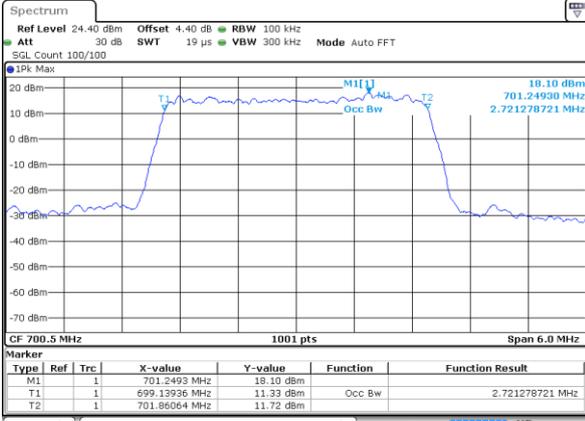




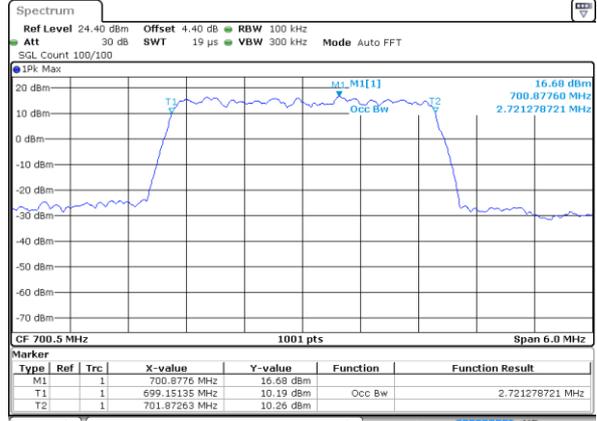
LTE Band 12

Lowest Channel / 3MHz / QPSK



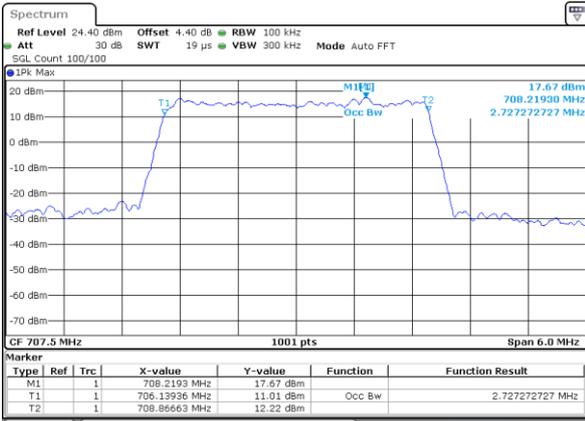
Date: 4 MAY 2020 15:58:09

Lowest Channel / 3MHz / 16QAM



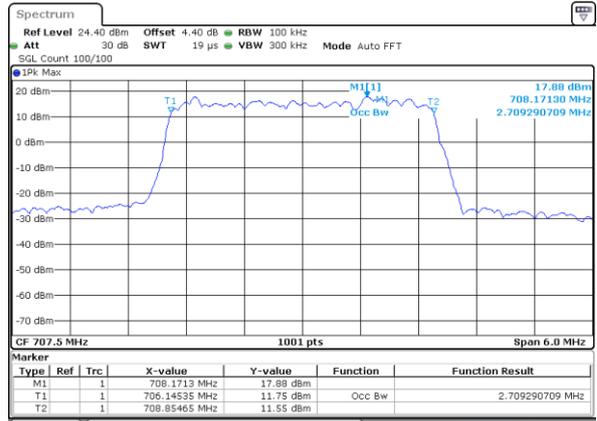
Date: 4 MAY 2020 15:58:19

Middle Channel / 3MHz / QPSK



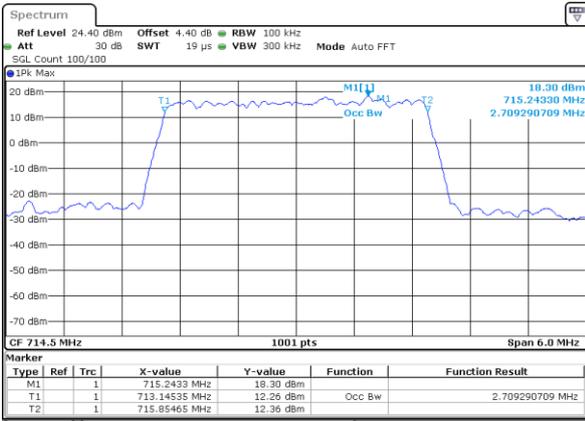
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Middle Channel / 3MHz / 16QAM



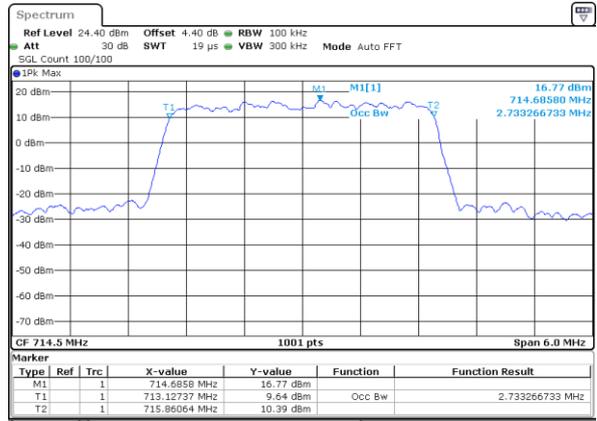
Date: 4 MAY 2020 15:58:29

Highest Channel / 3MHz / QPSK



Date: 4 MAY 2020 15:58:49

Highest Channel / 3MHz / 16QAM

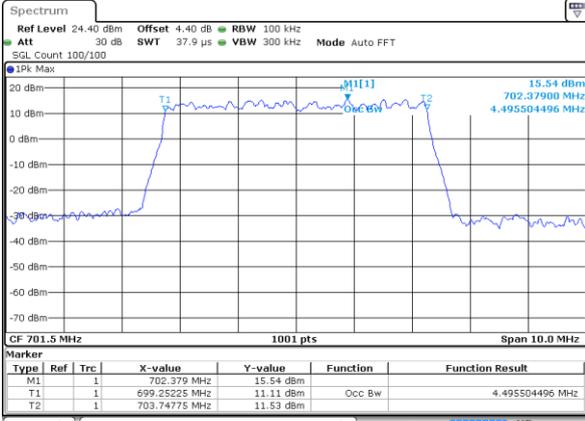


Date: 4 MAY 2020 15:58:59



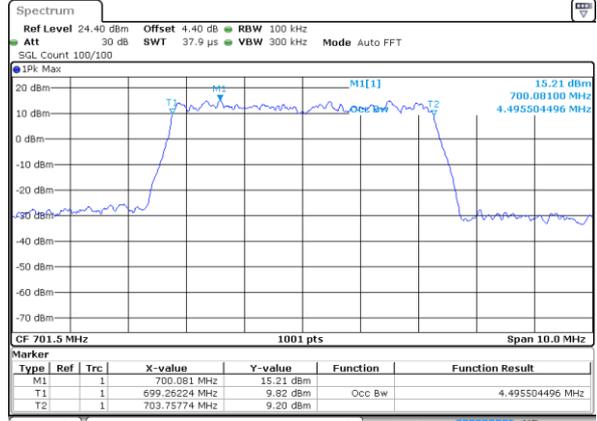
LTE Band 12

Lowest Channel / 5MHz / QPSK



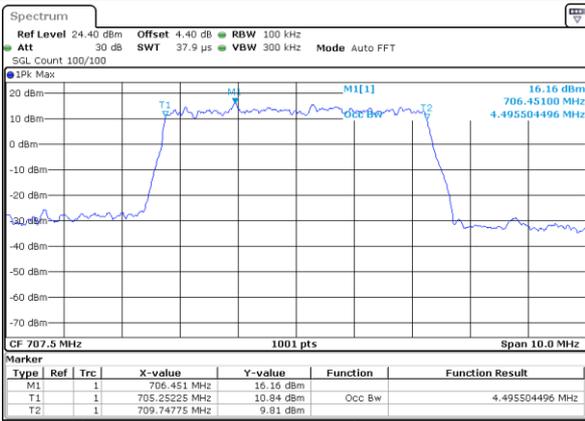
Date: 4 MAY 2020 16:14:38

Lowest Channel / 5MHz / 16QAM



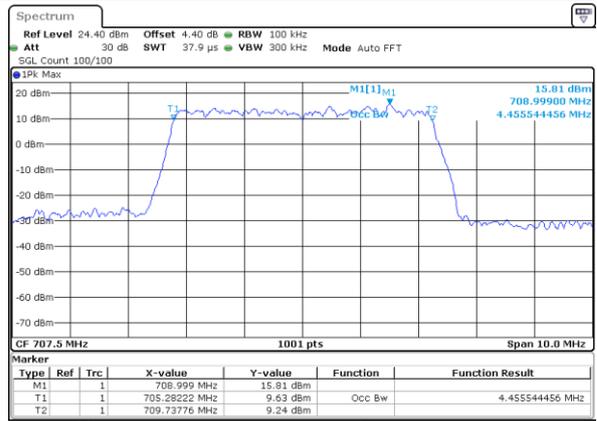
Date: 4 MAY 2020 16:14:48

Middle Channel / 5MHz / QPSK



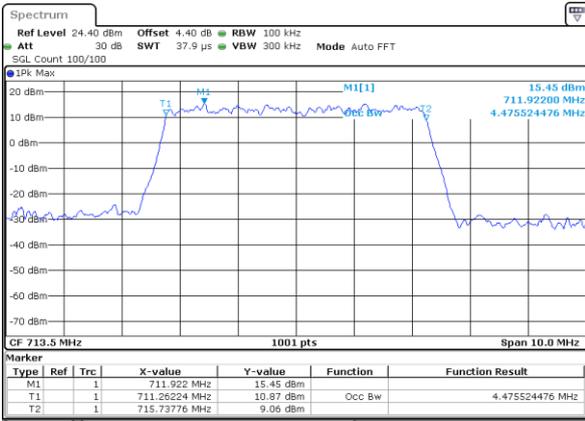
Date: 4 MAY 2020 16:15:08

Middle Channel / 5MHz / 16QAM



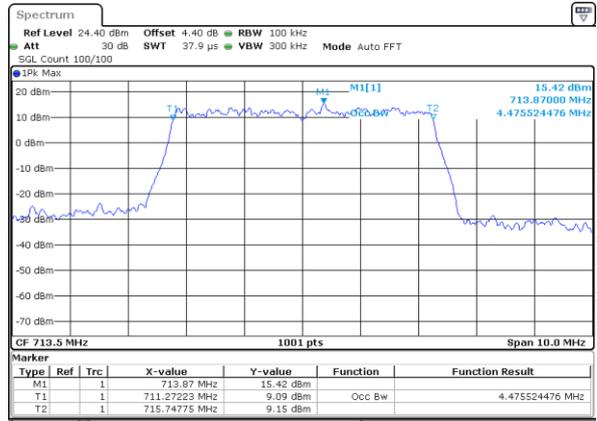
Date: 4 MAY 2020 16:14:58

Highest Channel / 5MHz / QPSK



Date: 4 MAY 2020 16:15:18

Highest Channel / 5MHz / 16QAM

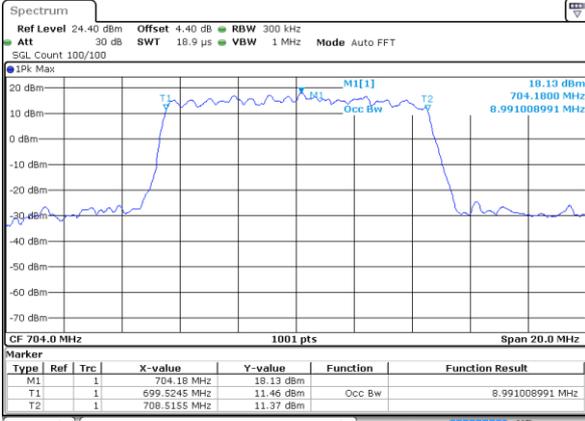


Date: 4 MAY 2020 16:15:28



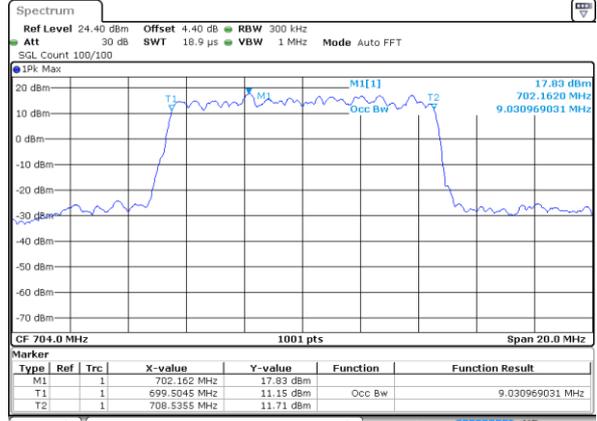
LTE Band 12

Lowest Channel / 10MHz / QPSK



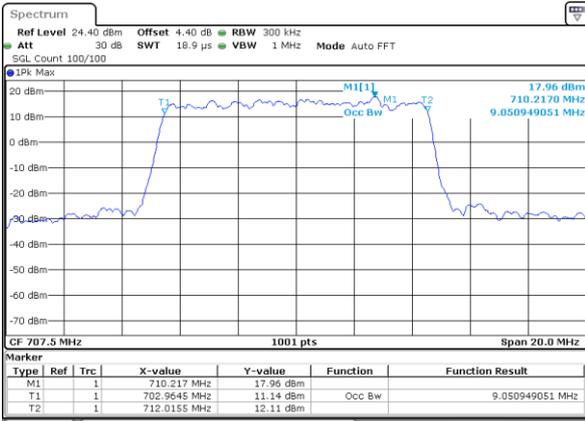
Date: 4 MAY 2020 16:31:07

Lowest Channel / 10MHz / 16QAM



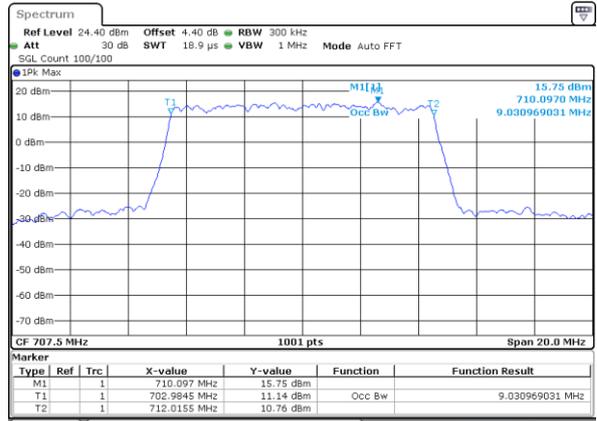
Date: 4 MAY 2020 16:31:17

Middle Channel / 10MHz / QPSK



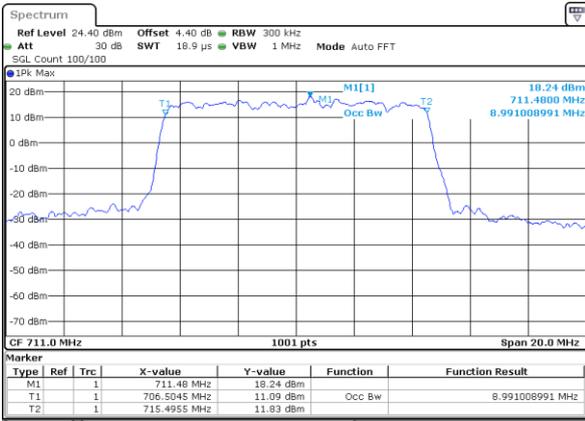
Date: 4 MAY 2020 16:31:37

Middle Channel / 10MHz / 16QAM



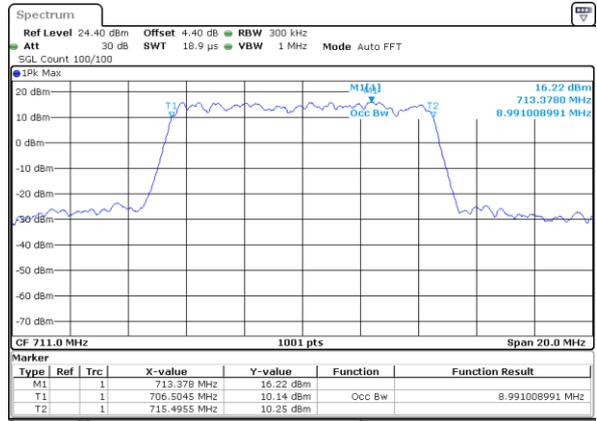
Date: 4 MAY 2020 16:31:27

Highest Channel / 10MHz / QPSK



Date: 4 MAY 2020 16:31:47

Highest Channel / 10MHz / 16QAM

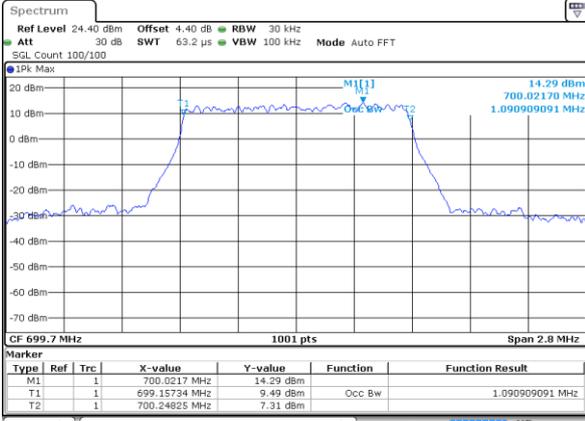


Date: 4 MAY 2020 16:31:57



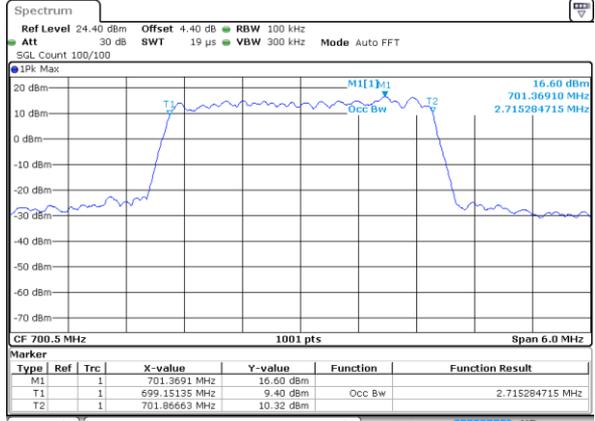
LTE Band 12

Lowest Channel / 1.4MHz / 64QAM



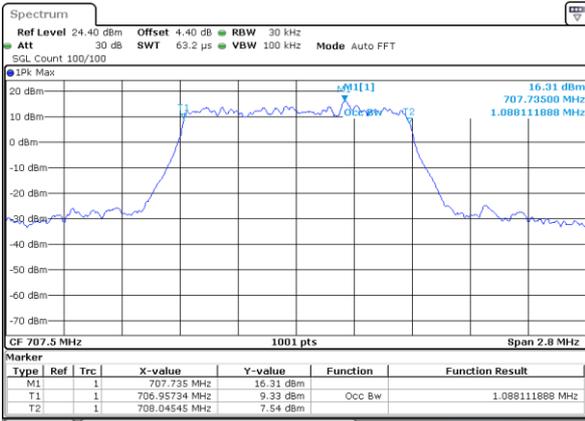
Date: 4 MAY 2020 16:47:36

Lowest Channel / 3MHz / 64QAM



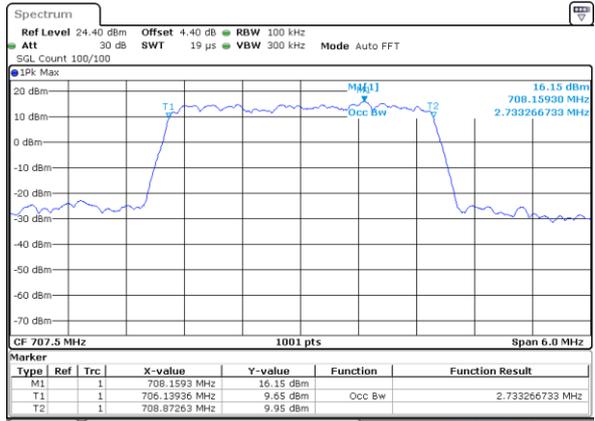
Date: 4 MAY 2020 16:58:31

Middle Channel / 1.4MHz / 64QAM



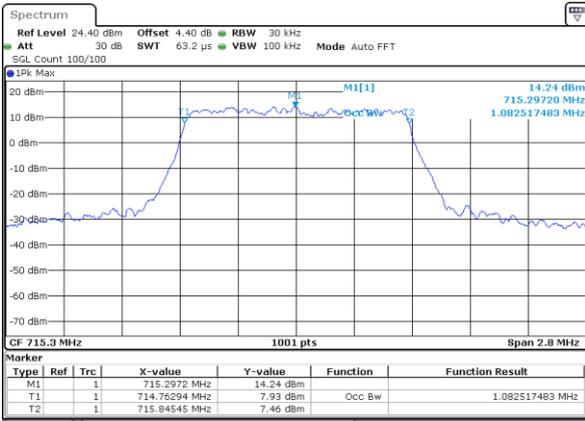
Date: 4 MAY 2020 16:47:56

Middle Channel / 3MHz / 64QAM



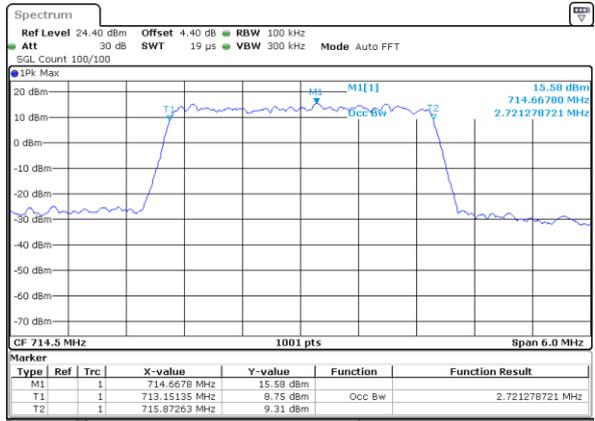
Date: 4 MAY 2020 16:58:51

Highest Channel / 1.4MHz / 64QAM



Date: 4 MAY 2020 16:48:16

Highest Channel / 3MHz / 64QAM

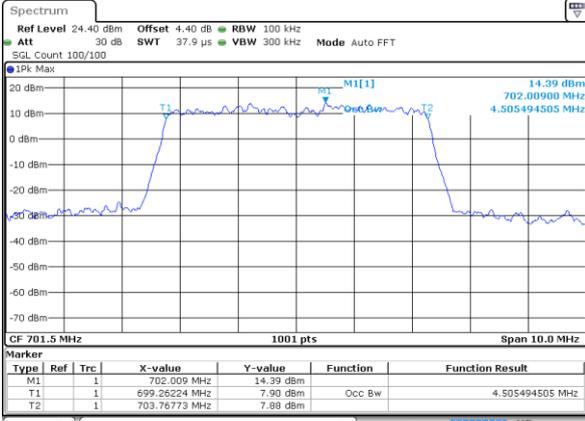


Date: 4 MAY 2020 16:59:11



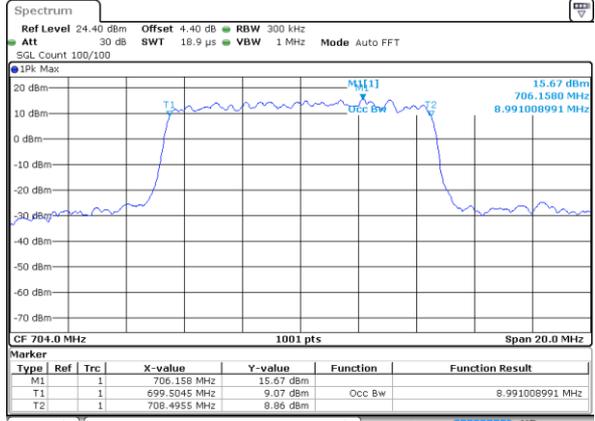
LTE Band 12

Lowest Channel / 5MHz / 64QAM



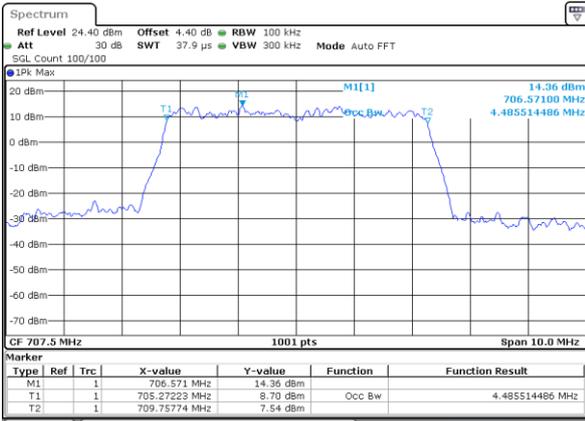
Date: 4 MAY 2020 17:04:05

Lowest Channel / 10MHz / 64QAM



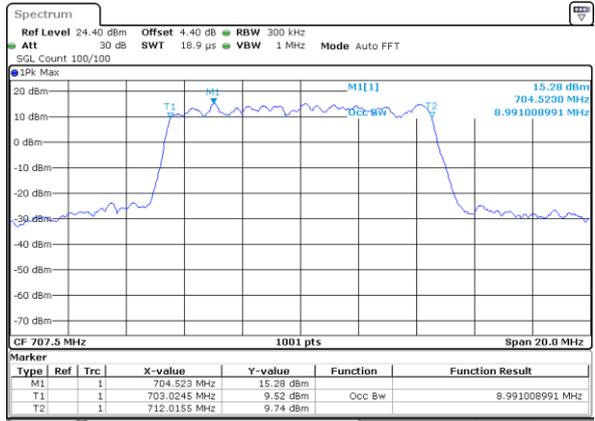
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Middle Channel / 5MHz / 64QAM



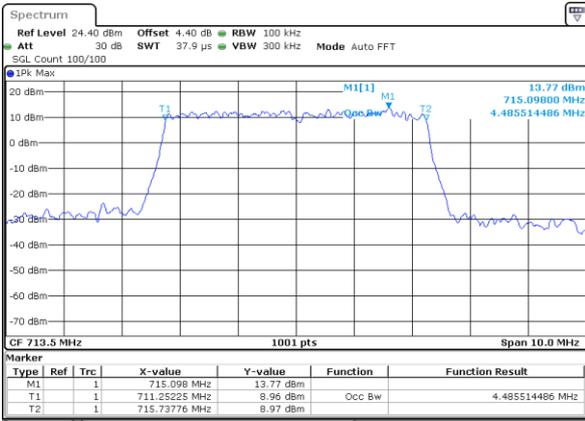
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Middle Channel / 10MHz / 64QAM



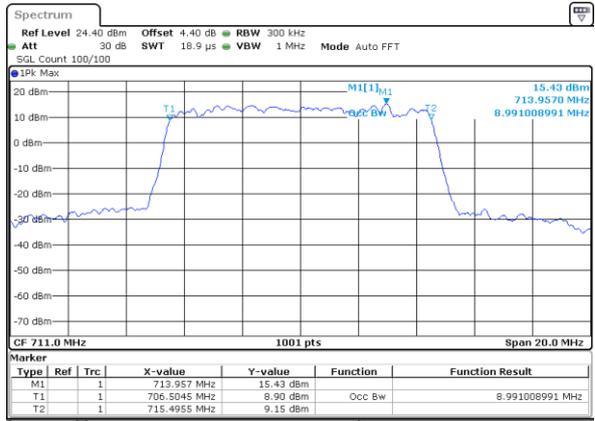
Date: 4 MAY 2020 17:15:20

Highest Channel / 5MHz / 64QAM



Date: 4 MAY 2020 17:04:45

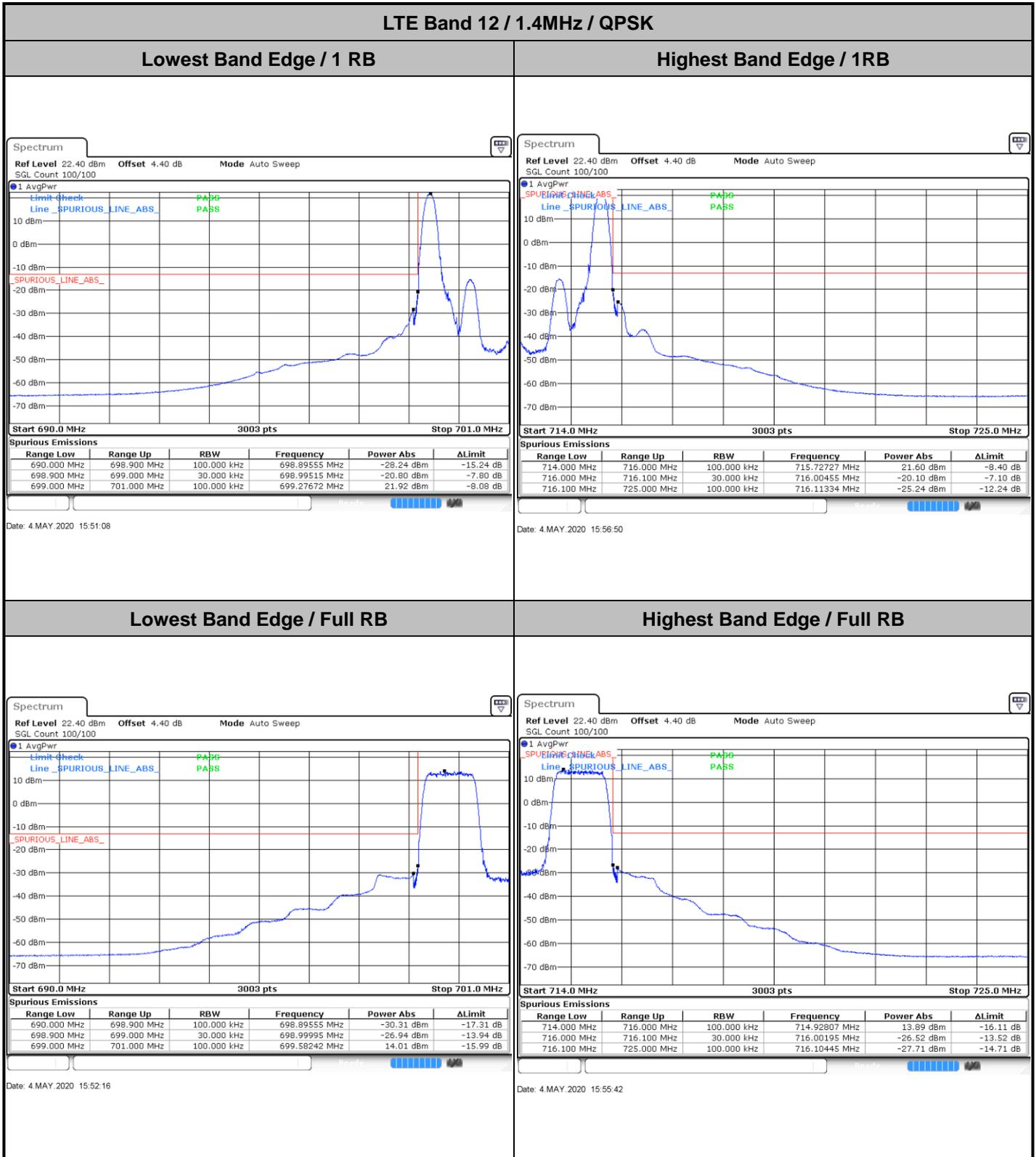
Highest Channel / 10MHz / 64QAM



Date: 4 MAY 2020 17:15:40



Conducted Band Edge





LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 4 MAY 2020 15:49:59

Highest Band Edge / 1 RB



Date: 4 MAY 2020 15:57:59

Lowest Band Edge / Full RB



Date: 4 MAY 2020 15:53:25

Highest Band Edge / Full RB



Date: 4 MAY 2020 15:54:33



LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



Date: 4 MAY 2020 16:51:51

Highest Band Edge / 1 RB



Date: 4 MAY 2020 16:49:34

Lowest Band Edge / Full RB



Date: 4 MAY 2020 16:53:00

Highest Band Edge / Full RB

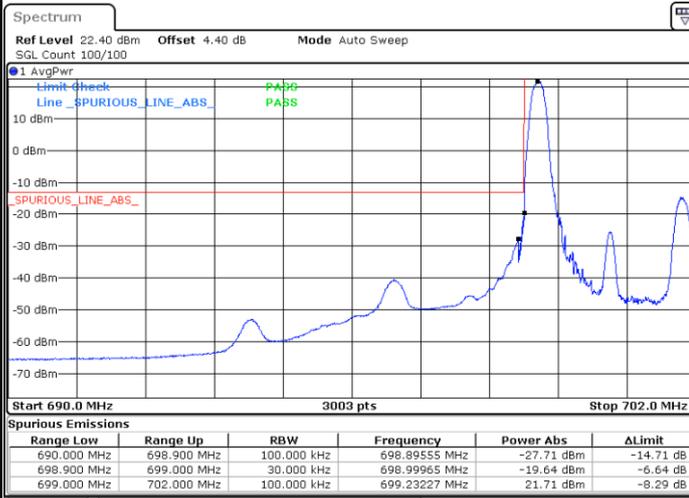


Date: 4 MAY 2020 16:50:43



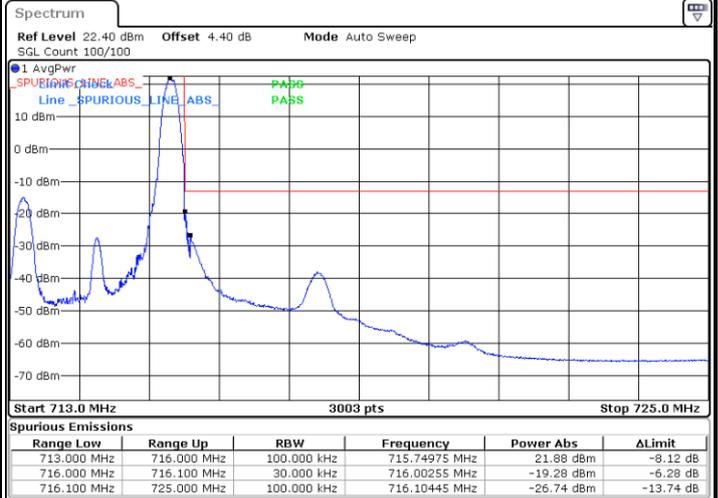
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



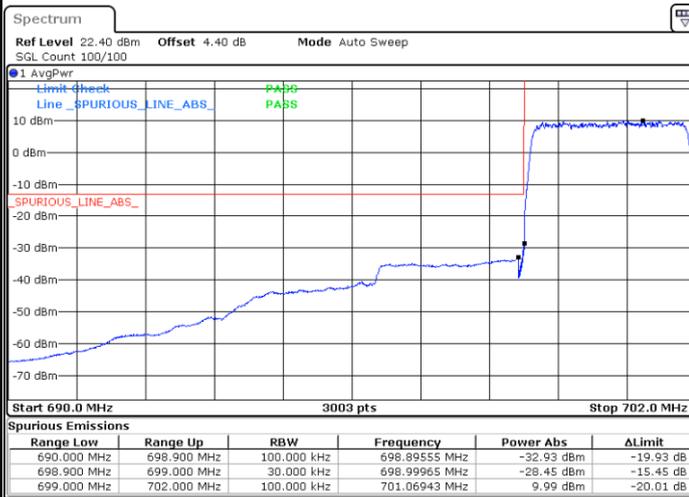
Date: 4 MAY 2020 16:07:36

Highest Band Edge / 1 RB



Date: 4 MAY 2020 16:13:19

Lowest Band Edge / Full RB



Date: 4 MAY 2020 16:08:45

Highest Band Edge / Full RB

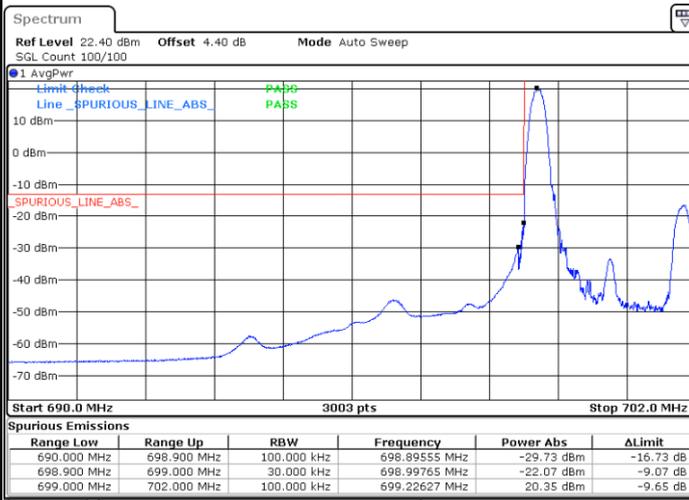


Date: 4 MAY 2020 16:12:11



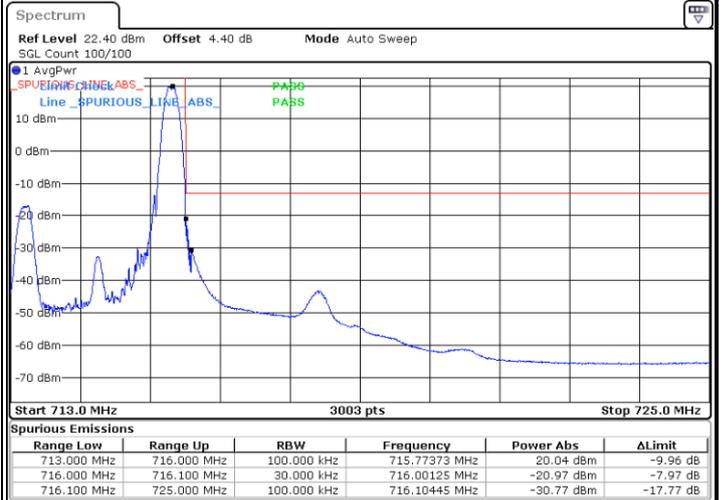
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 4 MAY 2020 16:06:28

Highest Band Edge / 1 RB



Date: 4 MAY 2020 16:14:28

Lowest Band Edge / Full RB



Date: 4 MAY 2020 16:09:54

Highest Band Edge / Full RB

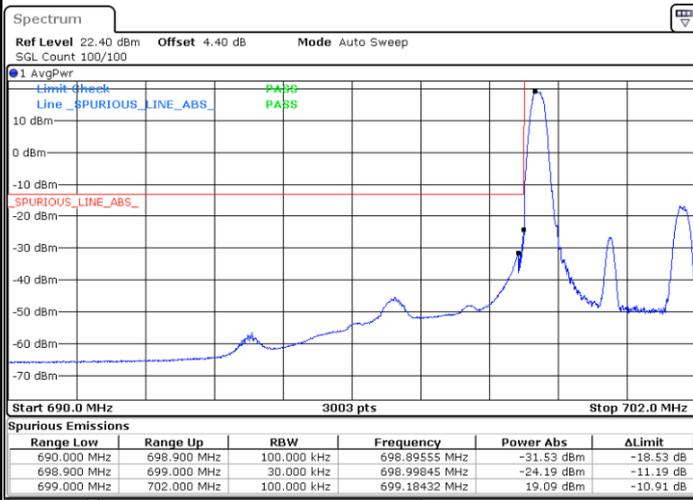


Date: 4 MAY 2020 16:11:02



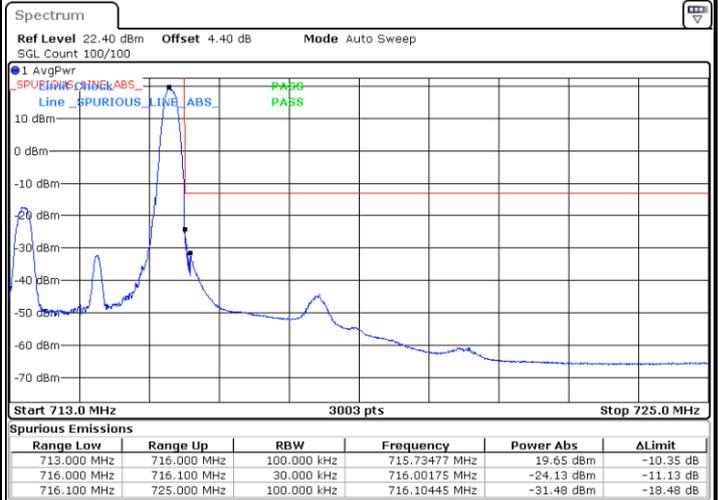
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



Date: 4 MAY 2020 17:00:29

Highest Band Edge / 1 RB



Date: 4 MAY 2020 17:03:55

Lowest Band Edge / Full RB



Date: 4 MAY 2020 17:01:37

Highest Band Edge / Full RB

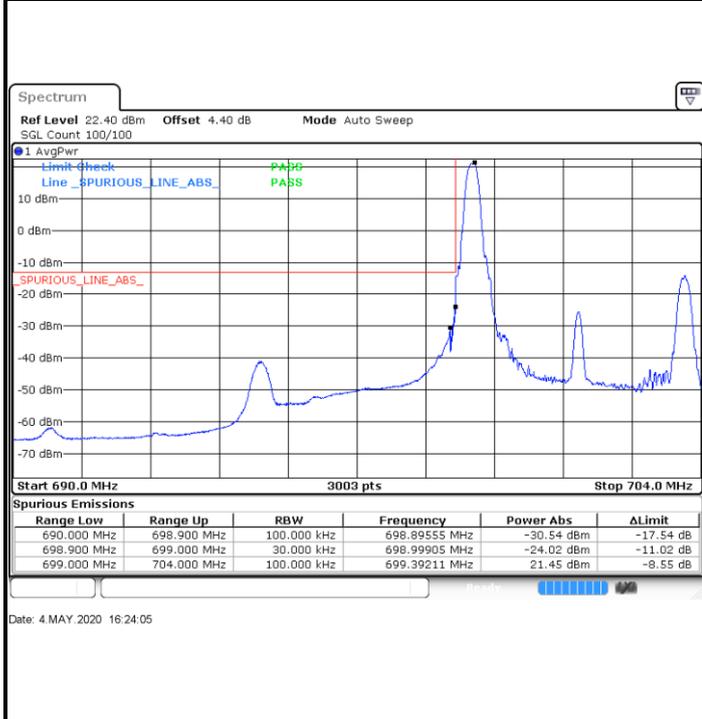


Date: 4 MAY 2020 17:02:46

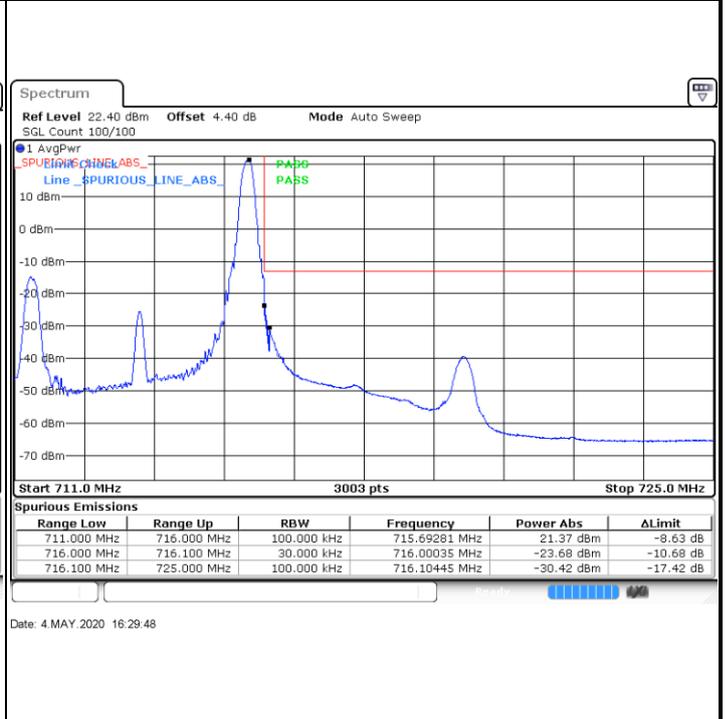


LTE Band 12 / 5MHz / QPSK

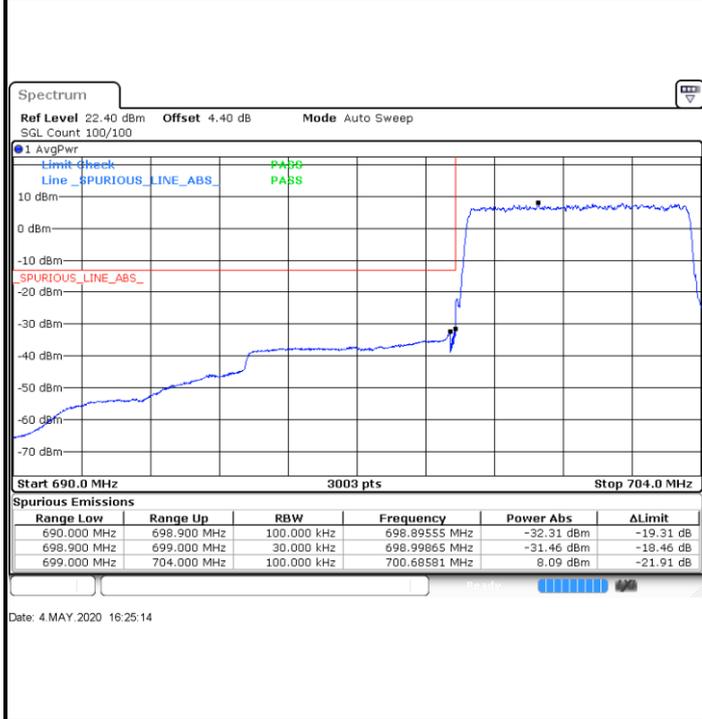
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



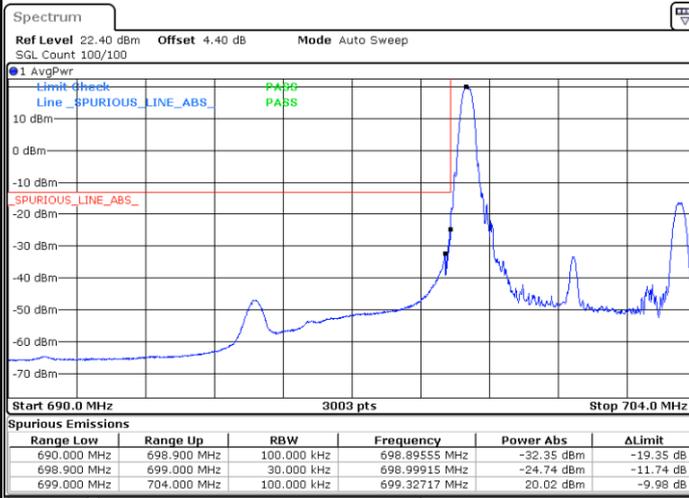
Highest Band Edge / Full RB





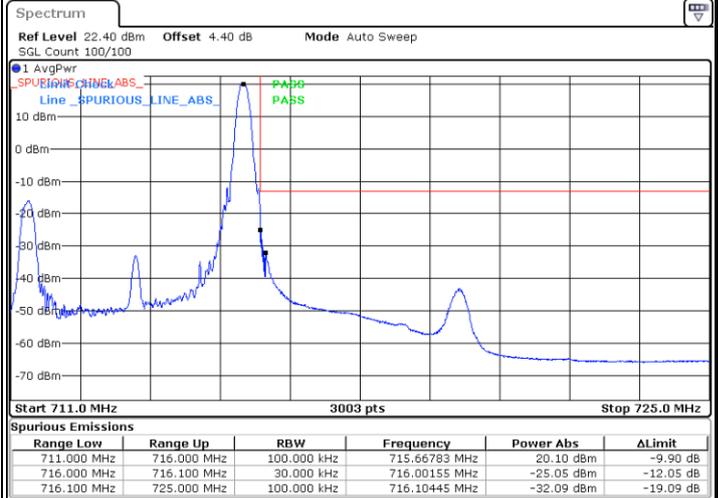
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



Date: 4 MAY 2020 16:22:57

Highest Band Edge / 1 RB



Date: 4 MAY 2020 16:30:57

Lowest Band Edge / Full RB



Date: 4 MAY 2020 16:26:22

Highest Band Edge / Full RB

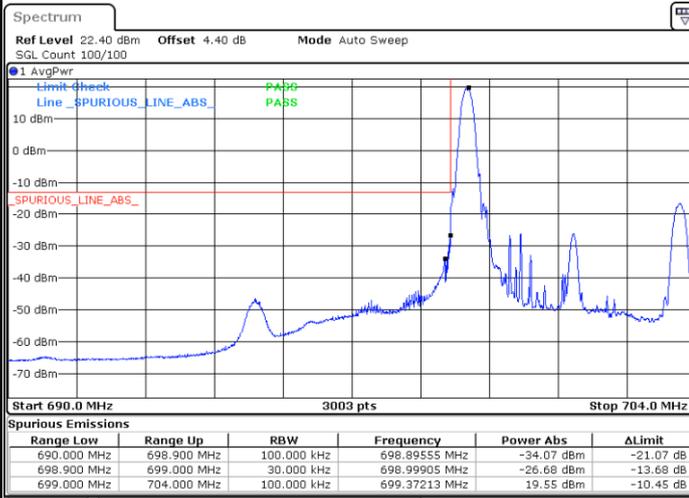


Date: 4 MAY 2020 16:27:31



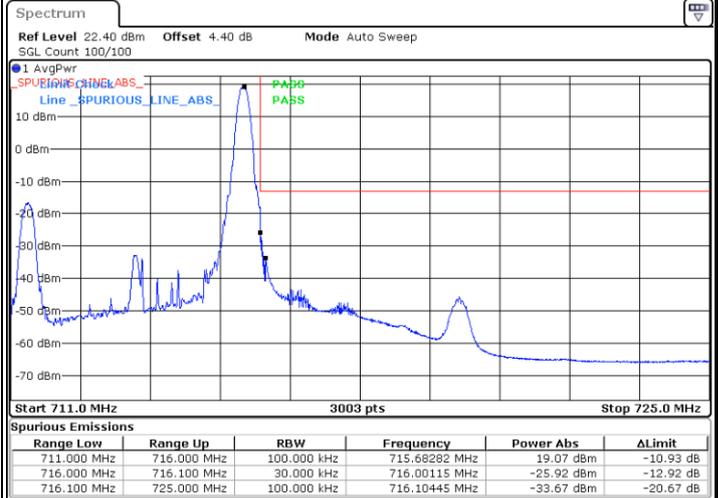
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



Date: 4 MAY 2020 17:08:20

Highest Band Edge / 1 RB



Date: 4 MAY 2020 17:07:11

Lowest Band Edge / Full RB



Date: 4 MAY 2020 17:09:29

Highest Band Edge / Full RB

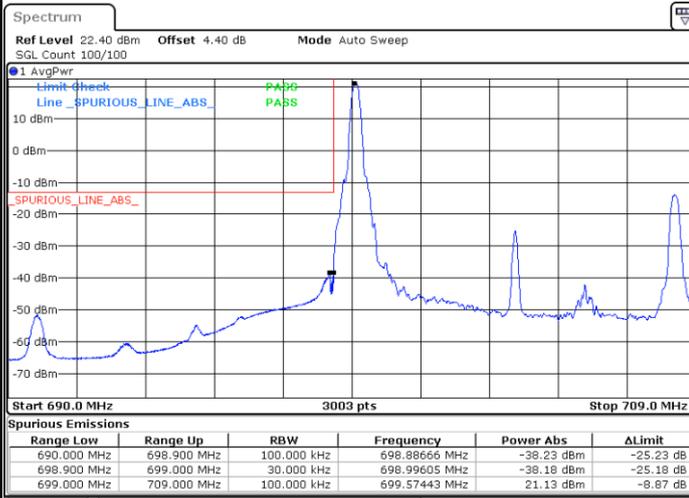


Date: 4 MAY 2020 17:06:03



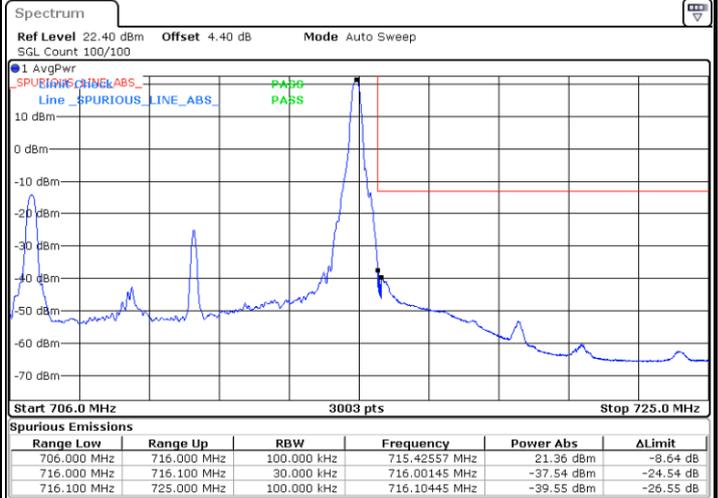
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



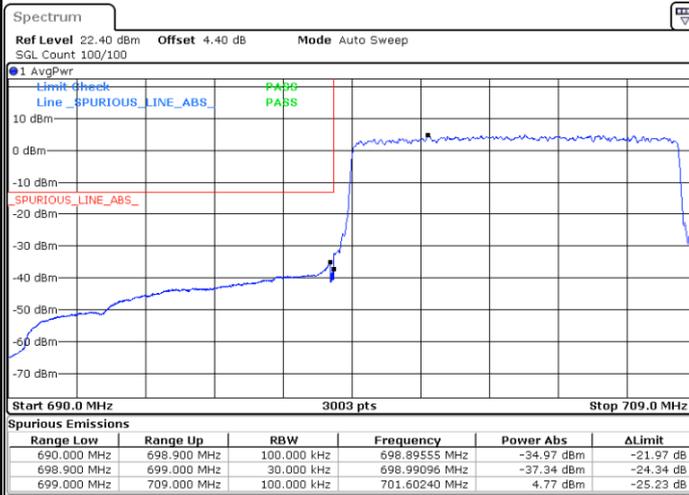
Date: 4 MAY 2020 16:40:35

Highest Band Edge / 1 RB



Date: 4 MAY 2020 16:46:17

Lowest Band Edge / Full RB



Date: 4 MAY 2020 16:41:43

Highest Band Edge / Full RB

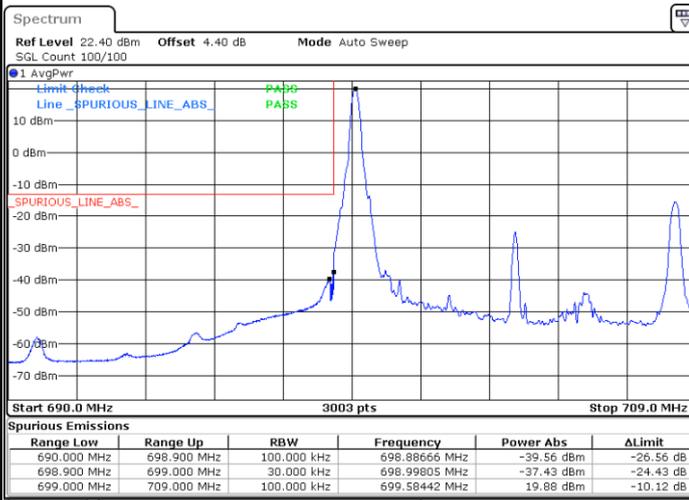


Date: 4 MAY 2020 16:45:09



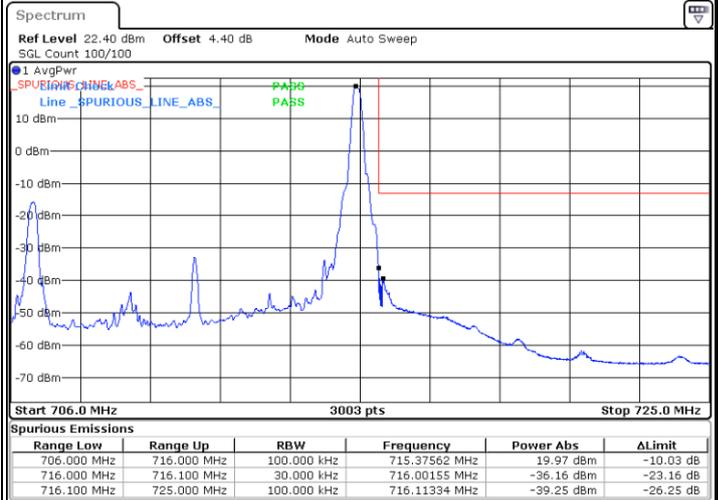
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



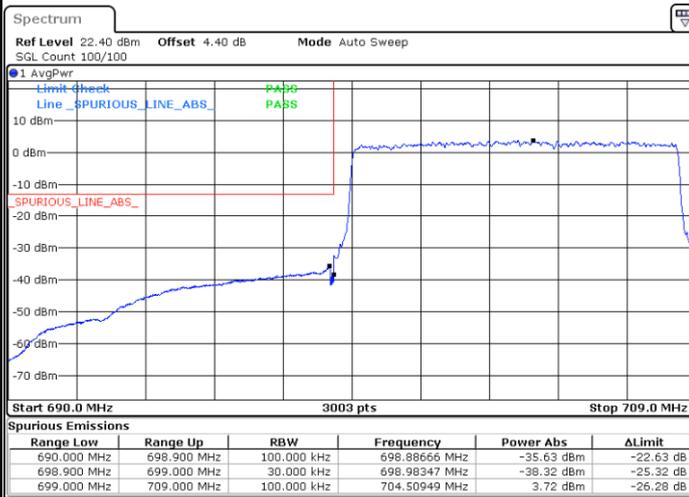
Date: 4 MAY 2020 16:39:26

Highest Band Edge / 1 RB



Date: 4 MAY 2020 16:47:26

Lowest Band Edge / Full RB



Date: 4 MAY 2020 16:42:52

Highest Band Edge / Full RB

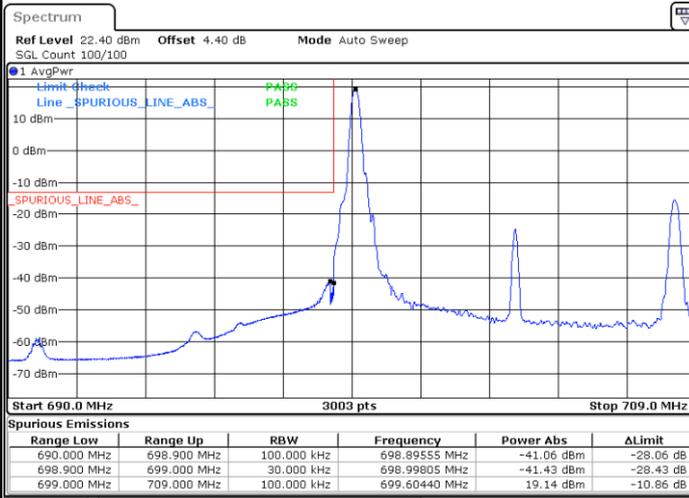


Date: 4 MAY 2020 16:44:00



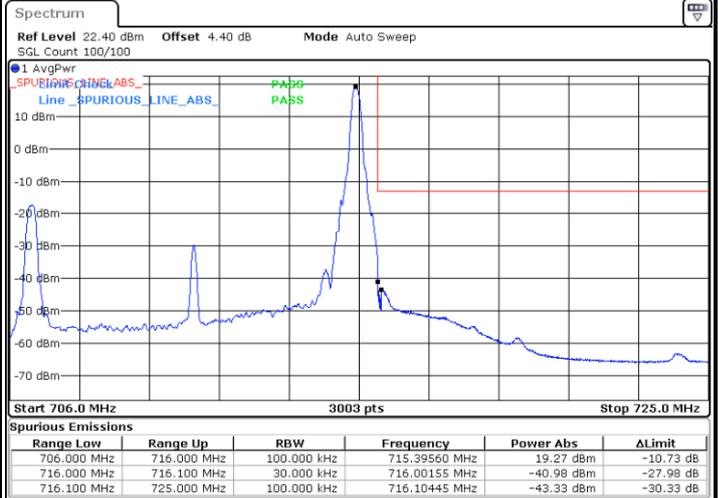
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



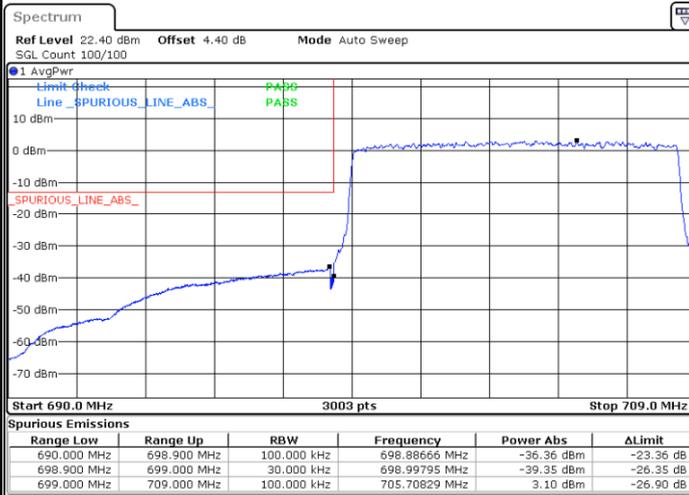
Date: 4 MAY 2020 17:19:15

Highest Band Edge / 1 RB



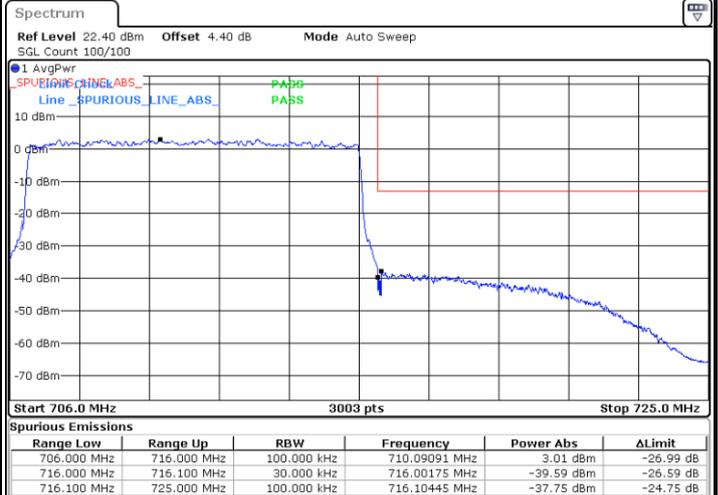
Date: 4 MAY 2020 17:18:06

Lowest Band Edge / Full RB



Date: 4 MAY 2020 17:20:23

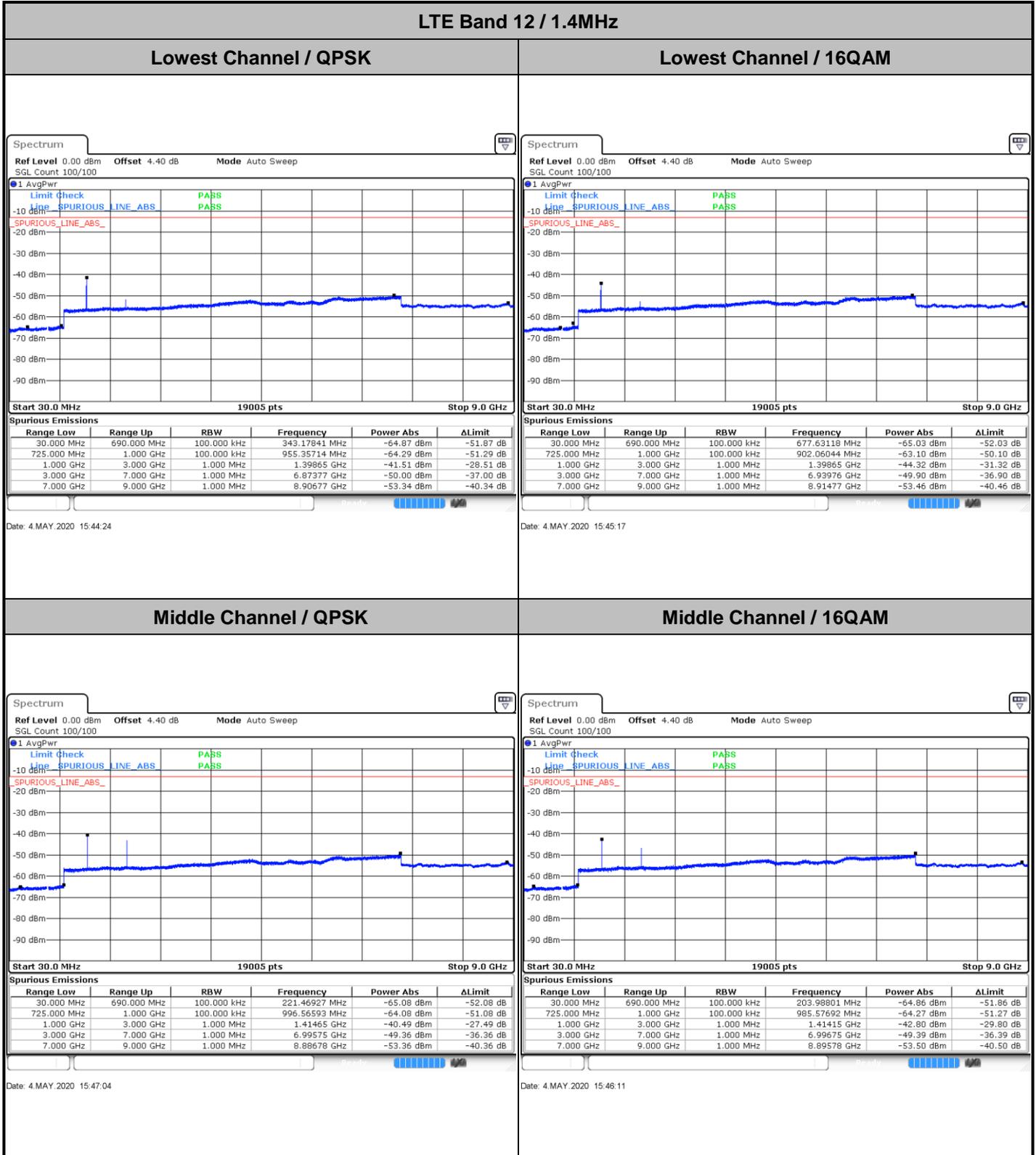
Highest Band Edge / Full RB



Date: 4 MAY 2020 17:16:58



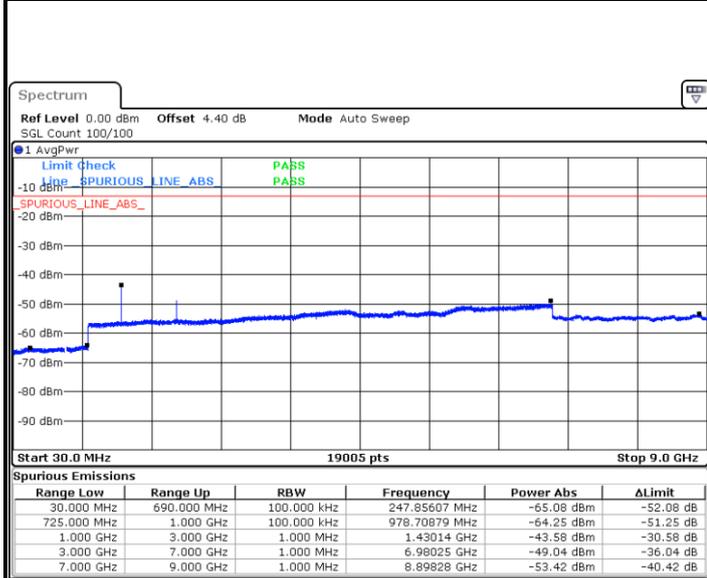
Conducted Spurious Emission





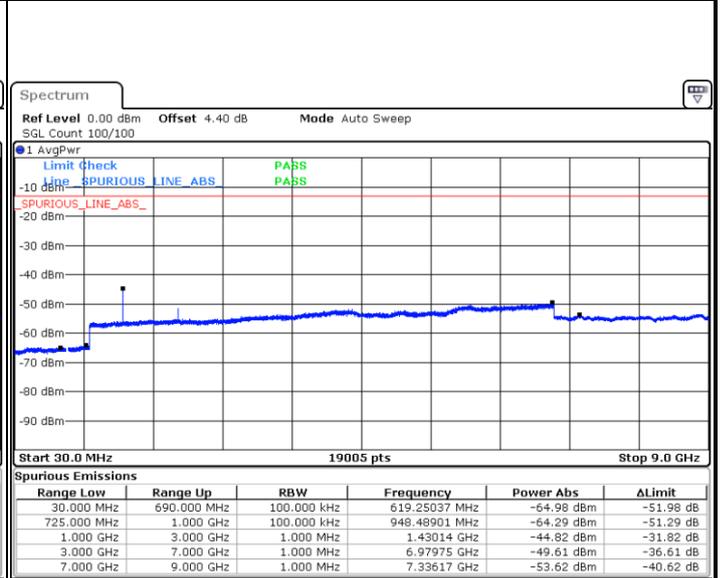
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 4 MAY 2020 15:47:58

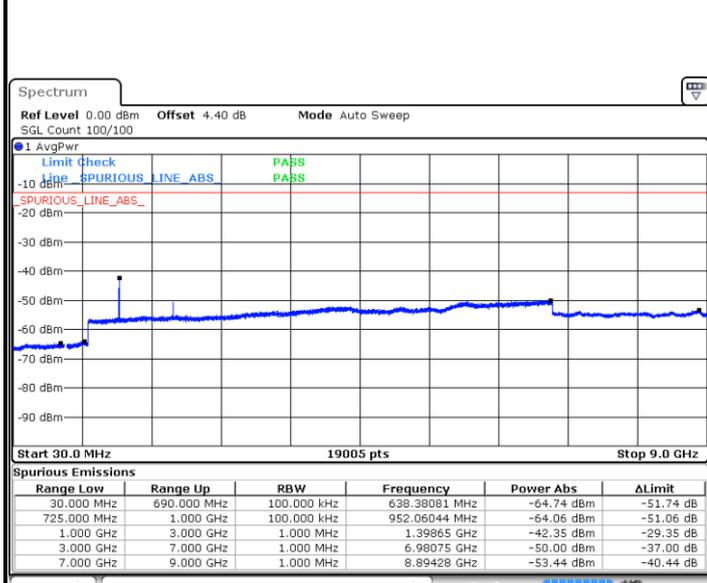
Highest Channel / 16QAM



Date: 4 MAY 2020 15:48:51

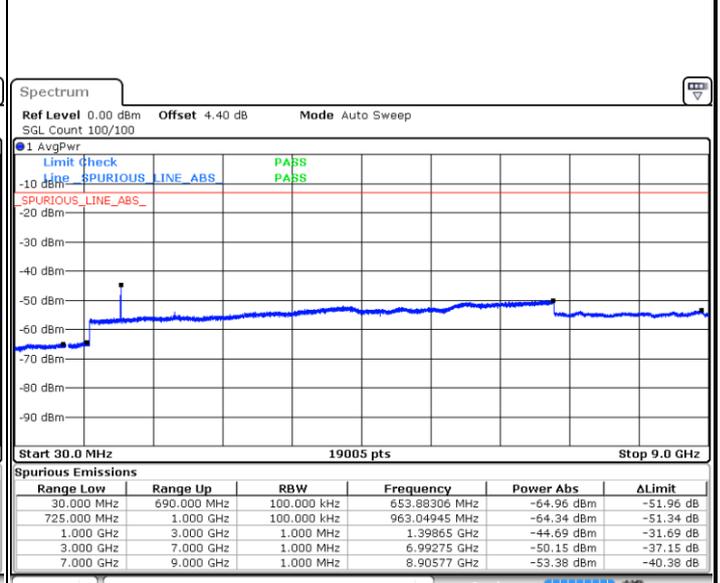
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 4 MAY 2020 16:00:53

Lowest Channel / 16QAM



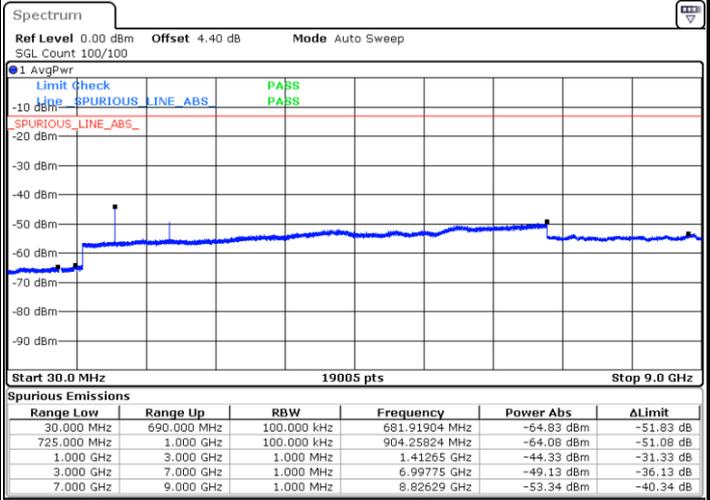
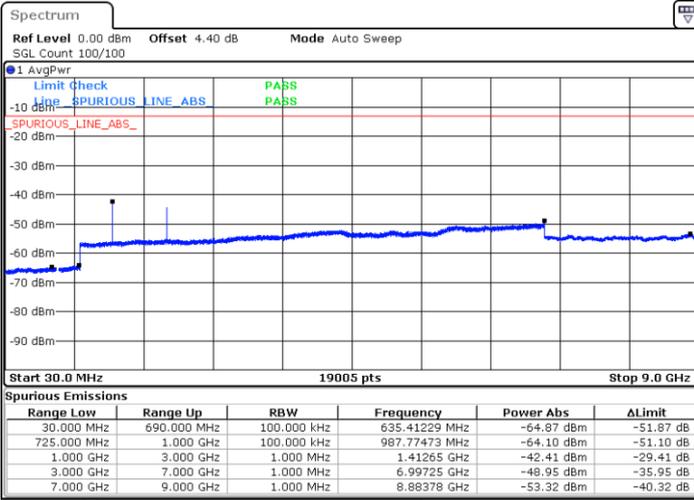
Date: 4 MAY 2020 16:01:46



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

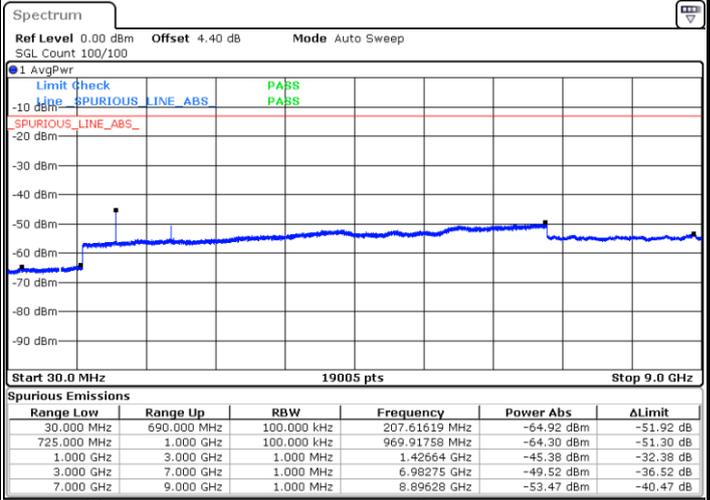
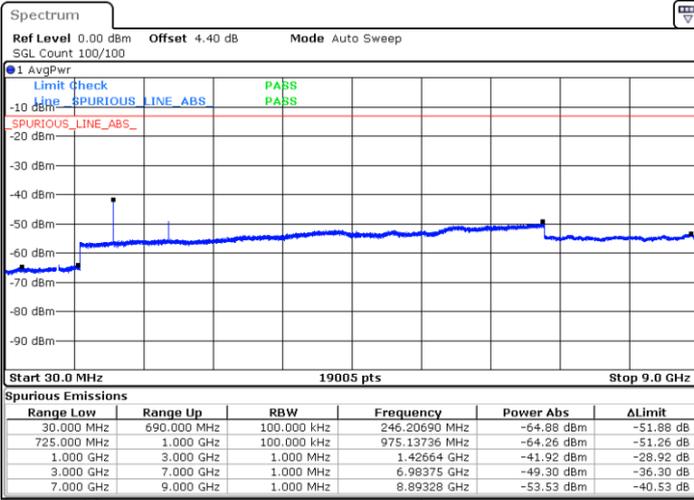


Date: 4 MAY.2020 16:03:33

Date: 4 MAY.2020 16:02:40

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 4 MAY.2020 16:04:26

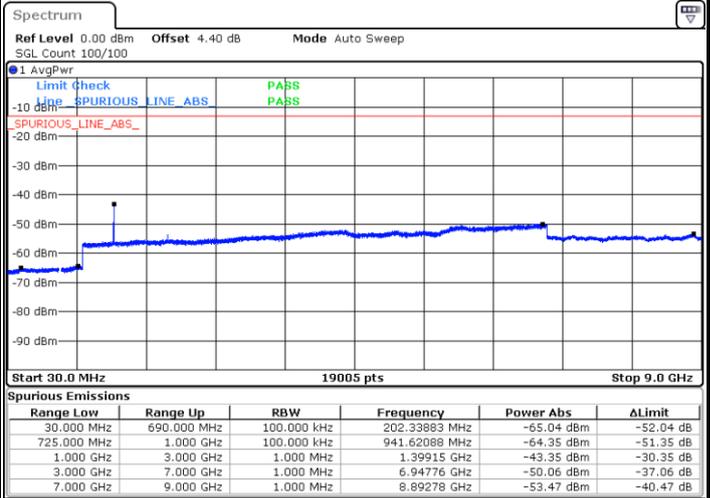
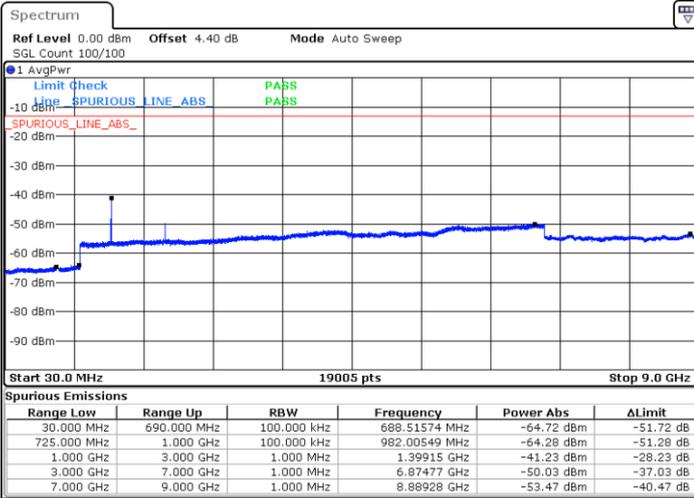
Date: 4 MAY.2020 16:05:20



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

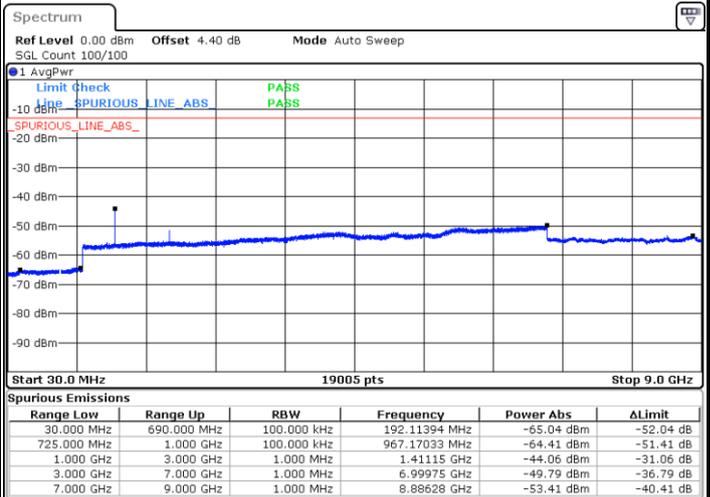
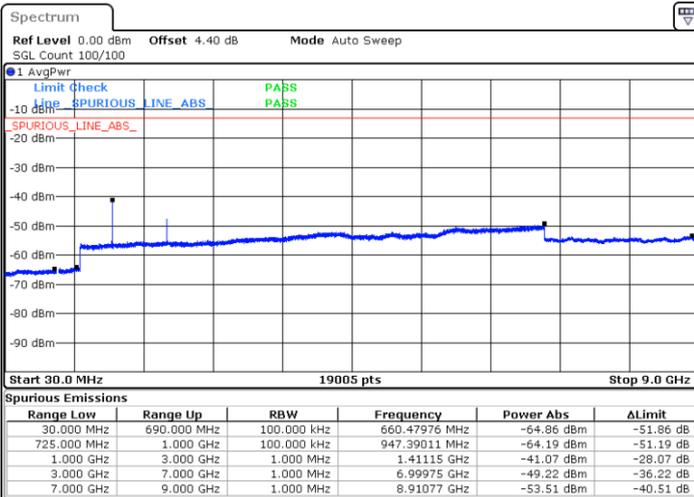


Date: 4 MAY.2020 16:17:22

Date: 4 MAY.2020 16:18:15

Middle Channel / QPSK

Middle Channel / 16QAM



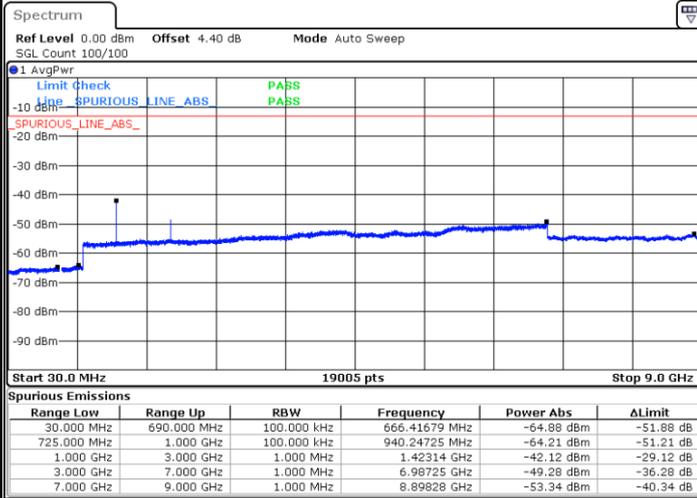
Date: 4 MAY.2020 16:20:02

Date: 4 MAY.2020 16:19:09



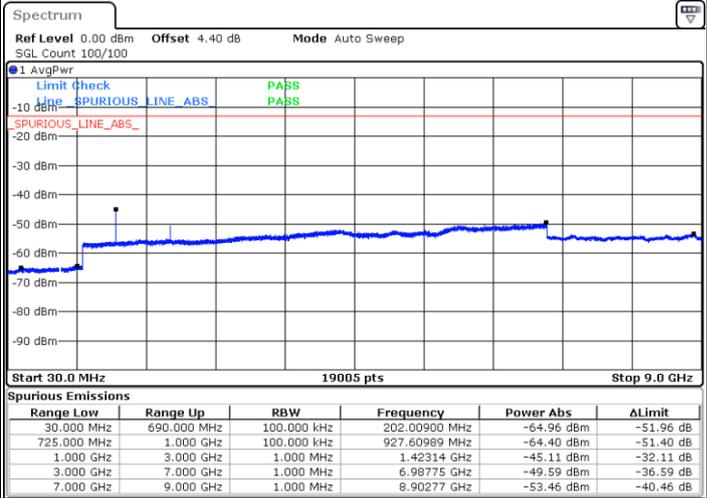
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 4 MAY 2020 16:20:55

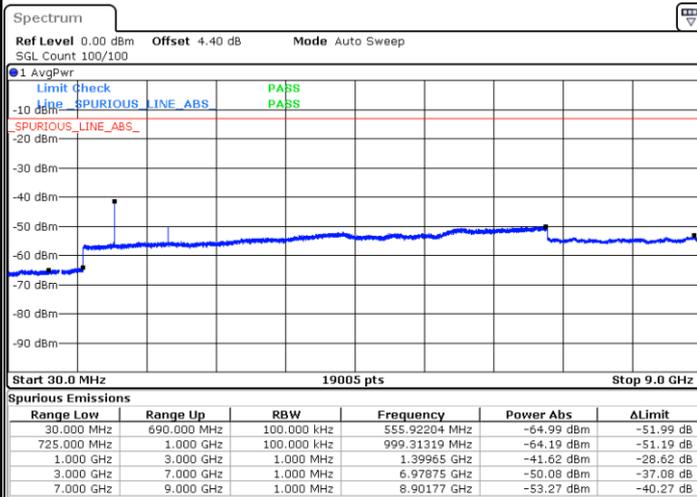
Highest Channel / 16QAM



Date: 4 MAY 2020 16:21:49

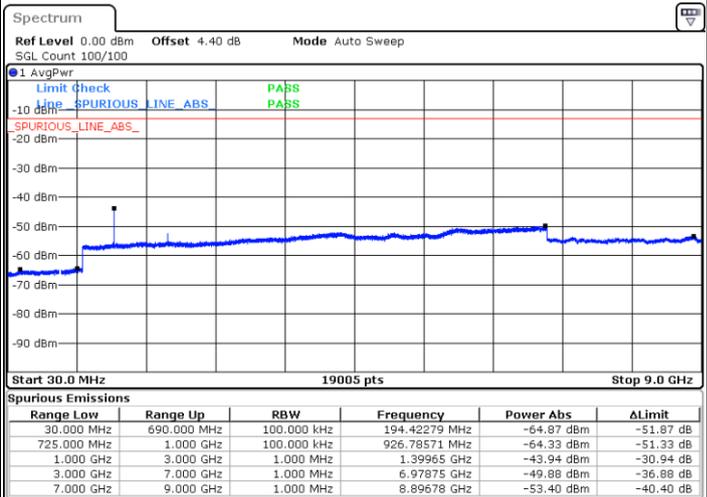
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 4 MAY 2020 16:33:51

Lowest Channel / 16QAM



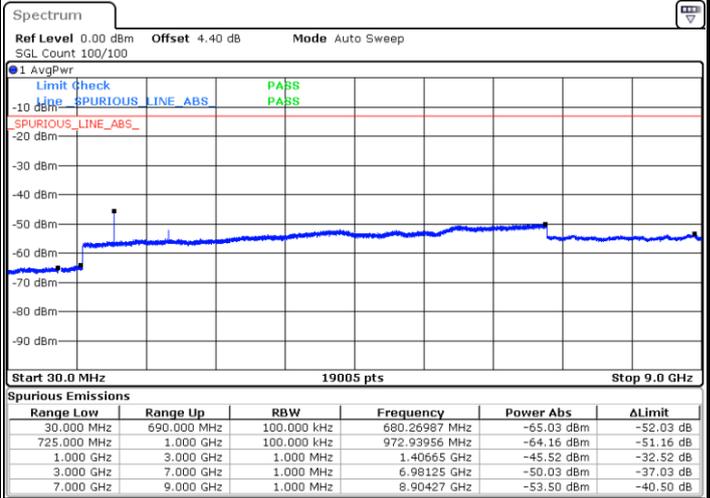
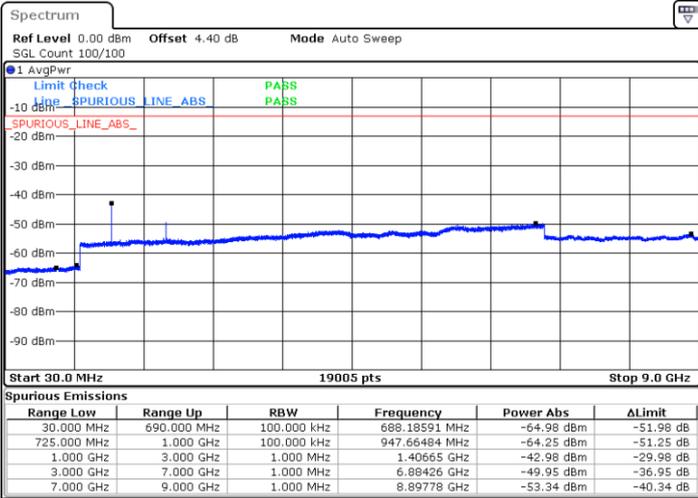
Date: 4 MAY 2020 16:34:44



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

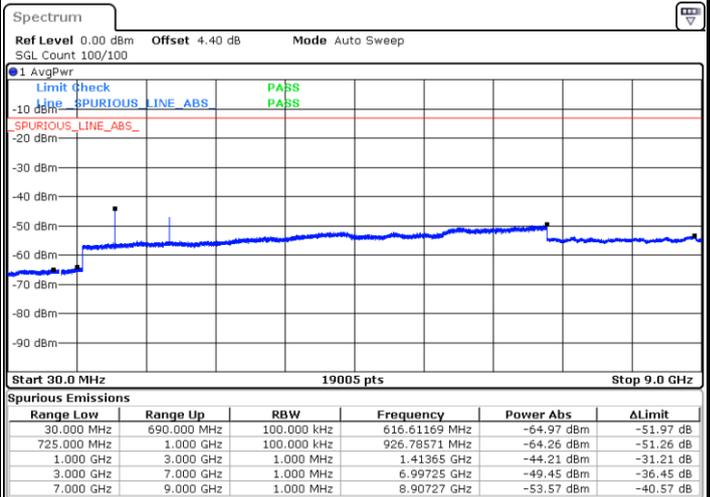
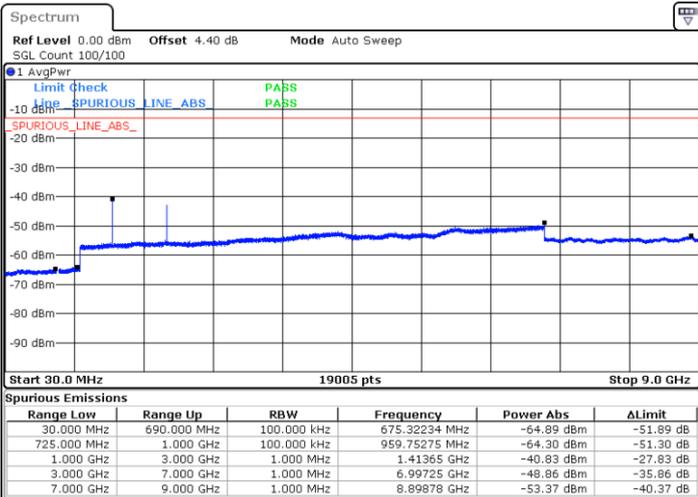


Date: 4 MAY.2020 16:36:31

Date: 4 MAY.2020 16:35:37

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 4 MAY.2020 16:37:24

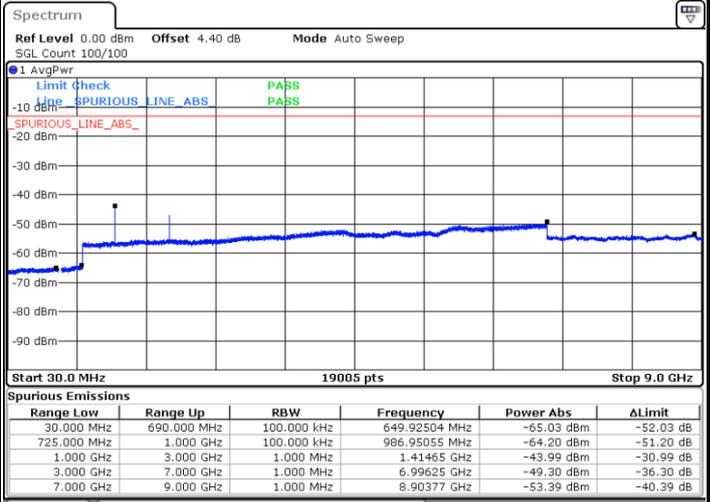
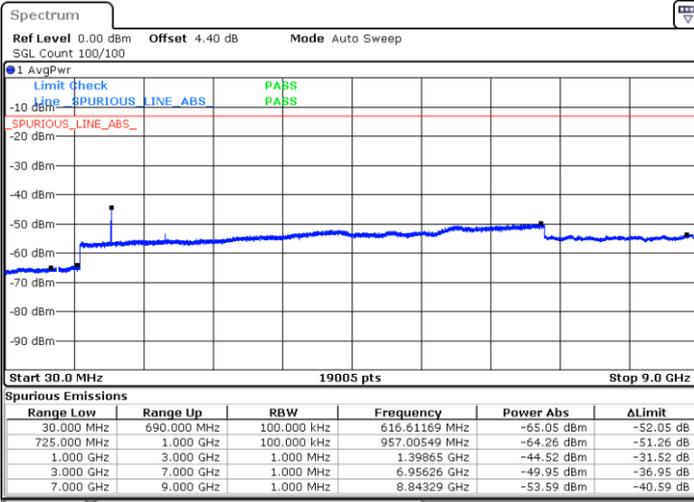
Date: 4 MAY.2020 16:38:18



LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

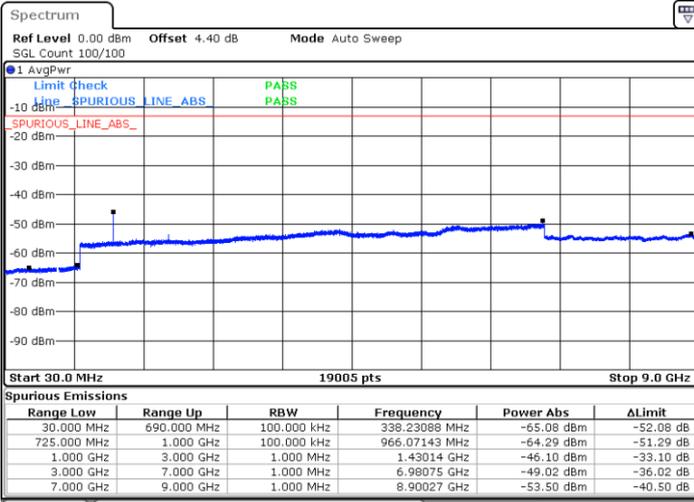
Middle Channel / 64QAM



Date: 4 MAY.2020 16:53:54

Date: 4 MAY.2020 16:54:48

Highest Channel / 64QAM



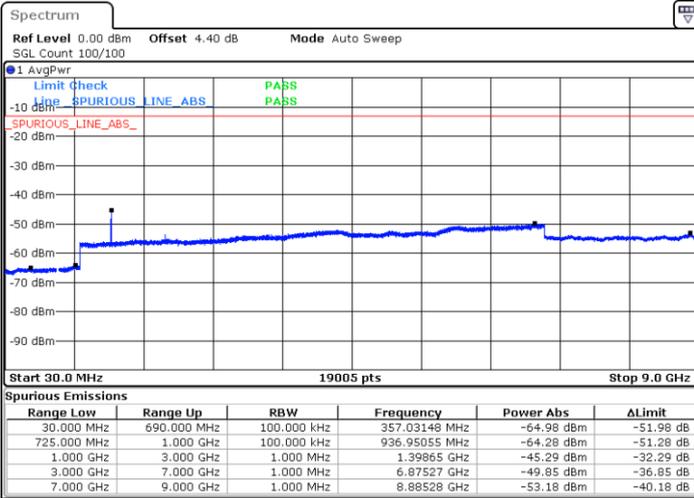
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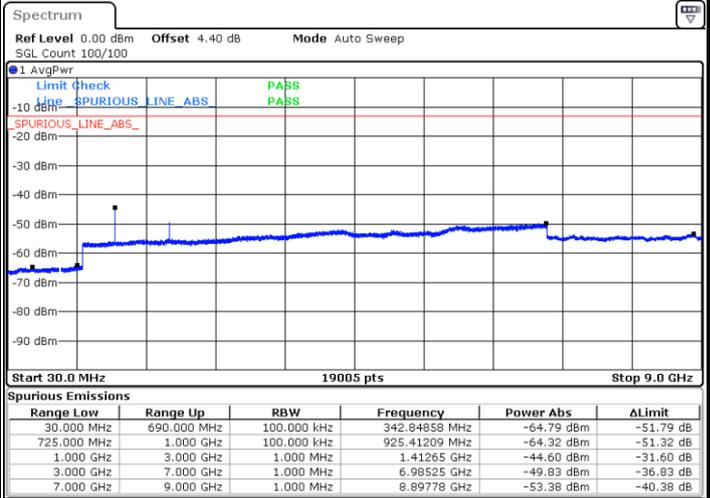
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

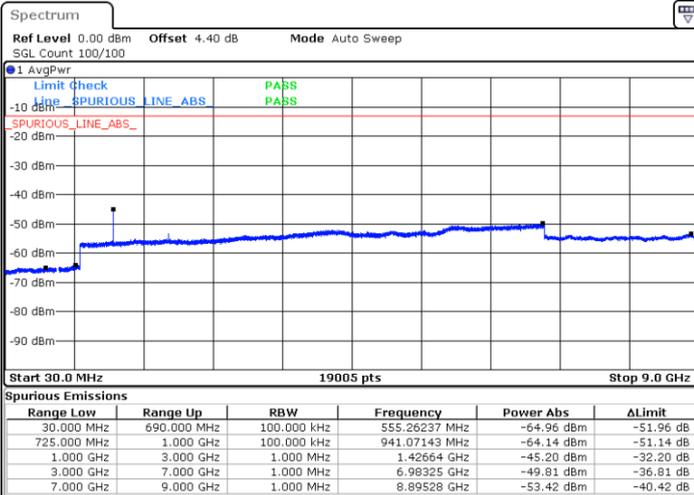


Date: 4 MAY.2020 16:56:35



Date: 4 MAY.2020 16:57:28

Highest Channel / 64QAM



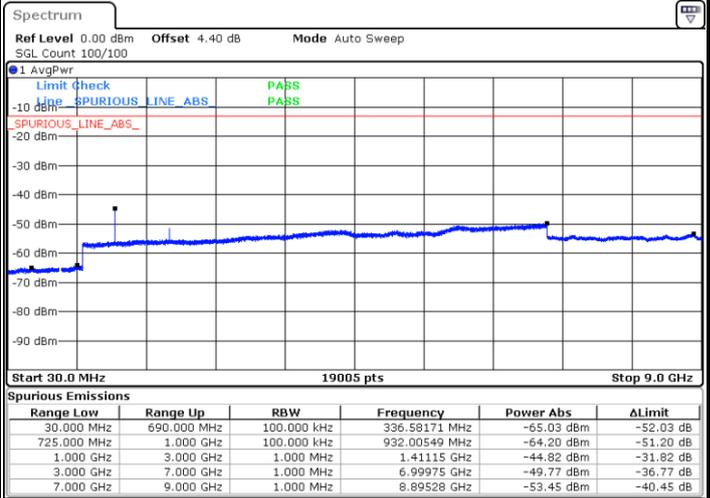
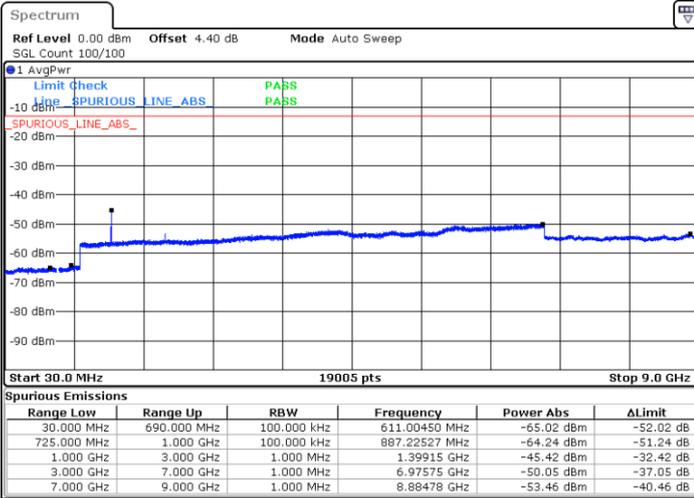
Date: 4 MAY.2020 16:58:22



LTE Band 12 / 5MHz

Lowest Channel / 64QAM

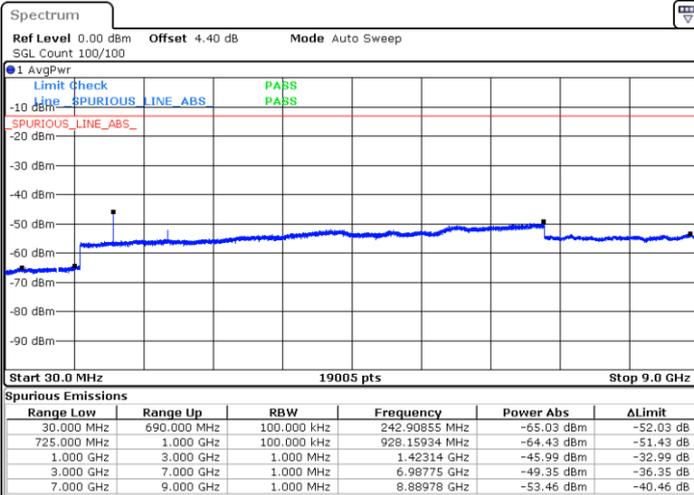
Middle Channel / 64QAM



Date: 4 MAY.2020 17:10:23

Date: 4 MAY.2020 17:11:16

Highest Channel / 64QAM



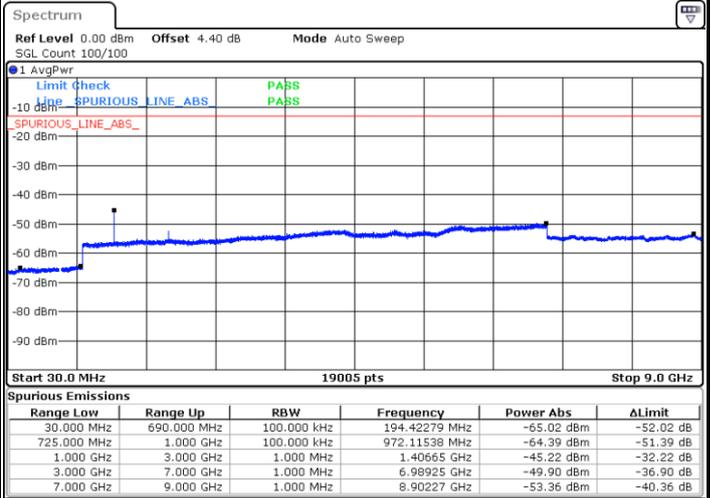
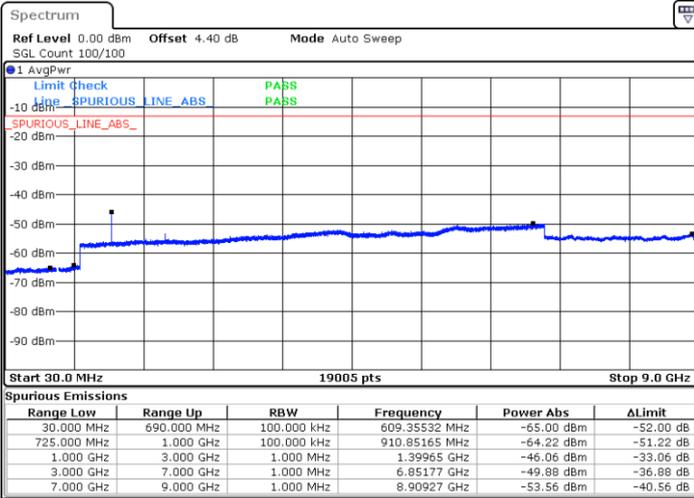
Date: 4 MAY.2020 17:12:10



LTE Band 12 / 10MHz

Lowest Channel / 64QAM

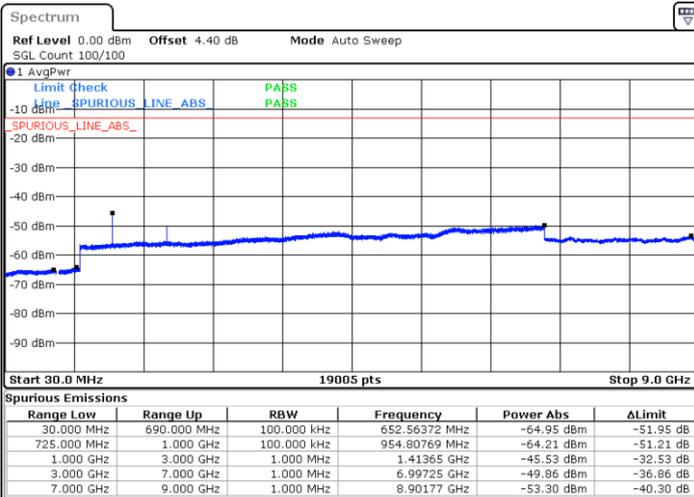
Middle Channel / 64QAM



Date: 4 MAY.2020 17:13:03

Date: 4 MAY.2020 17:13:57

Highest Channel / 64QAM



Date: 4 MAY.2020 17:14:50



Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0095	
30	Normal Voltage	0.0116	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0096	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0110	
-30	Normal Voltage	0.0102	
20	Maximum Voltage	0.0112	
20	Normal Voltage	0.0020	
20	Battery End Point	0.0140	

Note:

1. Normal Voltage =3.85V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.42	4.64	4.72	5.57	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.70	5.54	-	-	
Highest CH	-	-	-	-	