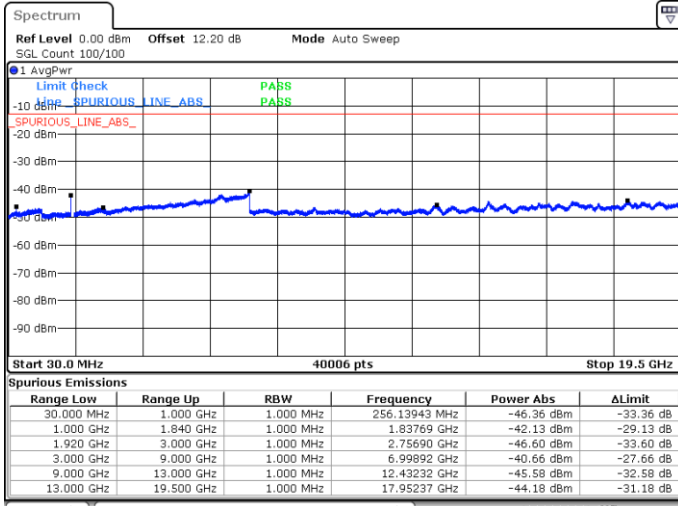
Date: 1.JUN.2020 09:43:59



LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

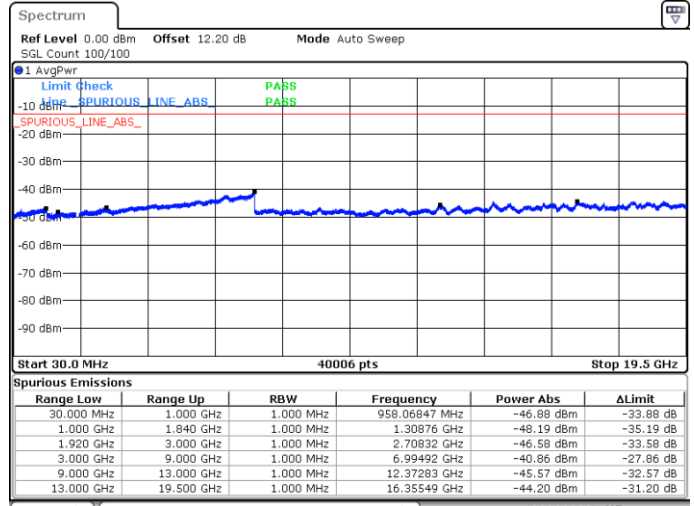
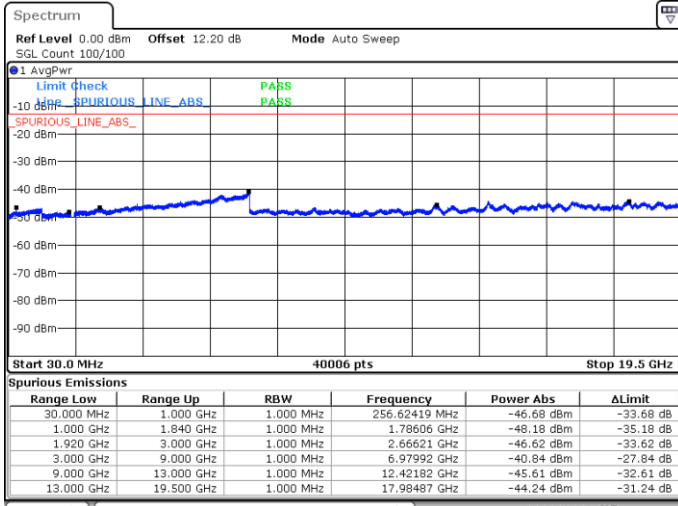


Date: 17.MAY.2020 16:55:09

Date: 17.MAY.2020 16:54:10

Middle Channel / QPSK

Middle Channel / 16QAM



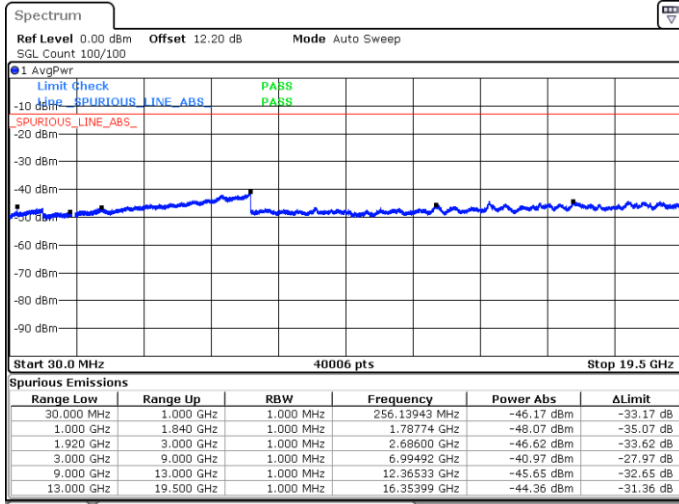
Date: 17.MAY.2020 16:56:56

Date: 17.MAY.2020 16:58:12



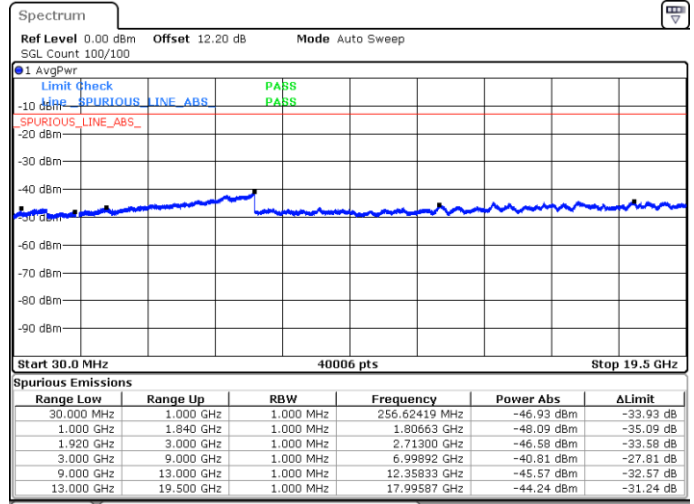
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 17.MAY.2020 16:59:52

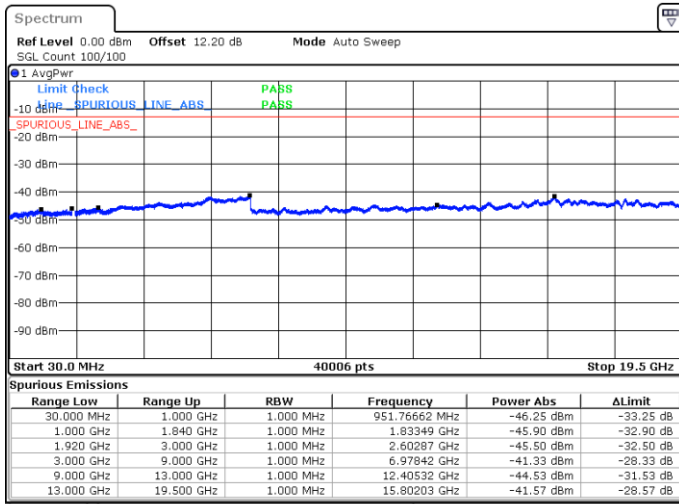
Highest Channel / 16QAM



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

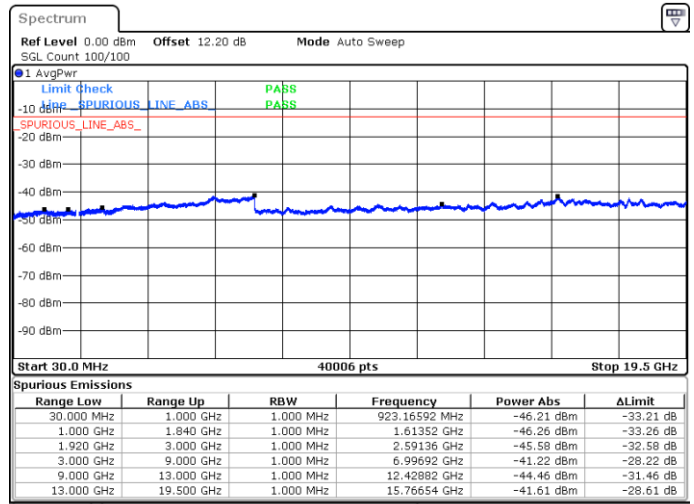
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 15.MAY.2020 17:33:53

Lowest Channel / 16QAM



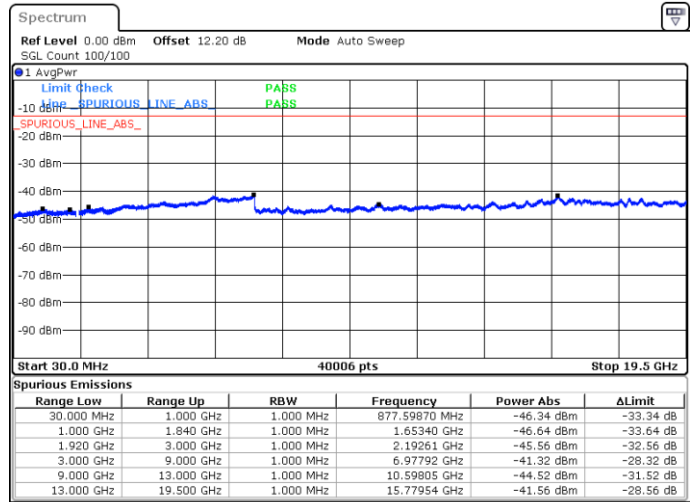
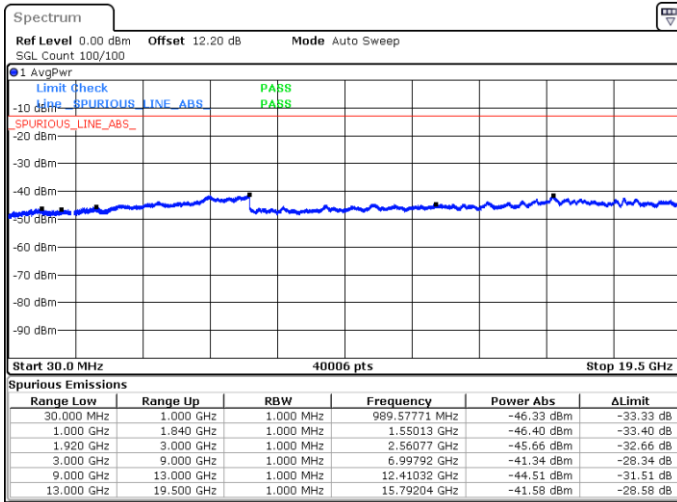
Date: 15.MAY.2020 17:34:33



LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

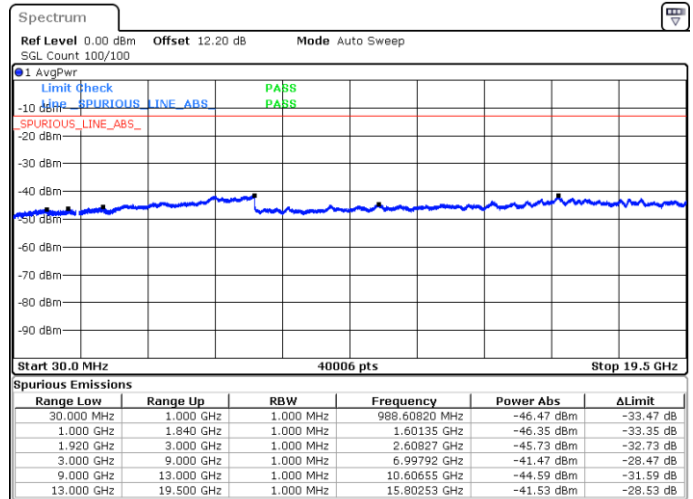
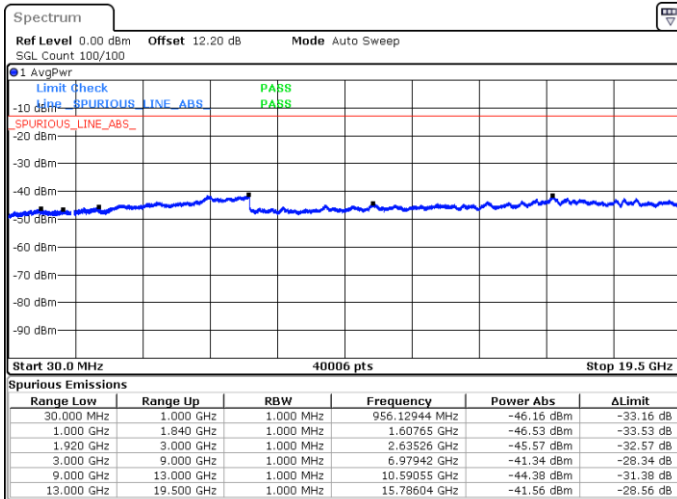


Date: 15.MAY.2020 17:35:59

Date: 15.MAY.2020 17:36:39

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 15.MAY.2020 17:42:06

Date: 15.MAY.2020 17:42:47



Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. 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	4.29	4.67	5.39	5.77	PASS
Middle CH	4.14	4.46	5.22	5.51	
Highest CH	3.74	4.41	4.67	5.42	



LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



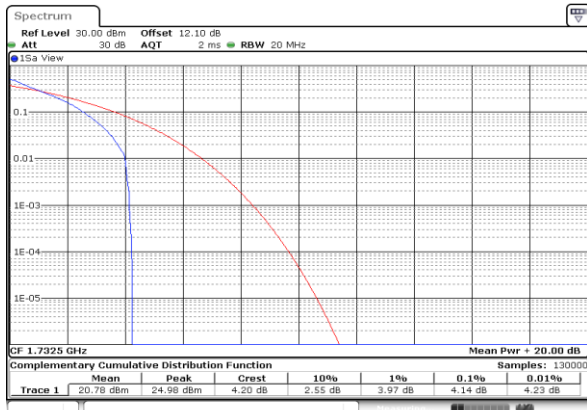
Date: 17.MAY.2020 17:04:59

Lowest Channel / Full RB



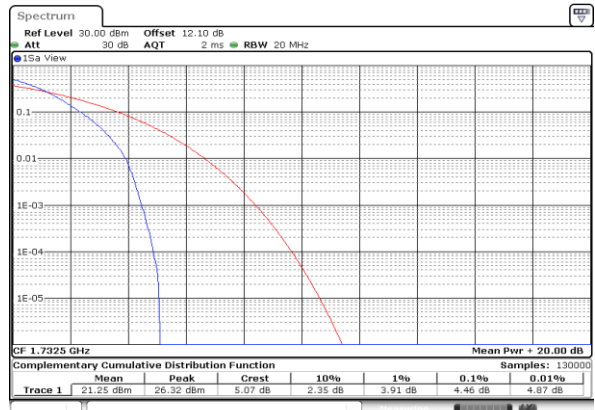
Date: 17.MAY.2020 17:05:10

Middle Channel / 1RB



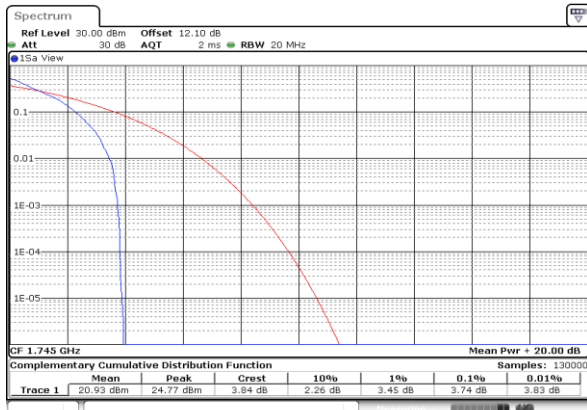
Date: 17.MAY.2020 17:05:21

Middle Channel / Full RB



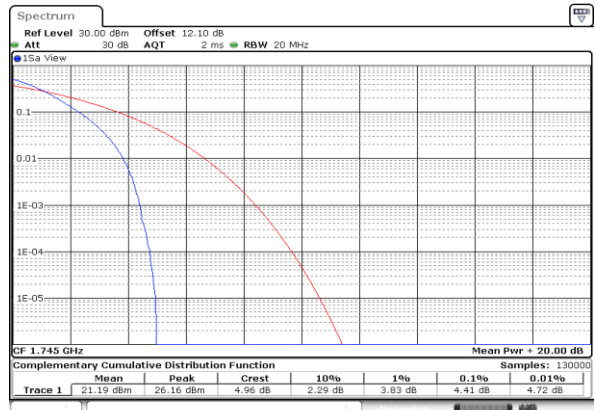
Date: 17.MAY.2020 17:05:31

Highest Channel / 1RB



Date: 17.MAY.2020 17:05:42

Highest Channel / Full RB



Date: 17.MAY.2020 17:06:03

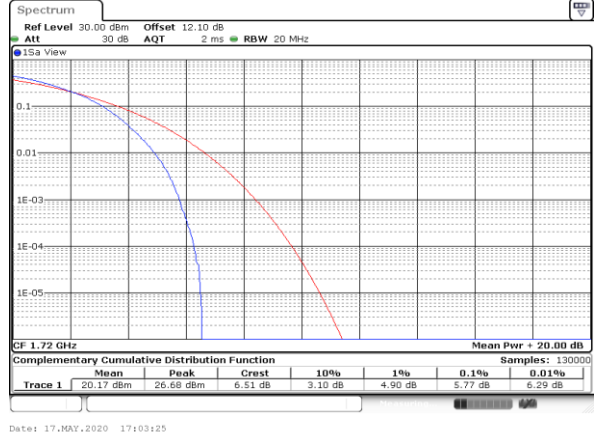


LTE Band 4 / 20MHz / 16QAM

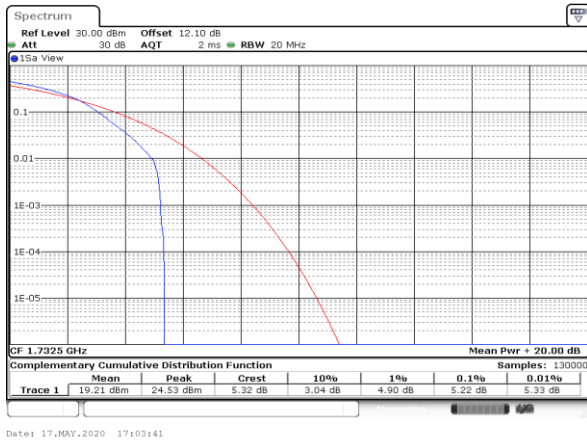
Lowest Channel / 1RB



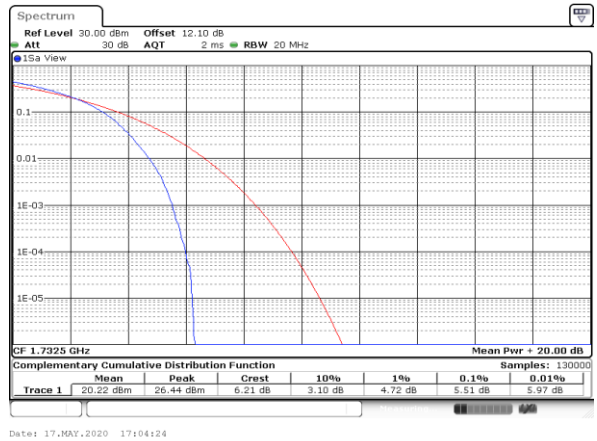
Lowest Channel / Full RB



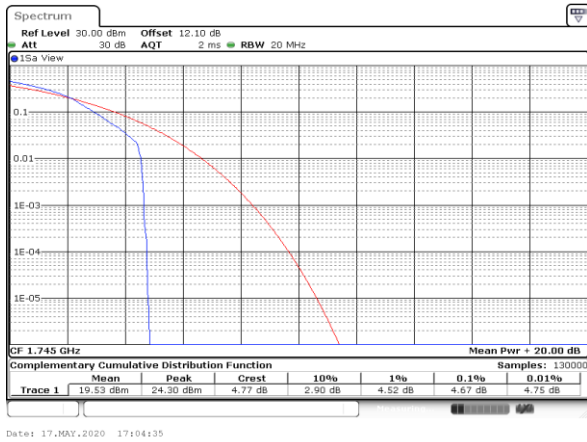
Middle Channel / 1RB



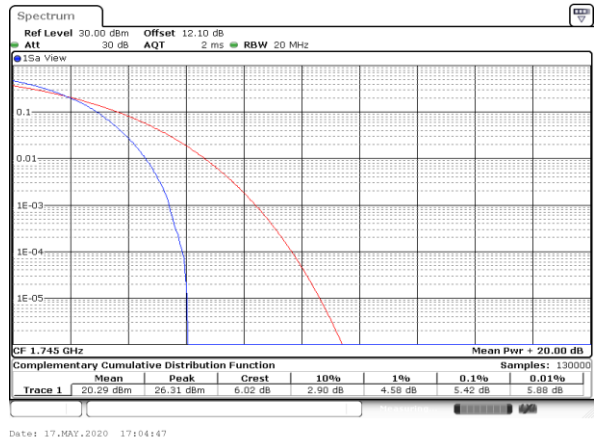
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB





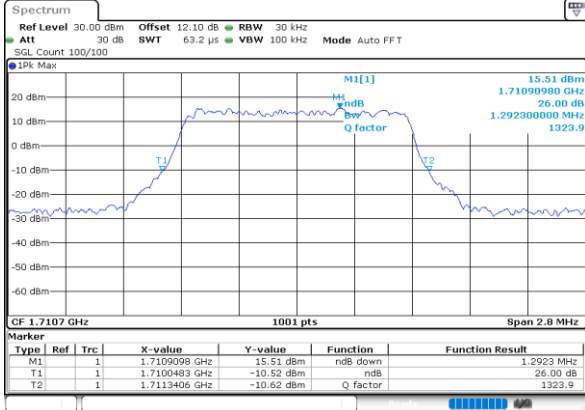
26dB Bandwidth

Mode	LTE Band 4 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.29	1.27	2.99	3.00	4.89	4.95	9.85	9.63	14.48	14.21	18.70	18.78
Middle CH	1.28	1.31	3.02	2.99	4.95	4.92	9.85	9.97	14.33	14.42	19.06	19.10
Highest CH	1.29	1.28	3.00	3.04	4.85	4.93	9.83	9.87	14.12	14.18	19.06	18.86



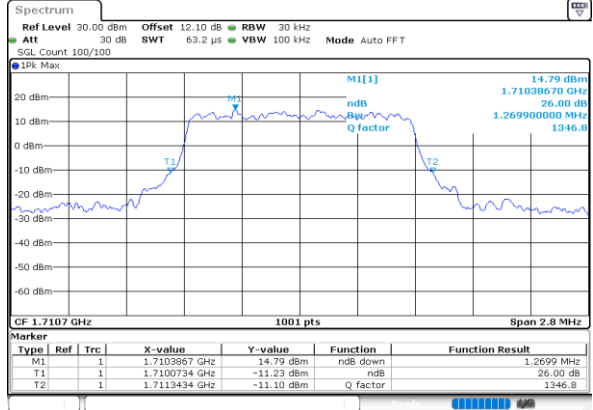
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



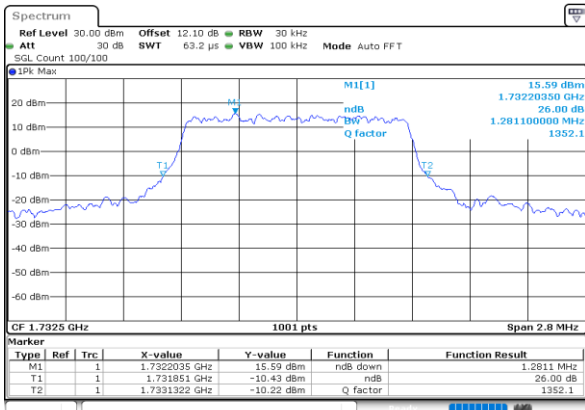
Date: 17.MAY.2020 12:14:35

Lowest Channel / 1.4MHz / 16QAM



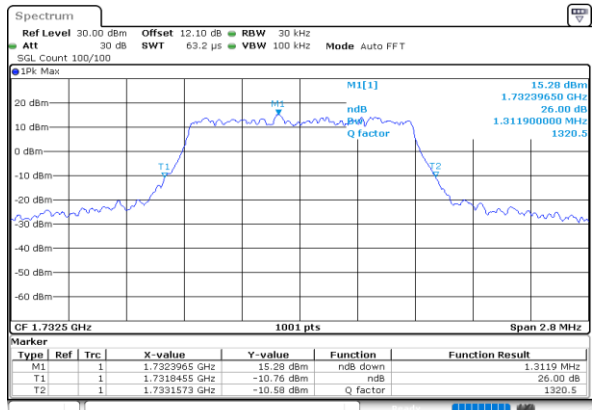
Date: 17.MAY.2020 12:14:47

Middle Channel / 1.4MHz / QPSK



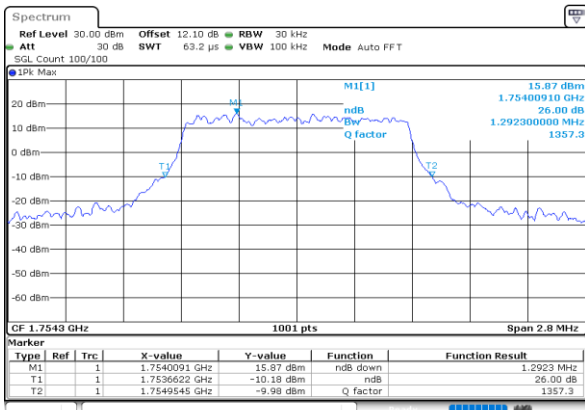
Date: 17.MAY.2020 12:20:50

Middle Channel / 1.4MHz / 16QAM



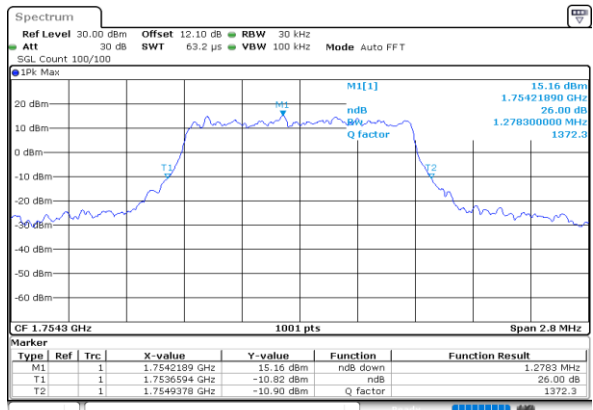
Date: 17.MAY.2020 12:21:05

Highest Channel / 1.4MHz / QPSK



Date: 17.MAY.2020 12:22:59

Highest Channel / 1.4MHz / 16QAM

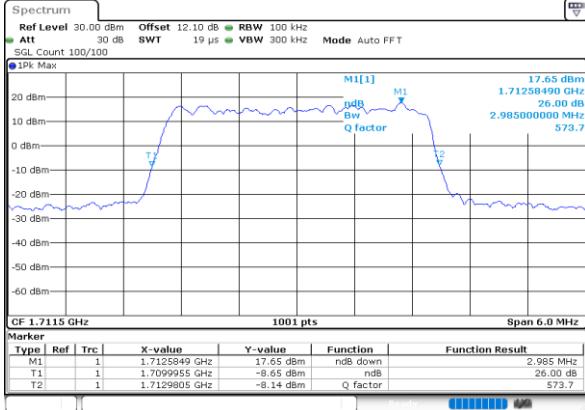


Date: 17.MAY.2020 12:23:11



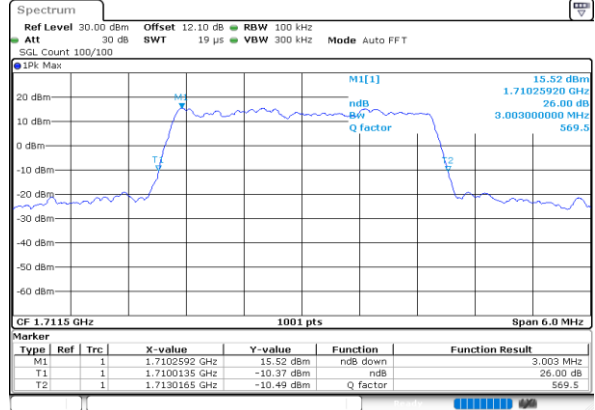
LTE Band 4

Lowest Channel / 3MHz / QPSK



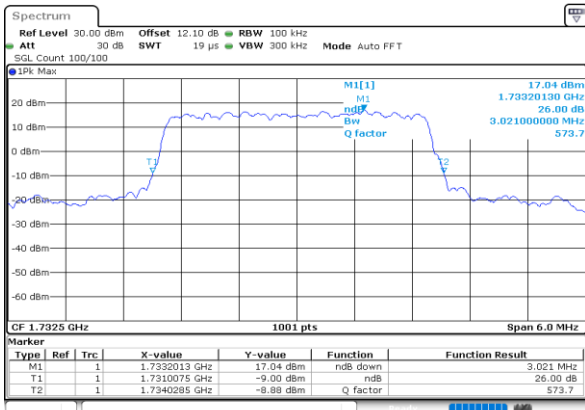
Date: 17.MAY.2020 11:02:10

Lowest Channel / 3MHz / 16QAM



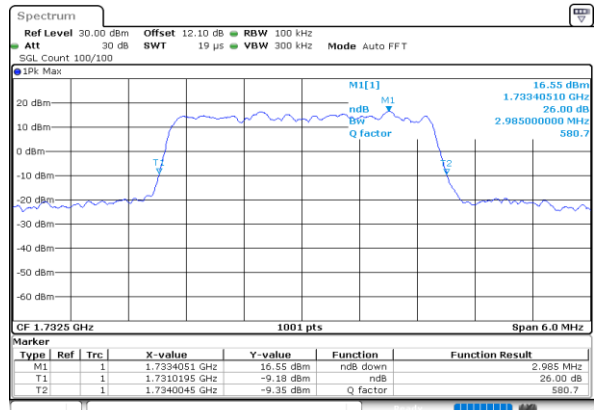
Date: 17.MAY.2020 11:02:22

Middle Channel / 3MHz / QPSK



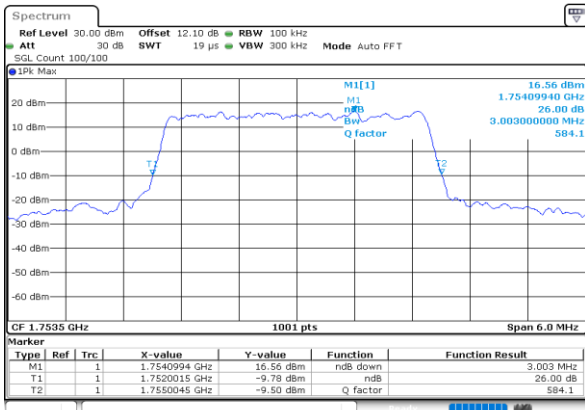
Date: 17.MAY.2020 11:08:16

Middle Channel / 3MHz / 16QAM



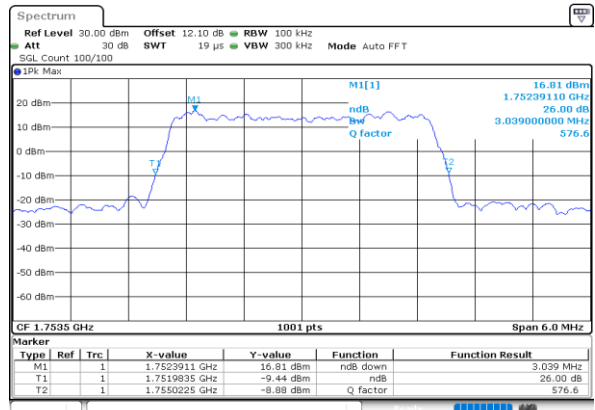
Date: 17.MAY.2020 11:08:28

Highest Channel / 3MHz / QPSK



Date: 17.MAY.2020 11:10:22

Highest Channel / 3MHz / 16QAM

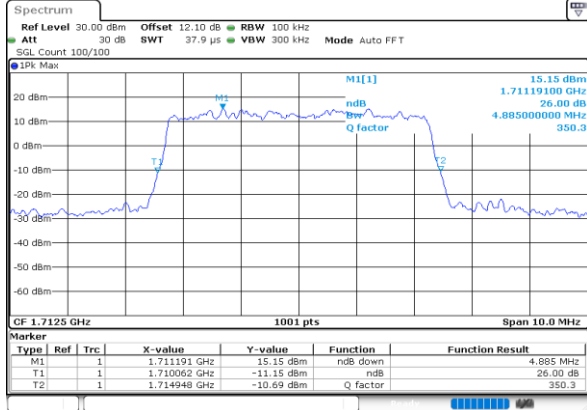


Date: 17.MAY.2020 11:10:34



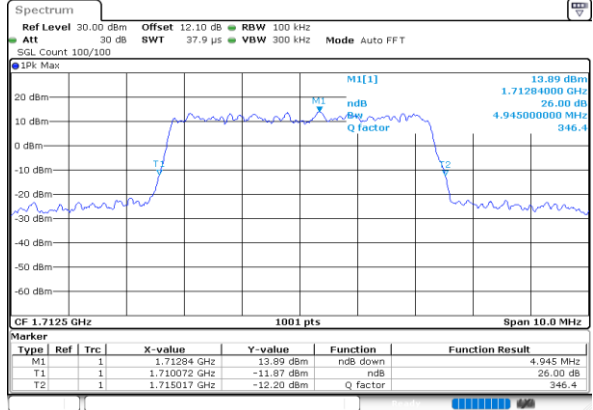
LTE Band 4

Lowest Channel / 5MHz / QPSK



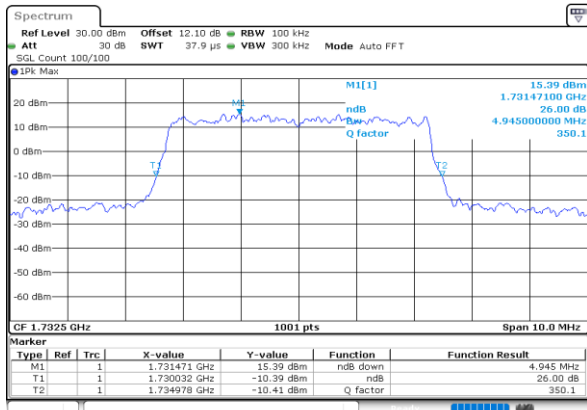
Date: 17.MAY.2020 11:16:31

Lowest Channel / 5MHz / 16QAM



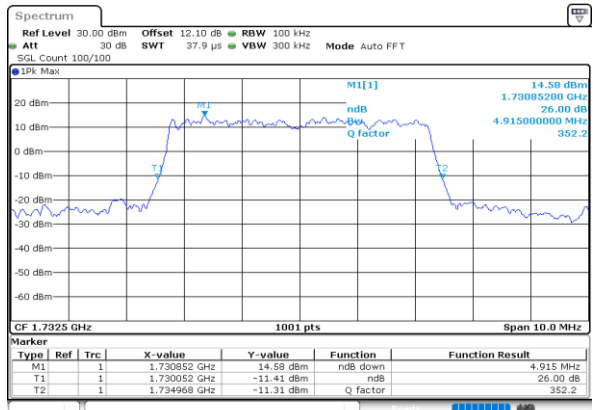
Date: 17.MAY.2020 11:16:43

Middle Channel / 5MHz / QPSK



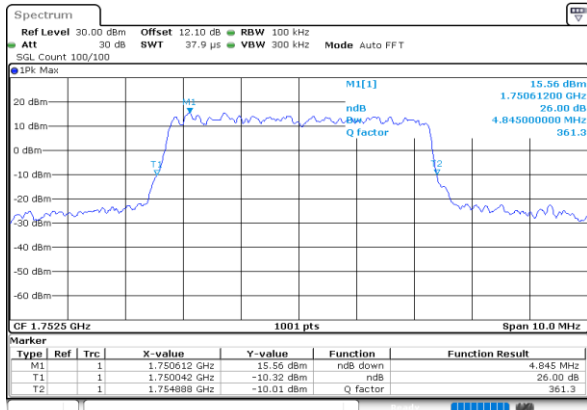
Date: 17.MAY.2020 11:22:37

Middle Channel / 5MHz / 16QAM



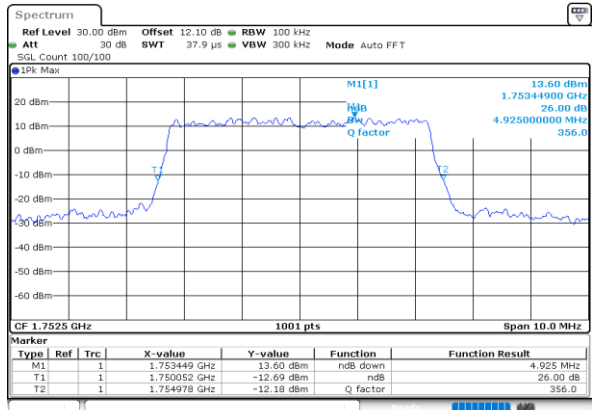
Date: 17.MAY.2020 11:22:48

Highest Channel / 5MHz / QPSK



Date: 17.MAY.2020 11:24:43

Highest Channel / 5MHz / 16QAM

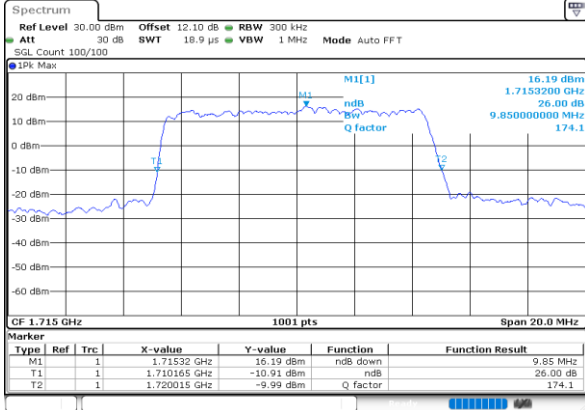


Date: 17.MAY.2020 11:24:55



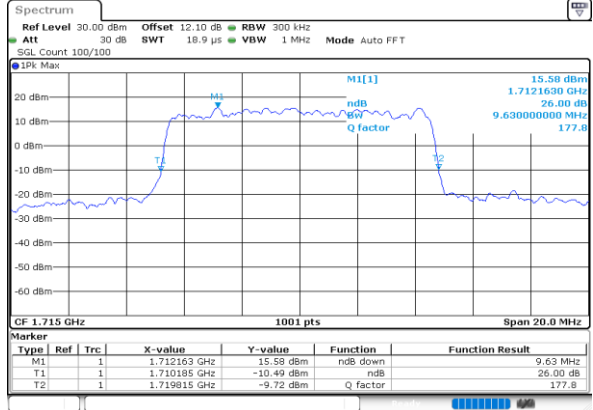
LTE Band 4

Lowest Channel / 10MHz / QPSK



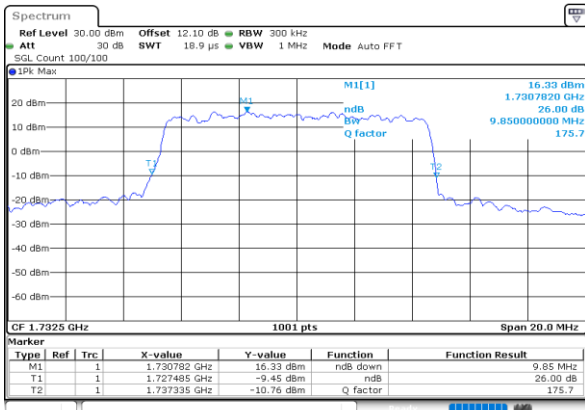
Date: 17.MAY.2020 11:30:51

Lowest Channel / 10MHz / 16QAM



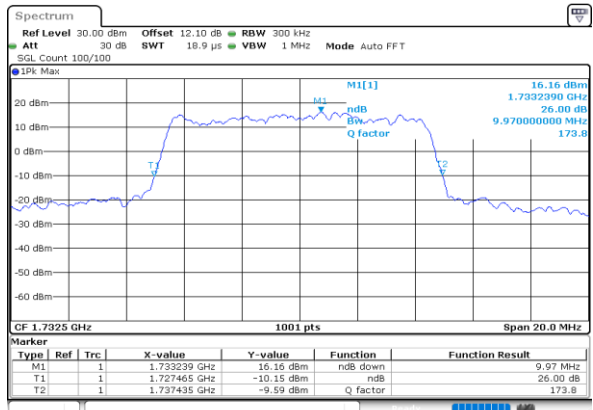
Date: 17.MAY.2020 11:31:03

Middle Channel / 10MHz / QPSK



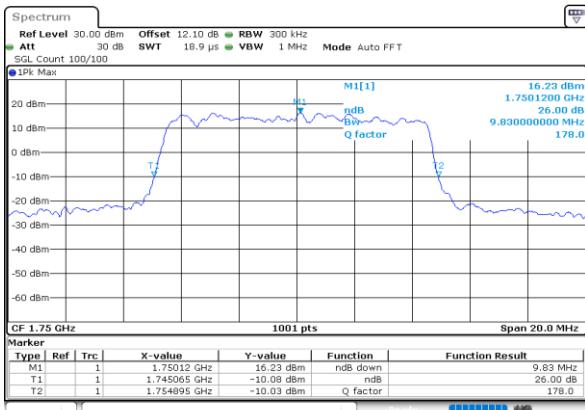
Date: 17.MAY.2020 11:36:57

Middle Channel / 10MHz / 16QAM



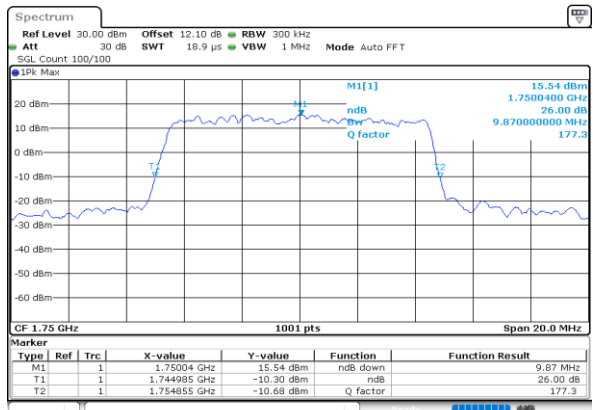
Date: 17.MAY.2020 11:37:09

Highest Channel / 10MHz / QPSK



Date: 17.MAY.2020 11:39:04

Highest Channel / 10MHz / 16QAM

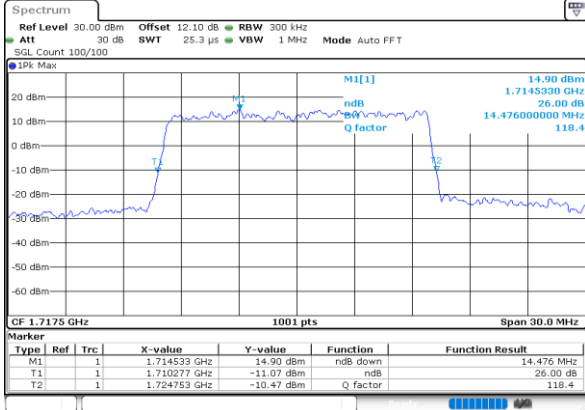


Date: 17.MAY.2020 11:39:16

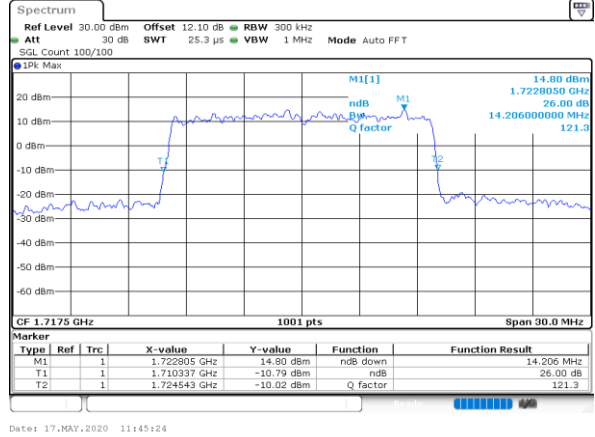


LTE Band 4

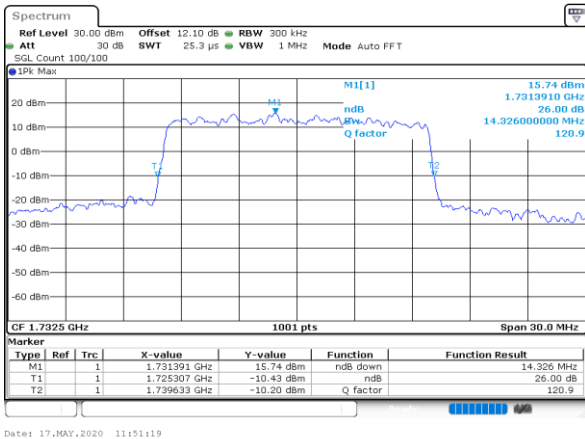
Lowest Channel / 15MHz / QPSK



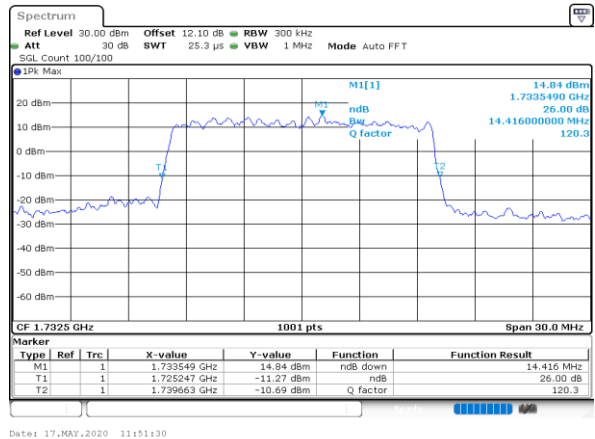
Lowest Channel / 15MHz / 16QAM



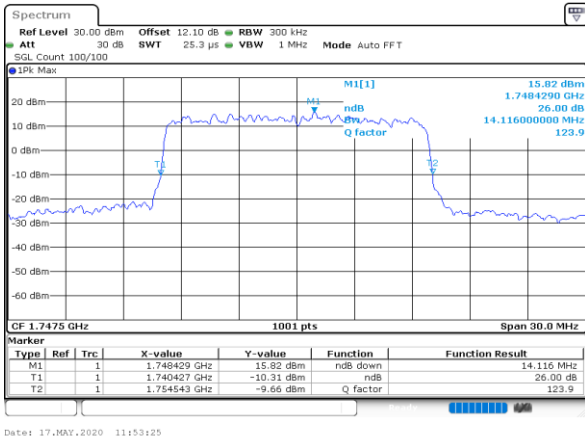
Middle Channel / 15MHz / QPSK



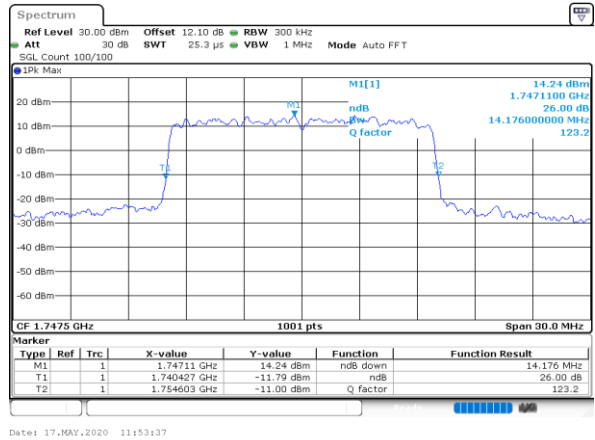
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



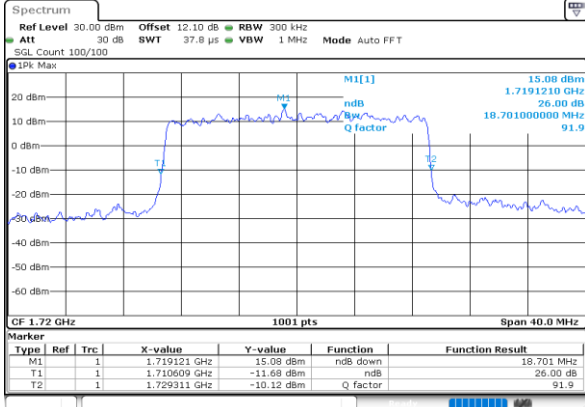
Highest Channel / 15MHz / 16QAM



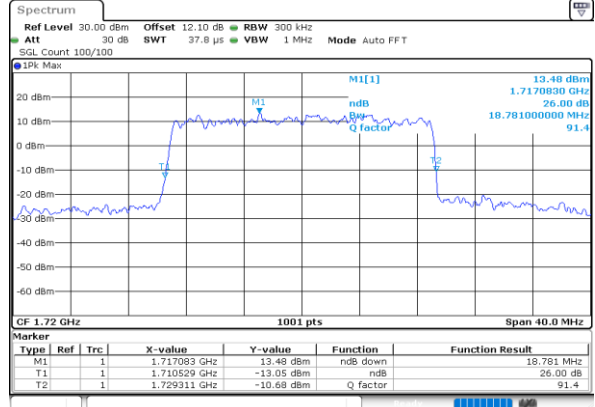


LTE Band 4

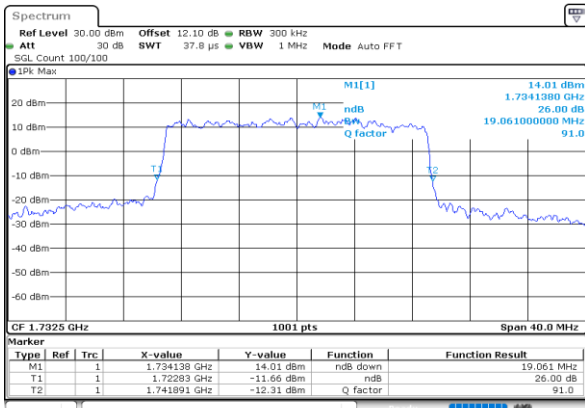
Lowest Channel / 20MHz / QPSK



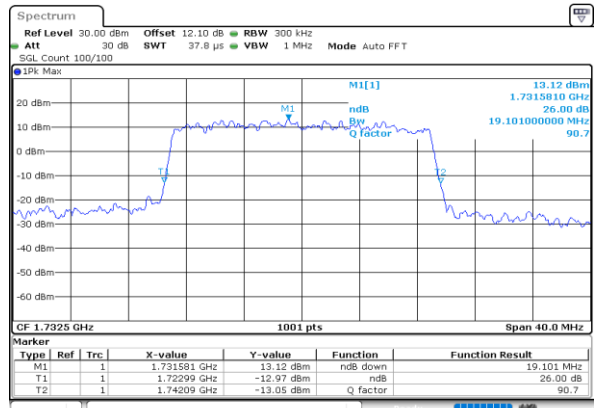
Lowest Channel / 20MHz / 16QAM



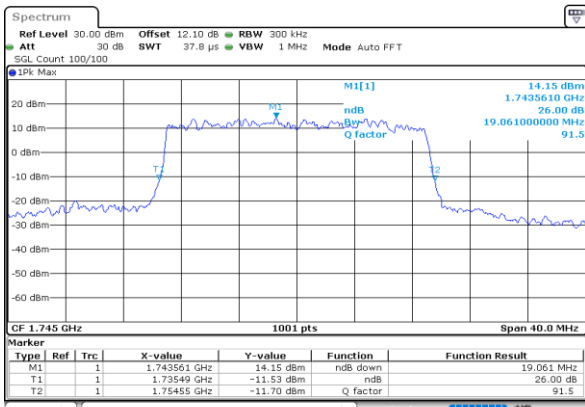
Middle Channel / 20MHz / QPSK



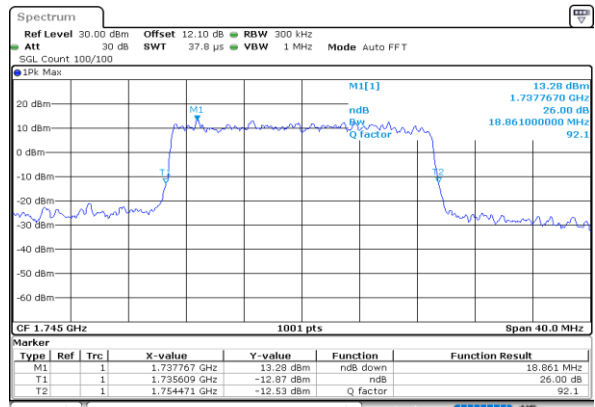
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM





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	1.10	1.09	2.71	2.73	4.51	4.49	9.03	8.97	13.31	13.46	17.78	17.86
Middle CH	1.09	1.09	2.70	2.71	4.49	4.50	8.97	9.01	13.43	13.37	17.86	17.74
Highest CH	1.09	1.09	2.72	2.70	4.48	4.50	9.07	9.03	13.37	13.40	17.90	17.78