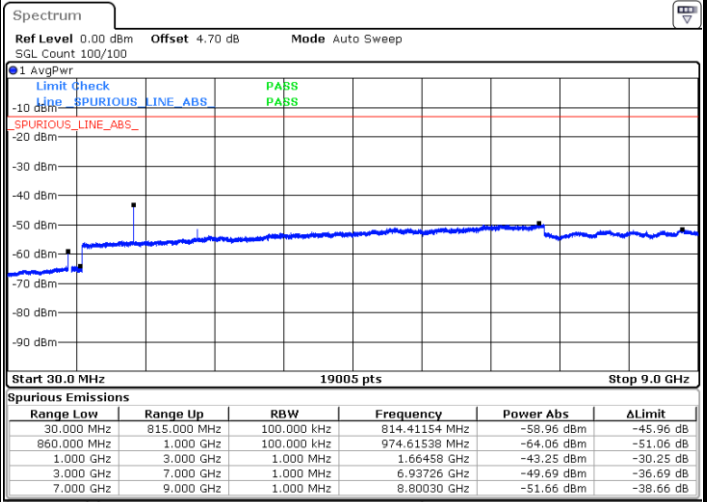
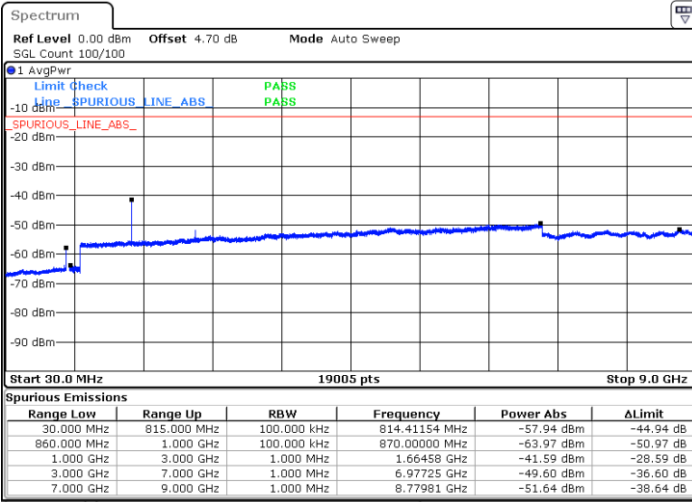




LTE Band 5 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

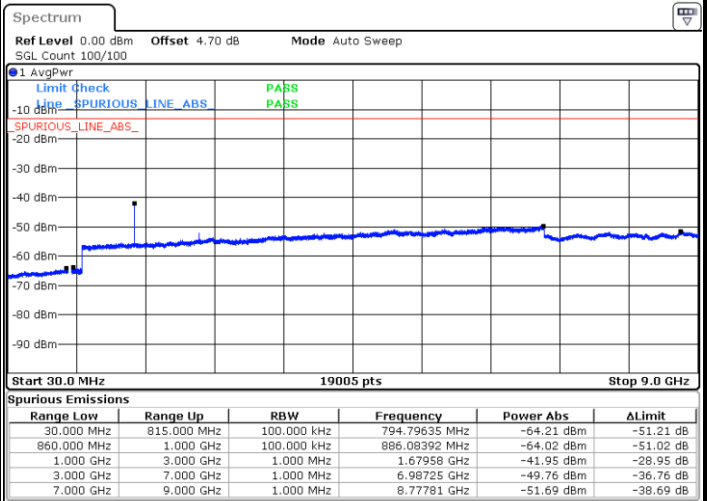
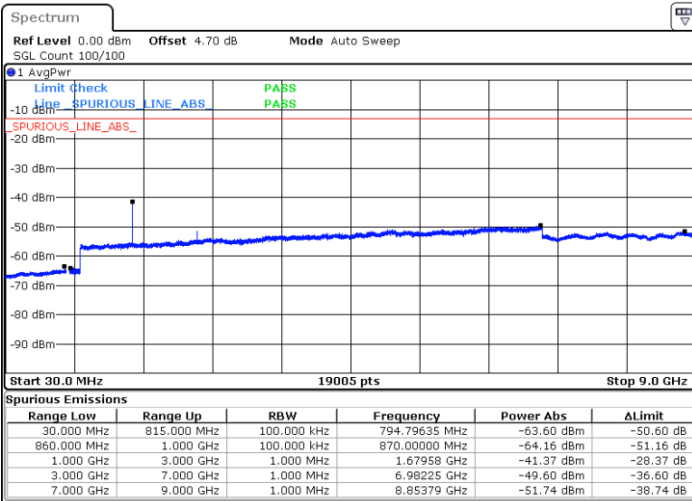


Date: 3 FEB 2020 17:07:39

Date: 3 FEB 2020 17:08:34

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 3 FEB 2020 17:16:39

Date: 3 FEB 2020 17:17:34



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0006	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0002	

Note: Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.3 V.



LTE Band 12

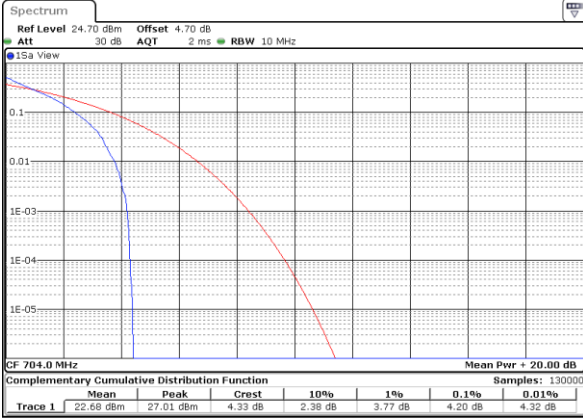
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.20	4.81	5.19	5.59	PASS
Middle CH	3.88	4.64	4.99	5.59	
Highest CH	4.00	4.70	4.96	5.57	



LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



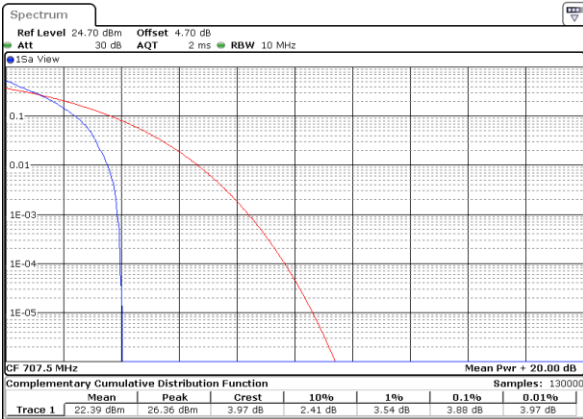
Date: 3 FEB 2020 18:53:50

Lowest Channel / Full RB



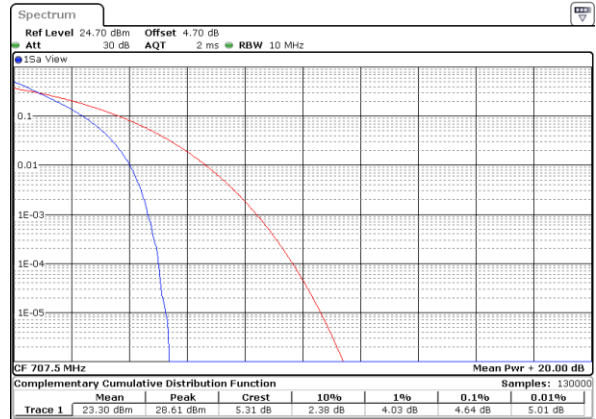
Date: 3 FEB 2020 18:53:59

Middle Channel / 1RB



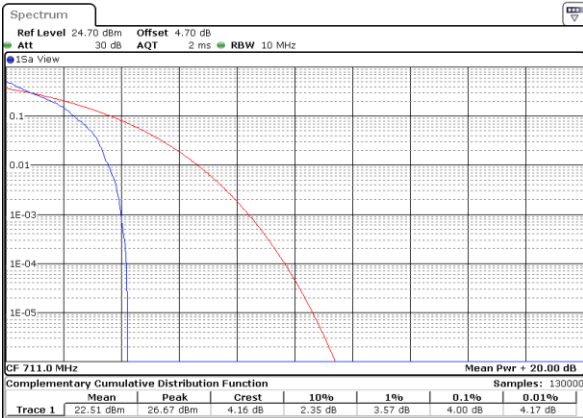
Date: 3 FEB 2020 18:54:34

Middle Channel / Full RB



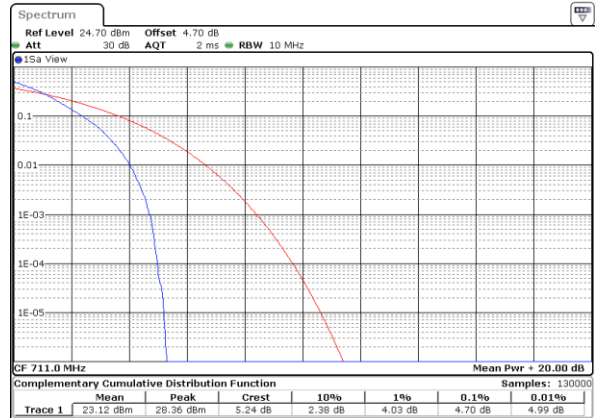
Date: 3 FEB 2020 18:54:25

Highest Channel / 1RB



Date: 3 FEB 2020 18:55:01

Highest Channel / Full RB

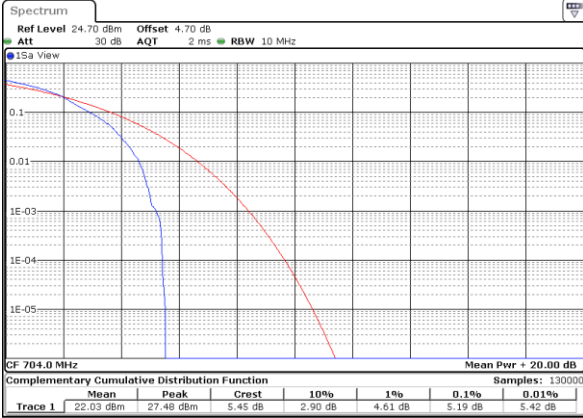


Date: 3 FEB 2020 18:55:10



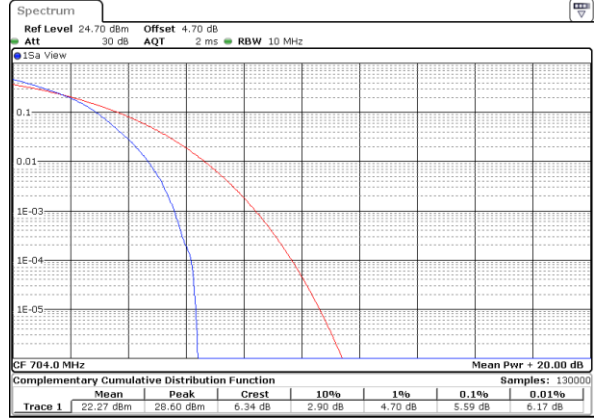
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



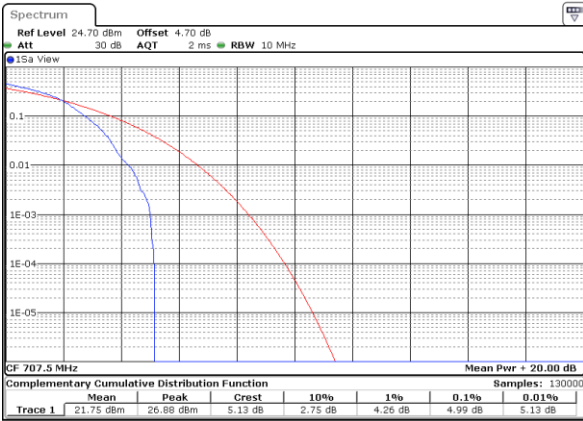
Date: 3 FEB 2020 18:53:41

Lowest Channel / Full RB



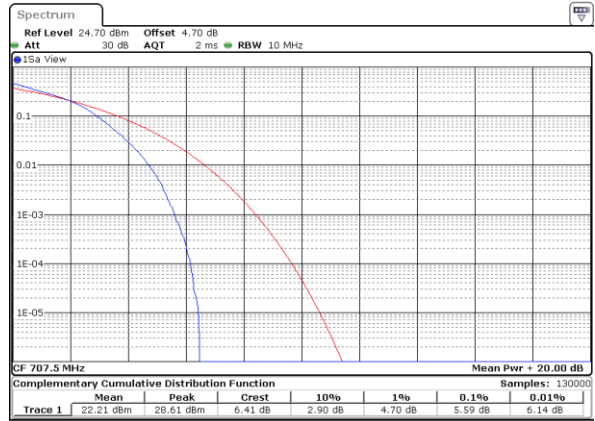
Date: 3 FEB 2020 18:54:08

Middle Channel / 1RB



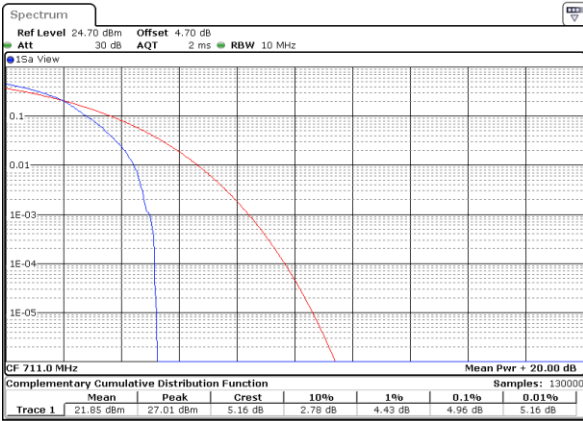
Date: 3 FEB 2020 18:54:43

Middle Channel / Full RB



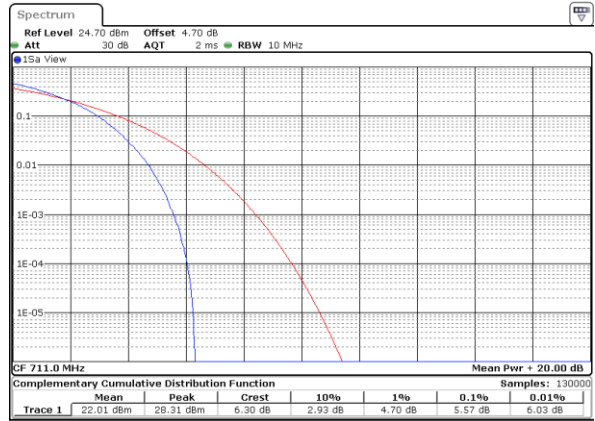
Date: 3 FEB 2020 18:54:16

Highest Channel / 1RB



Date: 3 FEB 2020 18:54:52

Highest Channel / Full RB



Date: 3 FEB 2020 18:55:29



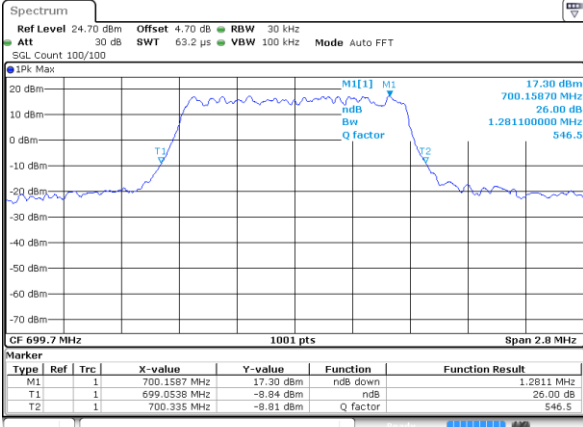
26dB Bandwidth

Mode	LTE Band 12 : 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	1.28	1.28	2.96	2.99	5.07	5.00	10.11	9.77				
Middle CH	1.29	1.30	2.96	2.92	5.22	5.13	9.79	10.19				
Highest CH	1.28	1.28	2.96	2.95	5.22	4.98	10.05	9.71				



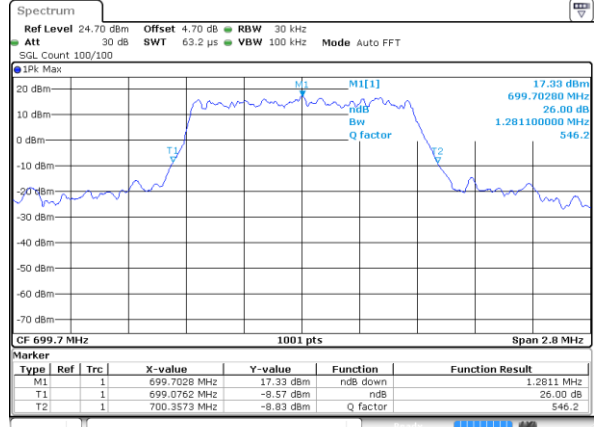
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



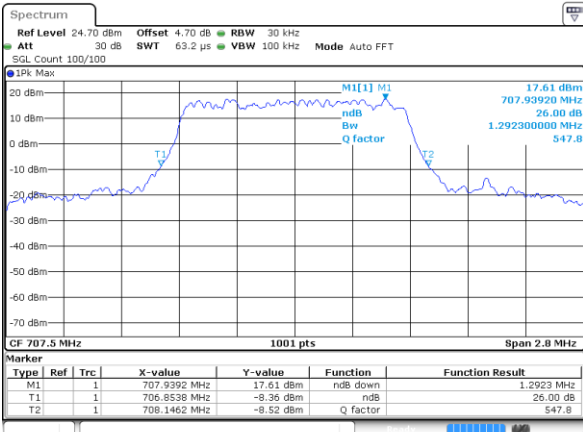
Date: 3 FEB 2020 17:46:24

Lowest Channel / 1.4MHz / 16QAM



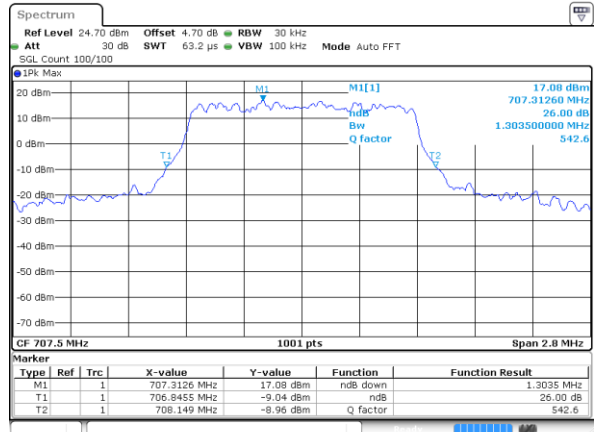
Date: 3 FEB 2020 17:46:14

Middle Channel / 1.4MHz / QPSK



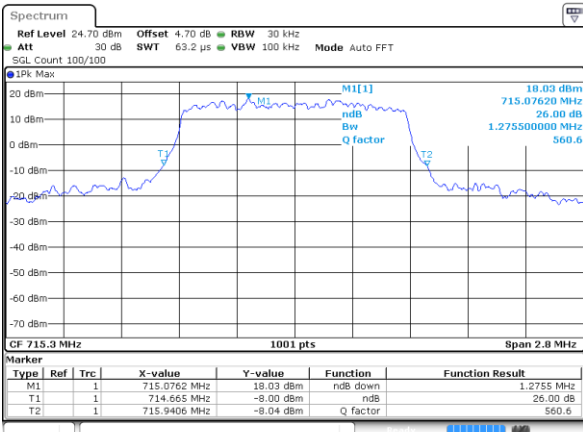
Date: 3 FEB 2020 17:45:54

Middle Channel / 1.4MHz / 16QAM



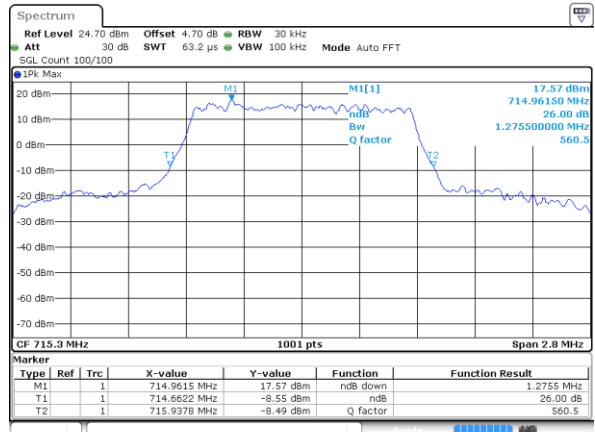
Date: 3 FEB 2020 17:46:04

Highest Channel / 1.4MHz / QPSK



Date: 3 FEB 2020 17:45:44

Highest Channel / 1.4MHz / 16QAM

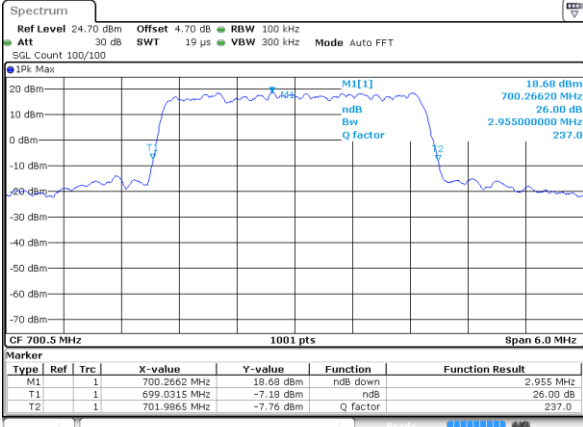


Date: 3 FEB 2020 17:45:33



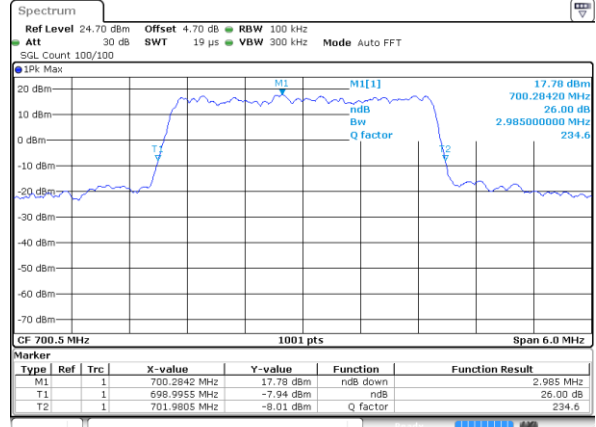
LTE Band 12

Lowest Channel / 3MHz / QPSK



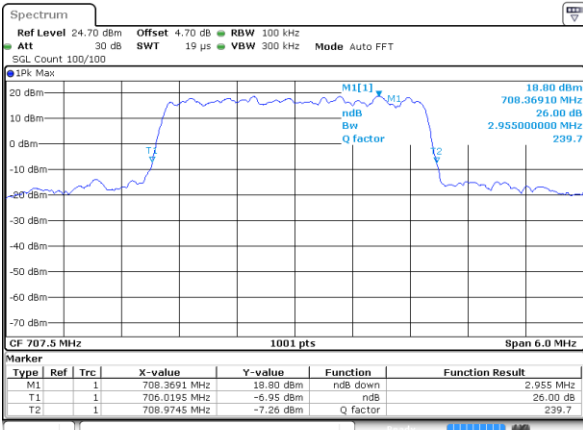
Date: 3 FEB 2020 18:02:54

Lowest Channel / 3MHz / 16QAM



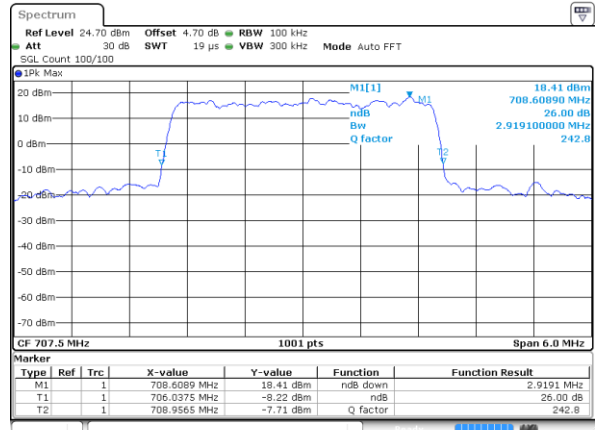
Date: 3 FEB 2020 18:02:44

Middle Channel / 3MHz / QPSK



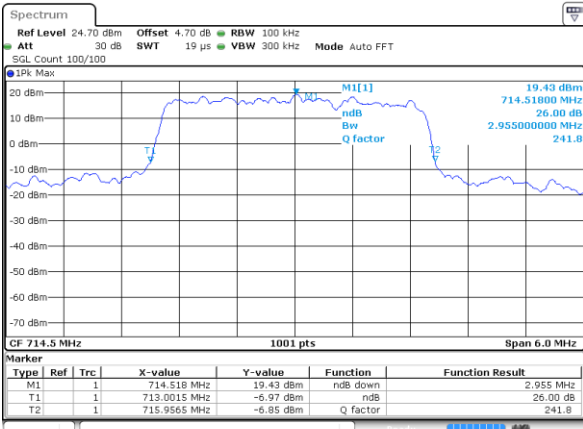
Date: 3 FEB 2020 18:02:24

Middle Channel / 3MHz / 16QAM



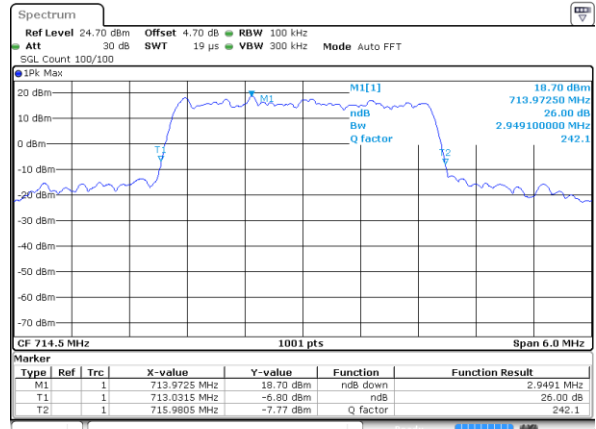
Date: 3 FEB 2020 18:02:34

Highest Channel / 3MHz / QPSK



Date: 3 FEB 2020 18:02:14

Highest Channel / 3MHz / 16QAM

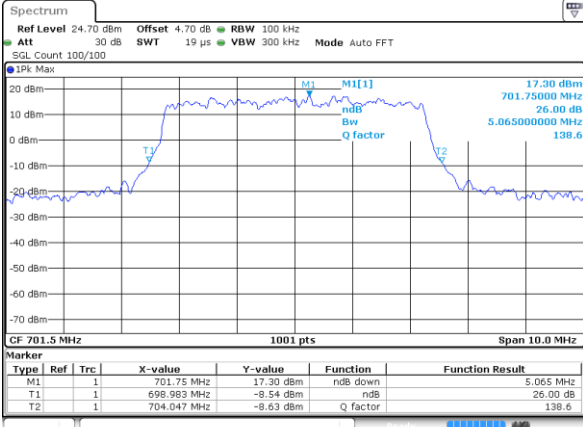


Date: 3 FEB 2020 18:02:04



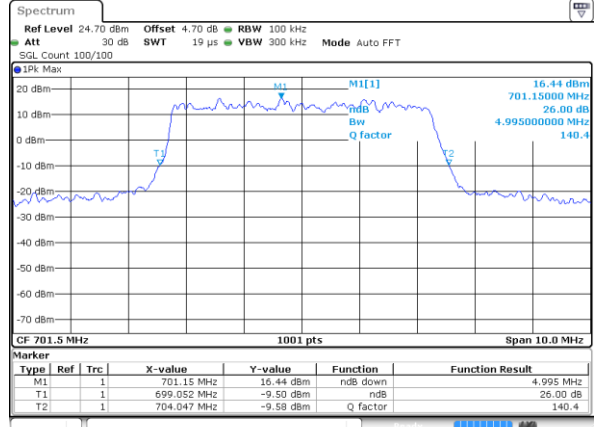
LTE Band 12

Lowest Channel / 5MHz / QPSK



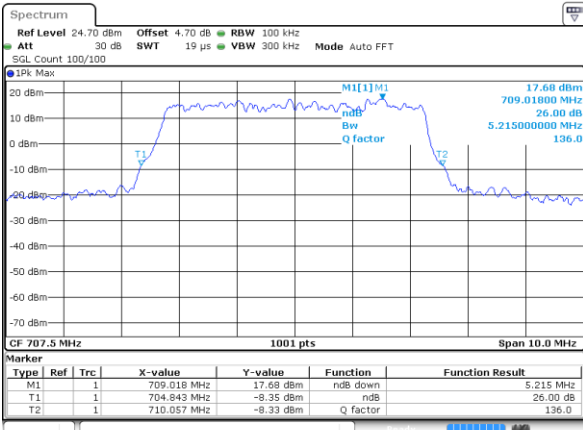
Date: 3 FEB 2020 18:19:25

Lowest Channel / 5MHz / 16QAM



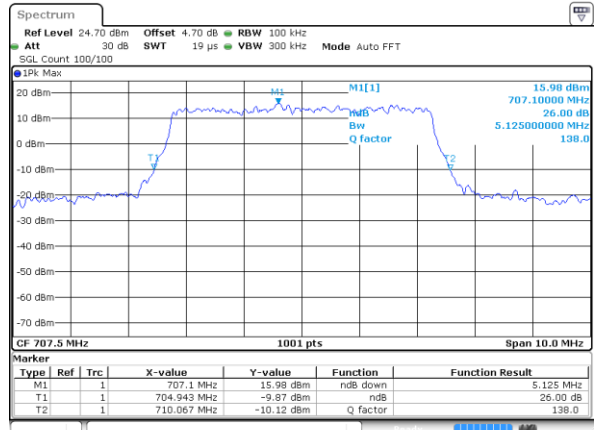
Date: 3 FEB 2020 18:19:14

Middle Channel / 5MHz / QPSK



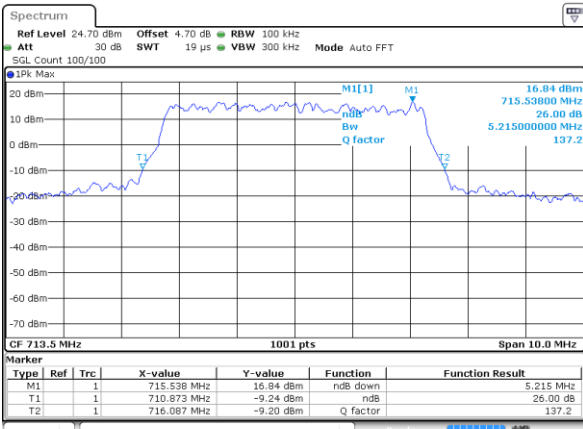
Date: 3 FEB 2020 18:18:54

Middle Channel / 5MHz / 16QAM



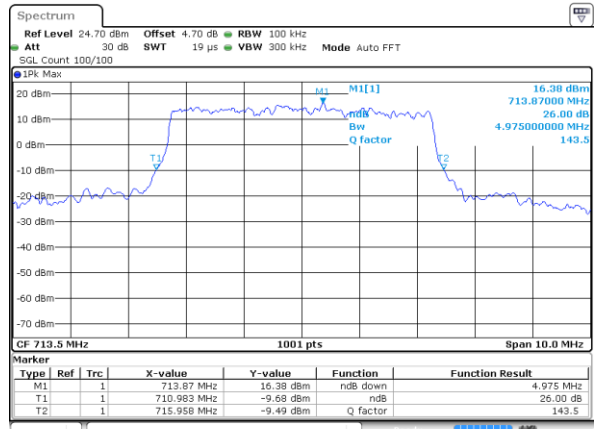
Date: 3 FEB 2020 18:19:04

Highest Channel / 5MHz / QPSK



Date: 3 FEB 2020 18:18:44

Highest Channel / 5MHz / 16QAM

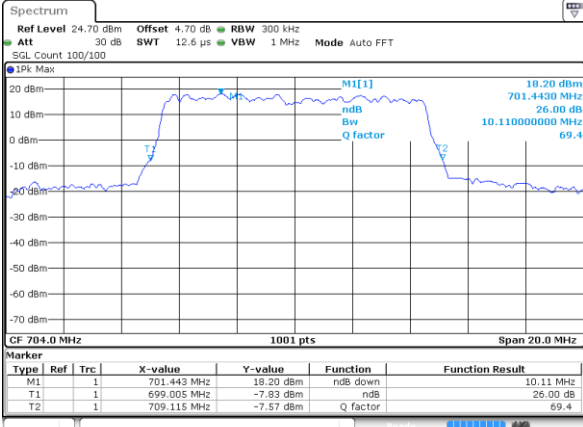


Date: 3 FEB 2020 18:18:34



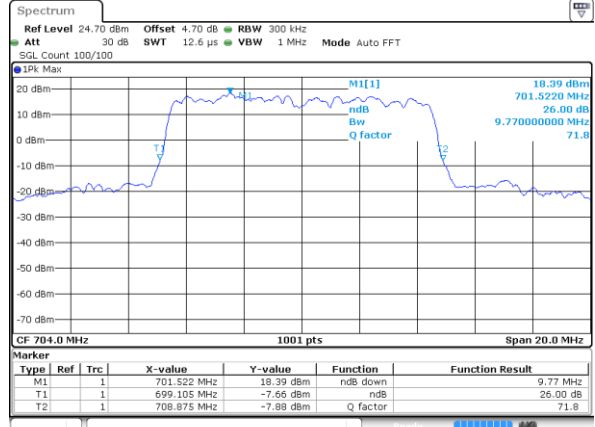
LTE Band 12

Lowest Channel / 10MHz / QPSK



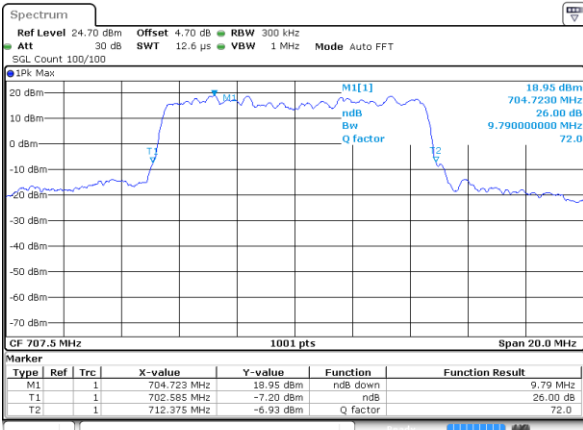
Date: 3 FEB 2020 18:35:55

Lowest Channel / 10MHz / 16QAM



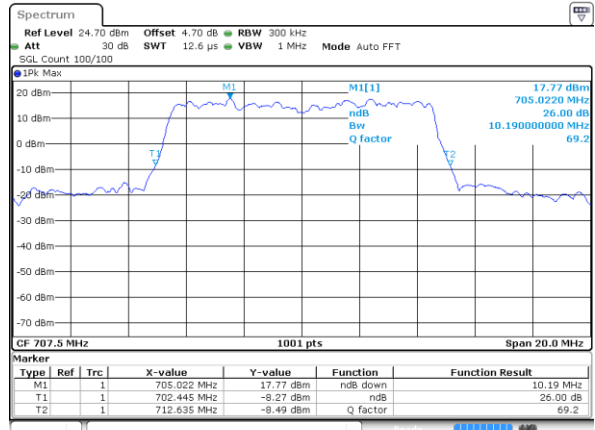
Date: 3 FEB 2020 18:35:45

Middle Channel / 10MHz / QPSK



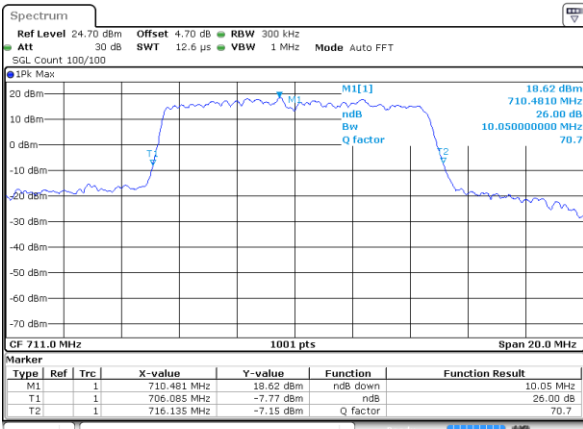
Date: 3 FEB 2020 18:35:25

Middle Channel / 10MHz / 16QAM



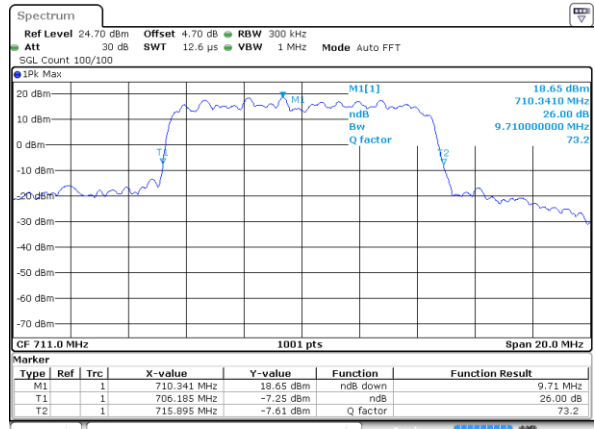
Date: 3 FEB 2020 18:35:35

Highest Channel / 10MHz / QPSK



Date: 3 FEB 2020 18:35:15

Highest Channel / 10MHz / 16QAM



Date: 3 FEB 2020 18:35:05



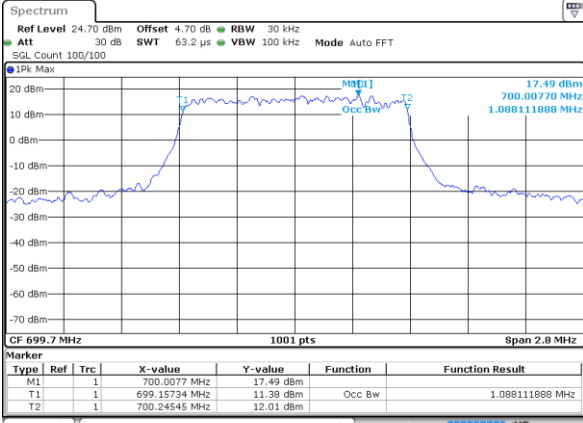
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.71	2.71	4.54	4.48	9.07	9.03				
Middle CH	1.09	1.09	2.71	2.70	4.53	4.48	9.01	9.05				
Highest CH	1.10	1.09	2.70	2.72	4.50	4.51	8.99	9.01				



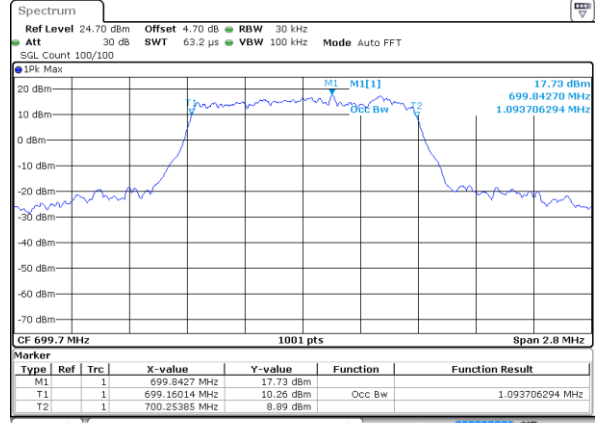
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



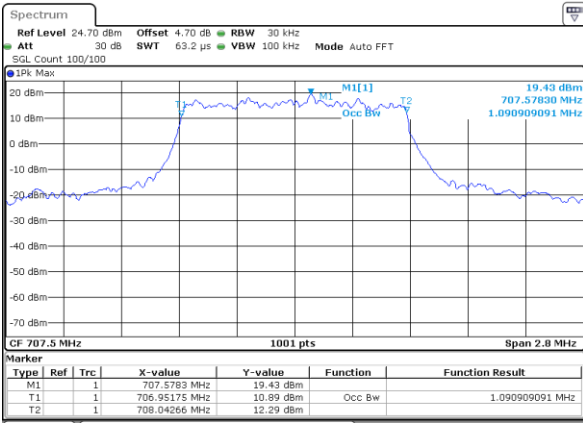
Date: 3 FEB 2020 17:44:33

Lowest Channel / 1.4MHz / 16QAM



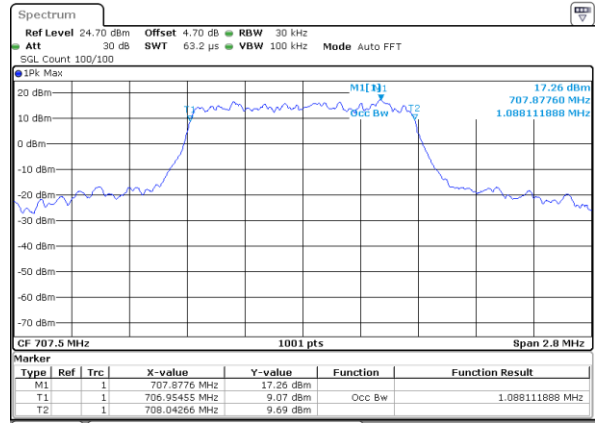
Date: 3 FEB 2020 17:44:43

Middle Channel / 1.4MHz / QPSK



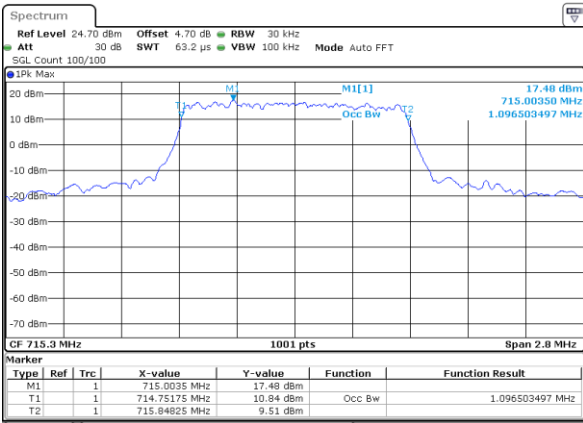
Date: 3 FEB 2020 17:45:03

Middle Channel / 1.4MHz / 16QAM



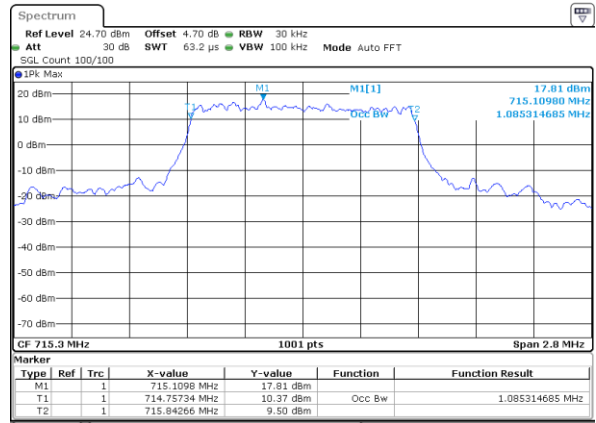
Date: 3 FEB 2020 17:44:53

Highest Channel / 1.4MHz / QPSK



Date: 3 FEB 2020 17:45:13

Highest Channel / 1.4MHz / 16QAM

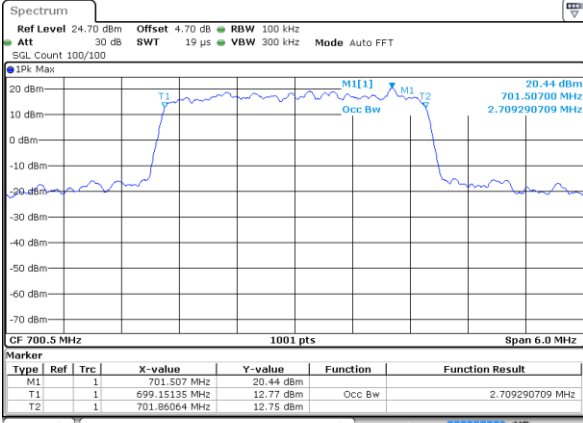


Date: 3 FEB 2020 17:45:23



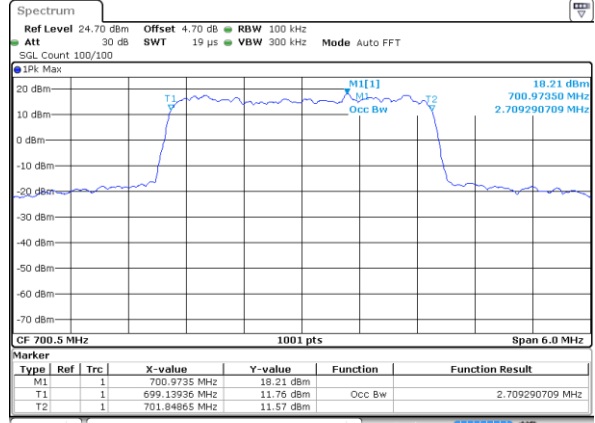
LTE Band 12

Lowest Channel / 3MHz / QPSK



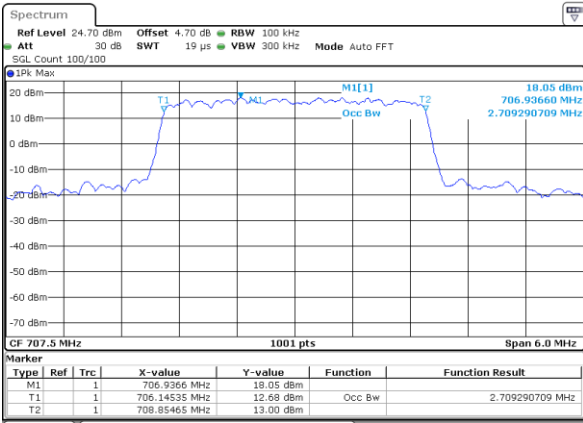
Date: 3 FEB 2020 18:01:03

Lowest Channel / 3MHz / 16QAM



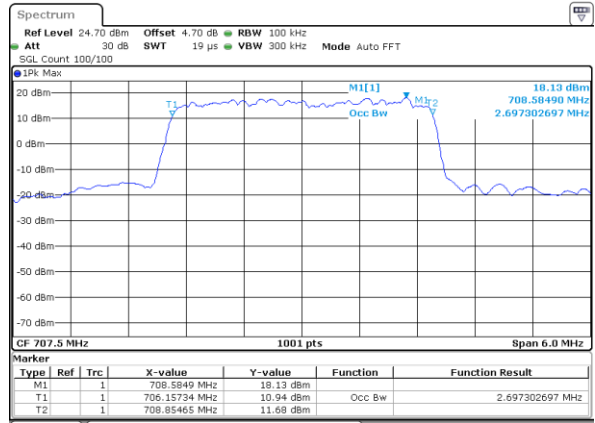
Date: 3 FEB 2020 18:01:13

Middle Channel / 3MHz / QPSK



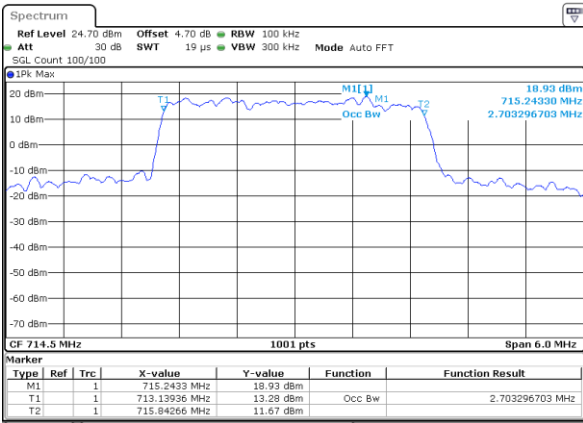
Date: 3 FEB 2020 18:01:33

Middle Channel / 3MHz / 16QAM



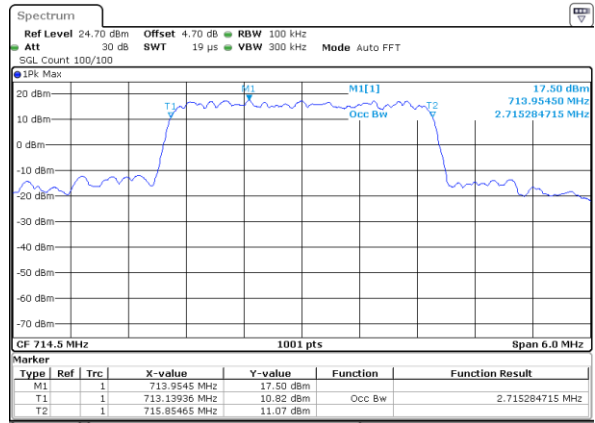
Date: 3 FEB 2020 18:01:23

Highest Channel / 3MHz / QPSK



Date: 3 FEB 2020 18:01:44

Highest Channel / 3MHz / 16QAM

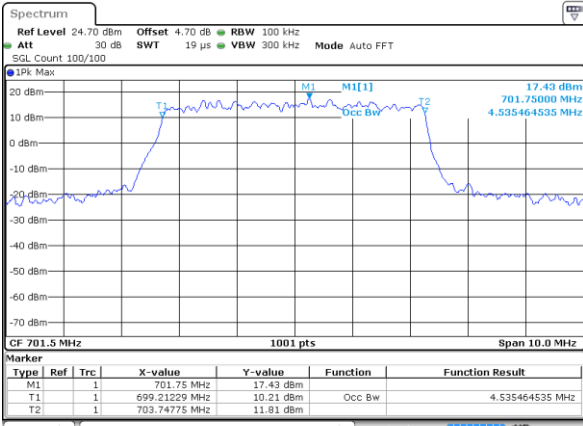


Date: 3 FEB 2020 18:01:54



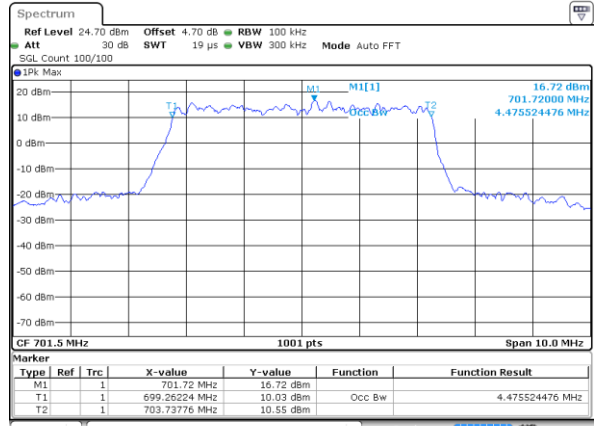
LTE Band 12

Lowest Channel / 5MHz / QPSK



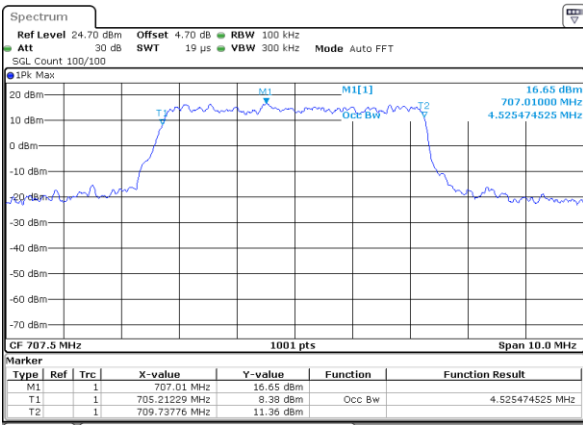
Date: 3 FEB 2020 18:17:34

Lowest Channel / 5MHz / 16QAM



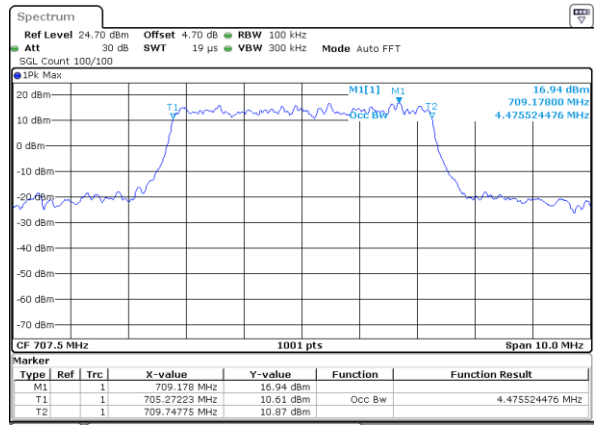
Date: 3 FEB 2020 18:17:44

Middle Channel / 5MHz / QPSK



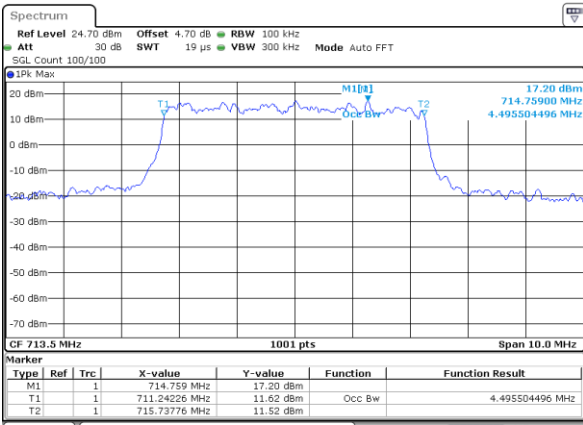
Date: 3 FEB 2020 18:18:04

Middle Channel / 5MHz / 16QAM



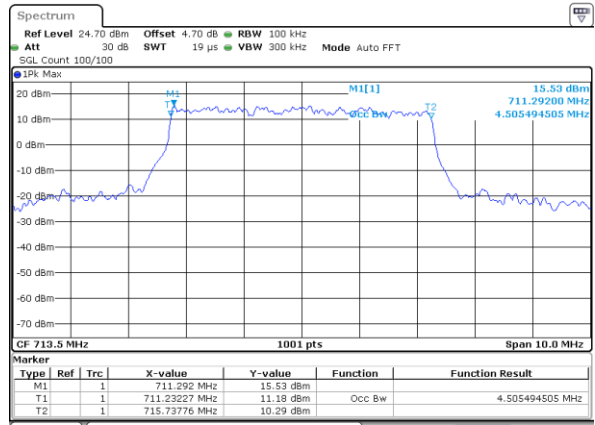
Date: 3 FEB 2020 18:17:54

Highest Channel / 5MHz / QPSK



Date: 3 FEB 2020 18:18:14

Highest Channel / 5MHz / 16QAM

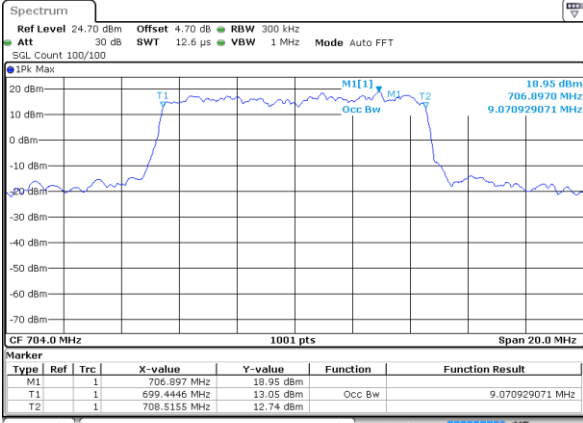


Date: 3 FEB 2020 18:18:24



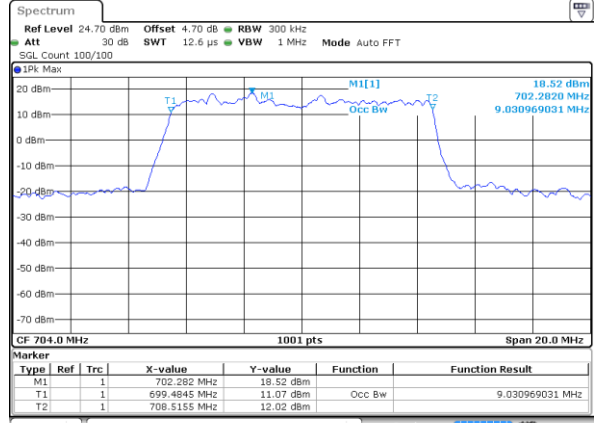
LTE Band 12

Lowest Channel / 10MHz / QPSK



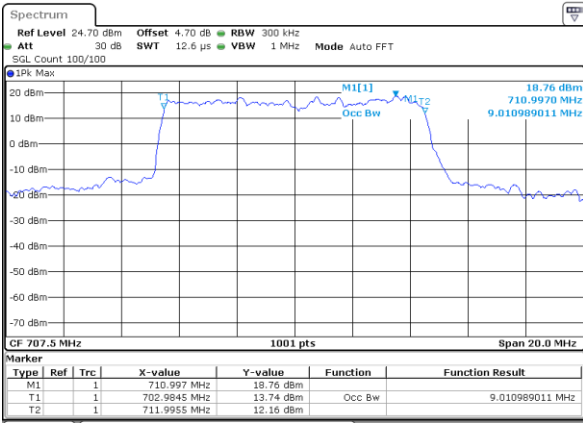
Date: 3 FEB 2020 18:34:04

Lowest Channel / 10MHz / 16QAM



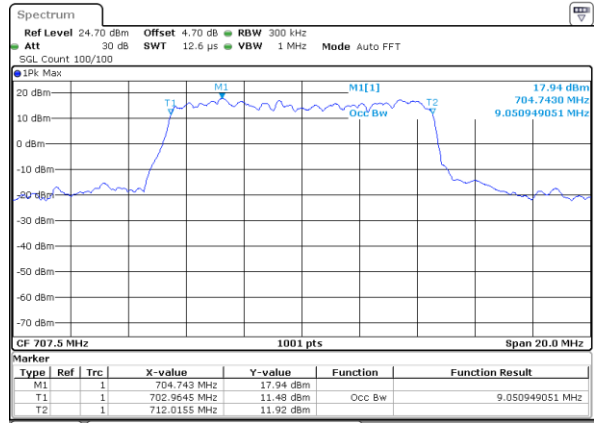
Date: 3 FEB 2020 18:34:14

Middle Channel / 10MHz / QPSK



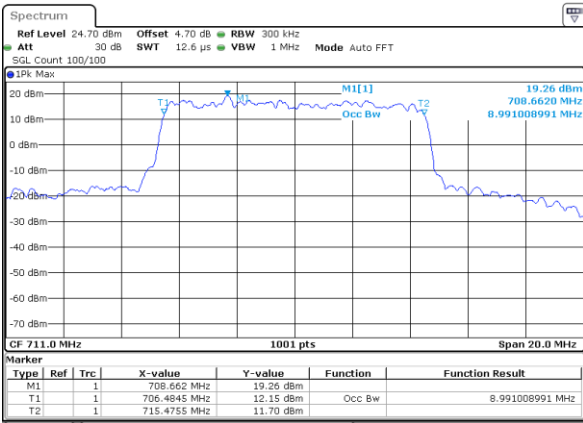
Date: 3 FEB 2020 18:34:34

Middle Channel / 10MHz / 16QAM



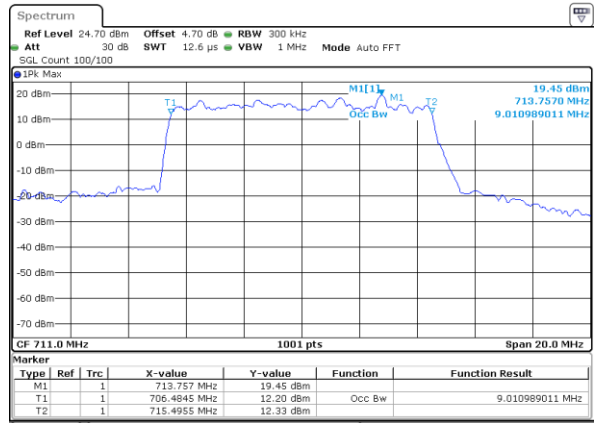
Date: 3 FEB 2020 18:34:24

Highest Channel / 10MHz / QPSK



Date: 3 FEB 2020 18:34:45

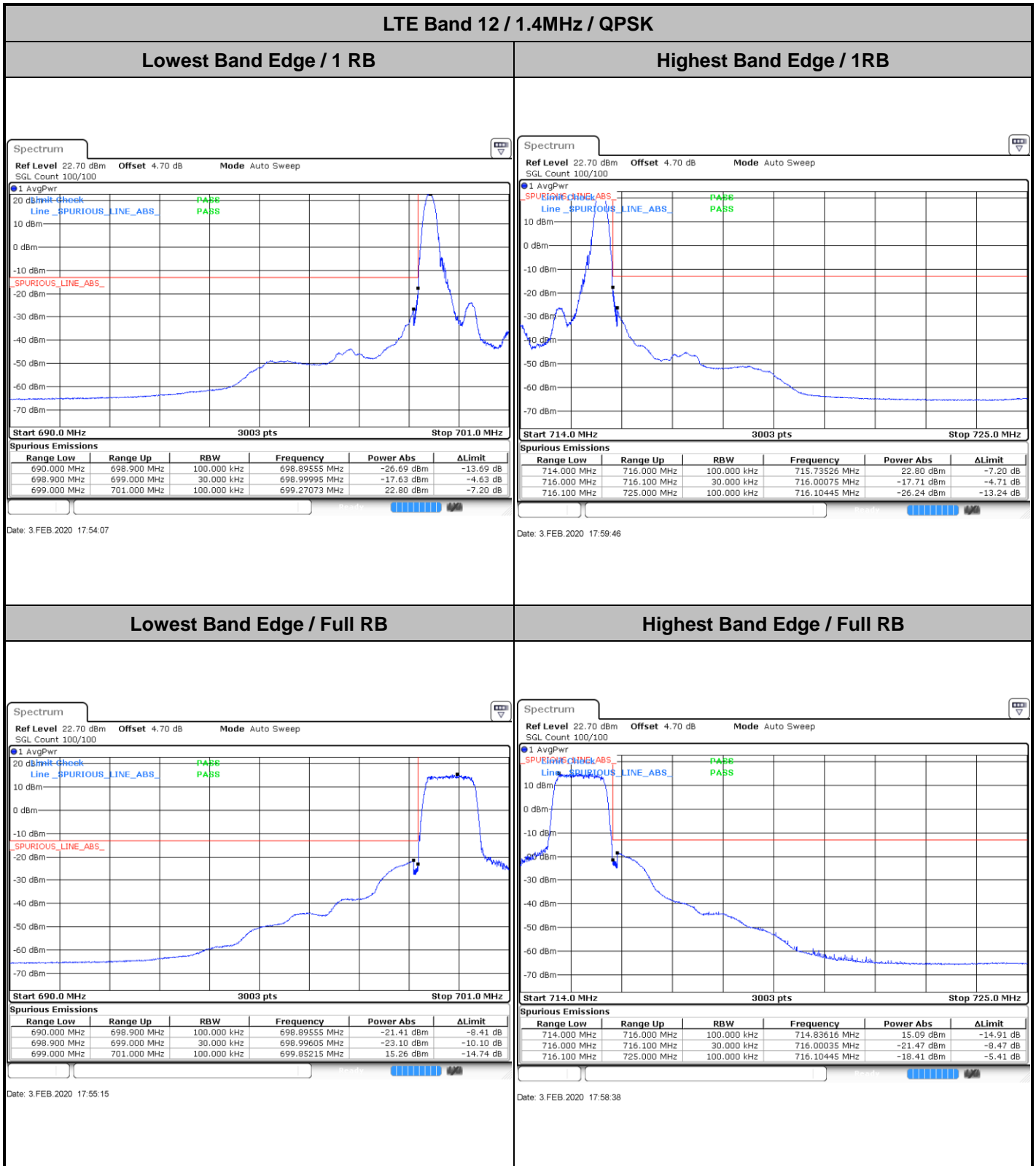
Highest Channel / 10MHz / 16QAM



Date: 3 FEB 2020 18:34:55



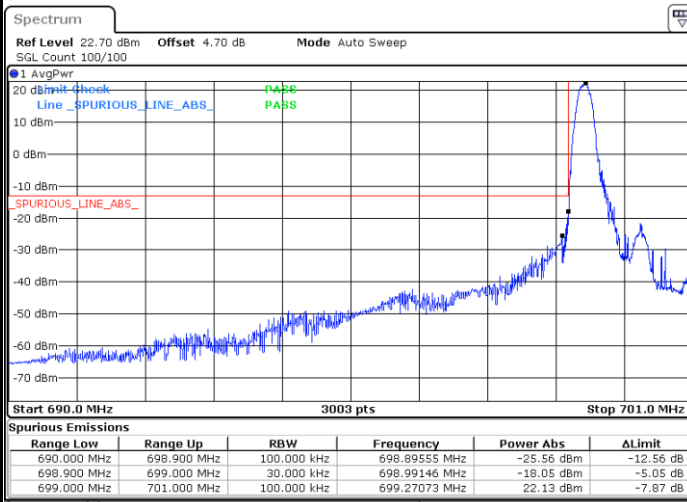
Conducted Band Edge





LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



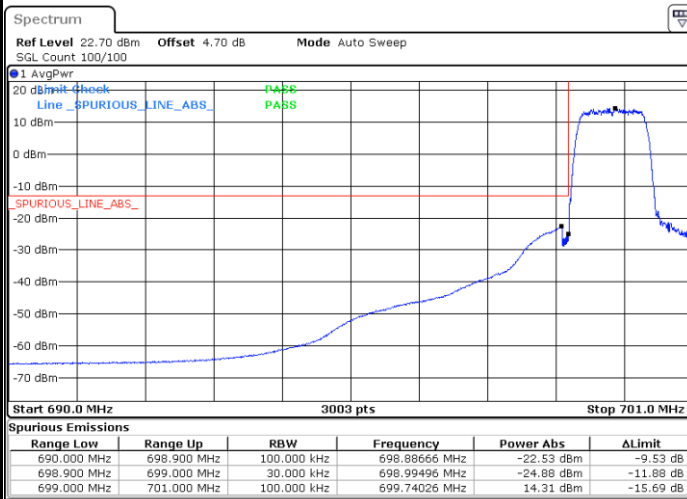
Date: 3.FEB.2020 17:53:00

Highest Band Edge / 1 RB



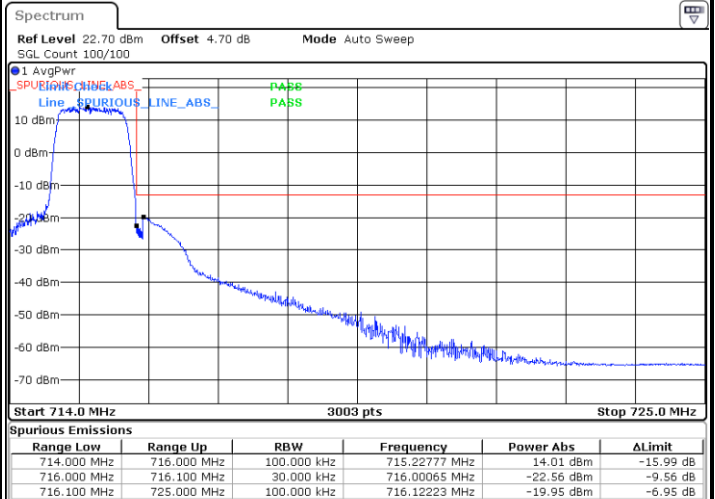
Date: 3.FEB.2020 18:00:53

Lowest Band Edge / Full RB



Date: 3.FEB.2020 17:56:23

Highest Band Edge / Full RB

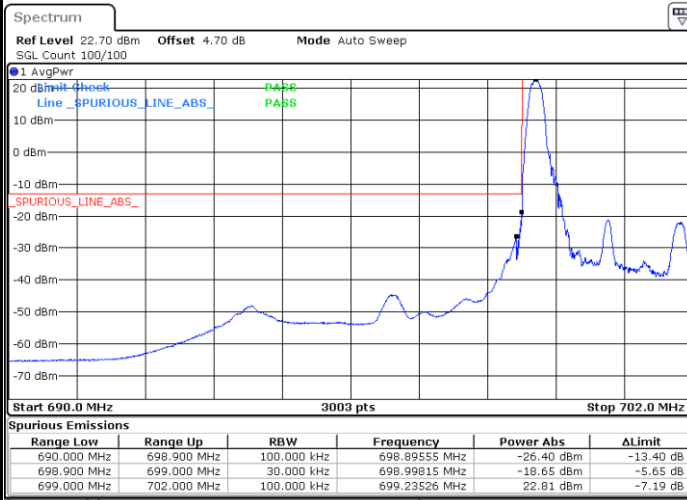


Date: 3.FEB.2020 17:57:30



LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



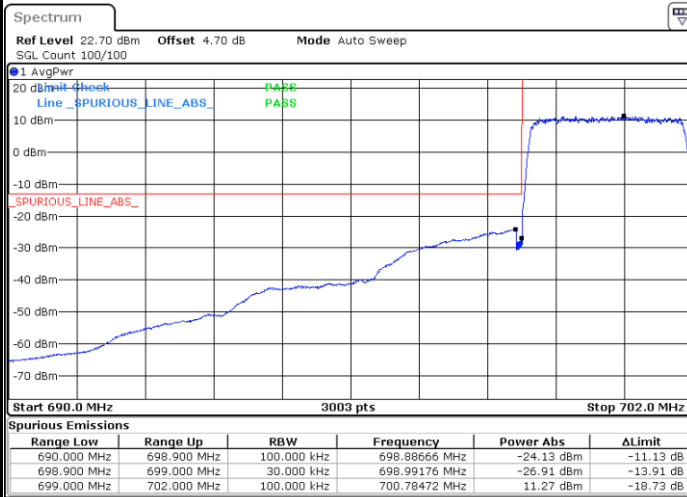
Date: 3.FEB.2020 18:10:38

Highest Band Edge / 1 RB



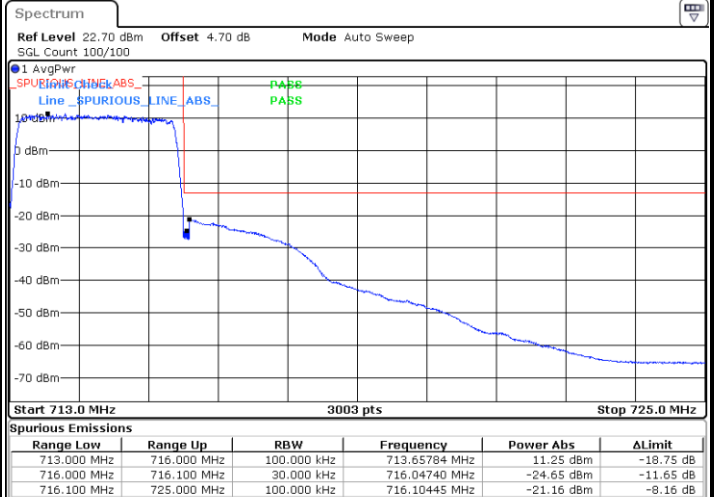
Date: 3.FEB.2020 18:16:16

Lowest Band Edge / Full RB



Date: 3.FEB.2020 18:11:46

Highest Band Edge / Full RB

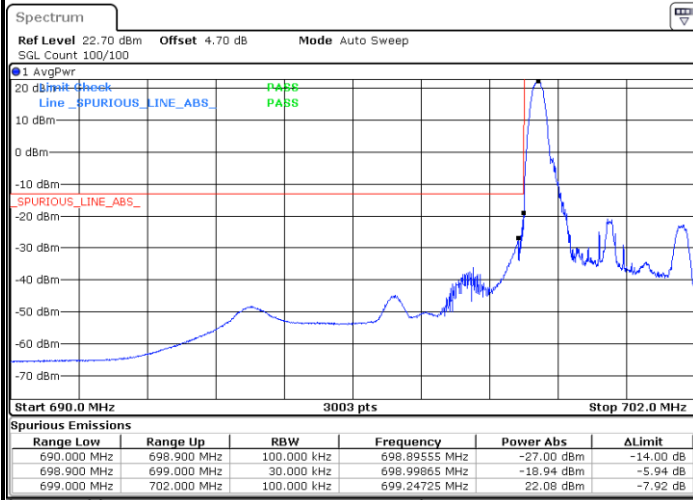


Date: 3.FEB.2020 18:15:08



LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



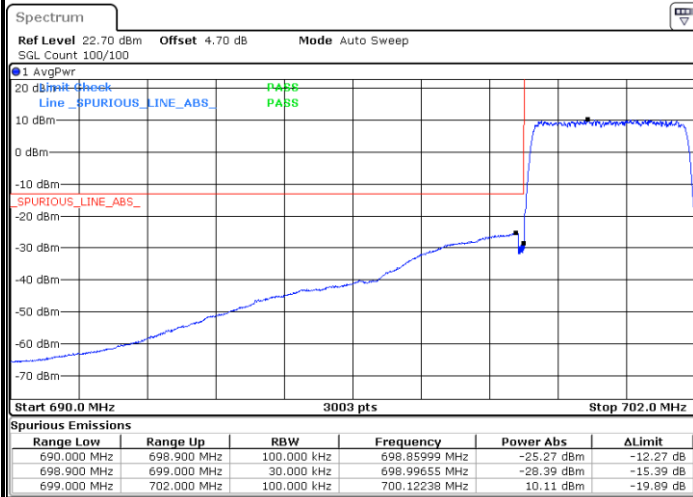
Date: 3.FEB.2020 18:09:30

Highest Band Edge / 1 RB



Date: 3.FEB.2020 18:17:24

Lowest Band Edge / Full RB



Date: 3.FEB.2020 18:12:53

Highest Band Edge / Full RB

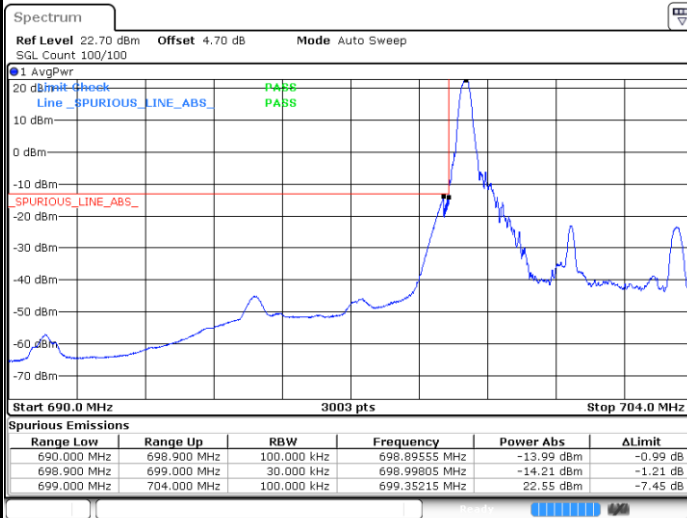


Date: 3.FEB.2020 18:14:01



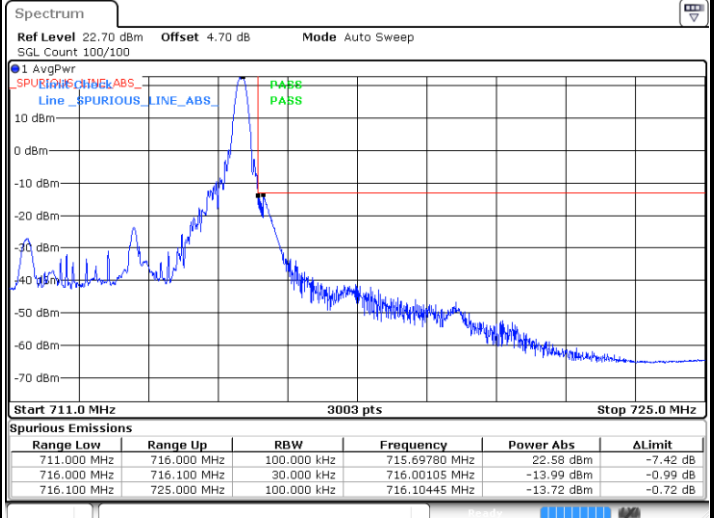
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



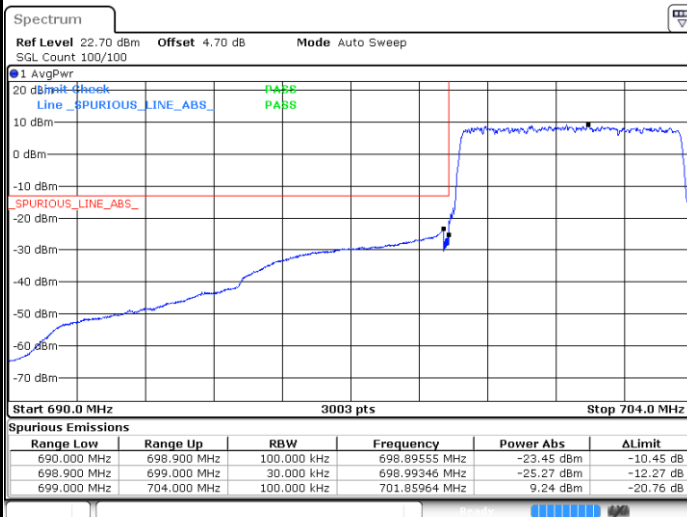
Date: 3.FEB.2020 18:27:08

Highest Band Edge / 1 RB



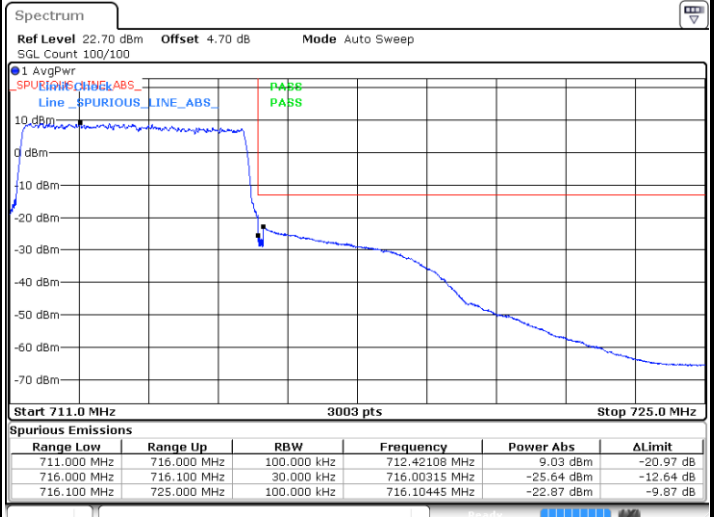
Date: 3.FEB.2020 18:32:47

Lowest Band Edge / Full RB



Date: 3.FEB.2020 18:28:16

Highest Band Edge / Full RB



Date: 3.FEB.2020 18:31:39



LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



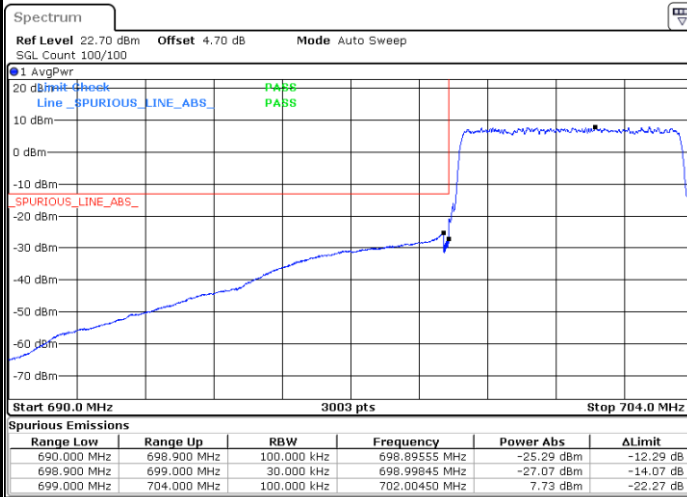
Date: 3.FEB.2020 18:26:01

Highest Band Edge / 1 RB



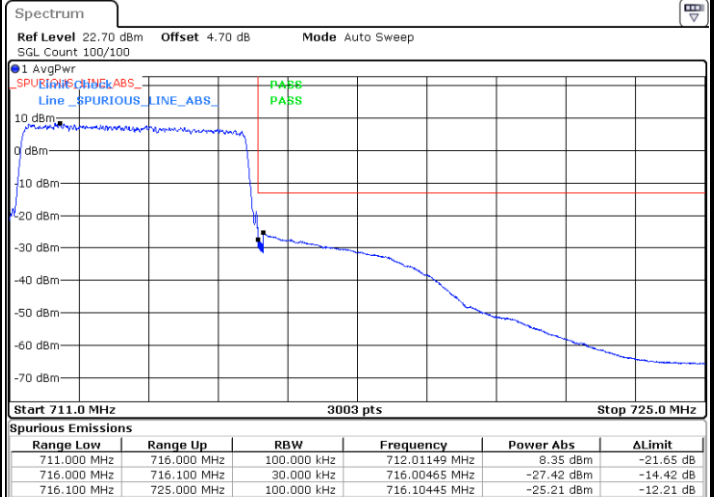
Date: 3.FEB.2020 18:33:54

Lowest Band Edge / Full RB



Date: 3.FEB.2020 18:29:24

Highest Band Edge / Full RB

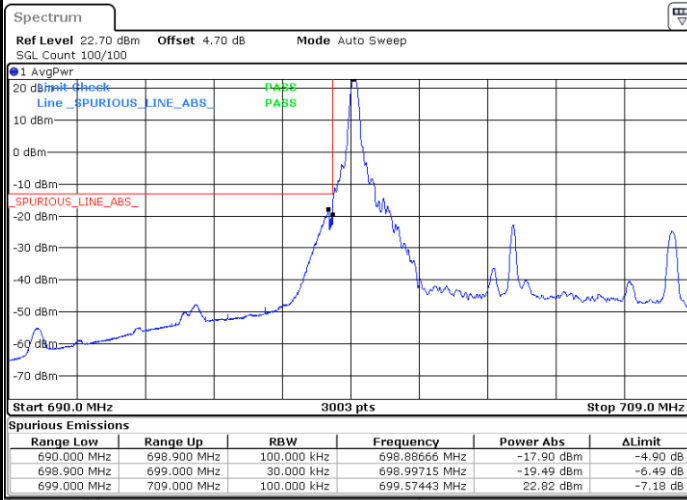


Date: 3.FEB.2020 18:30:31



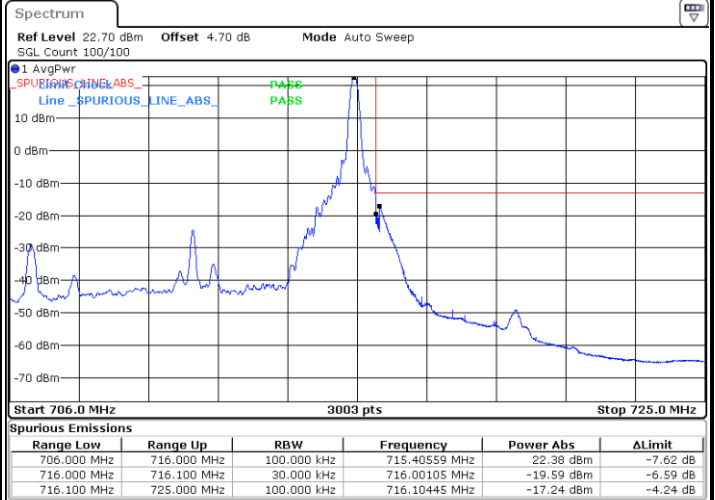
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



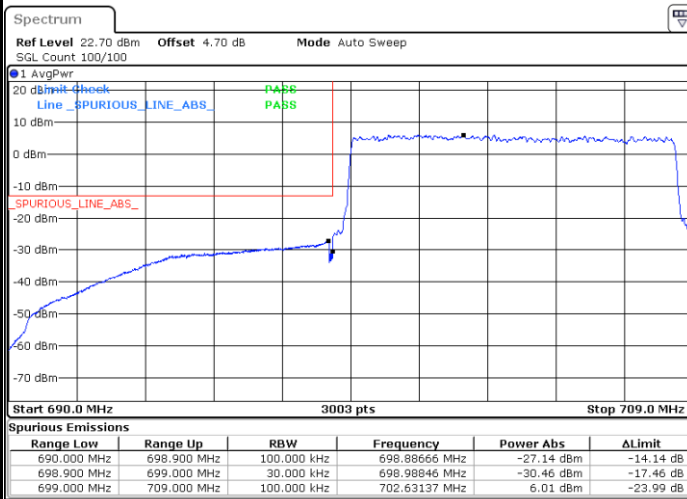
Date: 3.FEB.2020 18:43:39

Highest Band Edge / 1 RB



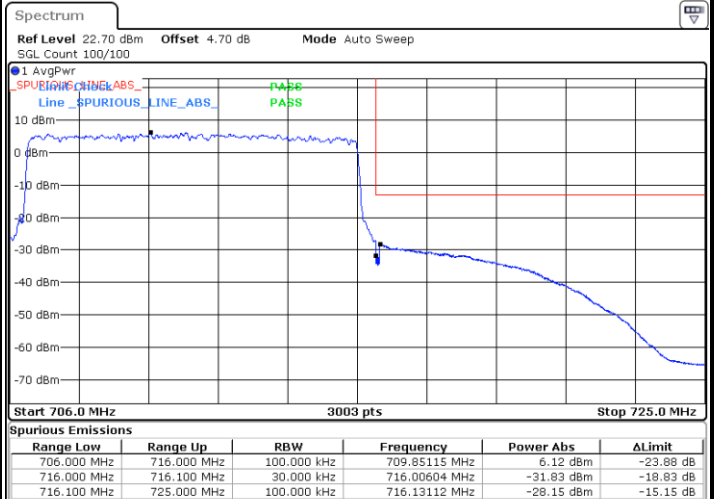
Date: 3.FEB.2020 18:49:17

Lowest Band Edge / Full RB



Date: 3.FEB.2020 18:44:47

Highest Band Edge / Full RB

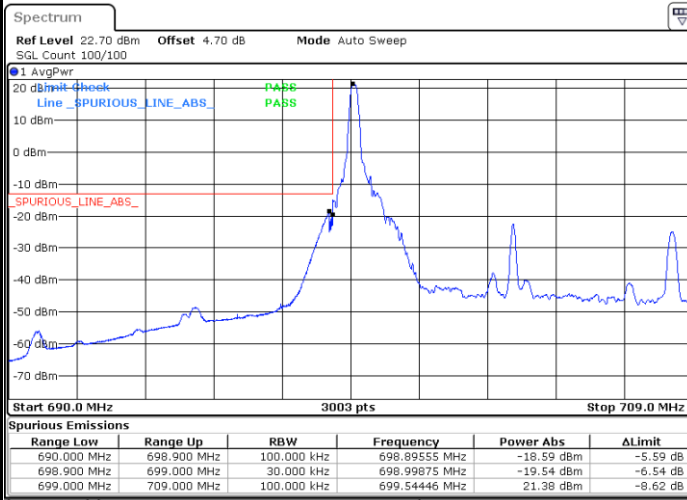


Date: 3.FEB.2020 18:48:10



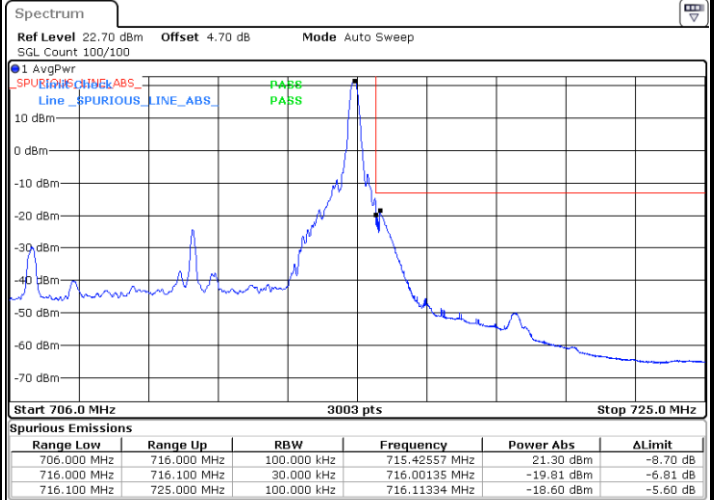
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



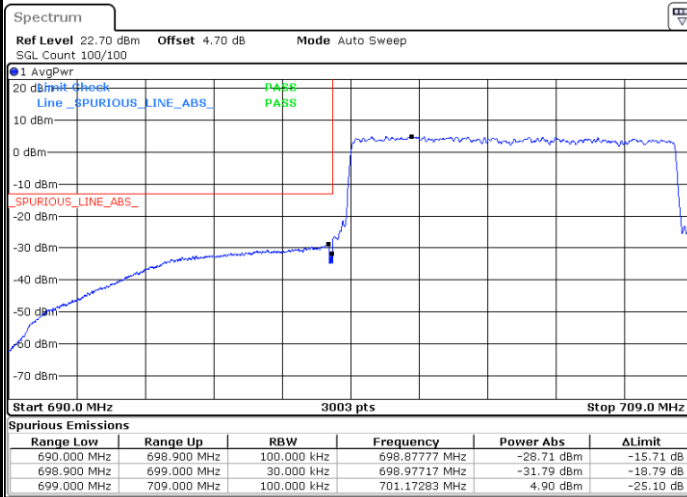
Date: 3.FEB.2020 18:42:31

Highest Band Edge / 1 RB



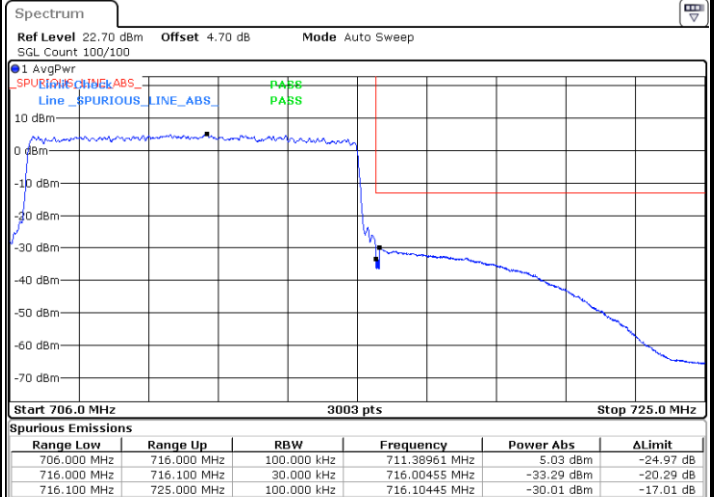
Date: 3.FEB.2020 18:50:25

Lowest Band Edge / Full RB



Date: 3.FEB.2020 18:45:54

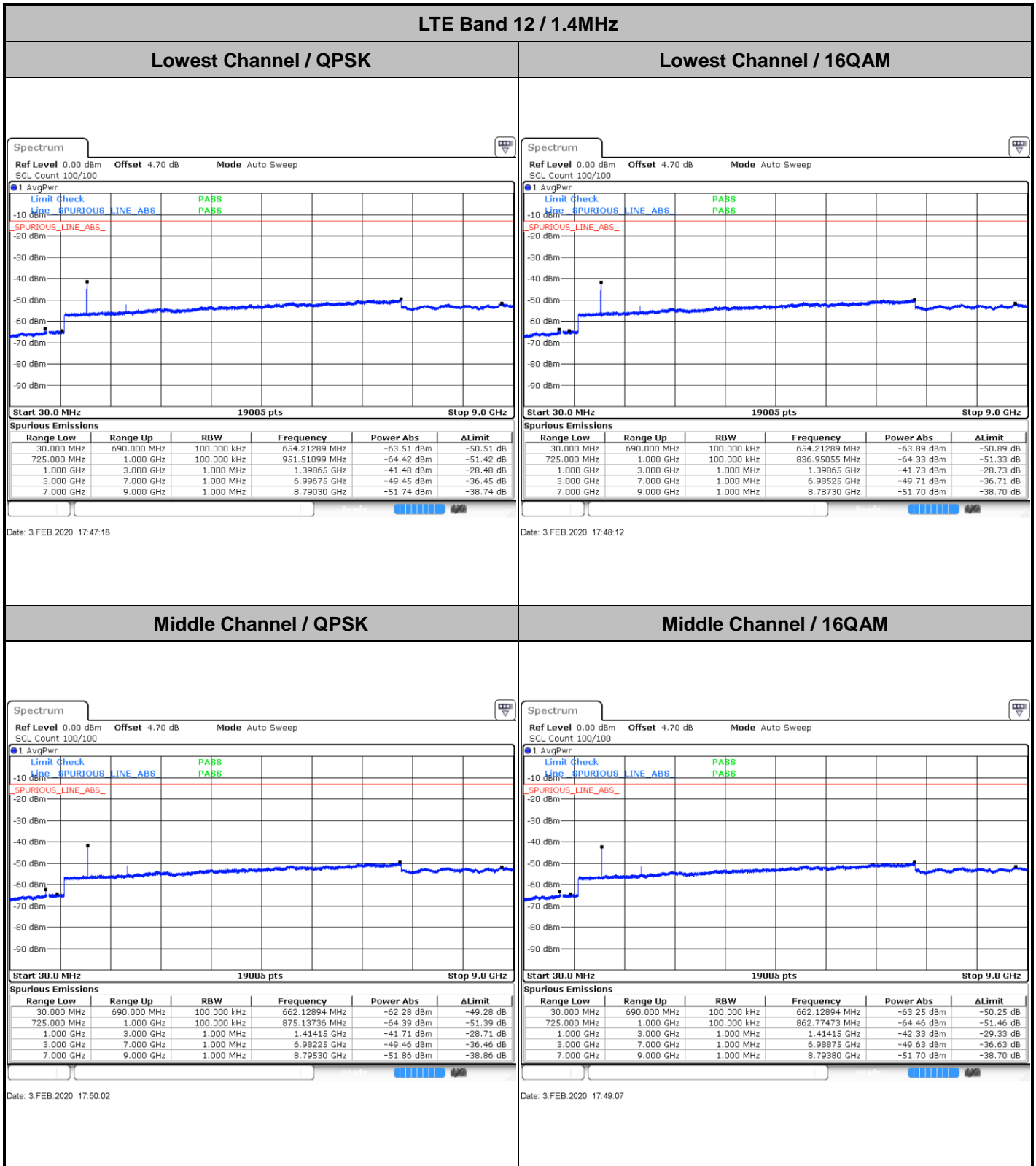
Highest Band Edge / Full RB



Date: 3.FEB.2020 18:47:02



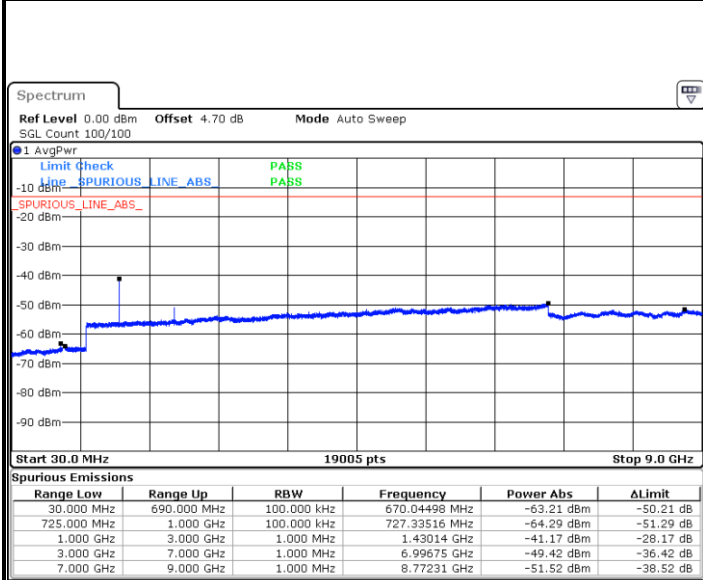
Conducted Spurious Emission





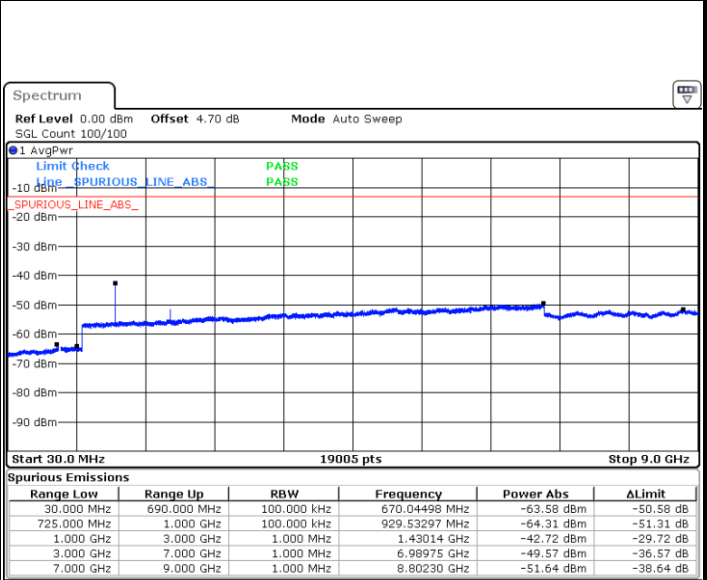
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 3.FEB.2020 17:50:57

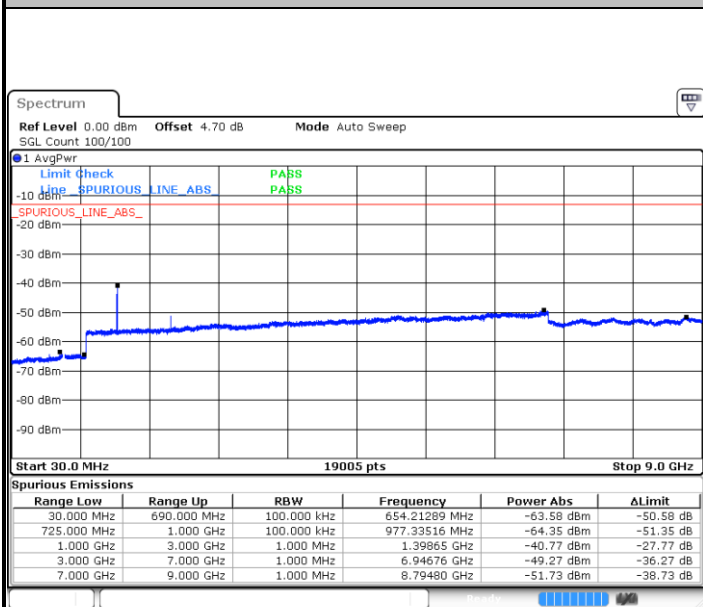
Highest Channel / 16QAM



Date: 3.FEB.2020 17:51:51

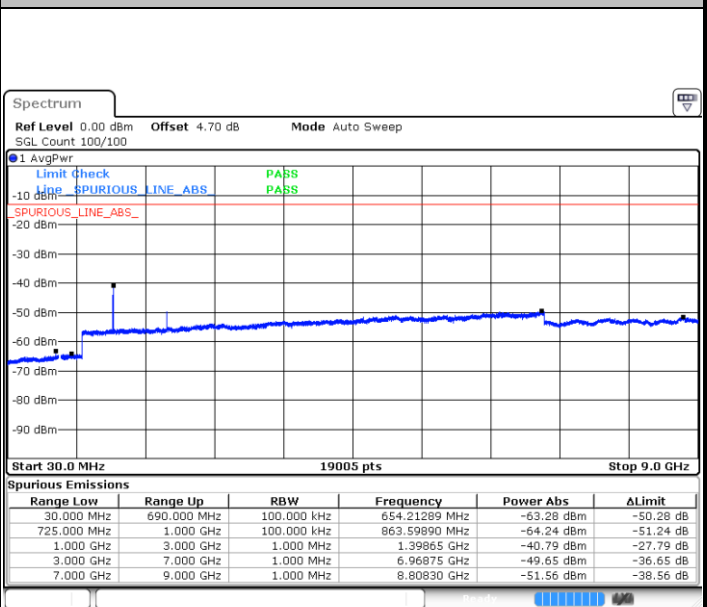
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 3.FEB.2020 18:03:48

Lowest Channel / 16QAM

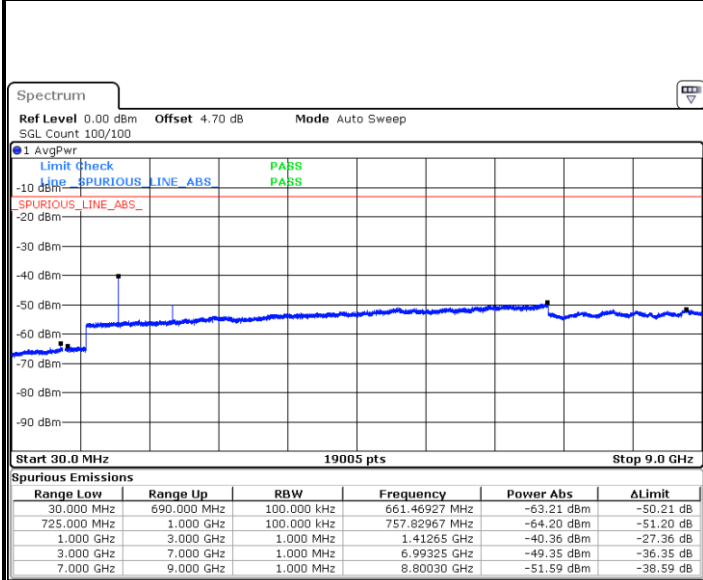


Date: 3.FEB.2020 18:04:43



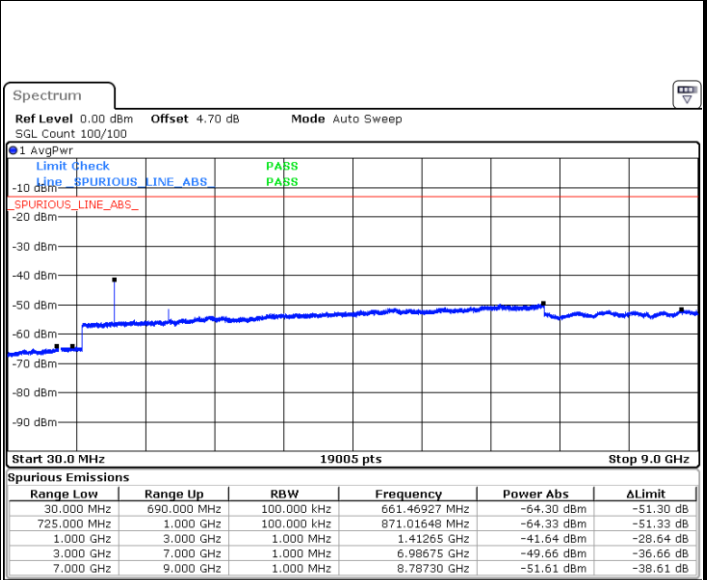
LTE Band 12 / 3MHz

Middle Channel / QPSK



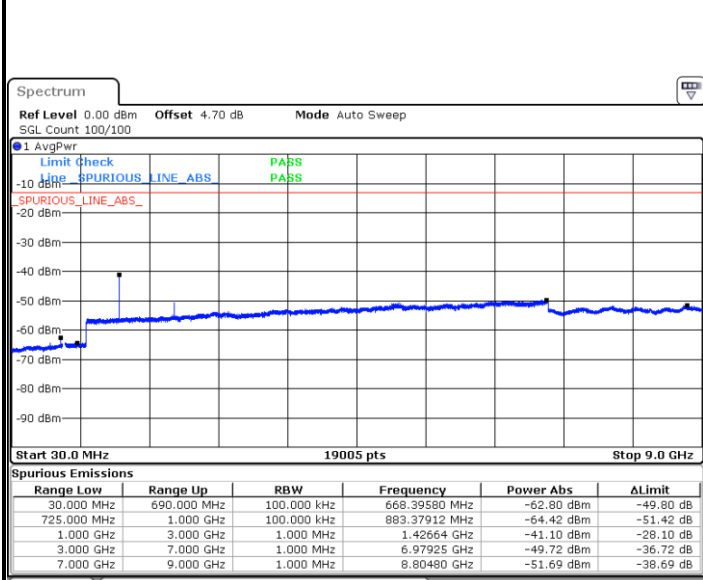
Date: 3 FEB 2020 18:06:32

Middle Channel / 16QAM



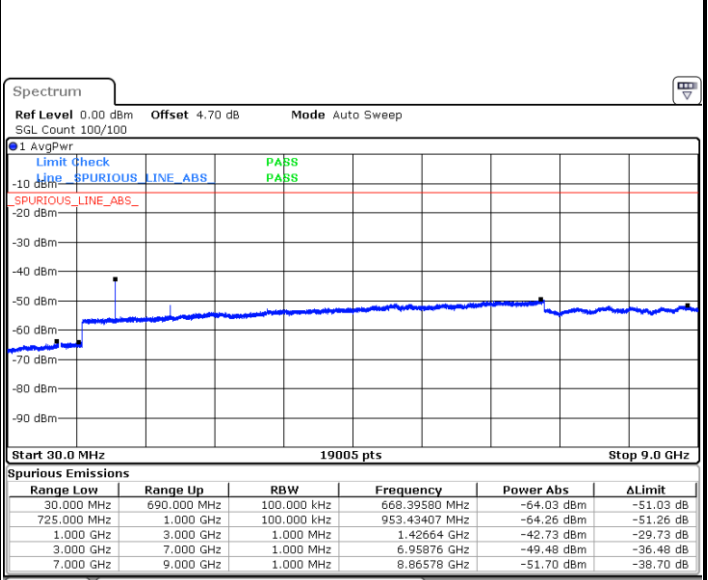
Date: 3 FEB 2020 18:05:38

Highest Channel / QPSK



Date: 3 FEB 2020 18:07:27

Highest Channel / 16QAM



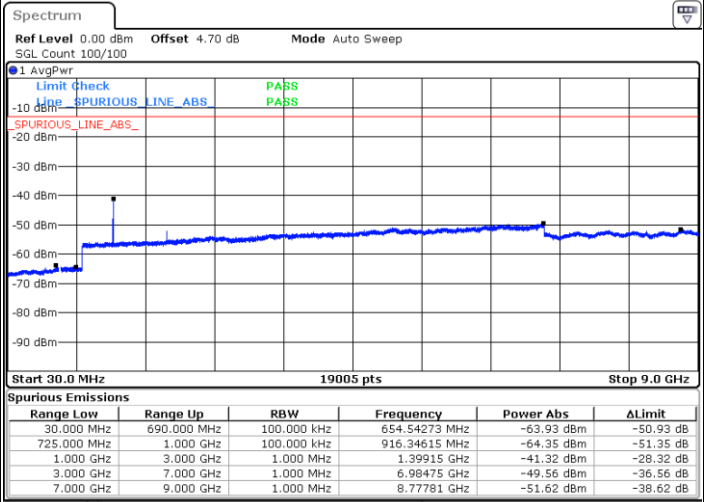
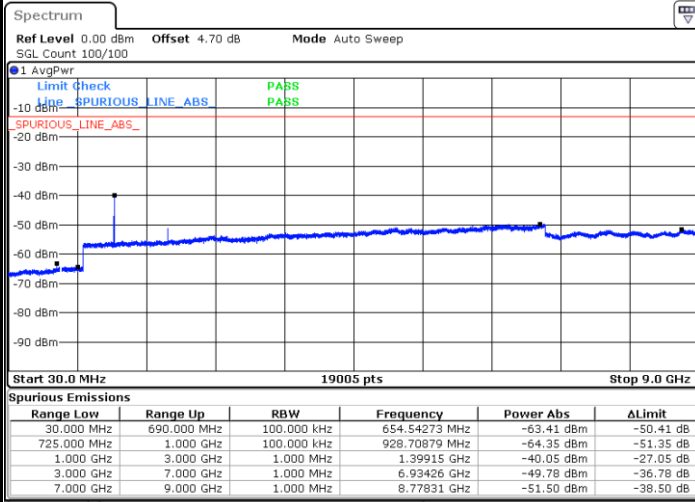
Date: 3 FEB 2020 18:08:22



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

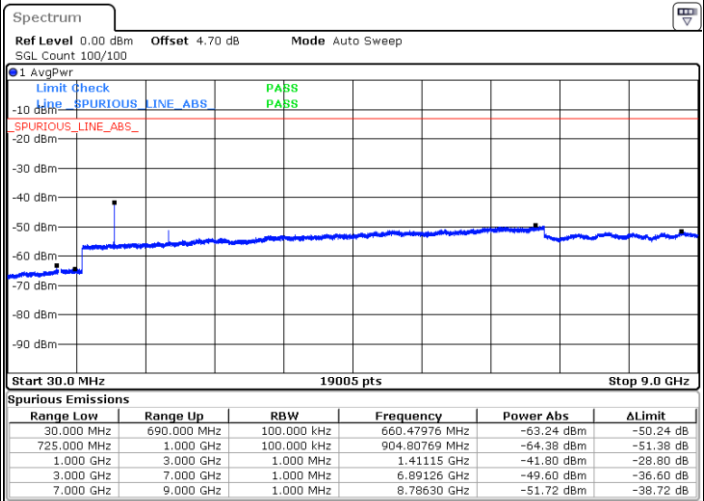
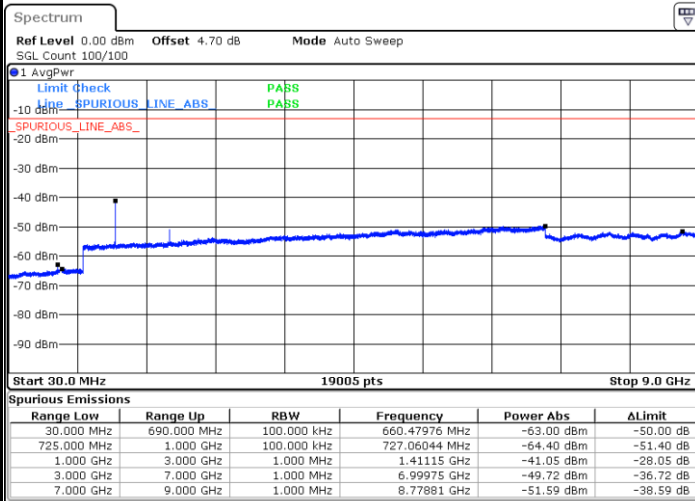


Date: 3 FEB 2020 18:20:19

Date: 3 FEB 2020 18:21:13

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 3 FEB 2020 18:23:03

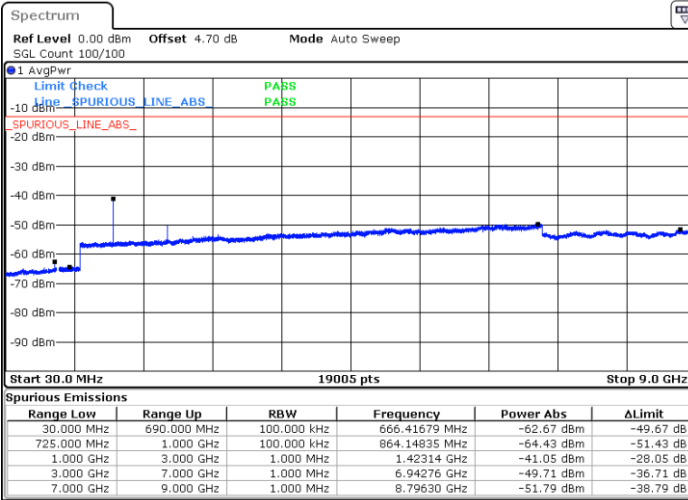
Date: 3 FEB 2020 18:22:08



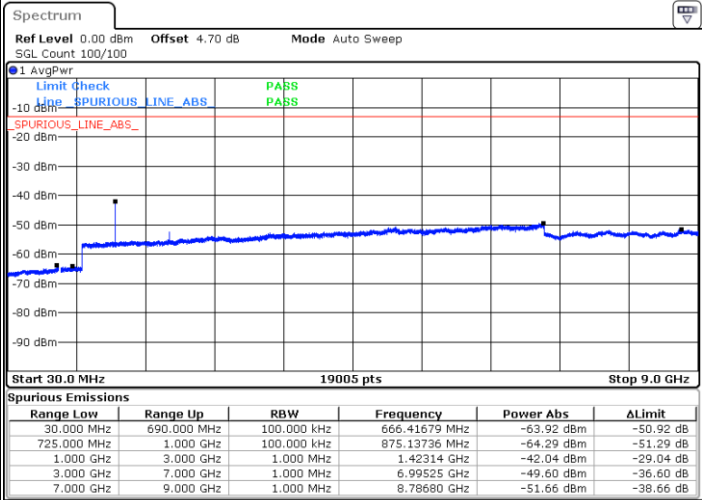
LTE Band 12 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 3 FEB 2020 18:23:58

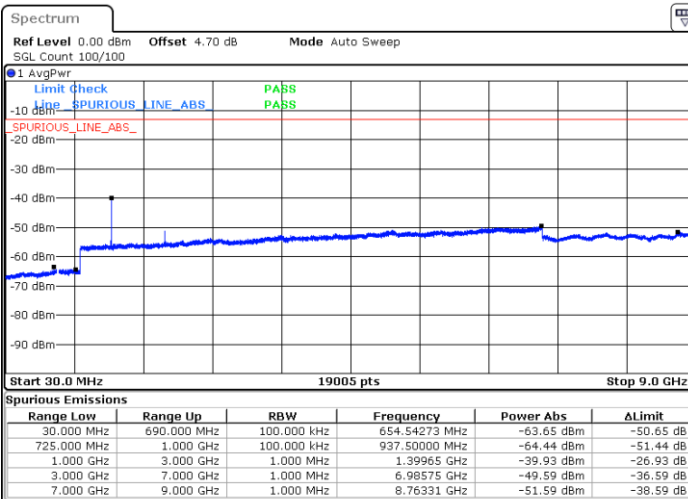


Date: 3 FEB 2020 18:24:52

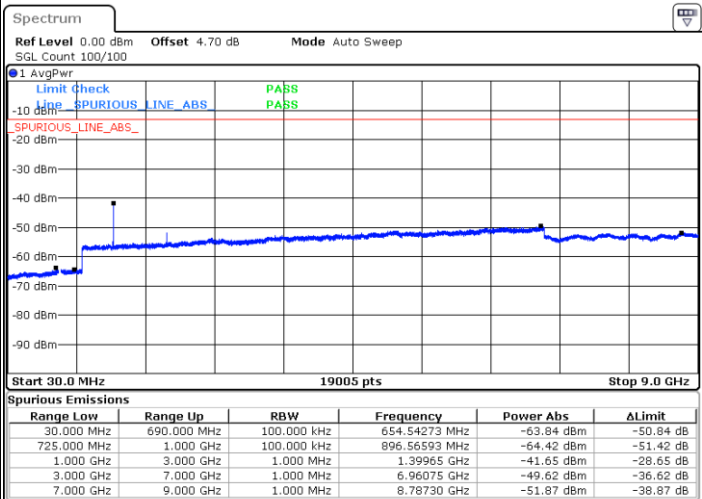
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 3 FEB 2020 18:36:49



Date: 3 FEB 2020 18:37:44