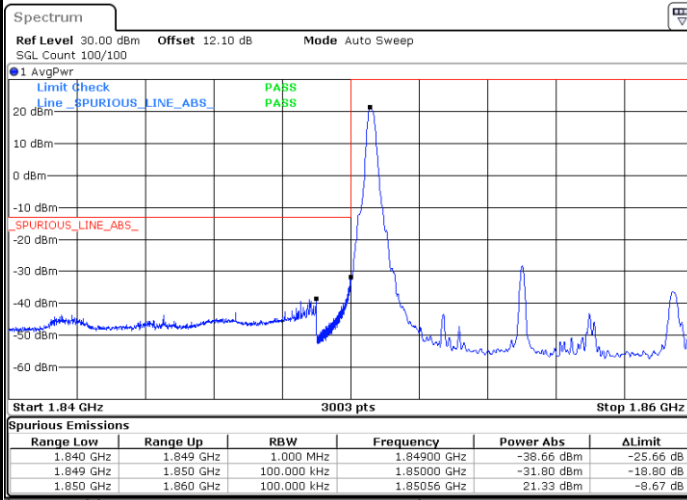




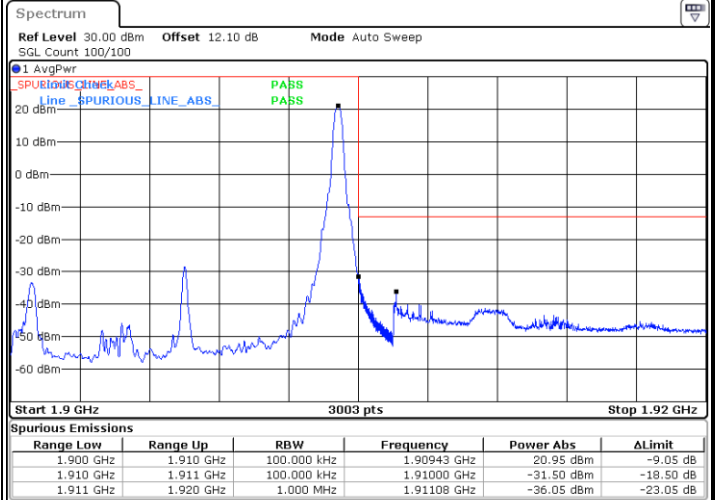
LTE Band 2 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



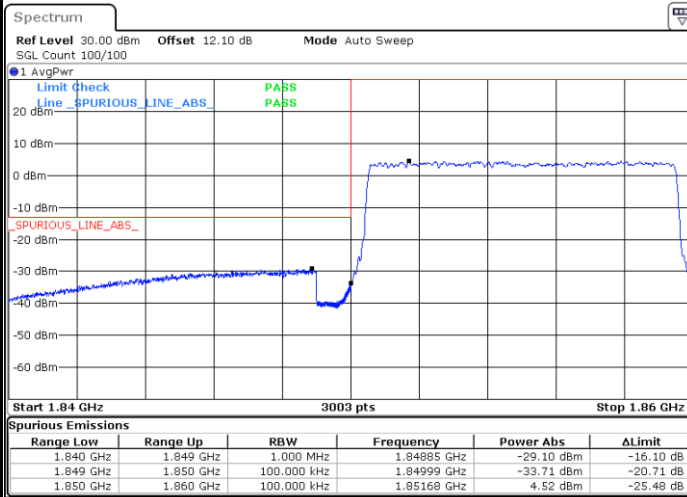
Date: 22.SEP.2020 20:42:26

Highest Band Edge / 1 RB



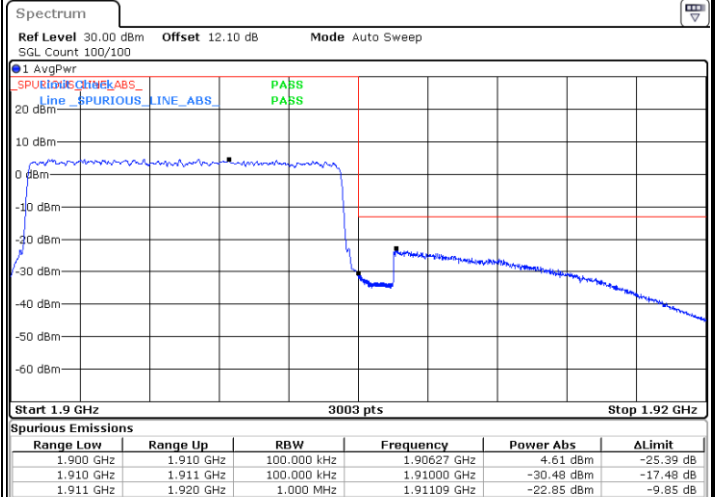
Date: 22.SEP.2020 20:50:42

Lowest Band Edge / Full RB



Date: 22.SEP.2020 20:44:26

Highest Band Edge / Full RB

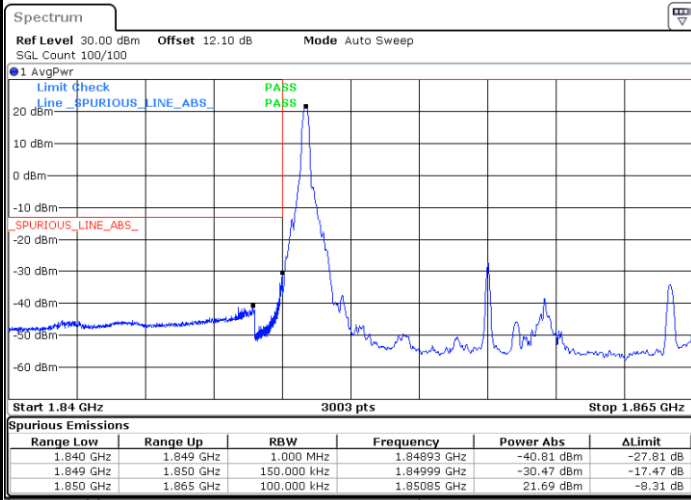


Date: 22.SEP.2020 20:52:42



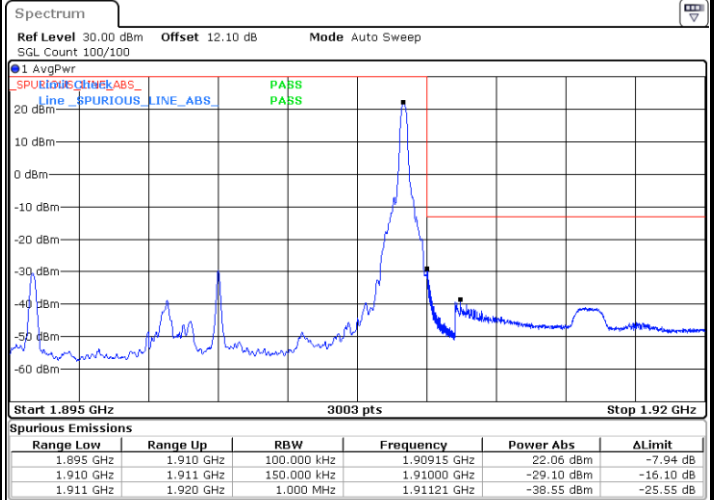
LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / 1 RB



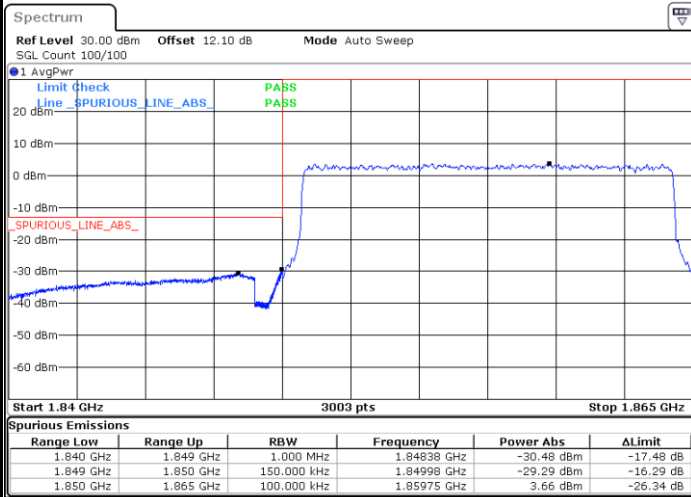
Date: 22.SEP.2020 21:07:07

Highest Band Edge / 1 RB



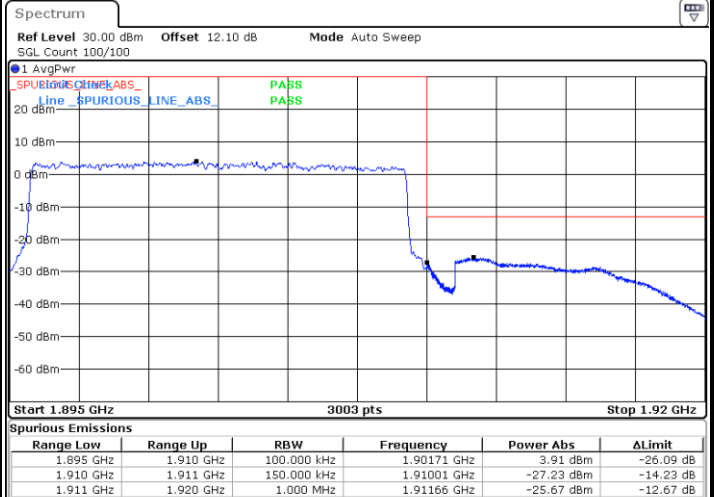
Date: 22.SEP.2020 21:15:23

Lowest Band Edge / Full RB



Date: 22.SEP.2020 21:09:07

Highest Band Edge / Full RB

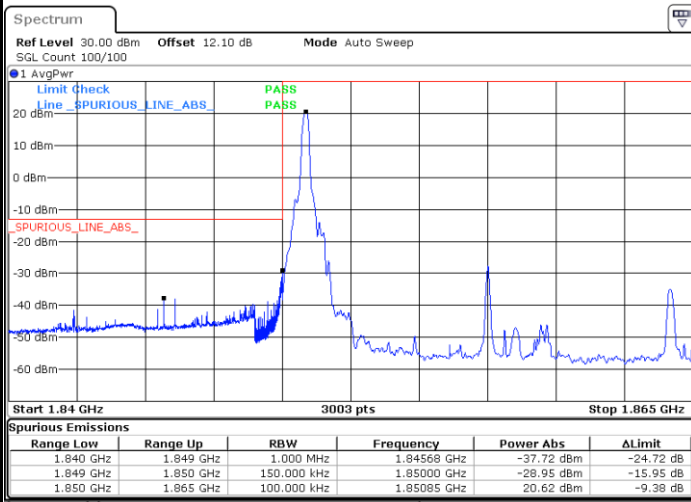


Date: 22.SEP.2020 21:17:23



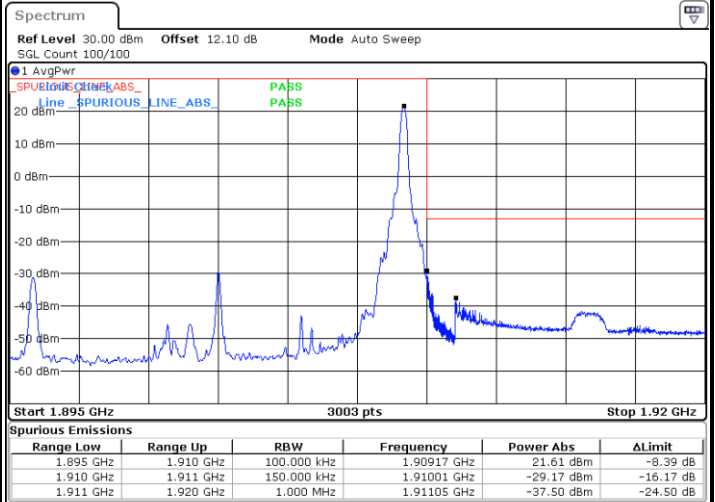
LTE Band 2 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



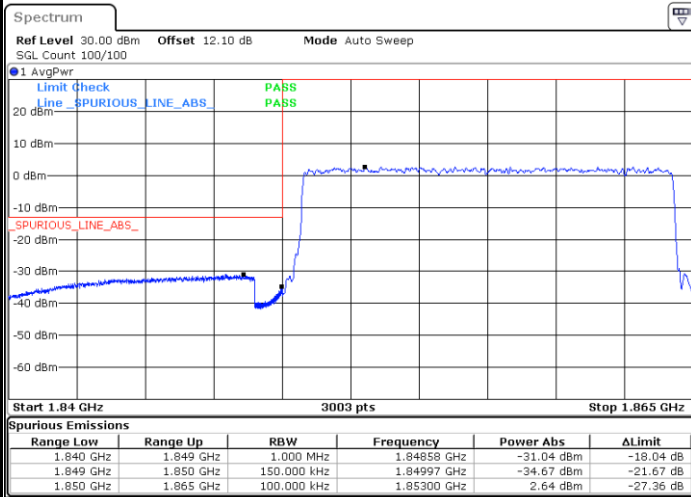
Date: 22.SEP.2020 21:08:07

Highest Band Edge / 1 RB



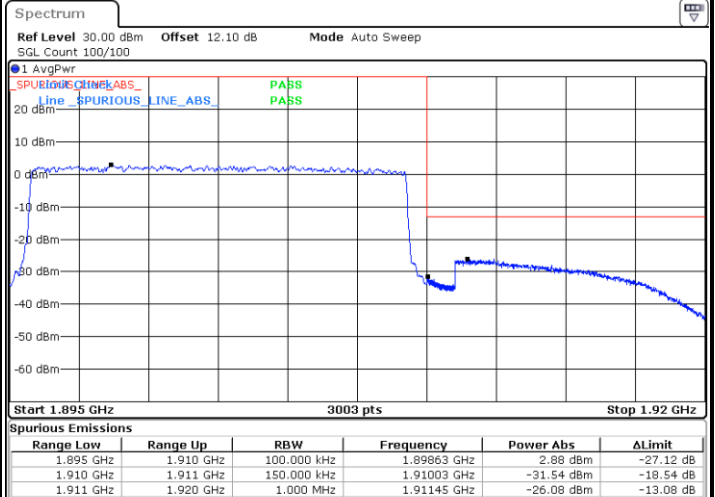
Date: 22.SEP.2020 21:16:23

Lowest Band Edge / Full RB



Date: 22.SEP.2020 21:10:07

Highest Band Edge / Full RB

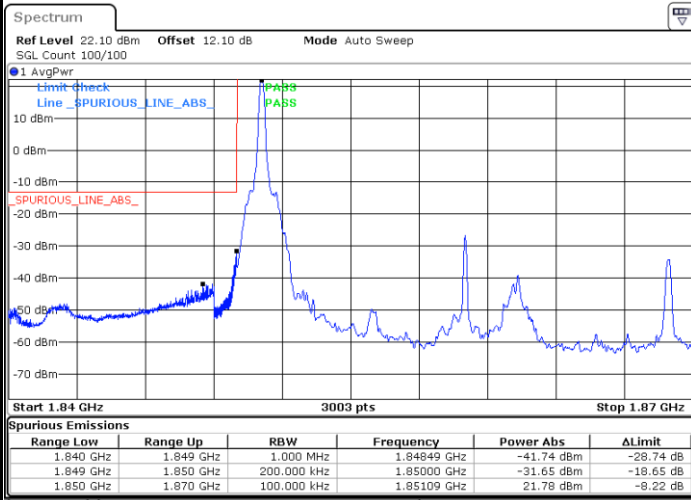


Date: 22.SEP.2020 21:18:22



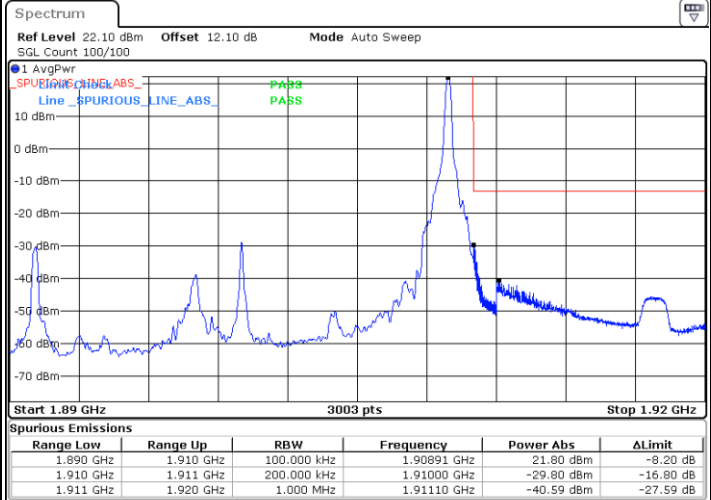
LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / 1 RB



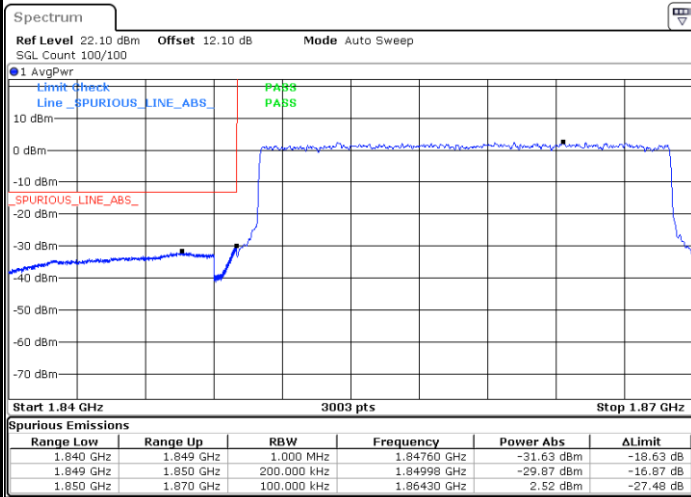
Date: 22.SEP.2020 21:21:32

Highest Band Edge / 1 RB



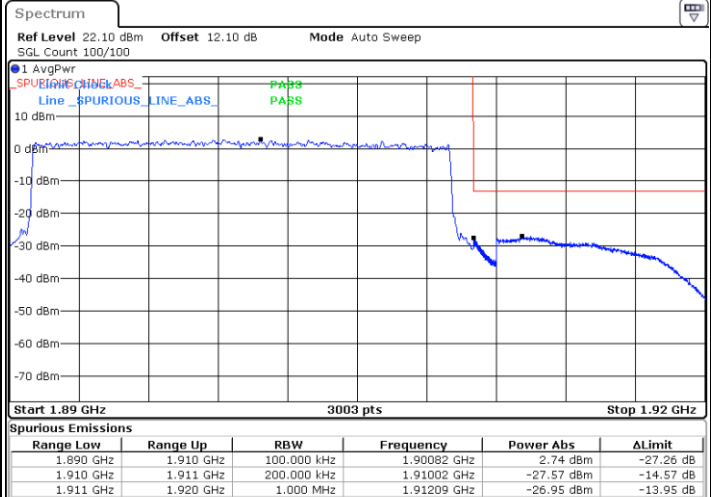
Date: 22.SEP.2020 21:29:47

Lowest Band Edge / Full RB



Date: 22.SEP.2020 21:23:32

Highest Band Edge / Full RB

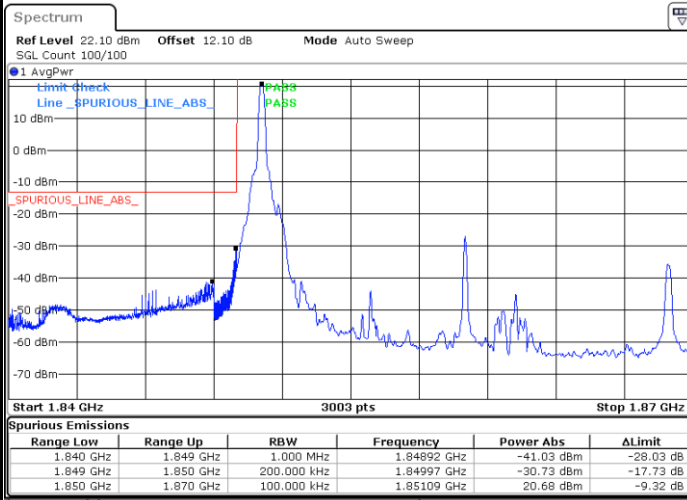


Date: 22.SEP.2020 21:31:47



LTE Band 2 / 20MHz / 16QAM

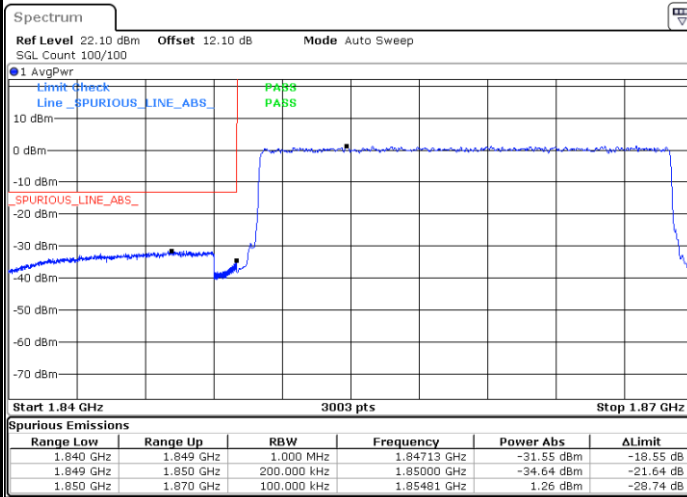
Lowest Band Edge / 1 RB



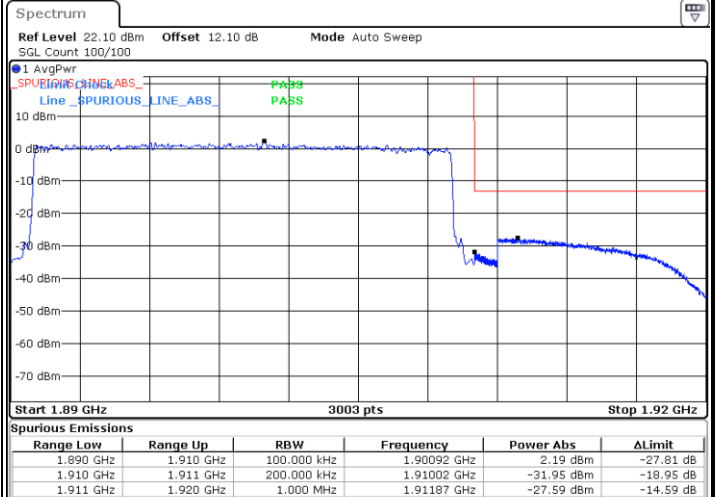
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

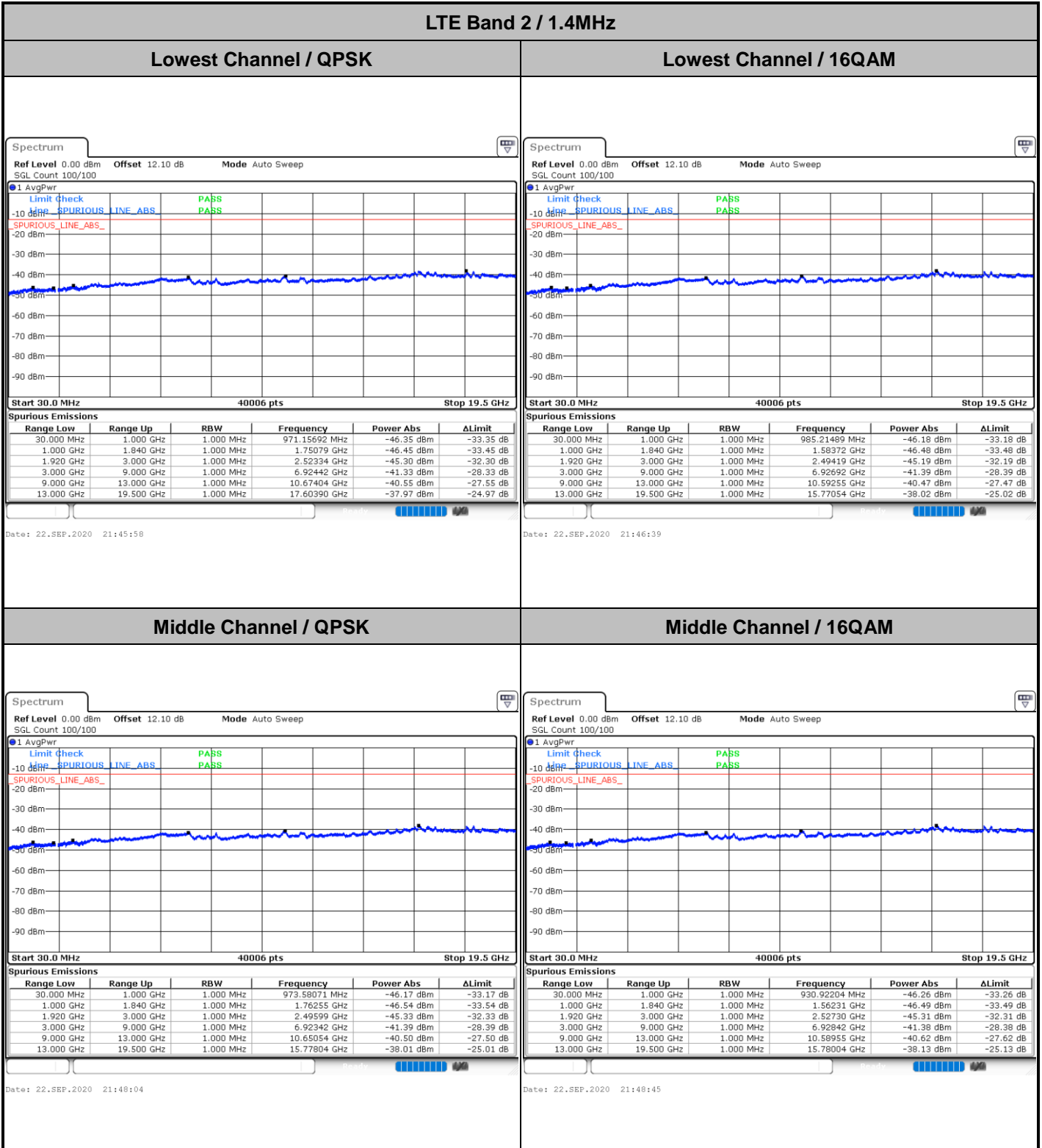


Highest Band Edge / Full RB





# Conducted Spurious Emission

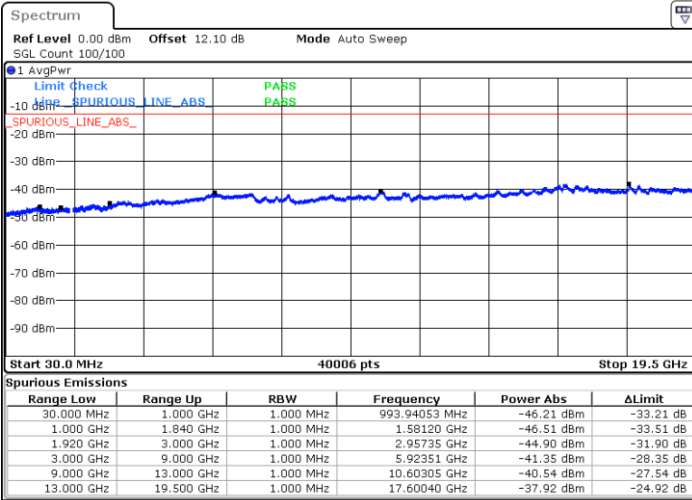




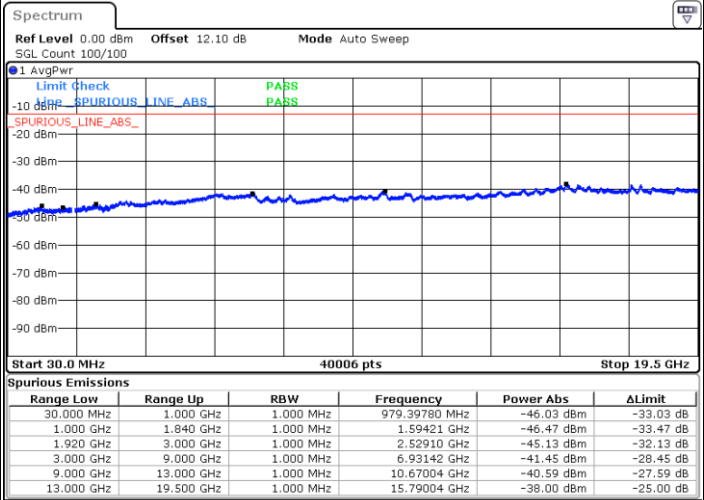
LTE Band 2 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 22.SEP.2020 21:54:26

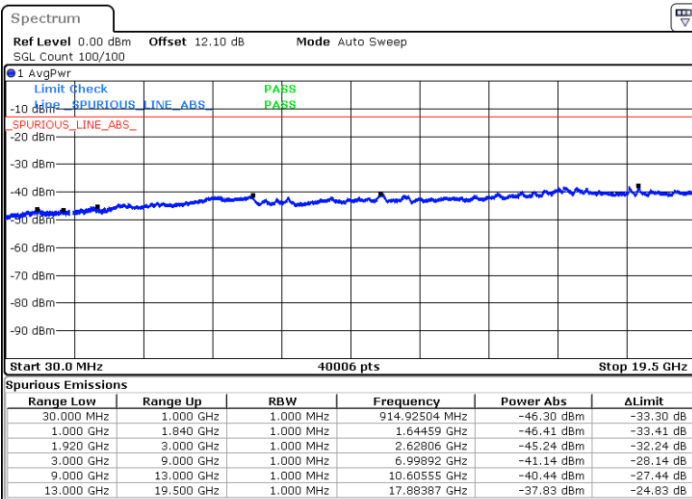


Date: 22.SEP.2020 21:55:07

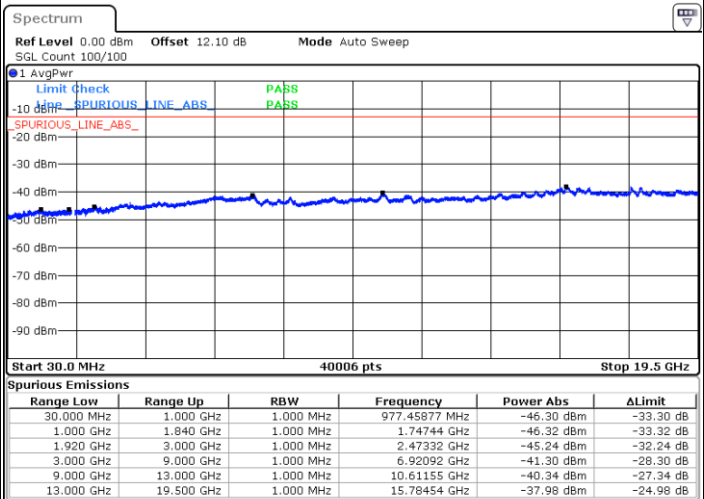
LTE Band 2 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 22.SEP.2020 20:16:18

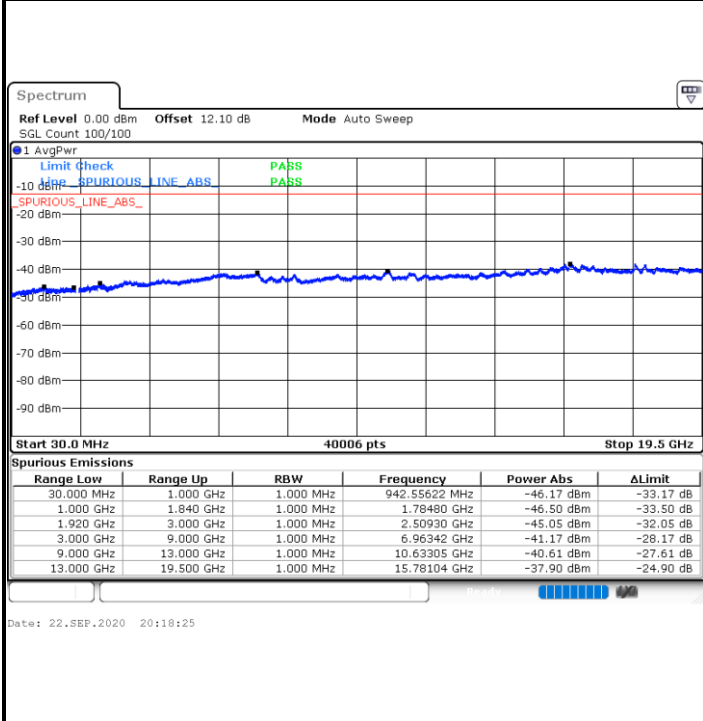


Date: 22.SEP.2020 20:16:59

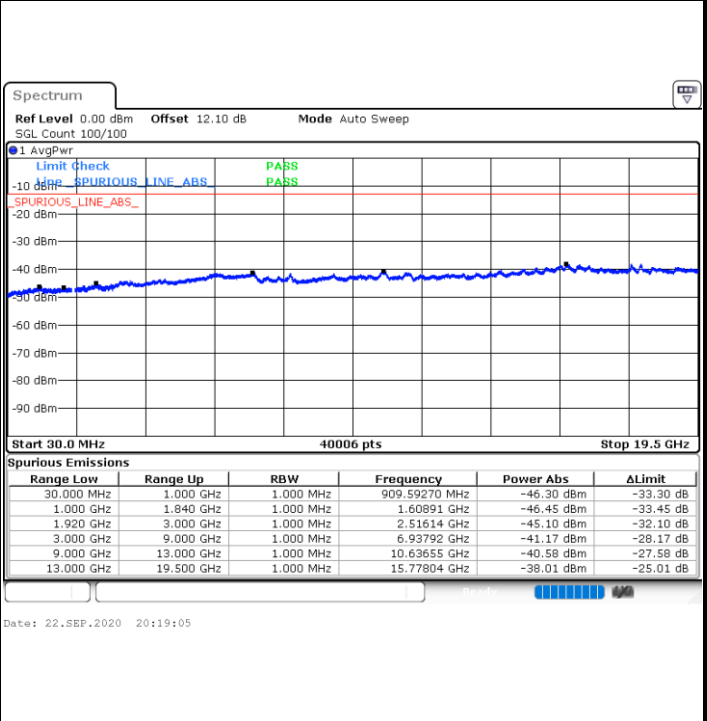


LTE Band 2 / 3MHz

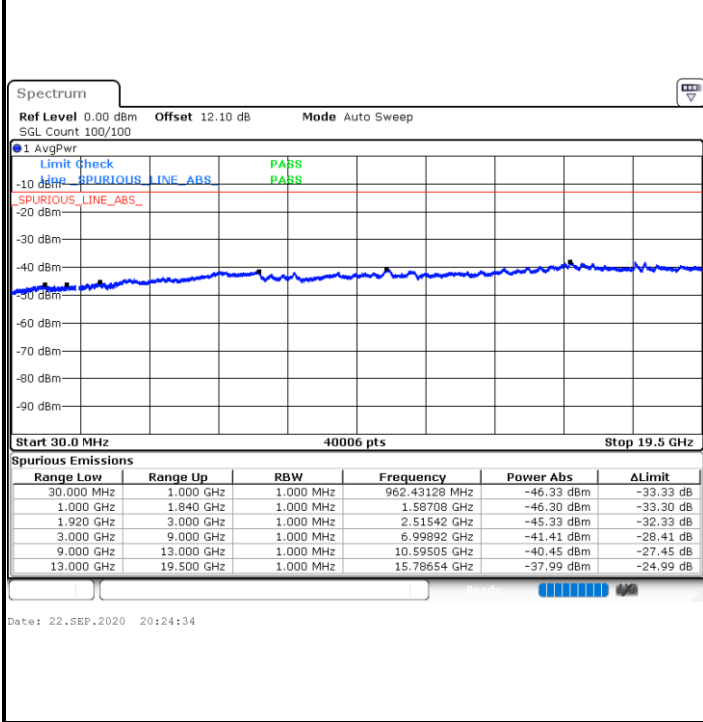
Middle Channel / QPSK



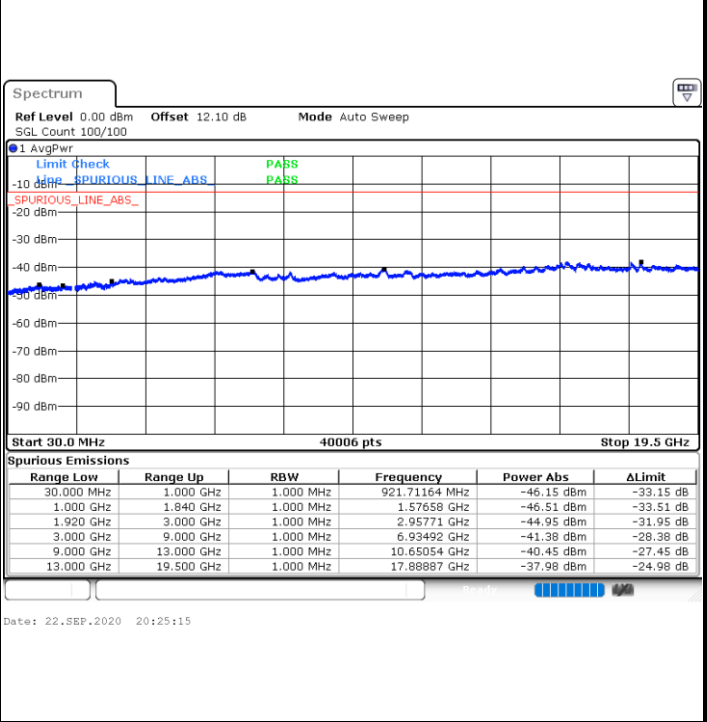
Middle Channel / 16QAM



Highest Channel / QPSK



Highest Channel / 16QAM



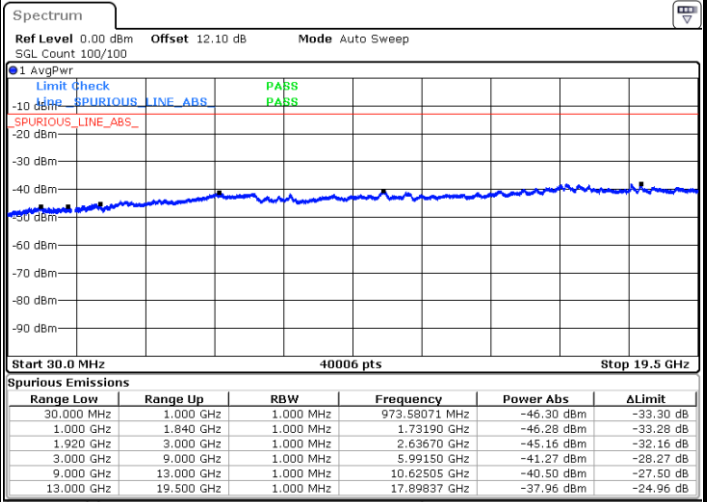
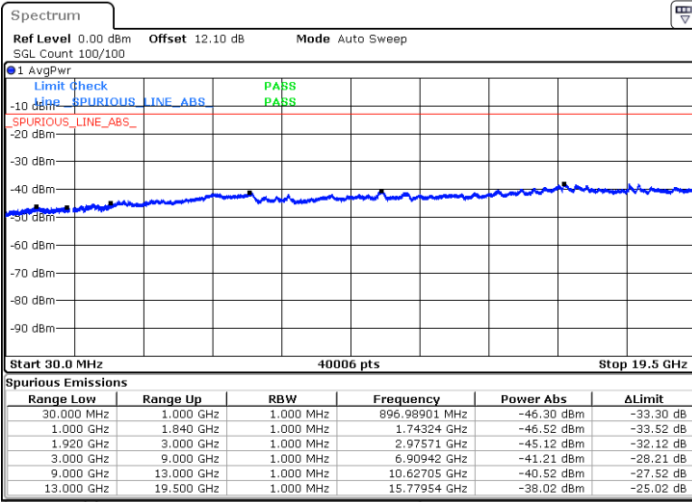




LTE Band 2 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

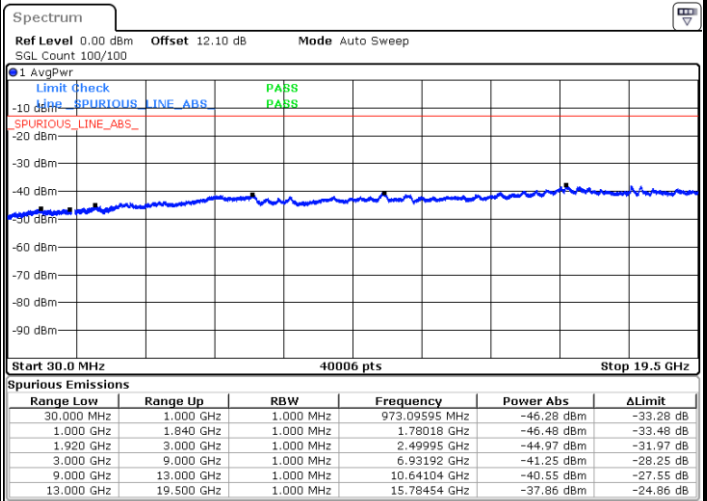
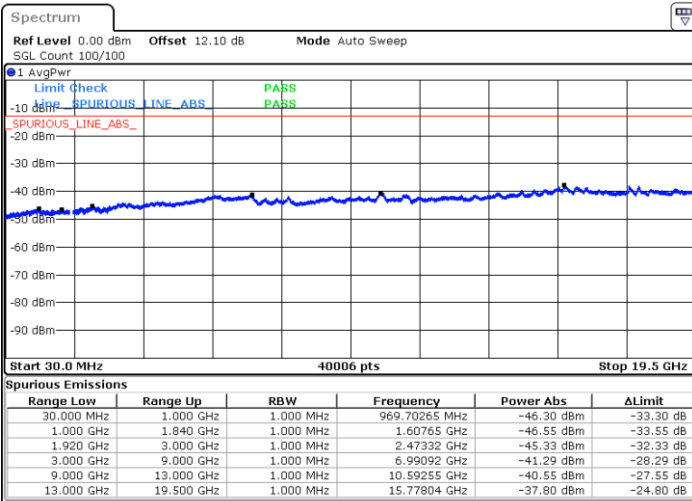


Date: 22.SEP.2020 20:30:43

Date: 22.SEP.2020 20:31:24

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 22.SEP.2020 20:32:50

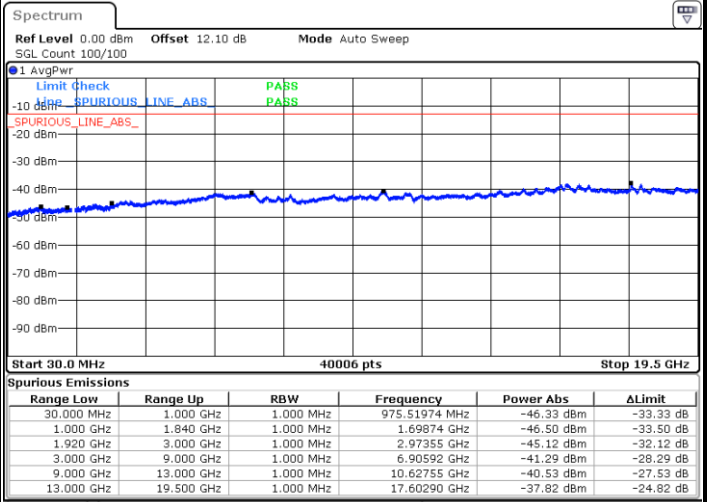
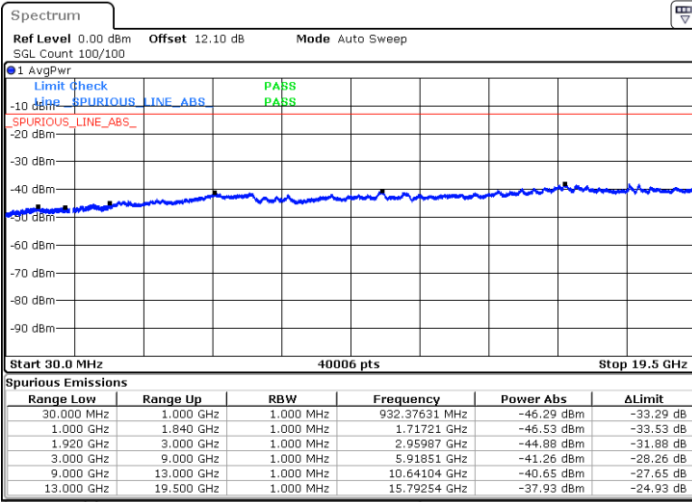
Date: 22.SEP.2020 20:33:30



LTE Band 2 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



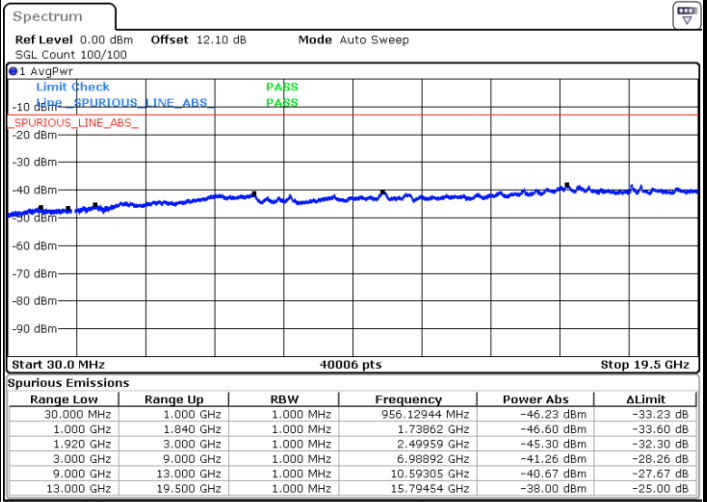
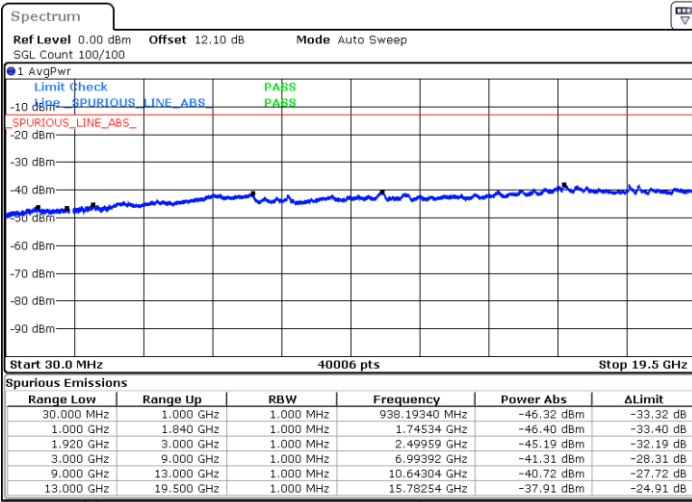
Date: 22.SEP.2020 20:38:58

Date: 22.SEP.2020 20:39:39

LTE Band 2 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 22.SEP.2020 20:45:07

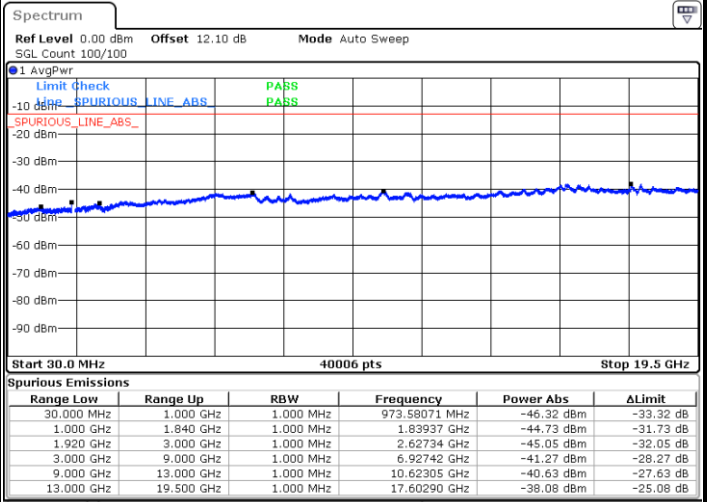
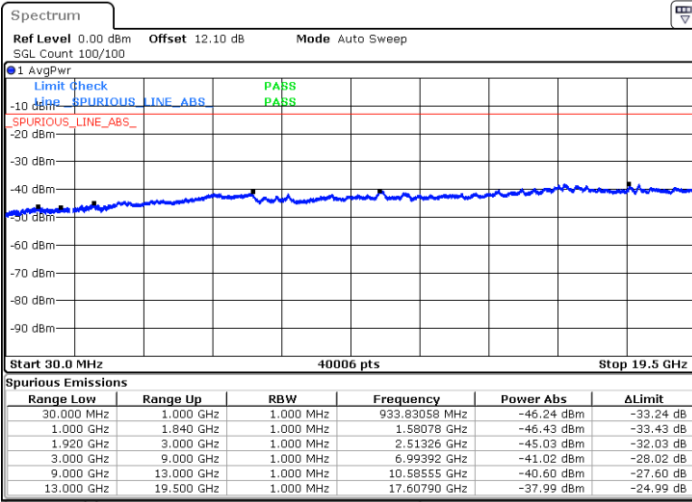
Date: 22.SEP.2020 20:45:48



LTE Band 2 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

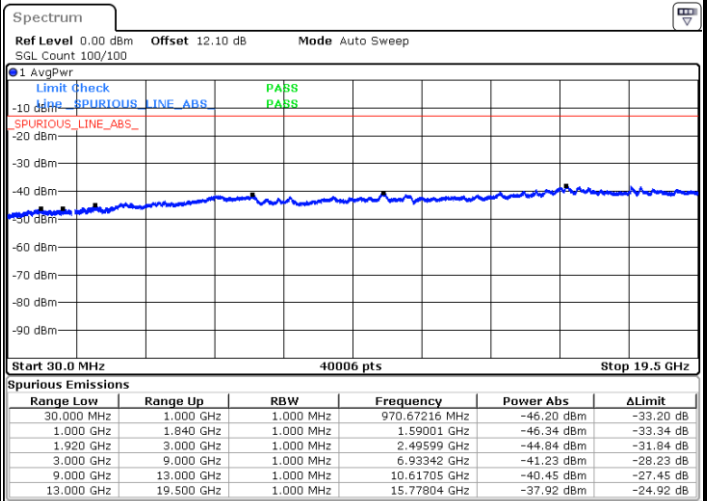
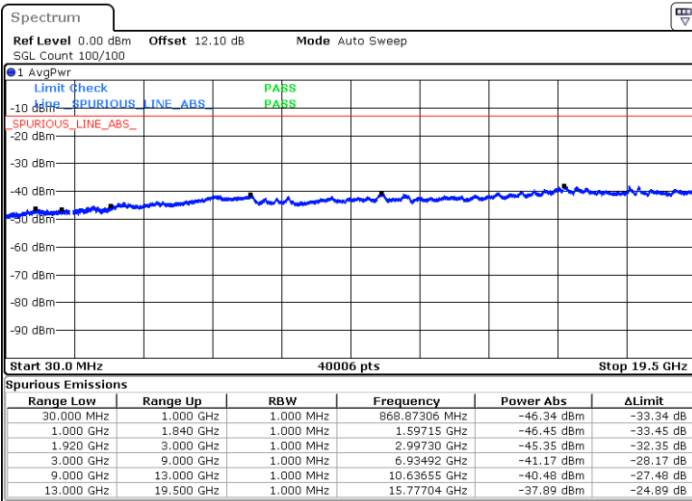


Date: 22.SEP.2020 20:47:14

Date: 22.SEP.2020 20:47:55

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 22.SEP.2020 20:53:23

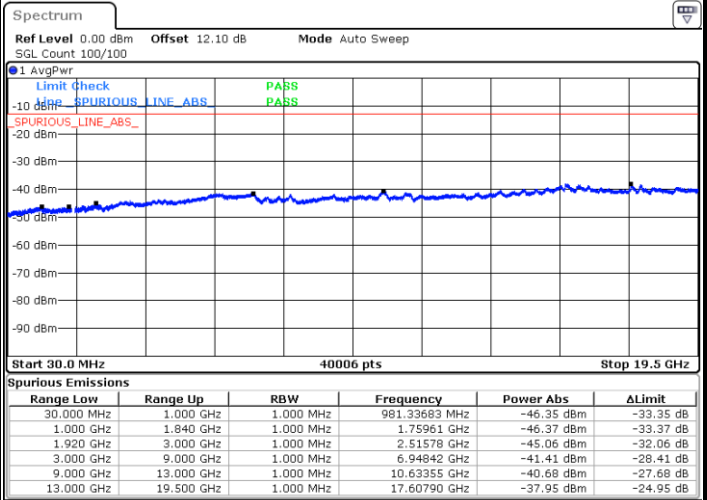
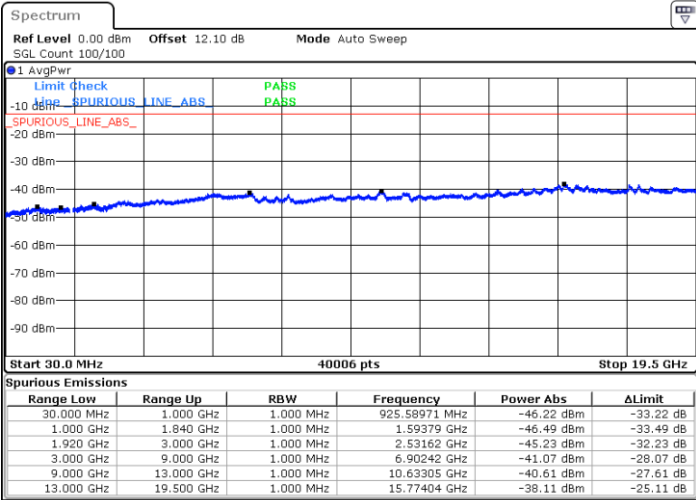
Date: 22.SEP.2020 21:04:40



LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

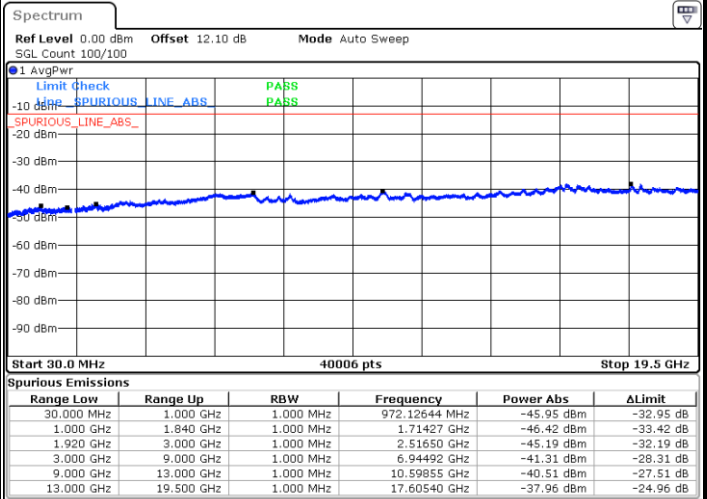
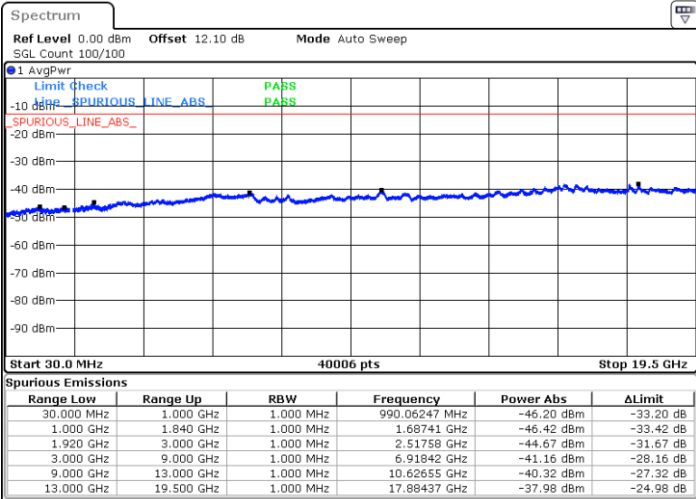


Date: 22.SEP.2020 21:10:48

Date: 22.SEP.2020 21:11:29

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 22.SEP.2020 21:12:55

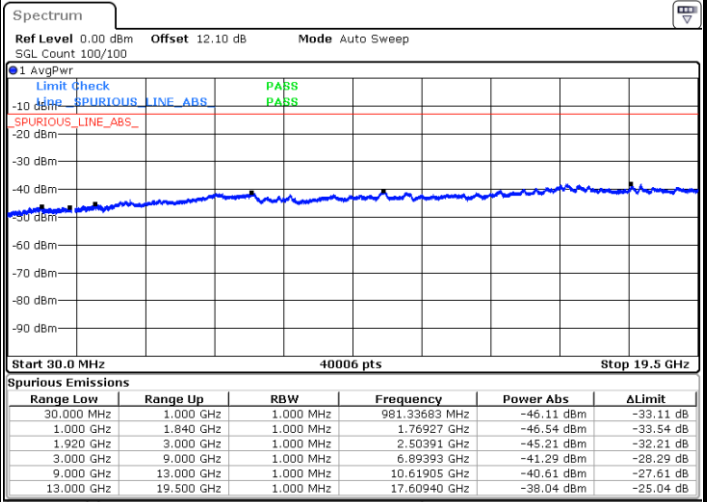
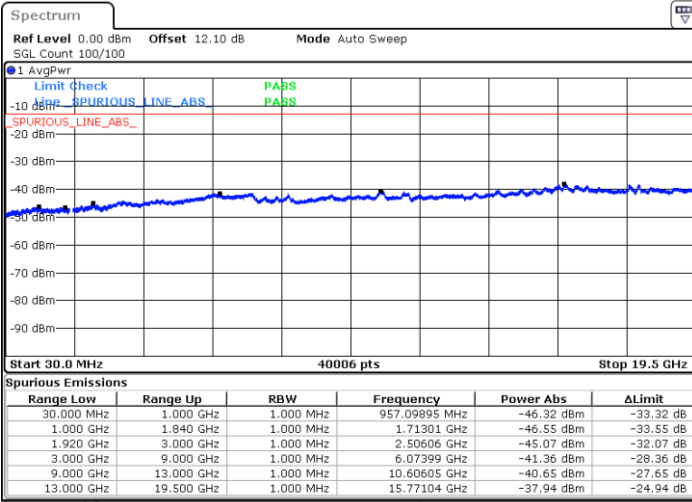
Date: 22.SEP.2020 21:13:36



LTE Band 2 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



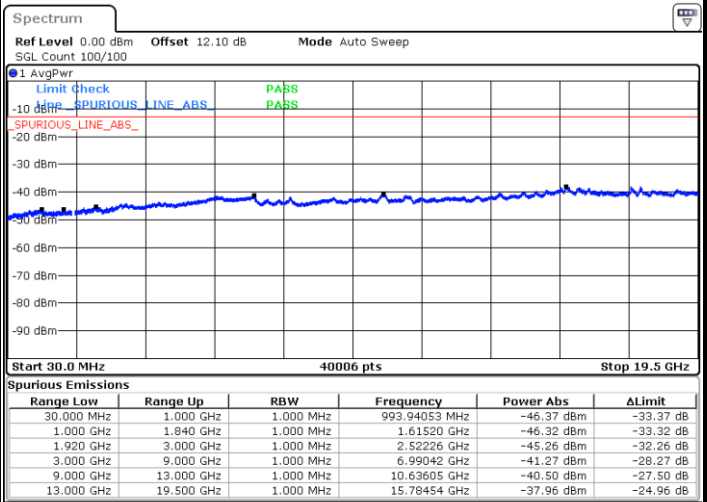
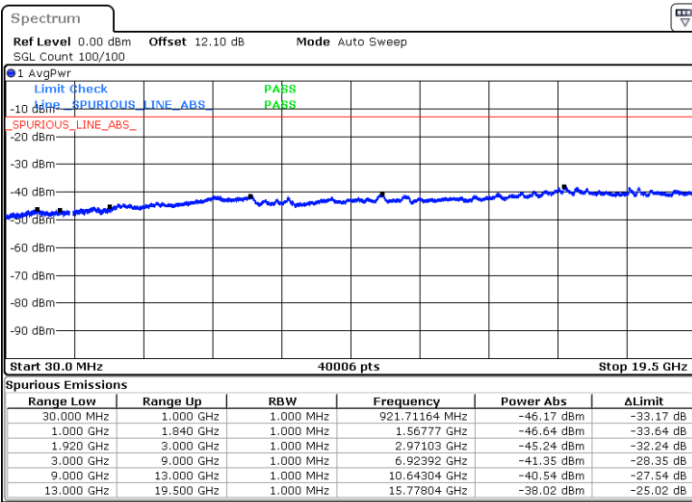
Date: 22.SEP.2020 21:19:04

Date: 22.SEP.2020 21:19:44

LTE Band 2 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 22.SEP.2020 21:25:13

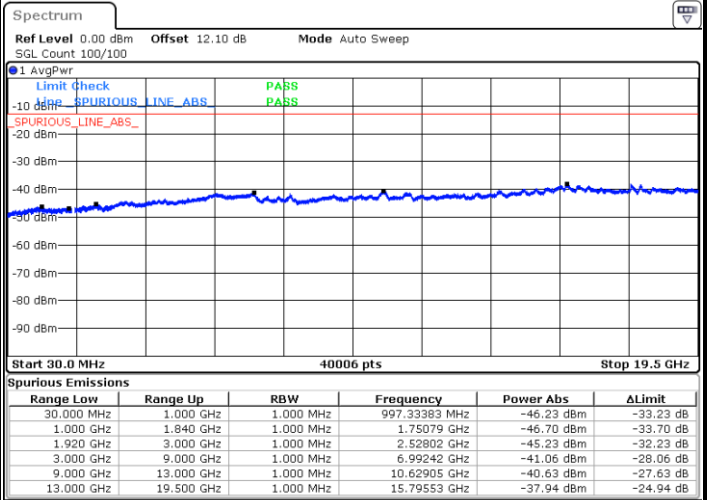
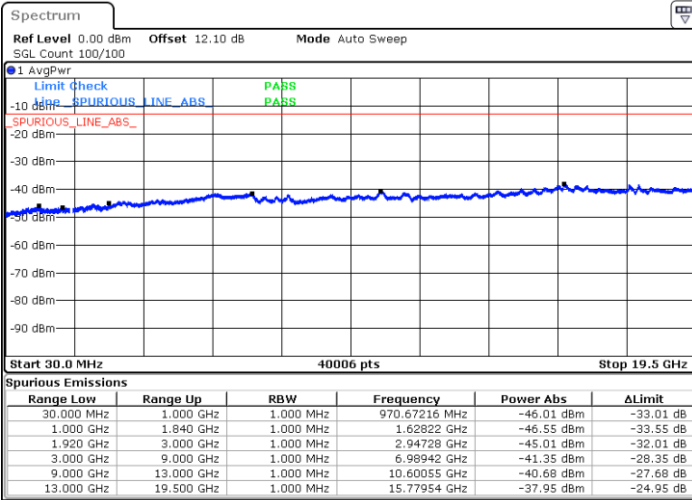
Date: 22.SEP.2020 21:25:54



LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

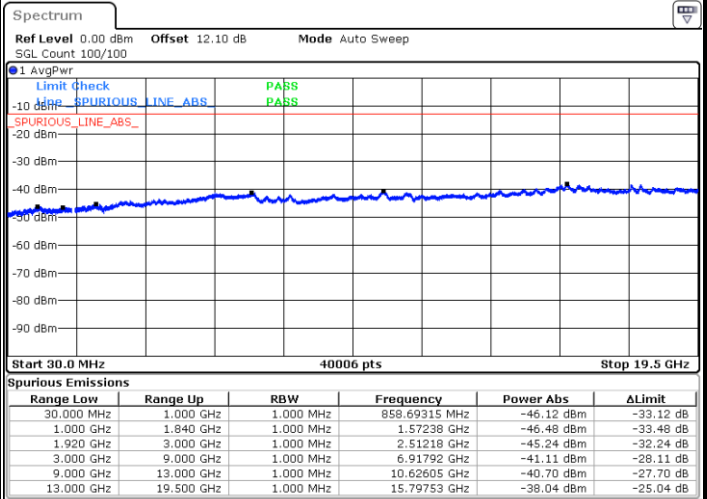
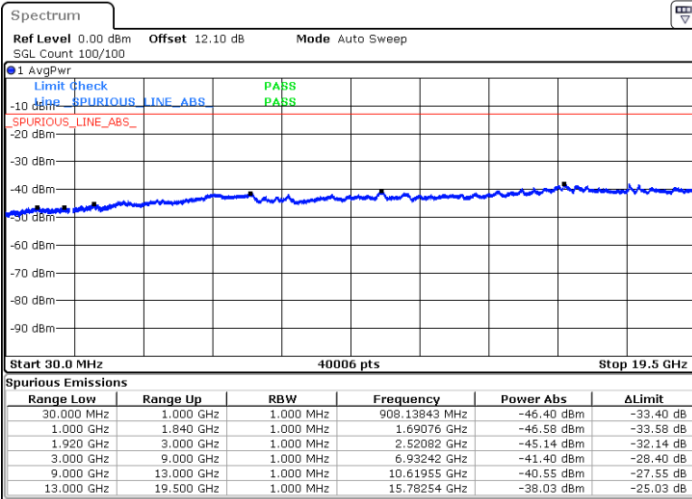


Date: 22.SEP.2020 21:27:20

Date: 22.SEP.2020 21:28:00

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 22.SEP.2020 21:33:28

Date: 22.SEP.2020 21:34:09



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	0.0097	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0097	
0	Normal Voltage	0.0030	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0086	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0030	
20	Normal Voltage	0.0097	
20	Battery End Point	0.0059	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 4

## Peak-to-Average Ratio

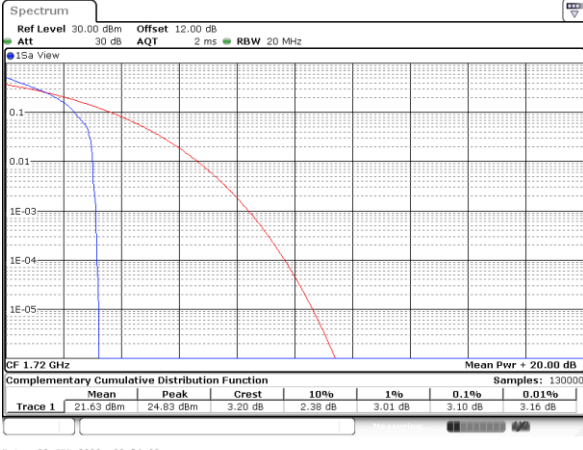
Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.10	4.29	4.41	5.54	<b>PASS</b>
Middle CH	3.39	4.38	5.01	5.59	
Highest CH	3.48	4.43	5.04	5.59	





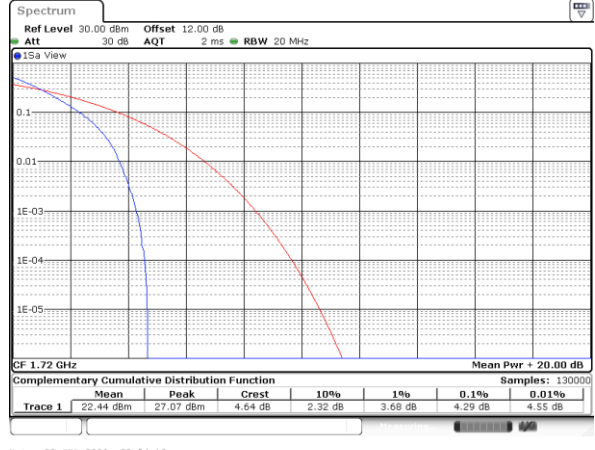
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



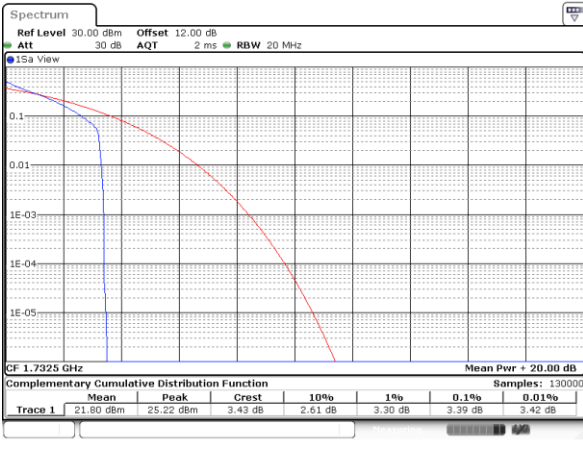
Date: 22\_SEP.2020 23:54:02

Lowest Channel / Full RB



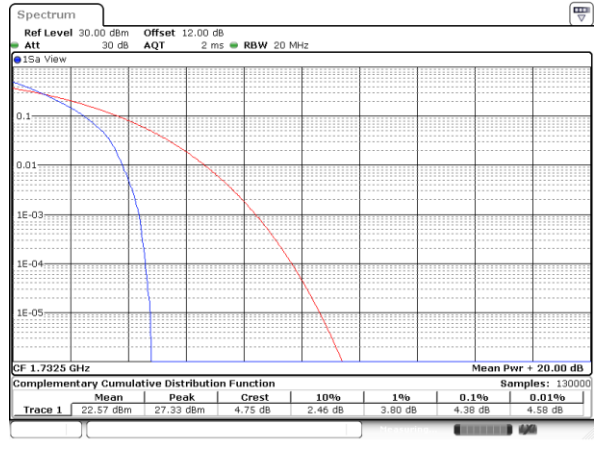
Date: 22\_SEP.2020 23:54:12

Middle Channel / 1RB



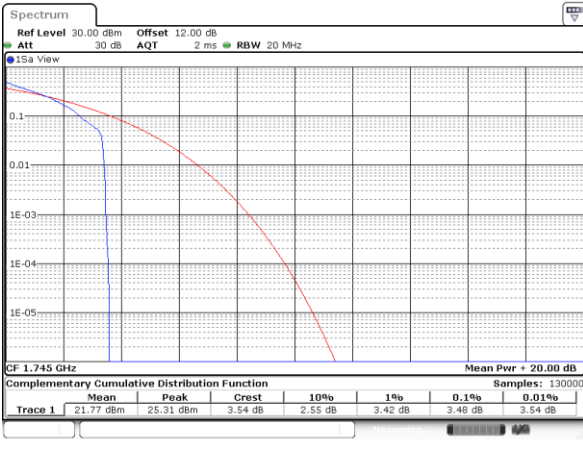
Date: 22\_SEP.2020 23:54:23

Middle Channel / Full RB



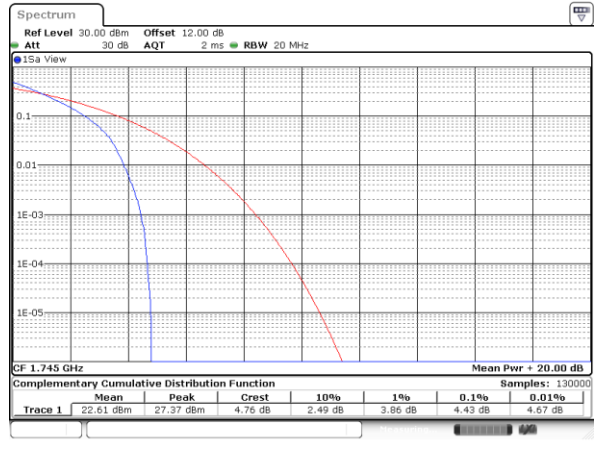
Date: 22\_SEP.2020 23:54:33

Highest Channel / 1RB



Date: 22\_SEP.2020 23:54:48

Highest Channel / Full RB

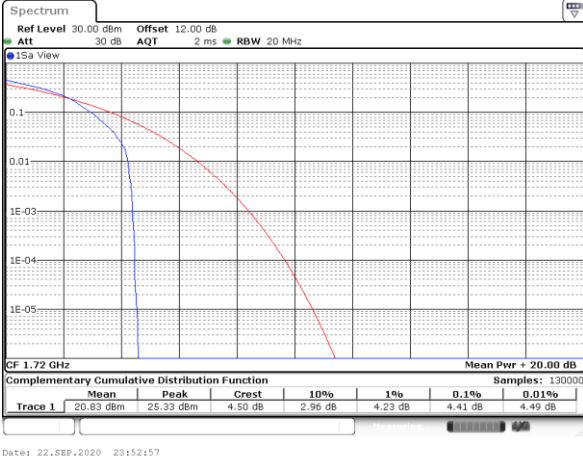


Date: 22\_SEP.2020 23:54:59



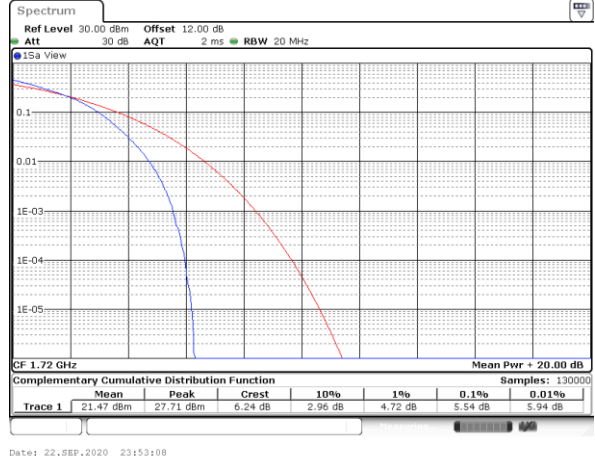
LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



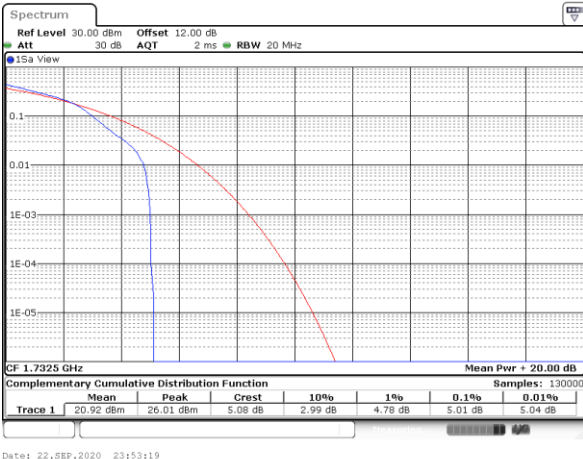
Date: 22\_SEP.2020 23:52:57

Lowest Channel / Full RB



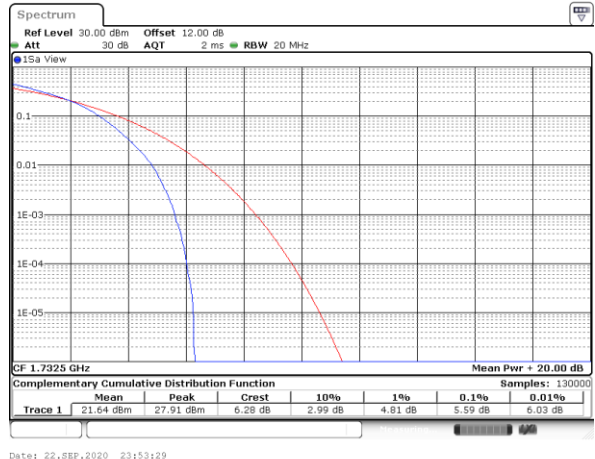
Date: 22\_SEP.2020 23:53:08

Middle Channel / 1RB



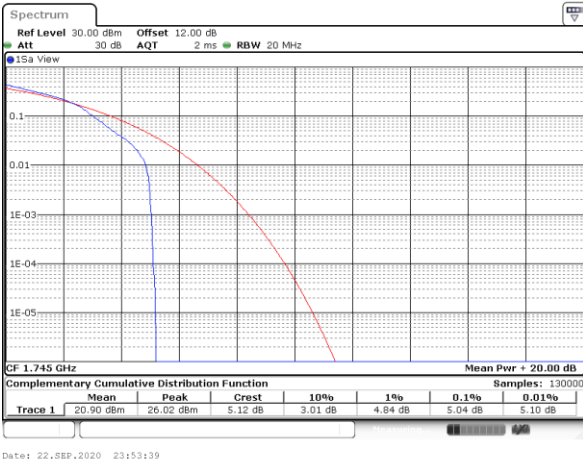
Date: 22\_SEP.2020 23:53:19

Middle Channel / Full RB



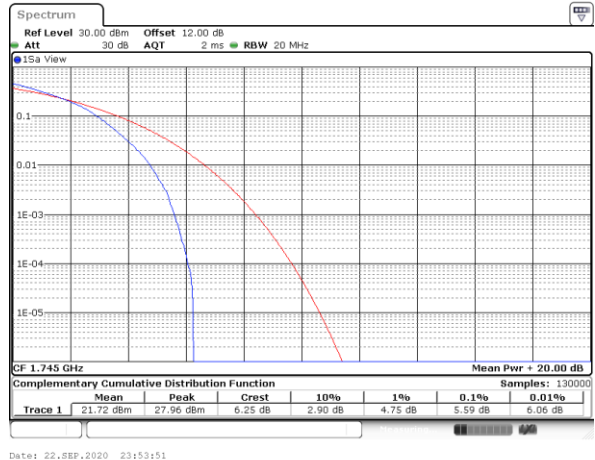
Date: 22\_SEP.2020 23:53:29

Highest Channel / 1RB



Date: 22\_SEP.2020 23:53:39

Highest Channel / Full RB



Date: 22\_SEP.2020 23:53:51



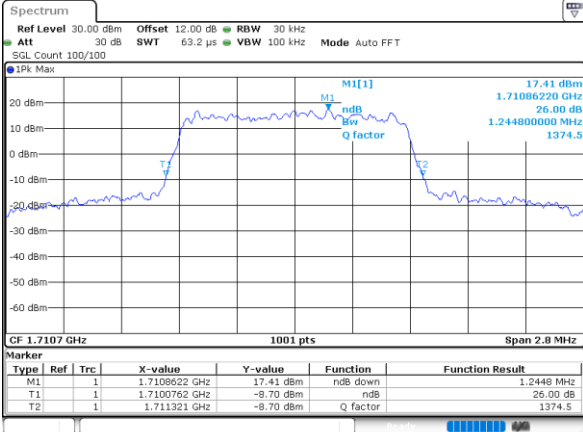
**26dB Bandwidth**

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	1.24	1.23	3.07	3.06	4.89	4.86	9.89	9.91	14.36	14.45	19.30	19.14
Middle CH	1.24	1.23	3.07	3.01	4.90	4.91	9.69	9.71	14.27	14.51	18.78	18.98
Highest CH	1.24	1.23	3.04	2.92	4.89	4.92	9.77	9.71	14.42	14.33	18.74	18.98



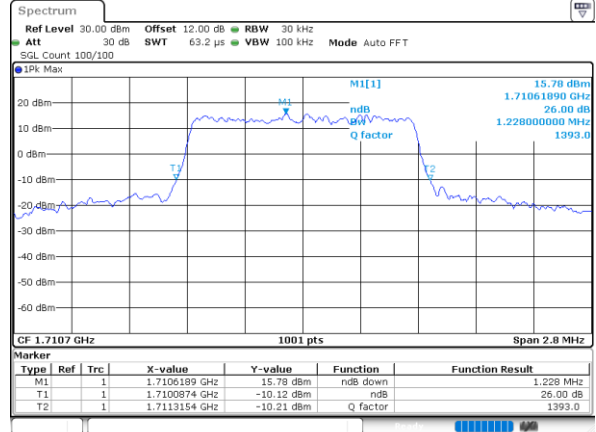
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



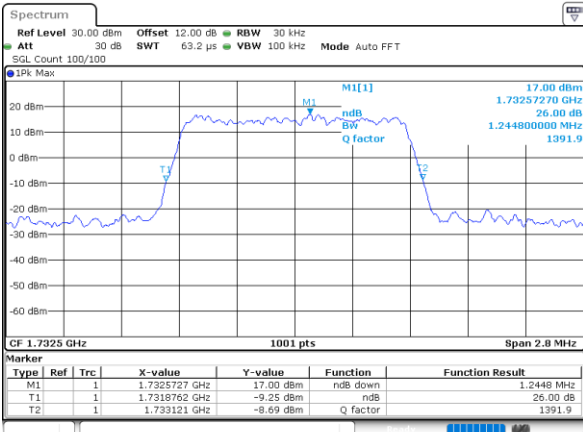
Date: 22\_SEP.2020 23:12:46

Lowest Channel / 1.4MHz / 16QAM



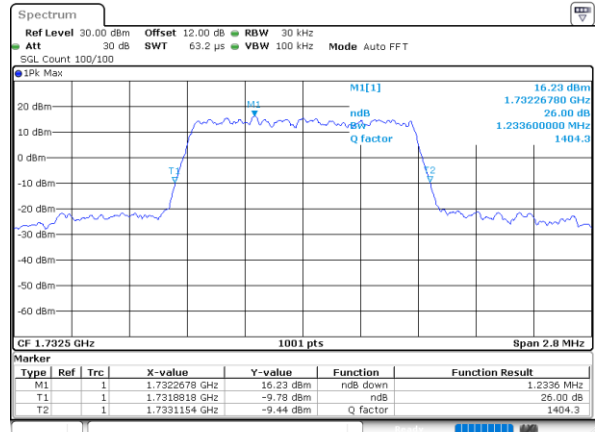
Date: 22\_SEP.2020 23:12:57

Middle Channel / 1.4MHz / QPSK



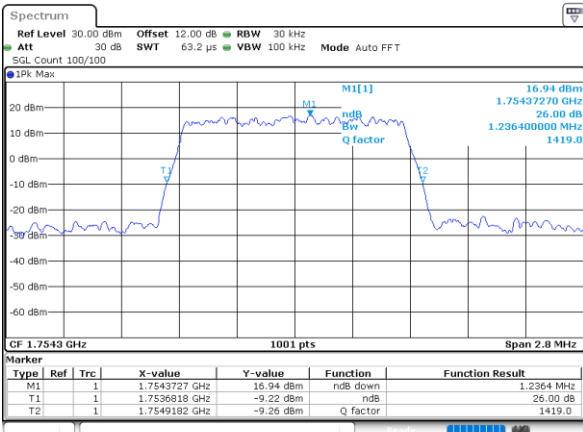
Date: 22\_SEP.2020 23:23:09

Middle Channel / 1.4MHz / 16QAM



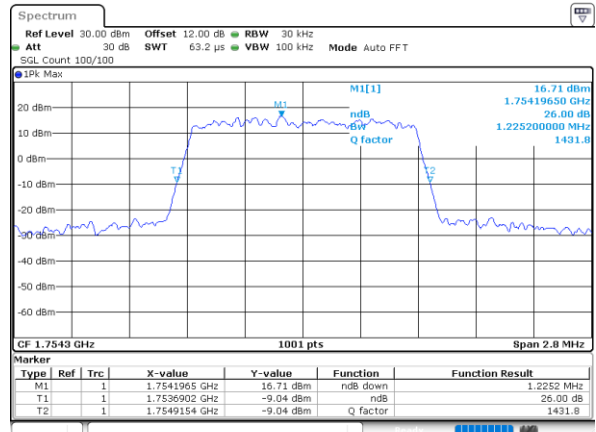
Date: 22\_SEP.2020 23:23:20

Highest Channel / 1.4MHz / QPSK



Date: 22\_SEP.2020 23:37:46

Highest Channel / 1.4MHz / 16QAM

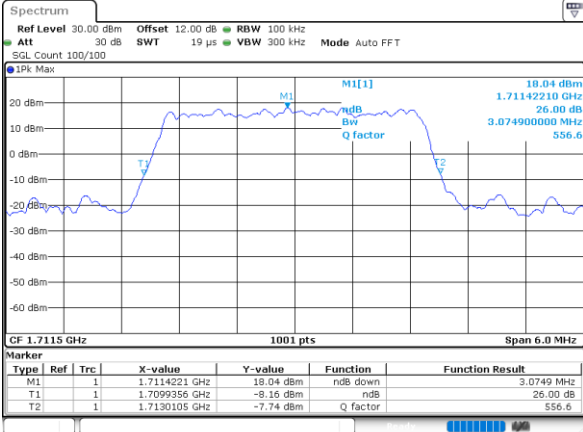


Date: 22\_SEP.2020 23:37:58



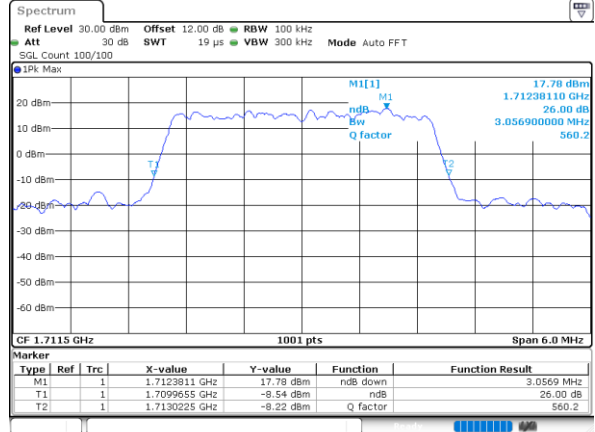
LTE Band 4

Lowest Channel / 3MHz / QPSK



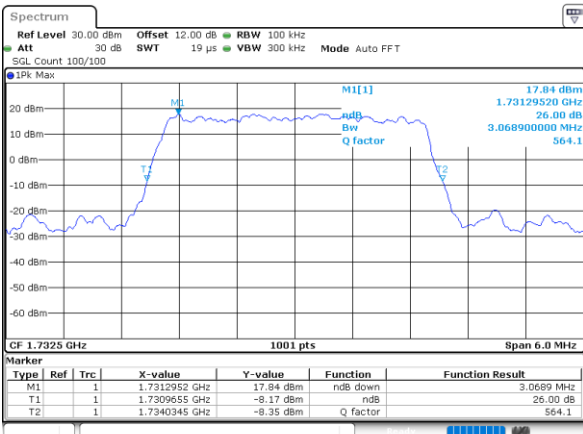
Date: 22\_SEP.2020 22:01:05

Lowest Channel / 3MHz / 16QAM



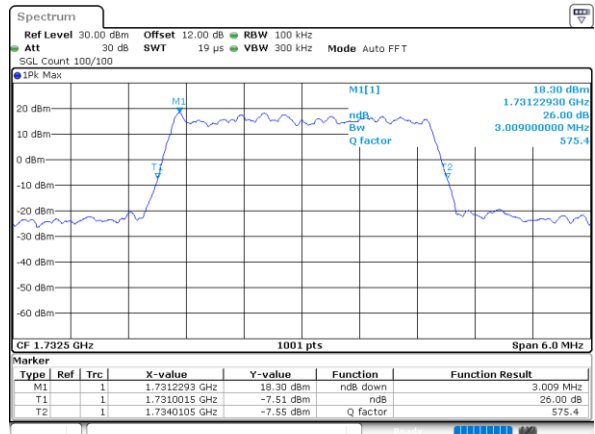
Date: 22\_SEP.2020 22:01:17

Middle Channel / 3MHz / QPSK



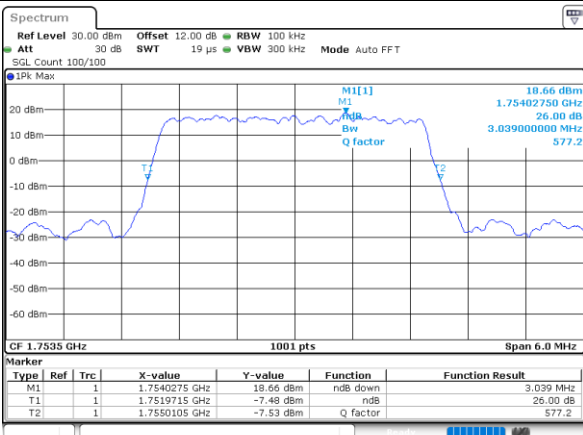
Date: 22\_SEP.2020 22:07:11

Middle Channel / 3MHz / 16QAM



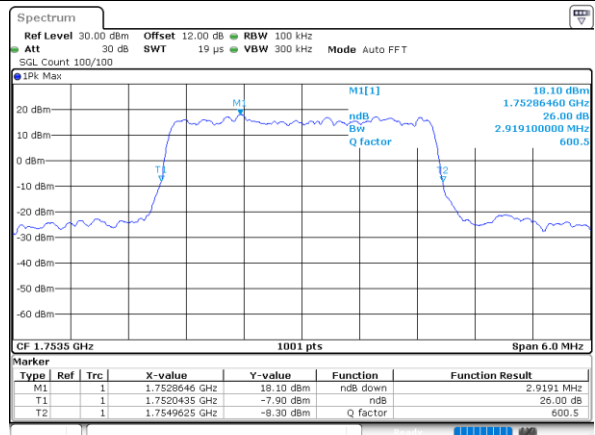
Date: 22\_SEP.2020 22:07:23

Highest Channel / 3MHz / QPSK



Date: 22\_SEP.2020 22:09:17

Highest Channel / 3MHz / 16QAM

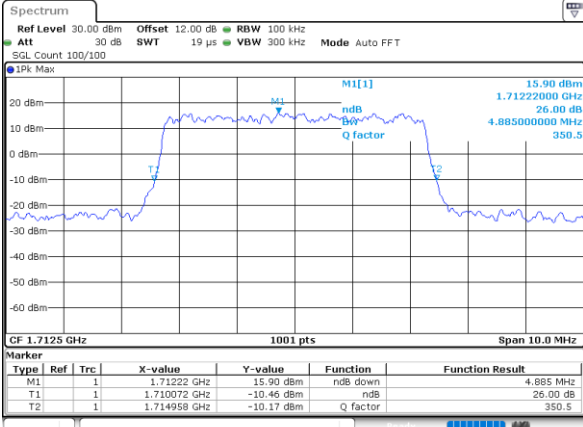


Date: 22\_SEP.2020 22:09:29



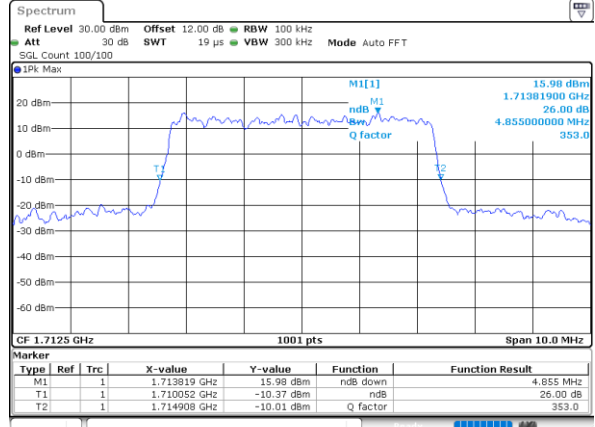
LTE Band 4

Lowest Channel / 5MHz / QPSK



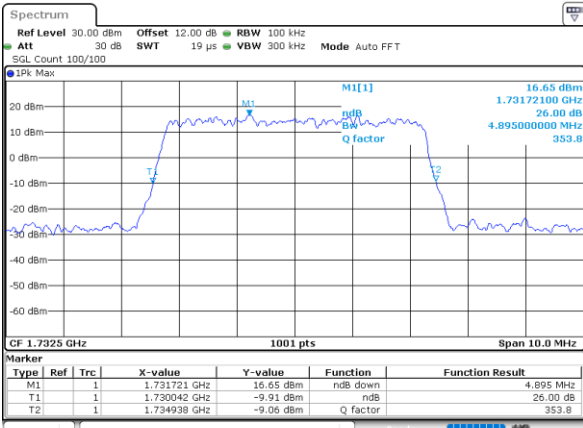
Date: 22\_SEP.2020 22:15:25

Lowest Channel / 5MHz / 16QAM



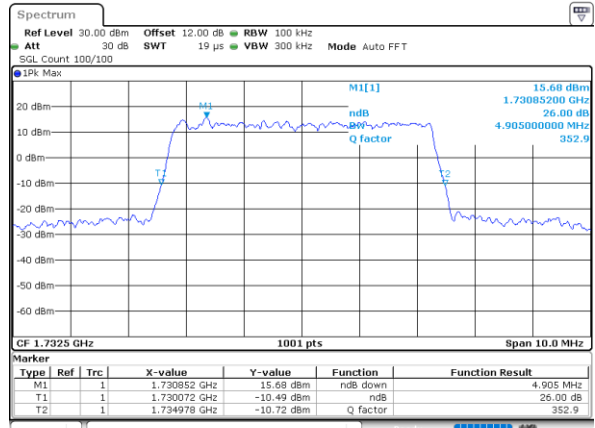
Date: 22\_SEP.2020 22:15:37

Middle Channel / 5MHz / QPSK



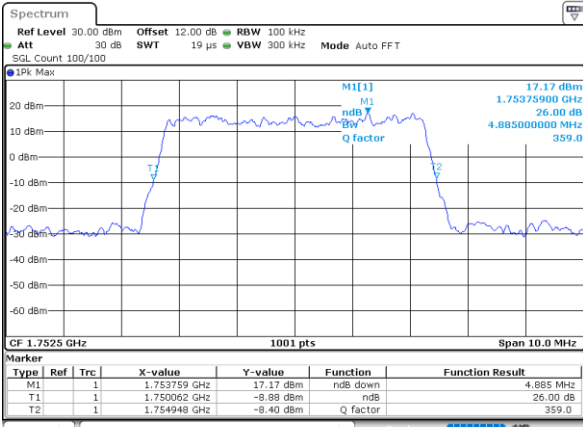
Date: 22\_SEP.2020 22:21:01

Middle Channel / 5MHz / 16QAM



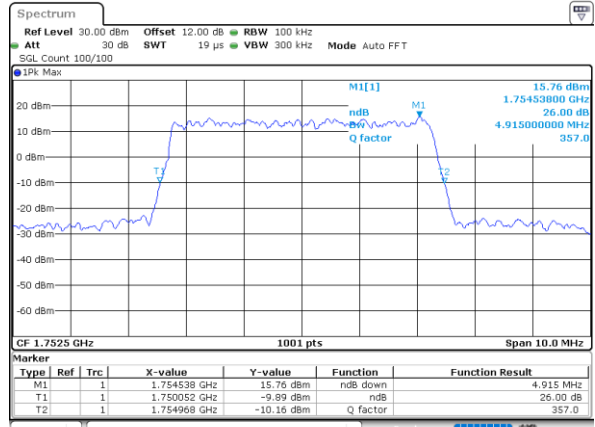
Date: 22\_SEP.2020 22:21:43

Highest Channel / 5MHz / QPSK



Date: 22\_SEP.2020 22:23:37

Highest Channel / 5MHz / 16QAM

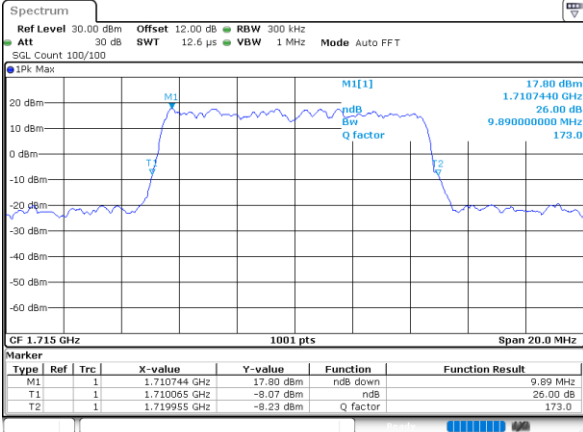


Date: 22\_SEP.2020 22:23:49



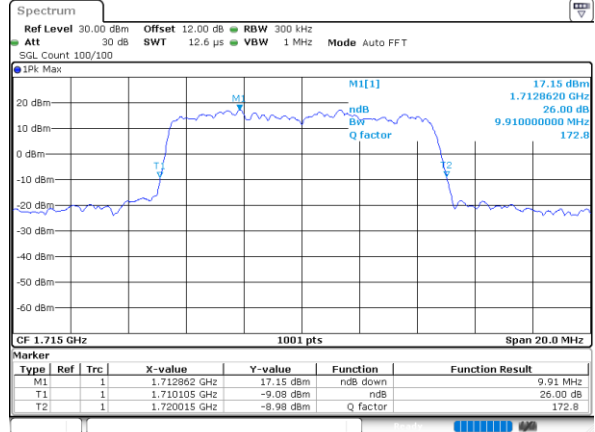
LTE Band 4

Lowest Channel / 10MHz / QPSK



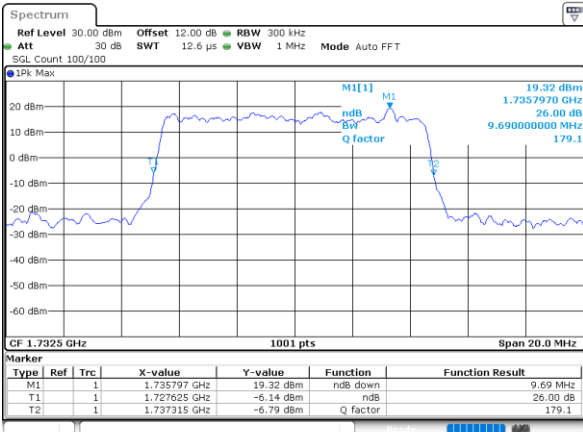
Date: 22\_SEP.2020 22:29:46

Lowest Channel / 10MHz / 16QAM



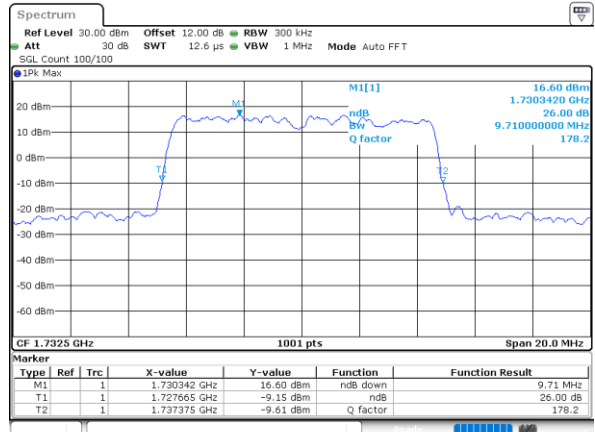
Date: 22\_SEP.2020 22:29:57

Middle Channel / 10MHz / QPSK



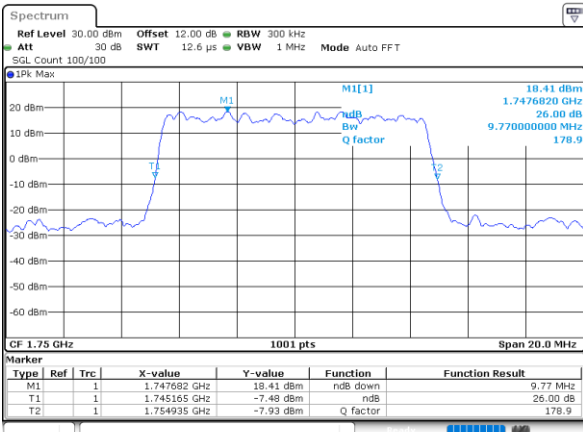
Date: 22\_SEP.2020 22:35:52

Middle Channel / 10MHz / 16QAM



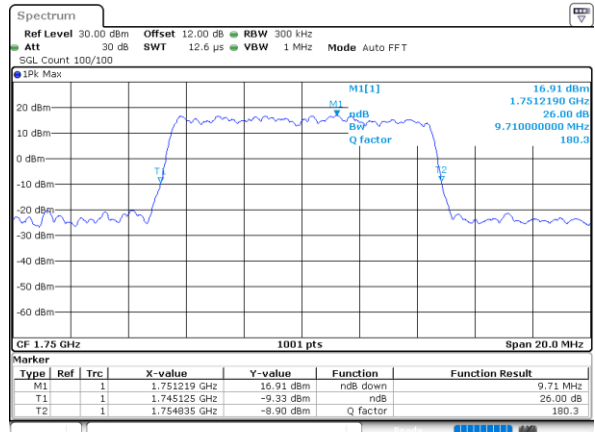
Date: 22\_SEP.2020 22:36:03

Highest Channel / 10MHz / QPSK



Date: 22\_SEP.2020 22:37:57

Highest Channel / 10MHz / 16QAM

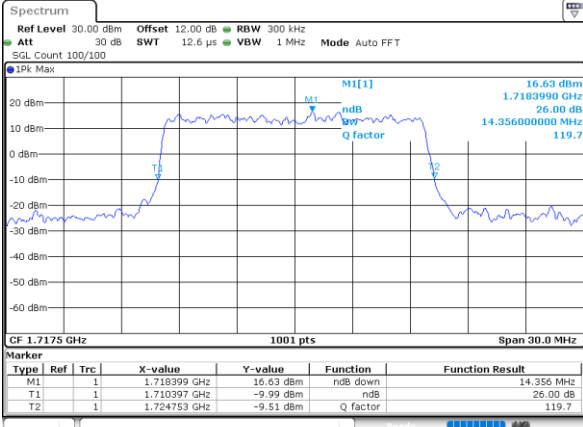


Date: 22\_SEP.2020 22:38:09



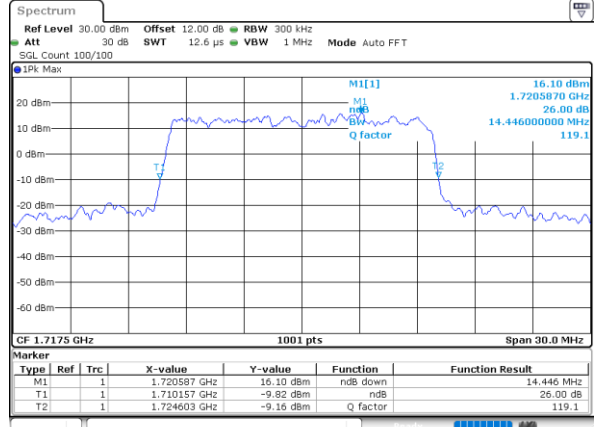
LTE Band 4

Lowest Channel / 15MHz / QPSK



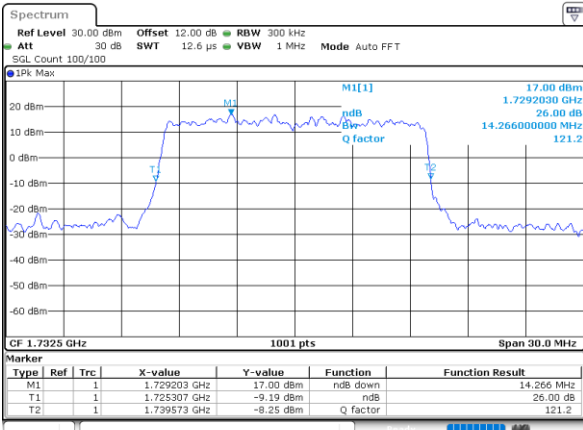
Date: 22\_SEP.2020 22:44:06

Lowest Channel / 15MHz / 16QAM



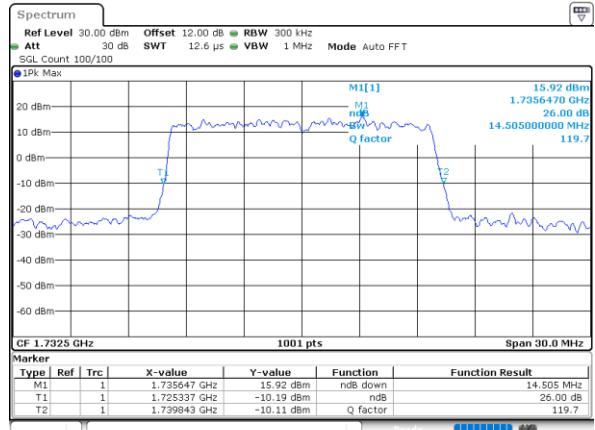
Date: 22\_SEP.2020 22:44:17

Middle Channel / 15MHz / QPSK



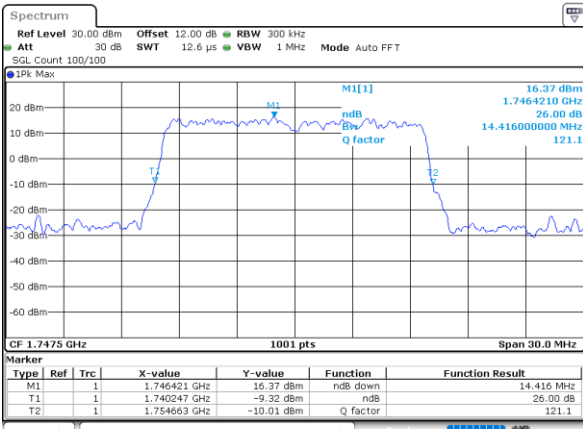
Date: 22\_SEP.2020 22:50:12

Middle Channel / 15MHz / 16QAM



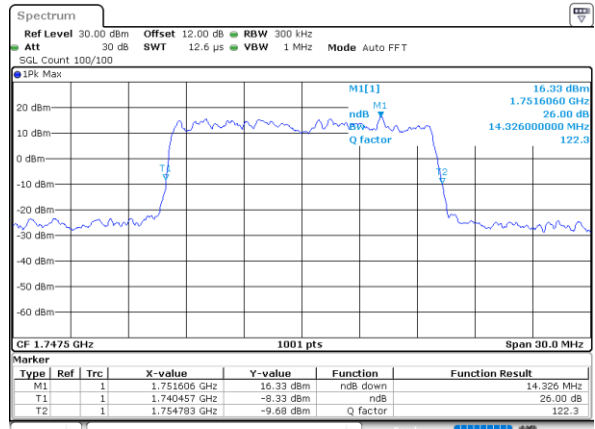
Date: 22\_SEP.2020 22:50:23

Highest Channel / 15MHz / QPSK



Date: 22\_SEP.2020 22:52:17

Highest Channel / 15MHz / 16QAM



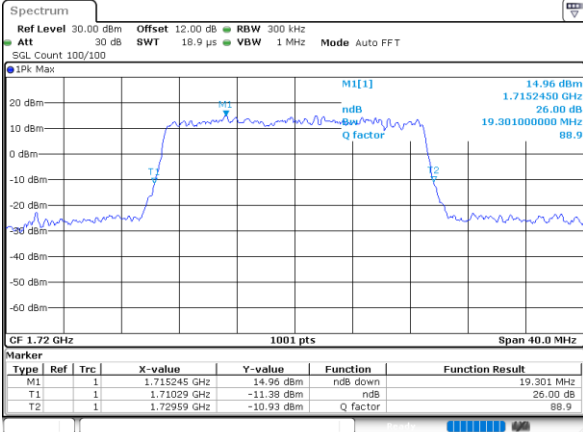
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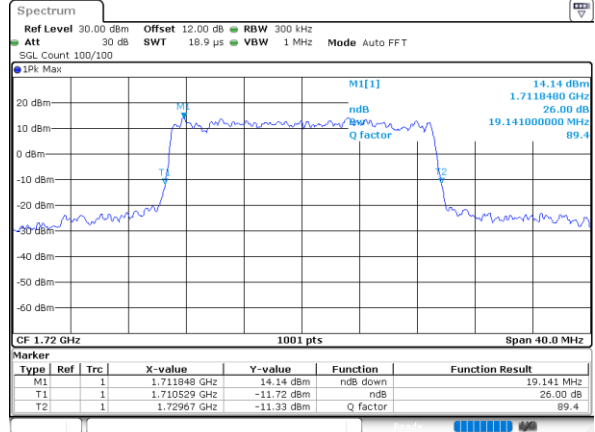
LTE Band 4

Lowest Channel / 20MHz / QPSK



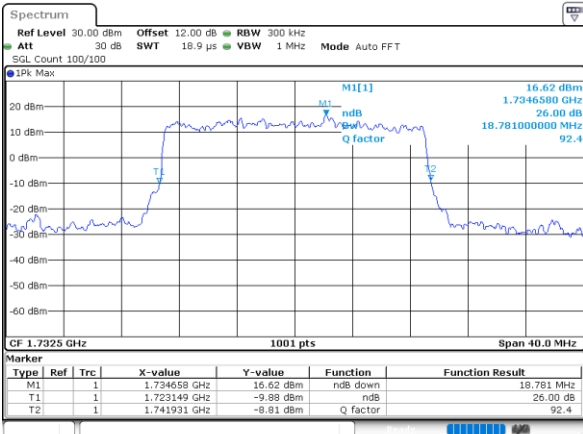
Date: 22\_SEP.2020 22:58:26

Lowest Channel / 20MHz / 16QAM



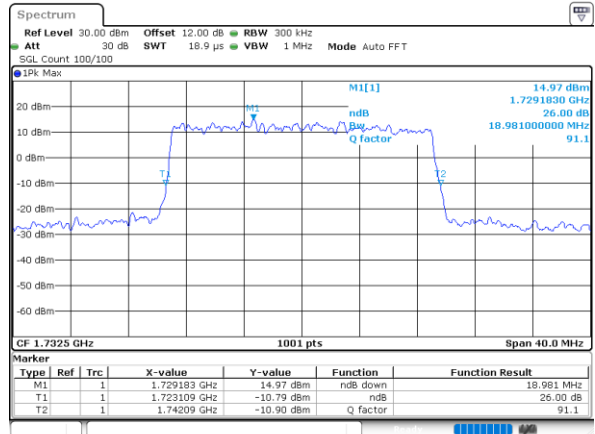
Date: 22\_SEP.2020 22:58:37

Middle Channel / 20MHz / QPSK



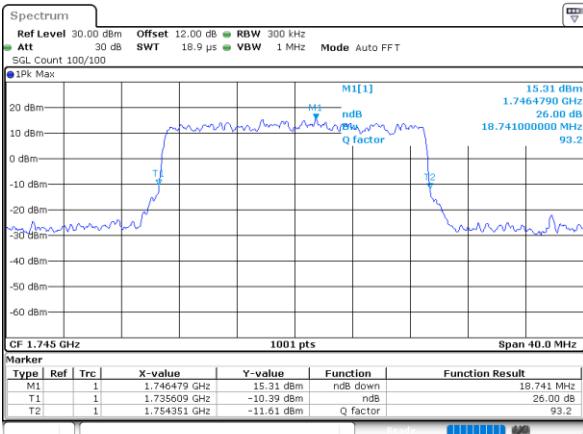
Date: 22\_SEP.2020 23:04:32

Middle Channel / 20MHz / 16QAM



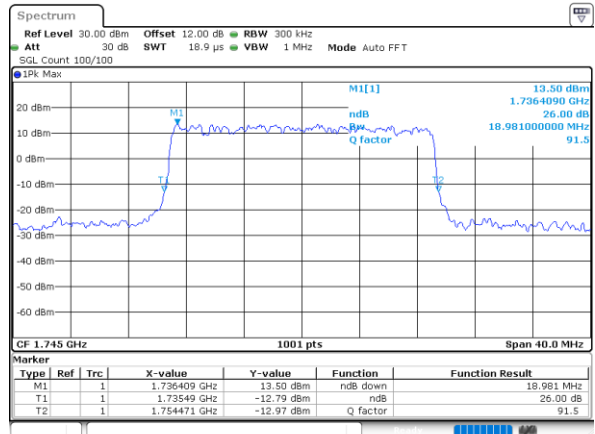
Date: 22\_SEP.2020 23:04:43

Highest Channel / 20MHz / QPSK



Date: 22\_SEP.2020 23:06:37

Highest Channel / 20MHz / 16QAM



Date: 22\_SEP.2020 23:06:49



**Occupied Bandwidth**

Mode	LTE Band 4 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.10	1.09	2.72	2.73	4.49	4.49	9.03	9.03	13.43	13.43	17.86	17.94
Middle CH	1.09	1.10	2.70	2.72	4.50	4.49	9.09	8.97	13.46	13.37	17.86	17.82
Highest CH	1.09	1.09	2.72	2.72	4.49	4.48	9.07	9.07	13.55	13.52	17.86	17.82