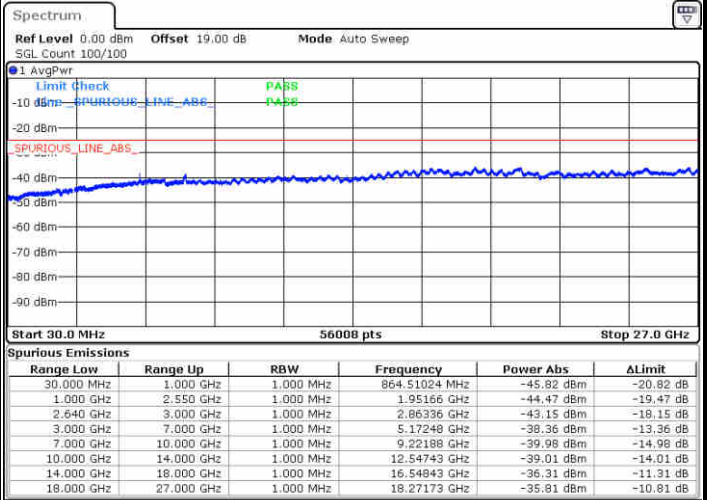
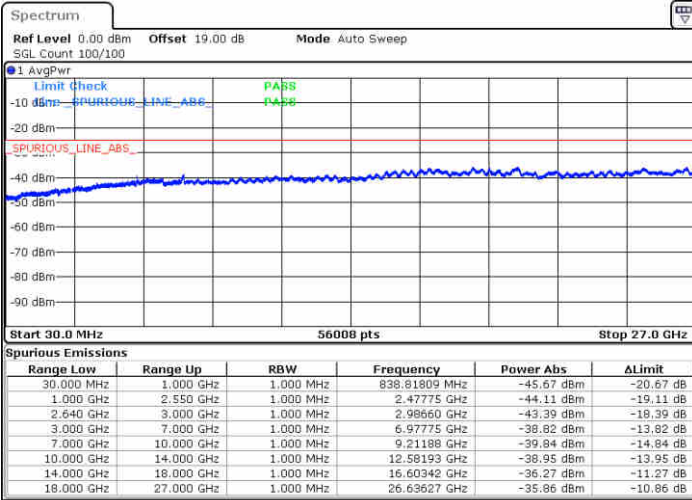




LTE Band 38 / 20MHz

Lowest Channel / 64QAM

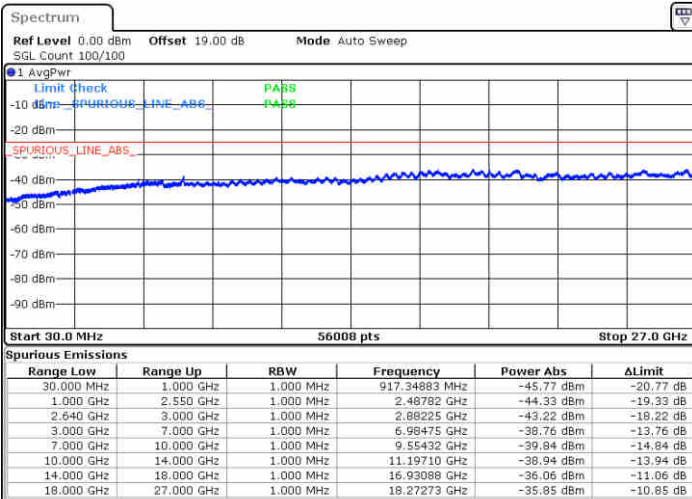
Middle Channel / 64QAM



Date: 13.DEC.2019 14:17:07

Date: 13.DEC.2019 14:17:53

Highest Channel / 64QAM



Date: 13.DEC.2019 14:18:40



Frequency Stability

Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0073	
30	Normal Voltage	0.0039	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0077	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0073	
20	Maximum Voltage	0.0030	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.32	5.33	5.59	7.59	PASS
Middle CH	5.39	5.80	6.06	6.90	
Highest CH	4.70	7.13	6.43	7.01	
Mode	LTE Band 41 / 20MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	5.42	6.38	-	-	PASS
Middle CH	5.65	7.59	-	-	
Highest CH	5.48	6.20	-	-	



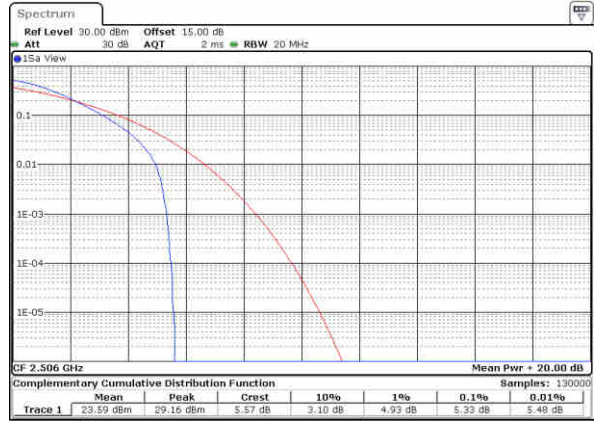
LTE Band 41 / 20MHz / QPSK

Lowest Channel / 1RB



Date: 13, DEC, 2019 12:55:27

Lowest Channel / Full RB



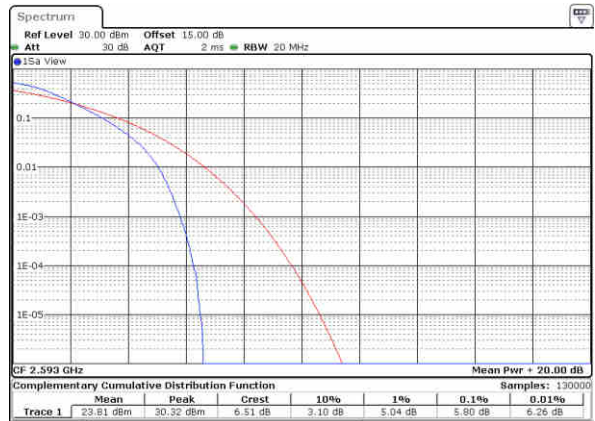
Date: 13, DEC, 2019 12:55:39

Middle Channel / 1RB



Date: 13, DEC, 2019 12:55:59

Middle Channel / Full RB



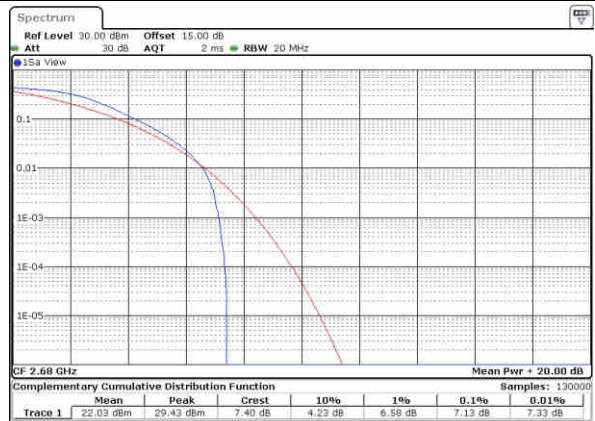
Date: 13, DEC, 2019 12:56:20

Highest Channel / 1RB



Date: 13, DEC, 2019 12:56:31

Highest Channel / Full RB



Date: 13, DEC, 2019 12:56:48



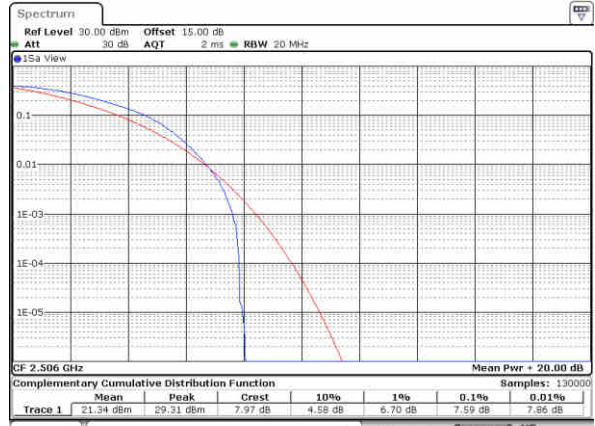
LTE Band 41 / 20MHz / 16QAM

Lowest Channel / 1RB



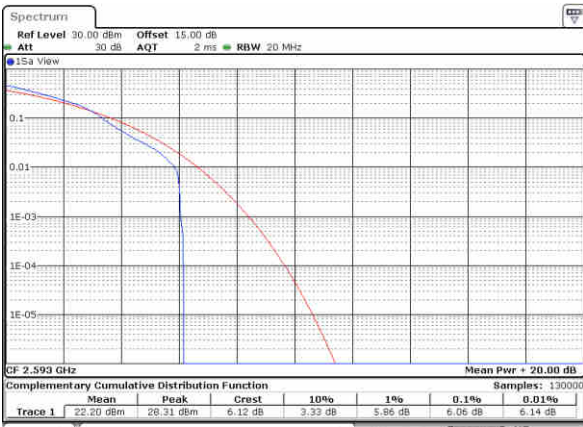
Date: 13, DEC, 2019 12:53:55

Lowest Channel / Full RB



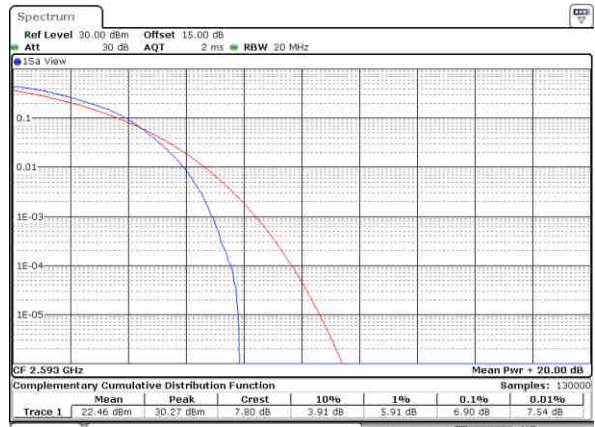
Date: 13, DEC, 2019 12:54:13

Middle Channel / 1RB



Date: 13, DEC, 2019 12:54:31

Middle Channel / Full RB



Date: 13, DEC, 2019 12:54:43

Highest Channel / 1RB



Date: 13, DEC, 2019 12:54:59

Highest Channel / Full RB

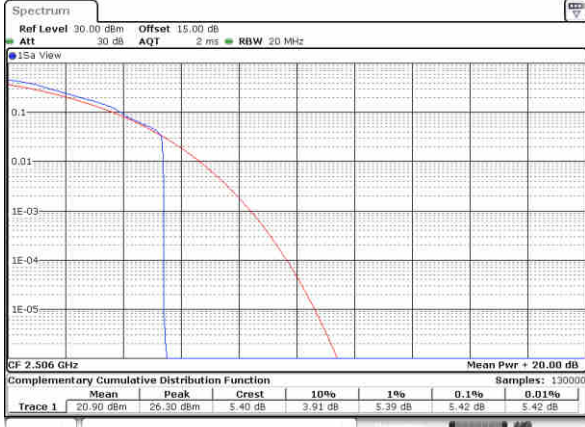


Date: 13, DEC, 2019 12:55:16



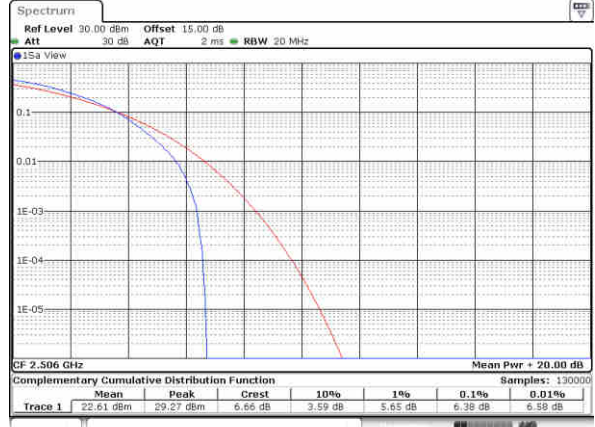
LTE Band 41 / 20MHz / 64QAM

Lowest Channel / 1RB



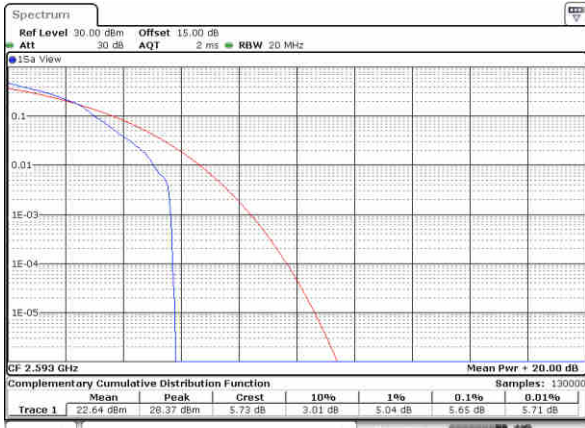
Date: 13, DEC, 2019 12:51:27

Lowest Channel / Full RB



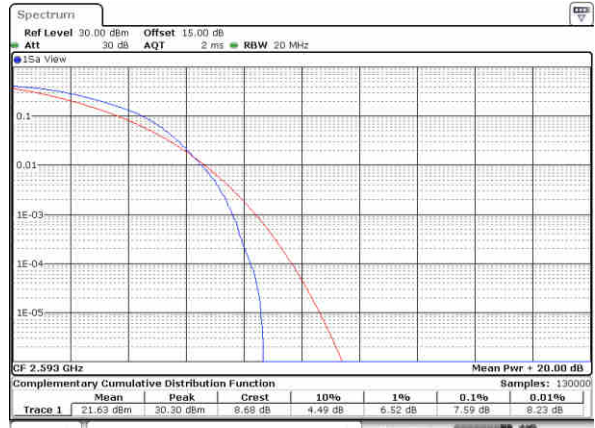
Date: 13, DEC, 2019 12:52:25

Middle Channel / 1RB



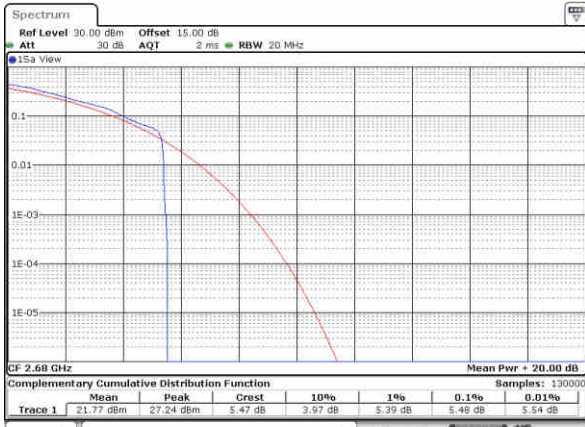
Date: 13, DEC, 2019 12:52:44

Middle Channel / Full RB



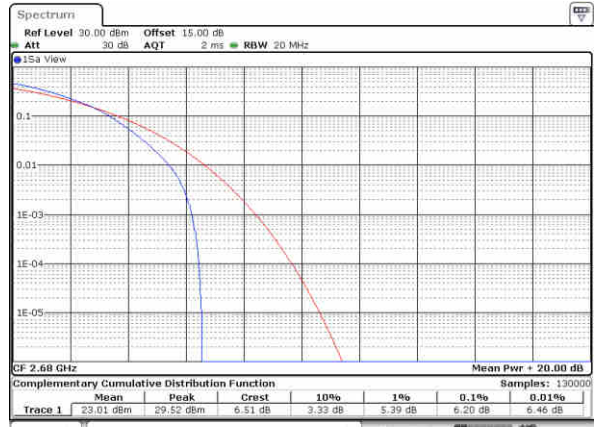
Date: 13, DEC, 2019 12:53:15

Highest Channel / 1RB



Date: 13, DEC, 2019 12:53:26

Highest Channel / Full RB



Date: 13, DEC, 2019 12:53:38



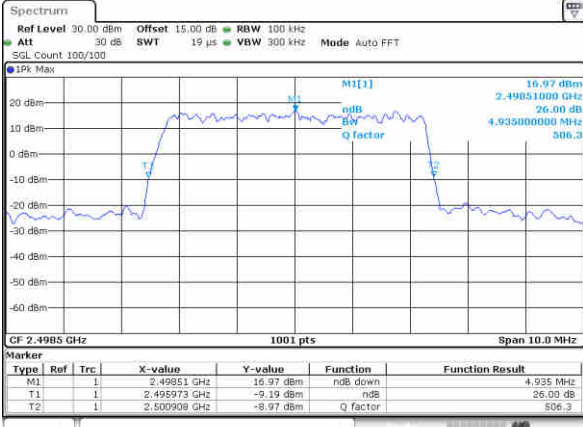
26dB Bandwidth

Mode	LTE Band 41 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.94	4.80	9.73	9.81	14.48	14.24	19.14	19.02
Middle CH	4.73	4.82	9.65	9.75	14.27	14.51	18.66	18.86
Highest CH	4.79	4.93	9.79	9.73	14.42	14.21	18.66	18.74
Mode	LTE Band 41 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	4.76		9.87		14.12		18.66	
Middle CH	4.82		9.65		14.33		18.74	
Highest CH	4.73		9.65		14.18		18.70	



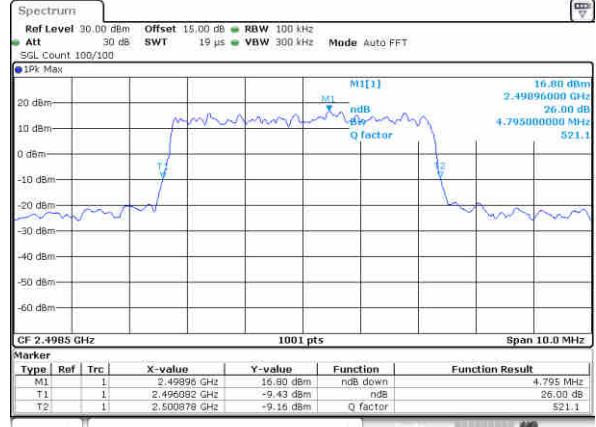
LTE Band 41

Lowest Channel / 5MHz / QPSK



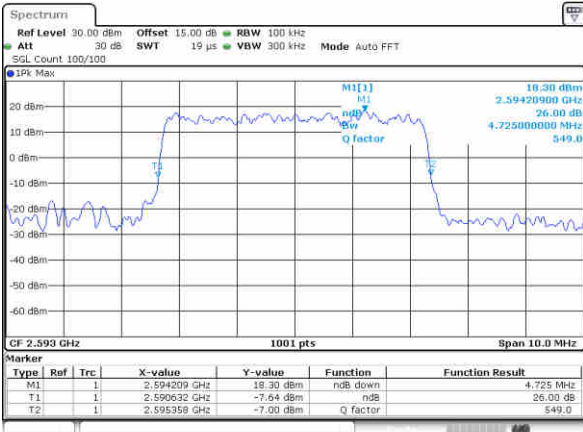
Date: 13, DEC, 2019 12:38:20

Lowest Channel / 5MHz / 16QAM



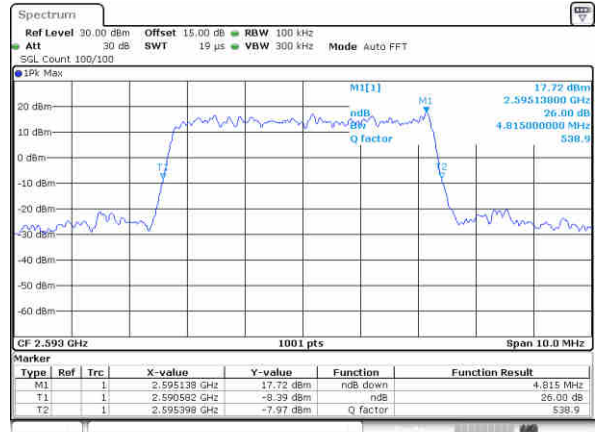
Date: 13, DEC, 2019 12:38:31

Middle Channel / 5MHz / QPSK



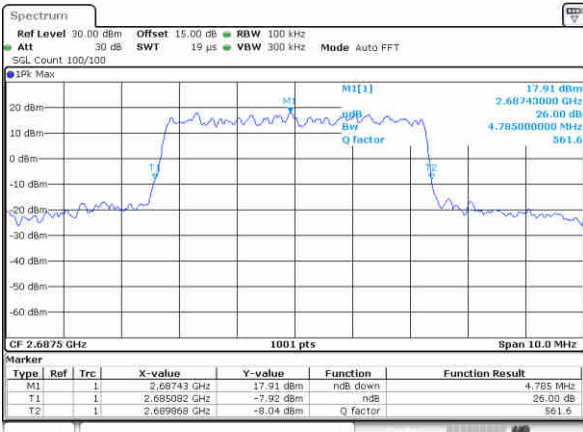
Date: 13, DEC, 2019 12:39:04

Middle Channel / 5MHz / 16QAM



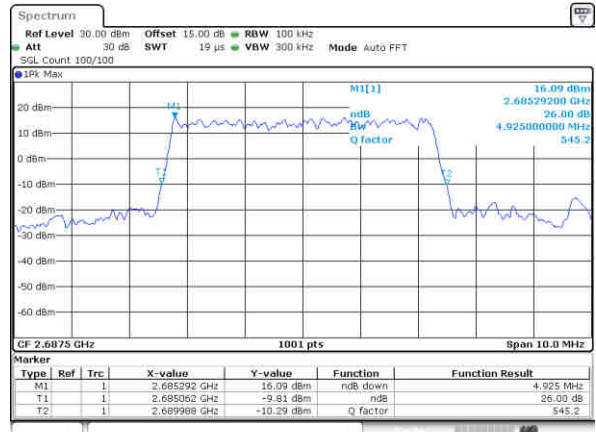
Date: 13, DEC, 2019 12:39:16

Highest Channel / 5MHz / QPSK



Date: 13, DEC, 2019 12:39:49

Highest Channel / 5MHz / 16QAM

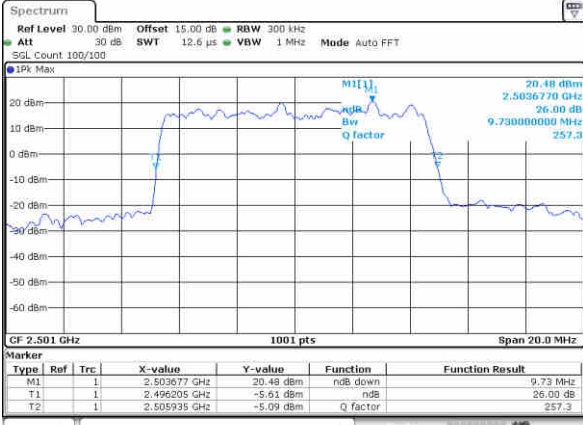


Date: 13, DEC, 2019 12:40:00



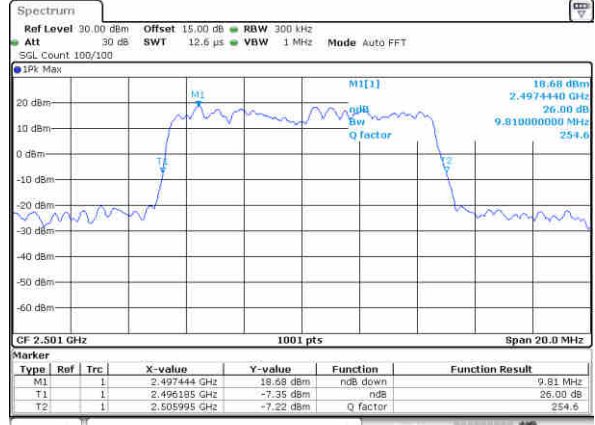
LTE Band 41

Lowest Channel / 10MHz / QPSK



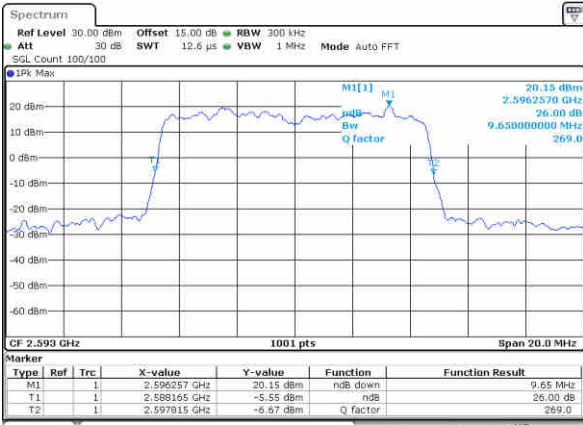
Date: 13, DEC, 2019 12:40:34

Lowest Channel / 10MHz / 16QAM



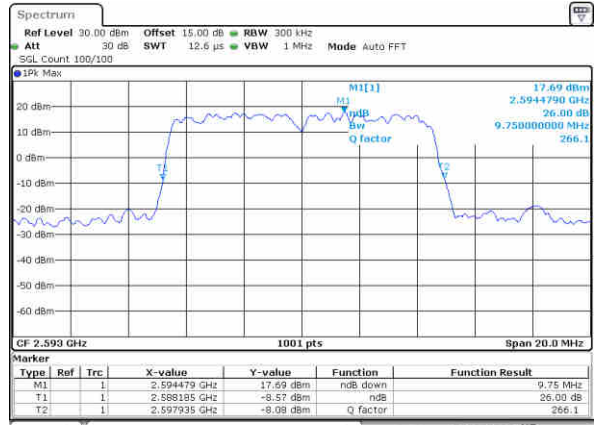
Date: 13, DEC, 2019 12:40:45

Middle Channel / 10MHz / QPSK



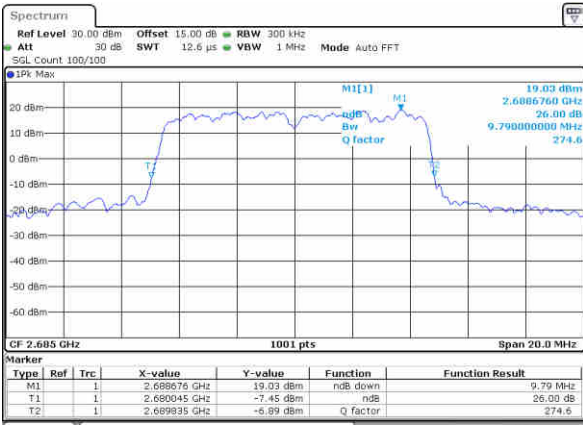
Date: 13, DEC, 2019 12:41:10

Middle Channel / 10MHz / 16QAM



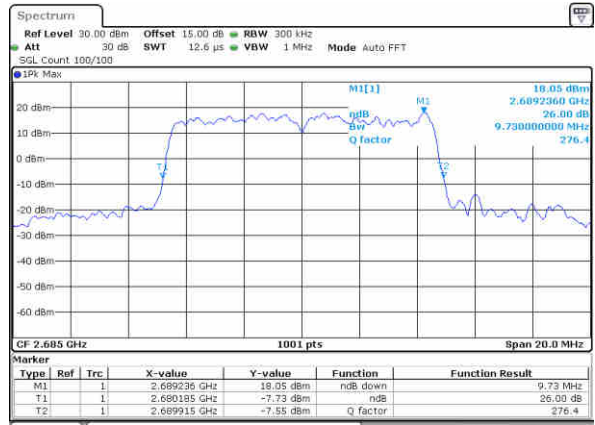
Date: 13, DEC, 2019 12:41:29

Highest Channel / 10MHz / QPSK



Date: 13, DEC, 2019 12:42:03

Highest Channel / 10MHz / 16QAM

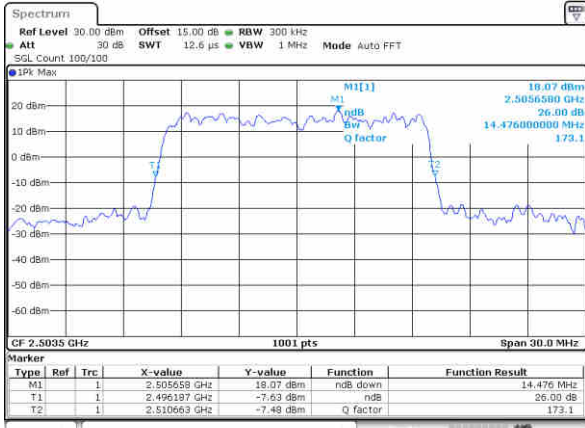


Date: 13, DEC, 2019 12:42:14



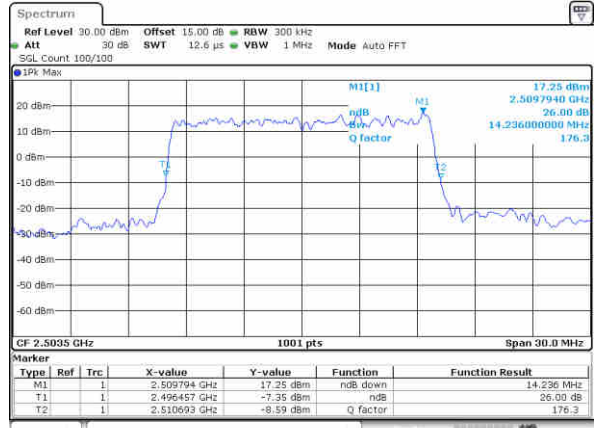
LTE Band 41

Lowest Channel / 15MHz / QPSK



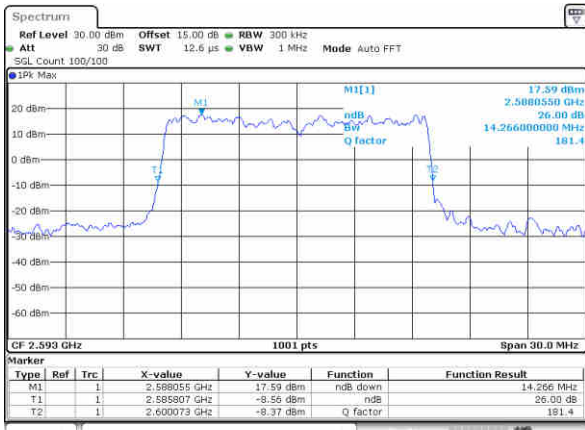
Date: 13, DEC, 2019 12:42:48

Lowest Channel / 15MHz / 16QAM



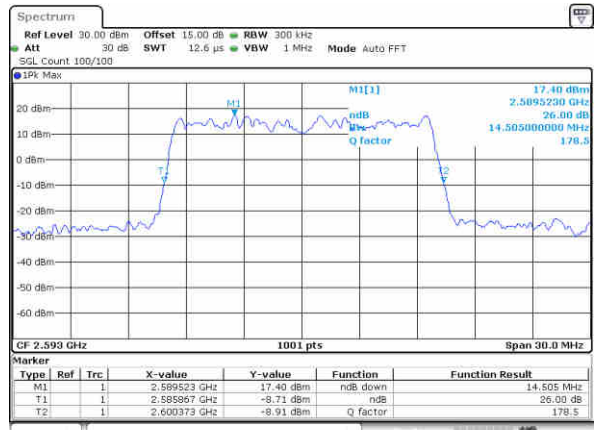
Date: 13, DEC, 2019 12:42:59

Middle Channel / 15MHz / QPSK



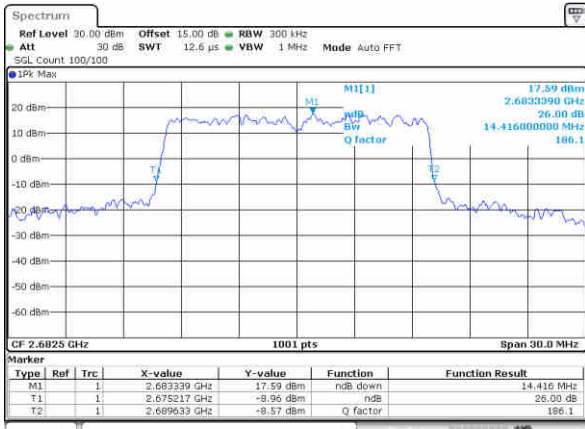
Date: 13, DEC, 2019 12:43:32

Middle Channel / 15MHz / 16QAM



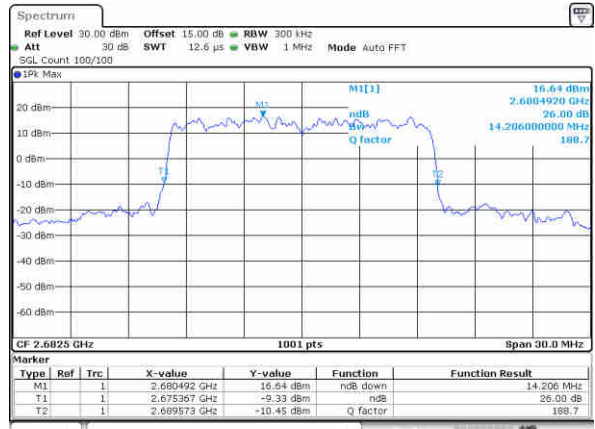
Date: 13, DEC, 2019 12:43:44

Highest Channel / 15MHz / QPSK



Date: 13, DEC, 2019 12:44:17

Highest Channel / 15MHz / 16QAM

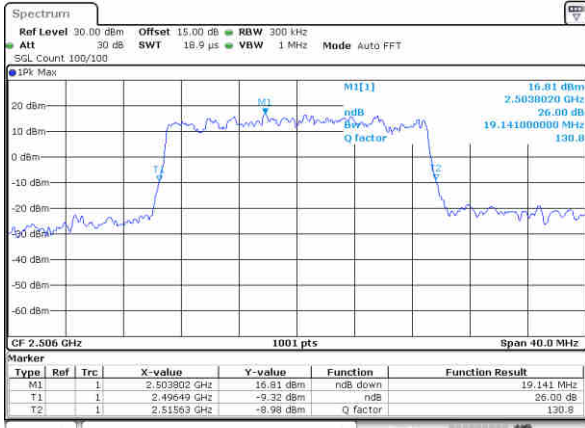


Date: 13, DEC, 2019 12:44:28



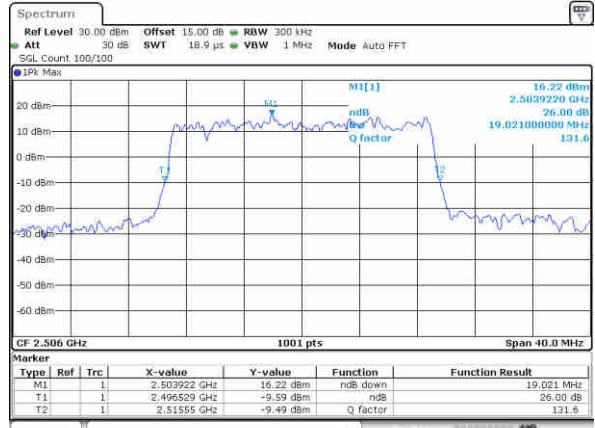
LTE Band 41

Lowest Channel / 20MHz / QPSK



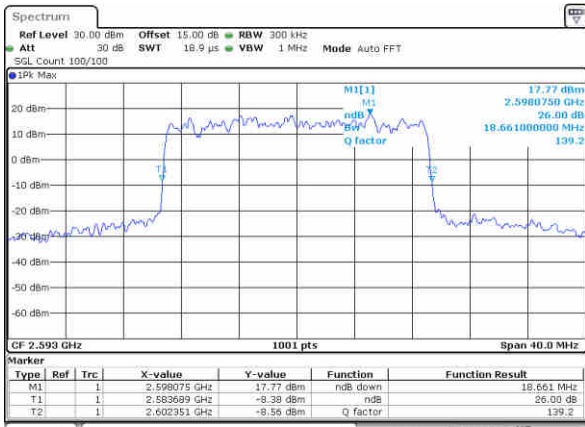
Date: 13, DEC, 2019 12:45:02

Lowest Channel / 20MHz / 16QAM



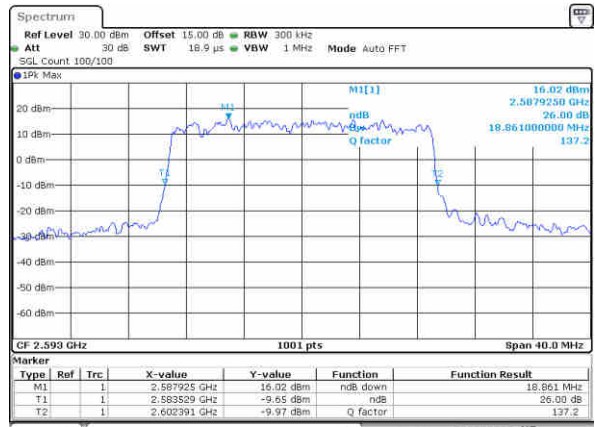
Date: 13, DEC, 2019 12:45:13

Middle Channel / 20MHz / QPSK



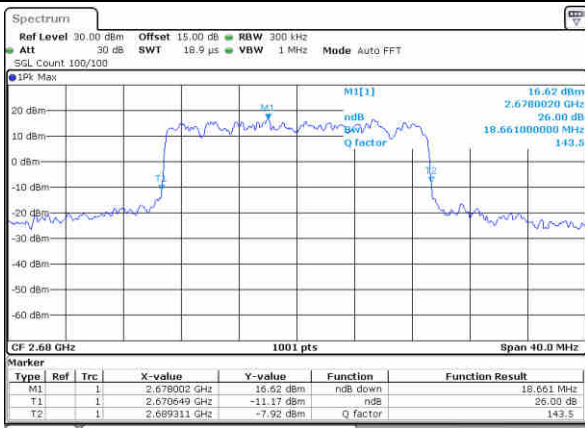
Date: 13, DEC, 2019 12:45:46

Middle Channel / 20MHz / 16QAM



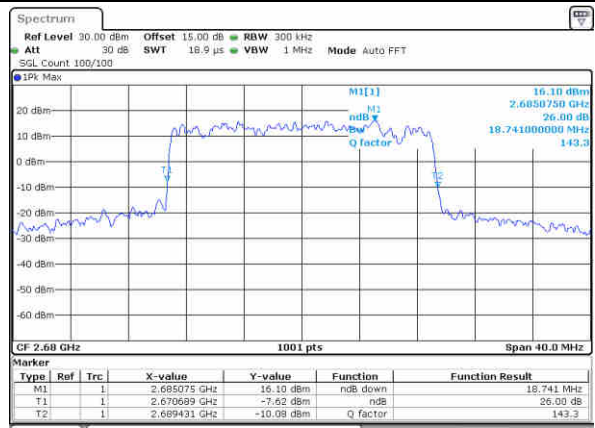
Date: 13, DEC, 2019 12:45:57

Highest Channel / 20MHz / QPSK



Date: 13, DEC, 2019 12:46:33

Highest Channel / 20MHz / 16QAM

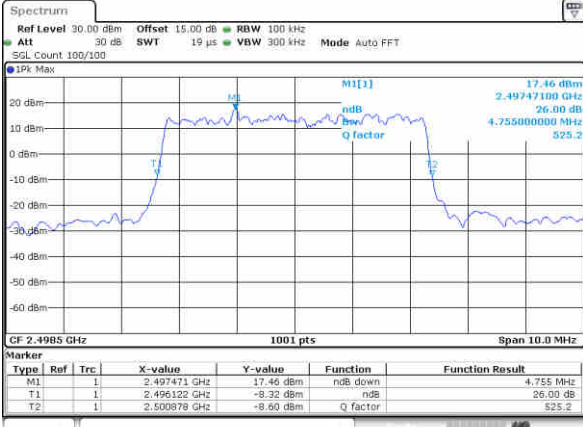


Date: 13, DEC, 2019 12:46:42



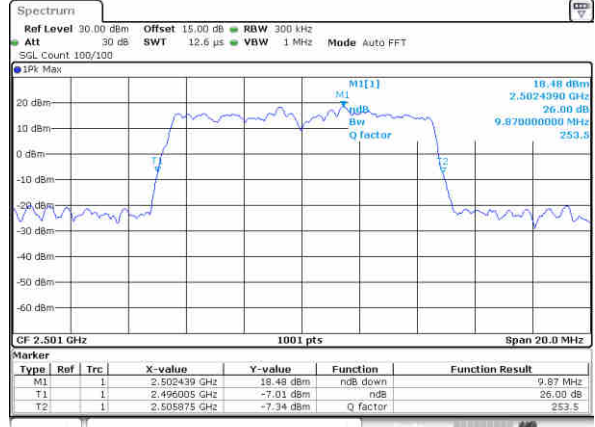
LTE Band 41

Lowest Channel / 5MHz / 64QAM



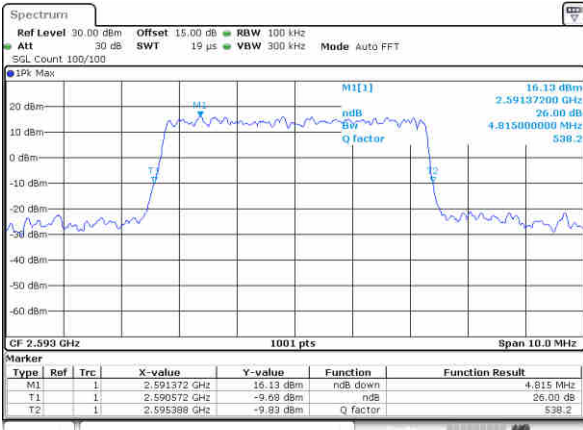
Date: 13, DEC, 2019 12:47:04

Lowest Channel / 10MHz / 64QAM



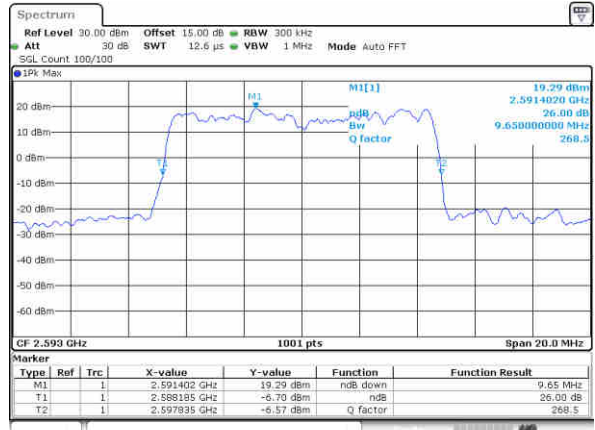
Date: 13, DEC, 2019 12:48:11

Middle Channel / 5MHz / 64QAM



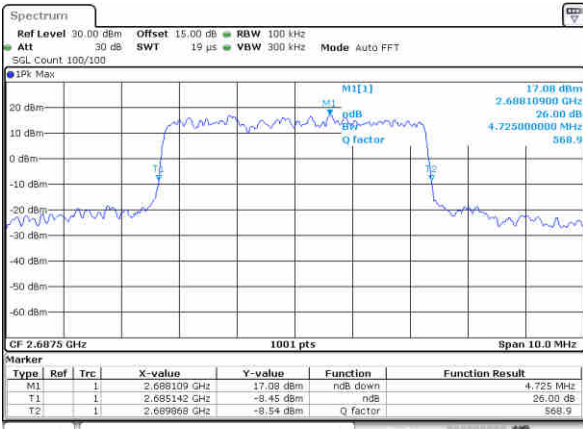
Date: 13, DEC, 2019 12:47:07

Middle Channel / 10MHz / 64QAM



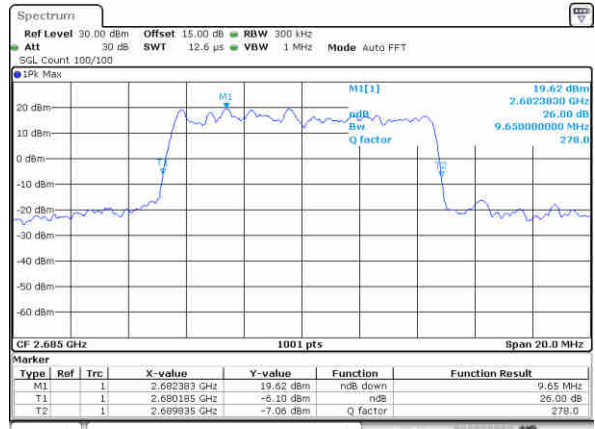
Date: 13, DEC, 2019 12:48:34

Highest Channel / 5MHz / 64QAM



Date: 13, DEC, 2019 12:47:49

Highest Channel / 10MHz / 64QAM

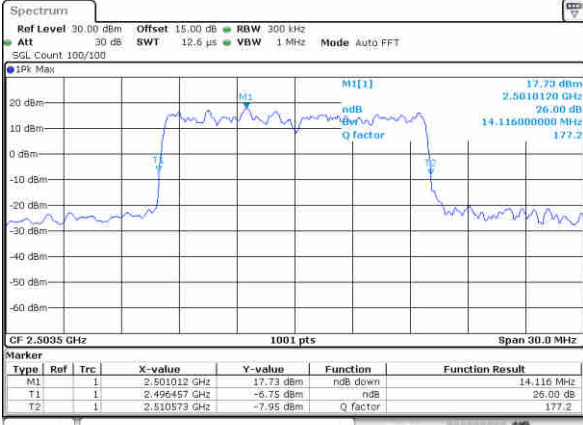


Date: 13, DEC, 2019 12:48:56



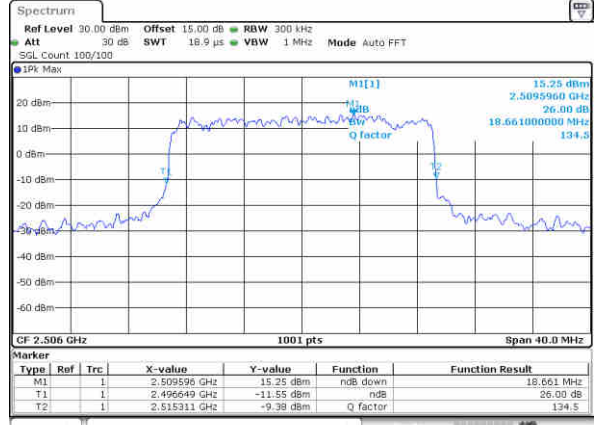
LTE Band 41

Lowest Channel / 15MHz / 64QAM



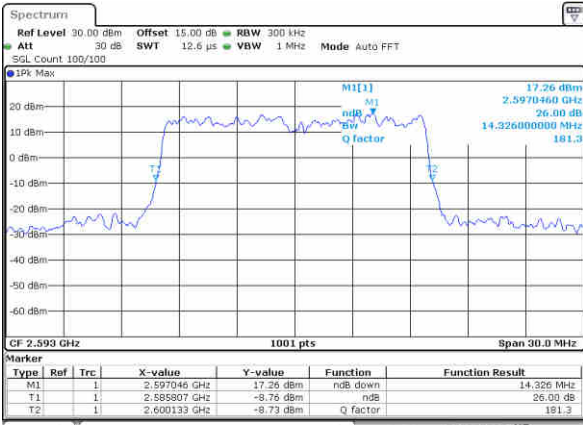
Date: 13, DEC, 2019 12:49:18

Lowest Channel / 20MHz / 64QAM



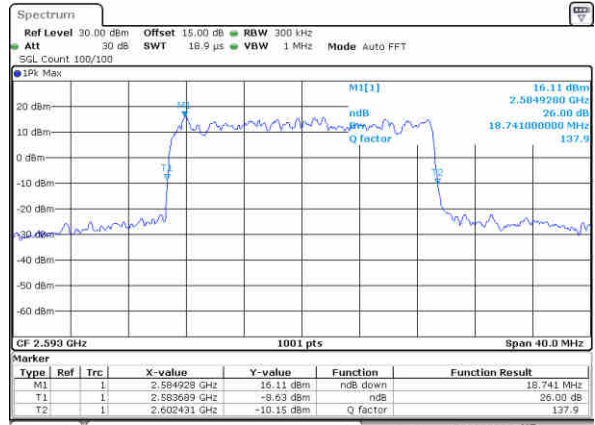
Date: 13, DEC, 2019 12:50:25

Middle Channel / 15MHz / 64QAM



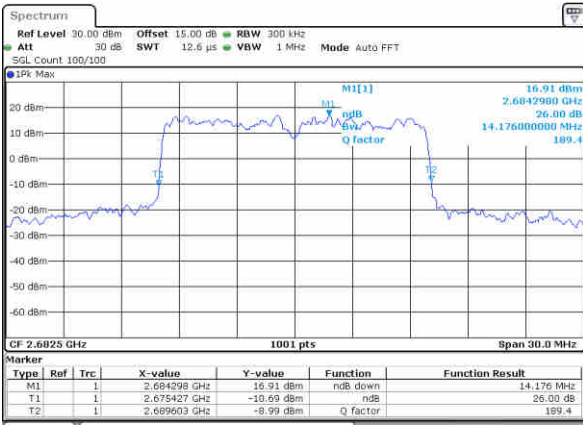
Date: 13, DEC, 2019 12:49:41

Middle Channel / 20MHz / 64QAM



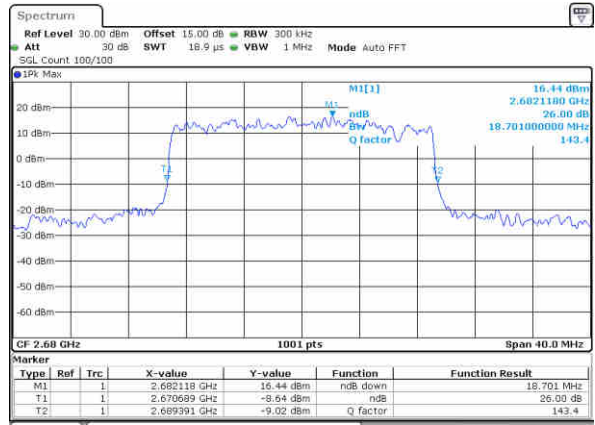
Date: 13, DEC, 2019 12:50:48

Highest Channel / 15MHz / 64QAM



Date: 13, DEC, 2019 12:50:03

Highest Channel / 20MHz / 64QAM



Date: 13, DEC, 2019 12:51:10



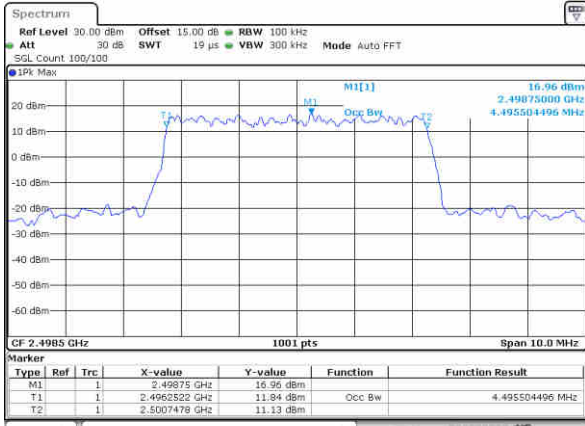
Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.50	4.50	8.99	8.99	13.40	13.37	17.82	17.82
Middle CH	4.48	4.48	8.99	8.97	13.43	13.46	17.90	17.90
Highest CH	4.50	4.51	9.05	9.05	13.43	13.43	17.82	17.82
Mode	LTE Band 41 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	4.48		9.05		13.46		17.86	
Middle CH	4.48		8.99		13.49		17.86	
Highest CH	4.48		8.99		13.43		17.86	



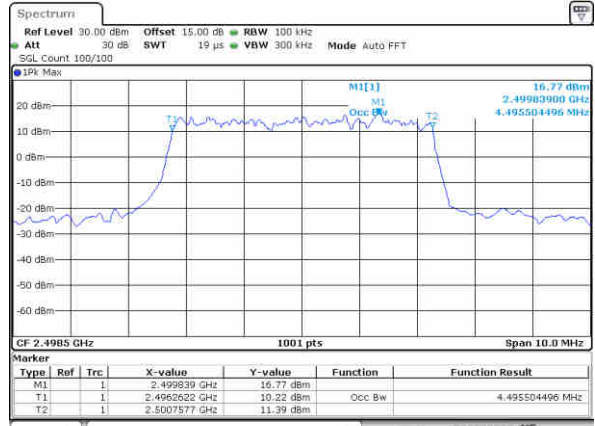
LTE Band 41

Lowest Channel / 5MHz / QPSK



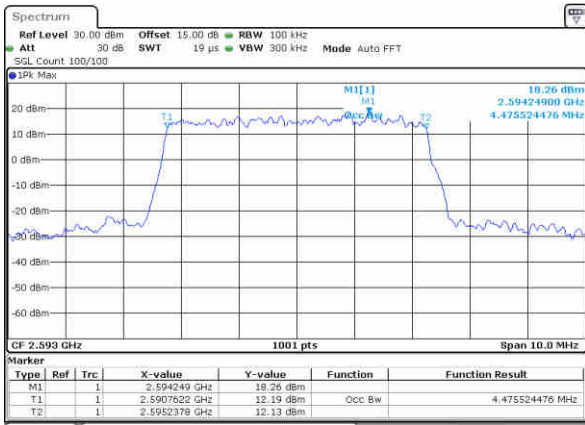
Date: 13, DEC, 2019 12:27:57

Lowest Channel / 5MHz / 16QAM



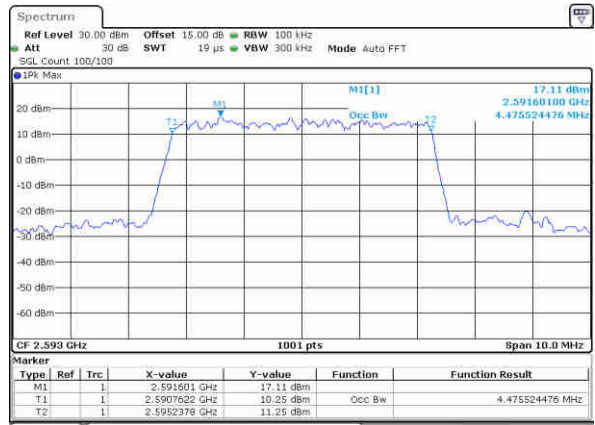
Date: 13, DEC, 2019 12:38:09

Middle Channel / 5MHz / QPSK



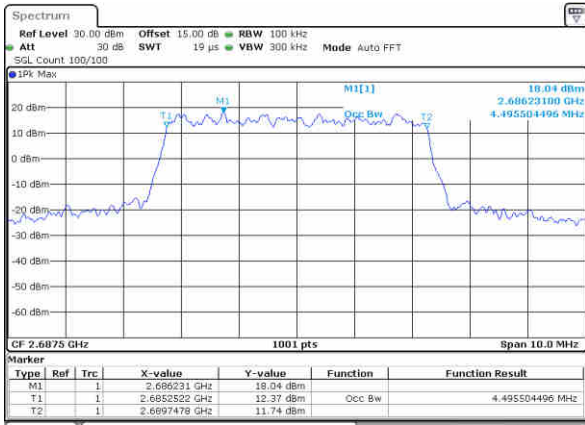
Date: 13, DEC, 2019 12:38:42

Middle Channel / 5MHz / 16QAM



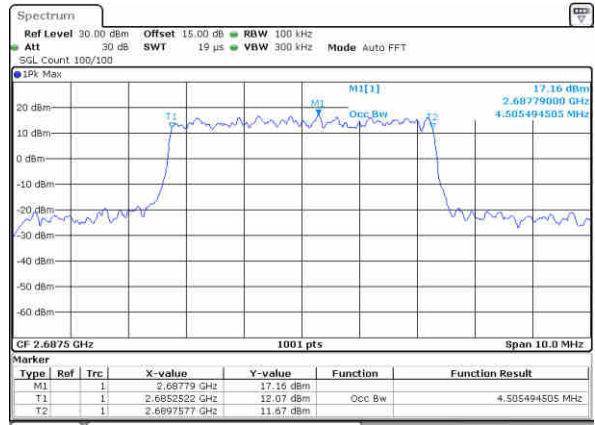
Date: 13, DEC, 2019 12:38:53

Highest Channel / 5MHz / QPSK



Date: 13, DEC, 2019 12:39:27

Highest Channel / 5MHz / 16QAM

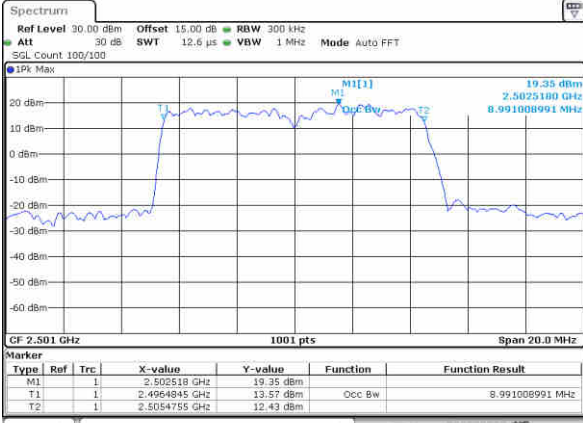


Date: 13, DEC, 2019 12:39:38



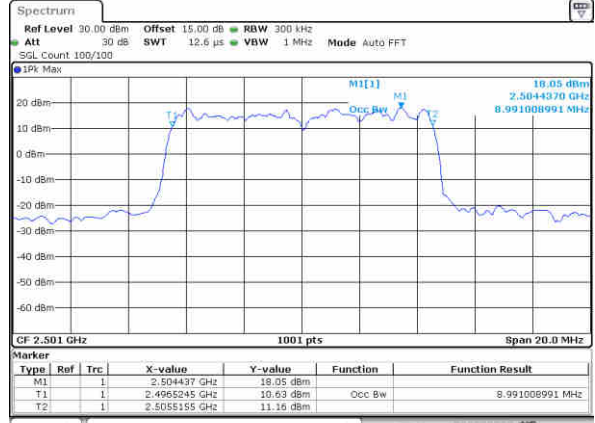
LTE Band 41

Lowest Channel / 10MHz / QPSK



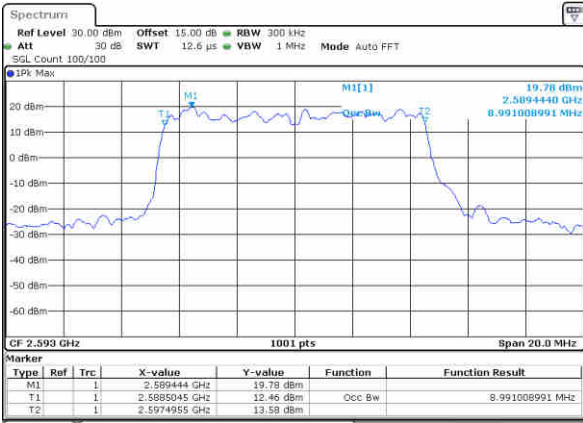
Date: 13, DEC, 2019 12:40:11

Lowest Channel / 10MHz / 16QAM



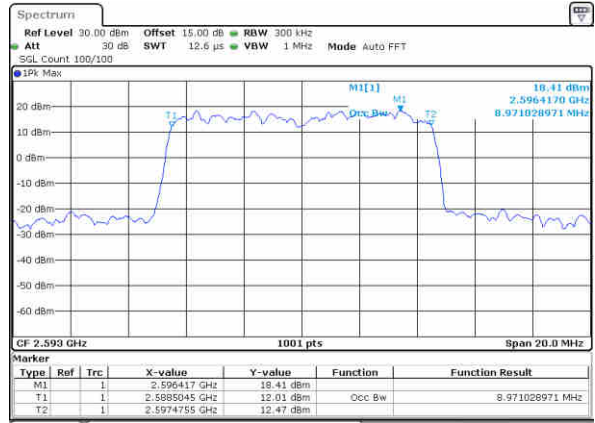
Date: 13, DEC, 2019 12:40:22

Middle Channel / 10MHz / QPSK



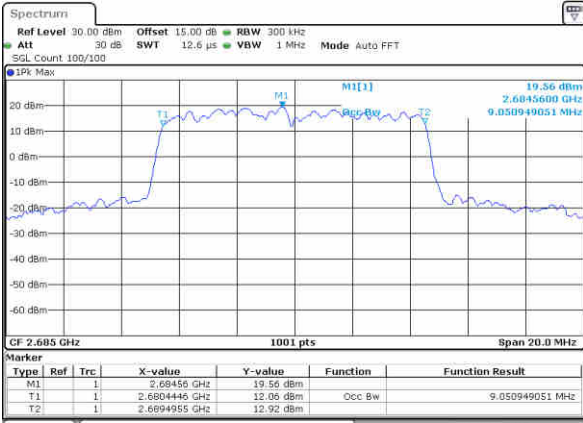
Date: 13, DEC, 2019 12:40:06

Middle Channel / 10MHz / 16QAM



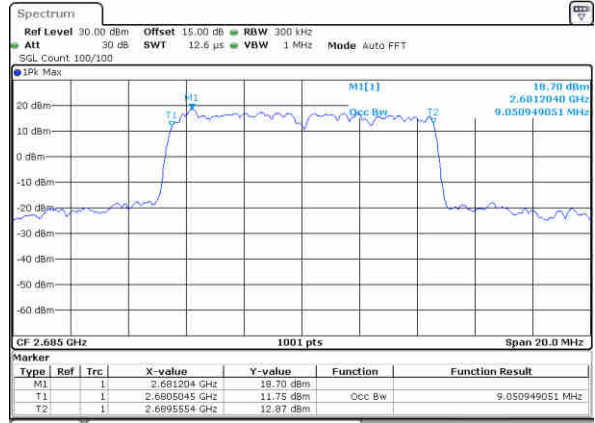
Date: 13, DEC, 2019 12:41:07

Highest Channel / 10MHz / QPSK



Date: 13, DEC, 2019 12:41:41

Highest Channel / 10MHz / 16QAM

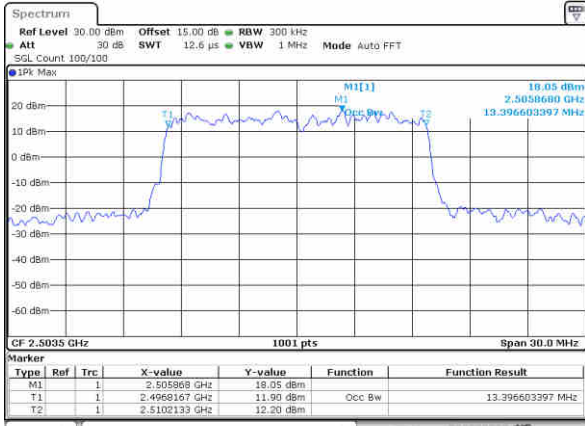


Date: 13, DEC, 2019 12:41:52



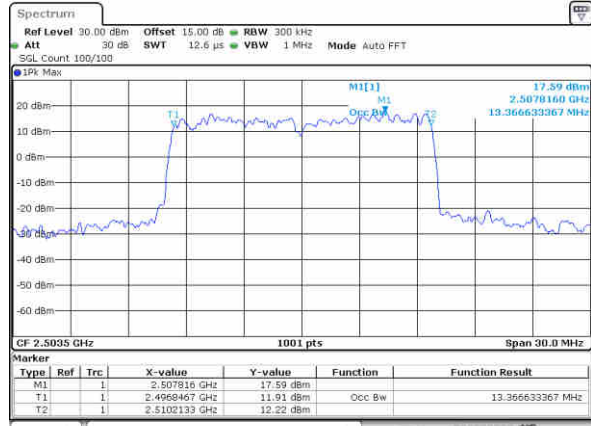
LTE Band 41

Lowest Channel / 15MHz / QPSK



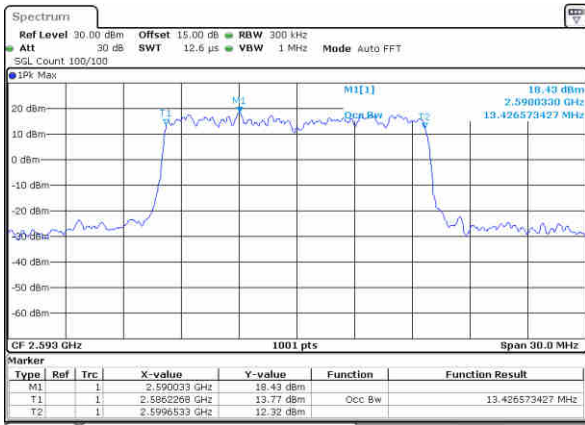
Date: 13, DEC, 2019 12:42:25

Lowest Channel / 15MHz / 16QAM



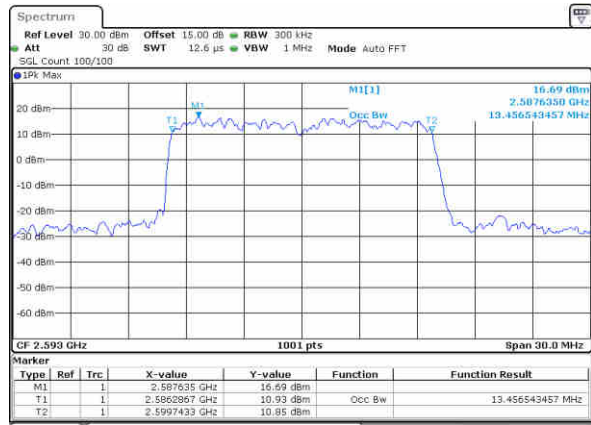
Date: 13, DEC, 2019 12:42:36

Middle Channel / 15MHz / QPSK



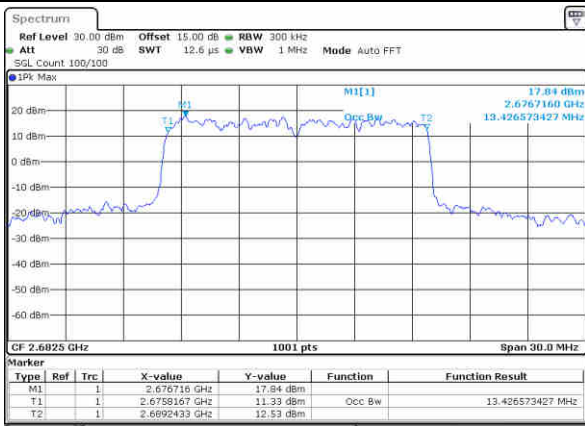
Date: 13, DEC, 2019 12:43:10

Middle Channel / 15MHz / 16QAM



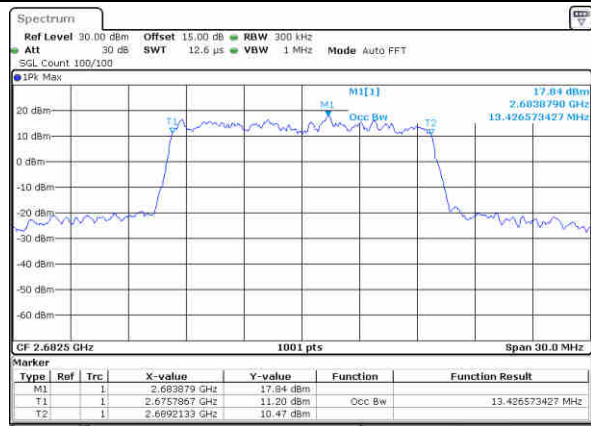
Date: 13, DEC, 2019 12:43:21

Highest Channel / 15MHz / QPSK



Date: 13, DEC, 2019 12:43:55

Highest Channel / 15MHz / 16QAM

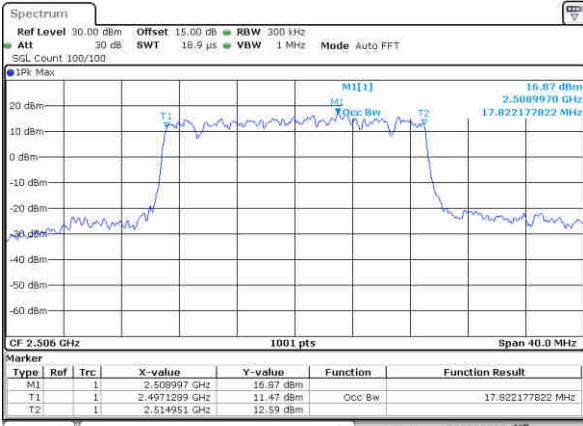


Date: 13, DEC, 2019 12:44:06



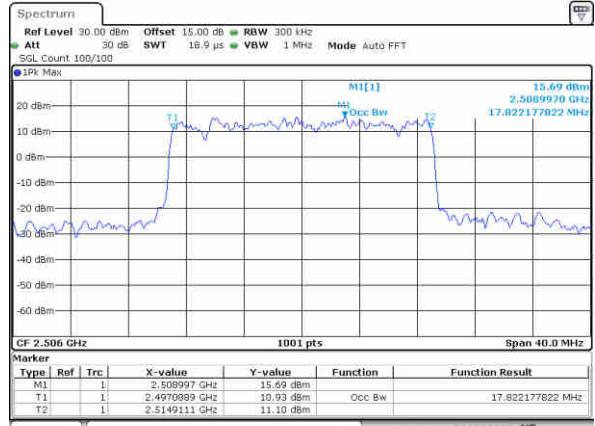
LTE Band 41

Lowest Channel / 20MHz / QPSK



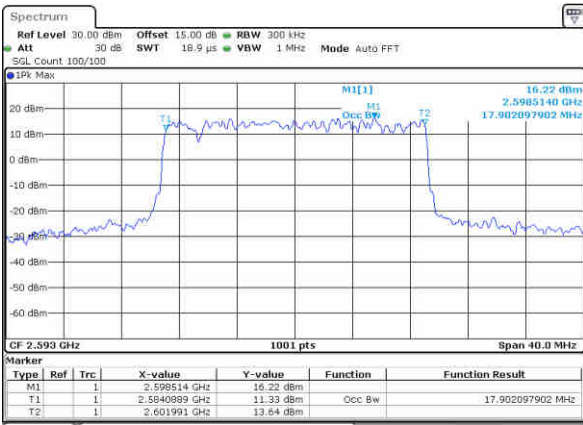
Date: 13, DEC, 2019 12:44:39

Lowest Channel / 20MHz / 16QAM



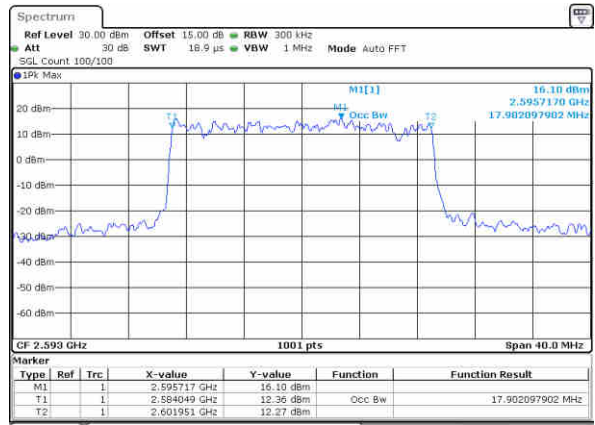
Date: 13, DEC, 2019 12:44:51

Middle Channel / 20MHz / QPSK



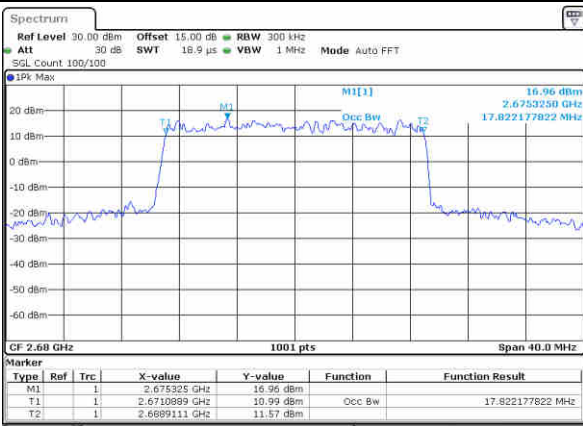
Date: 13, DEC, 2019 12:45:24

Middle Channel / 20MHz / 16QAM



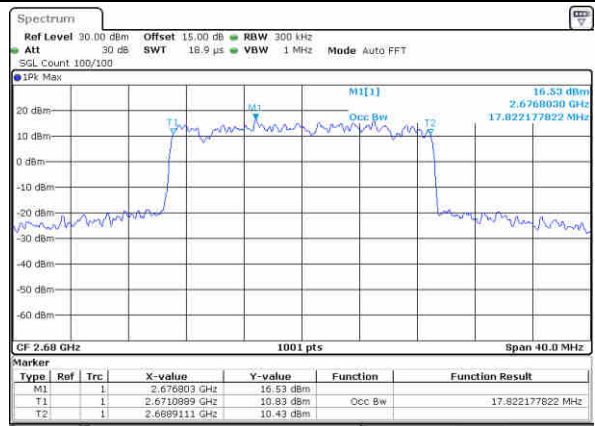
Date: 13, DEC, 2019 12:45:35

Highest Channel / 20MHz / QPSK



Date: 13, DEC, 2019 12:46:09

Highest Channel / 20MHz / 16QAM

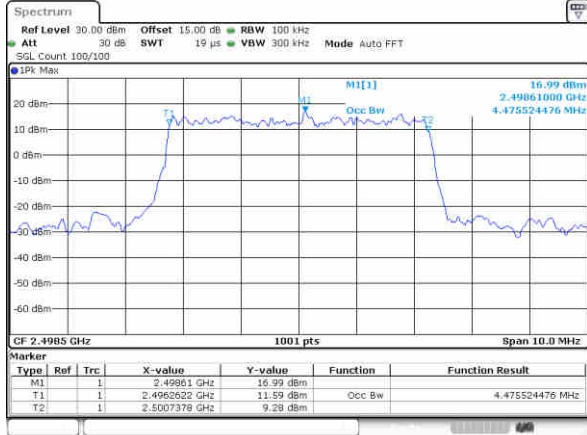


Date: 13, DEC, 2019 12:46:20



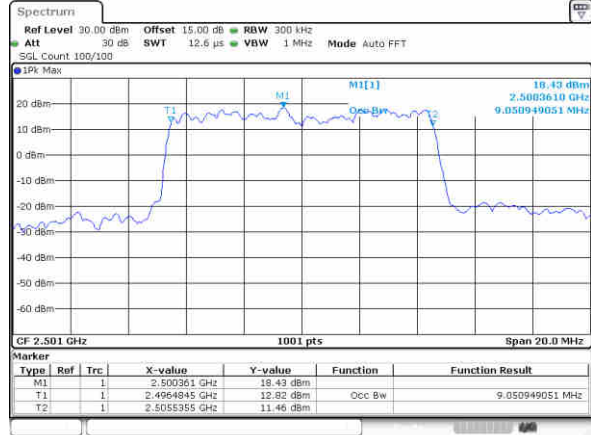
LTE Band 41

Lowest Channel / 5MHz / 64QAM



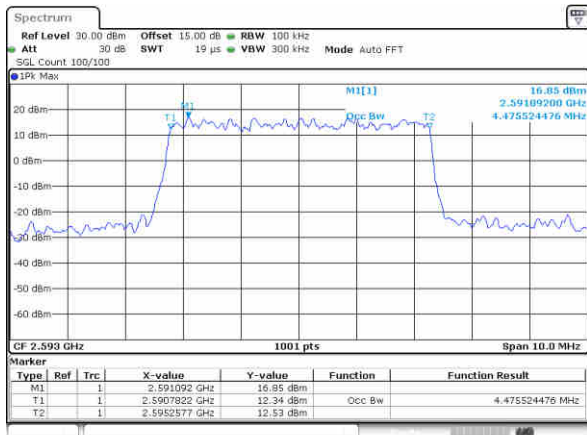
Date: 13, DEC, 2019 12:14:53

Lowest Channel / 10MHz / 64QAM



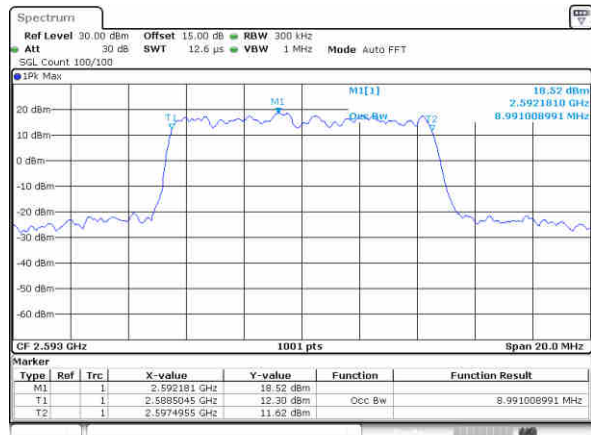
Date: 13, DEC, 2019 12:14:50

Middle Channel / 5MHz / 64QAM



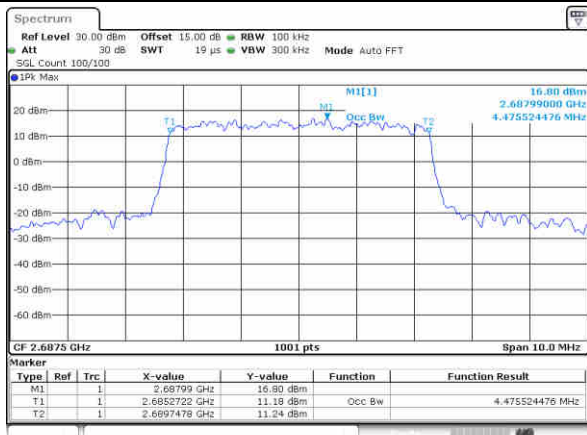
Date: 13, DEC, 2019 12:14:55

Middle Channel / 10MHz / 64QAM



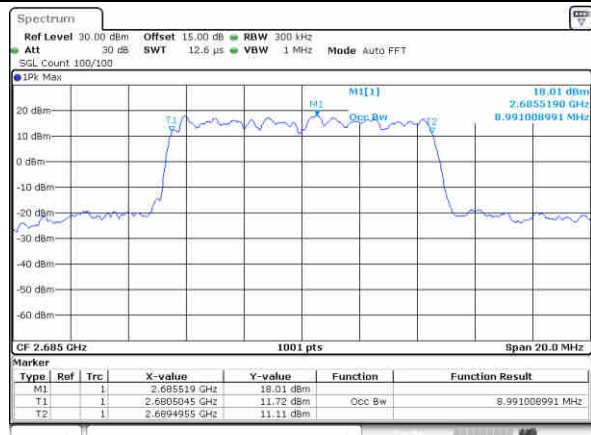
Date: 13, DEC, 2019 12:14:52

Highest Channel / 5MHz / 64QAM



Date: 13, DEC, 2019 12:14:38

Highest Channel / 10MHz / 64QAM

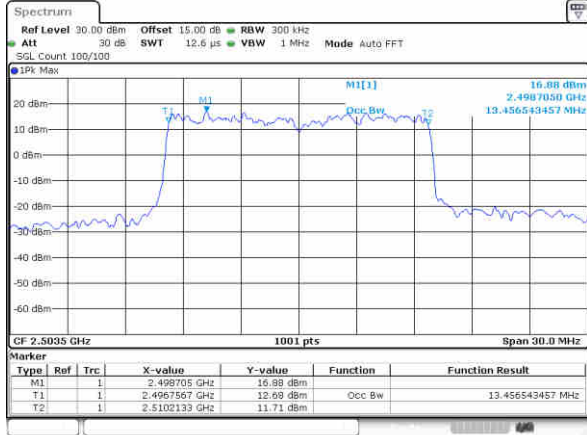


Date: 13, DEC, 2019 12:14:45



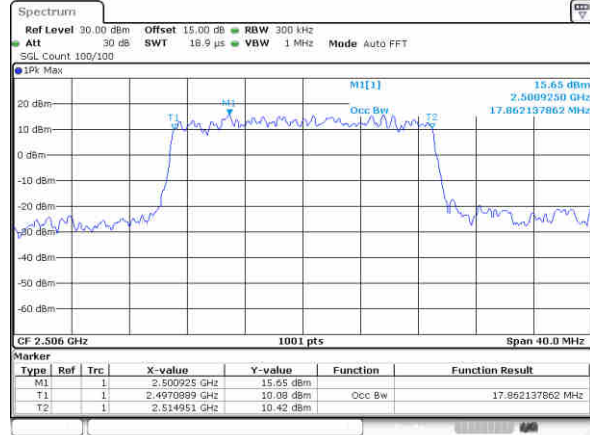
LTE Band 41

Lowest Channel / 15MHz / 64QAM



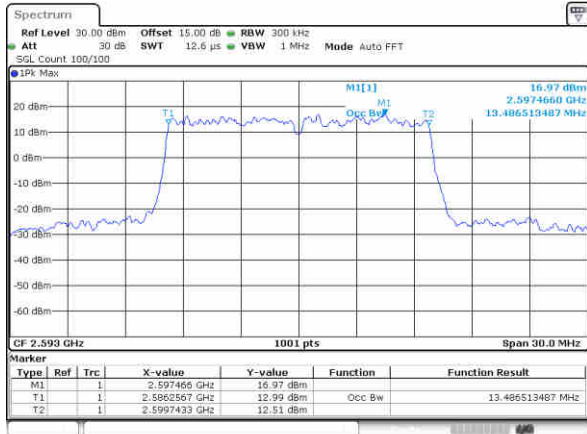
Date: 13, DEC, 2019 12:49:07

Lowest Channel / 20MHz / 64QAM



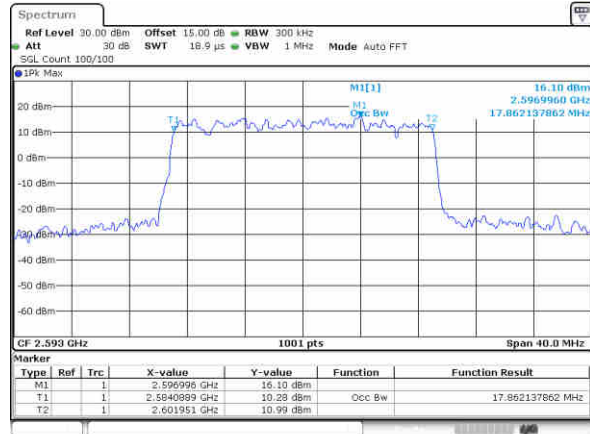
Date: 13, DEC, 2019 12:50:14

Middle Channel / 15MHz / 64QAM



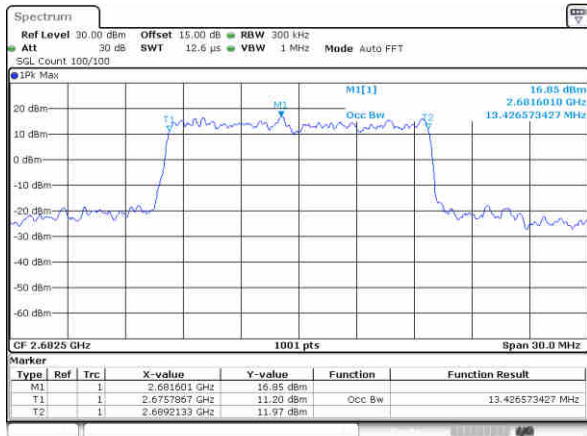
Date: 13, DEC, 2019 12:49:20

Middle Channel / 20MHz / 64QAM



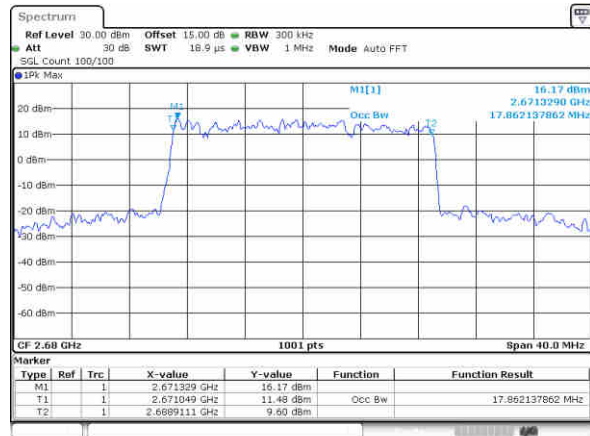
Date: 13, DEC, 2019 12:50:37

Highest Channel / 15MHz / 64QAM



Date: 13, DEC, 2019 12:49:52

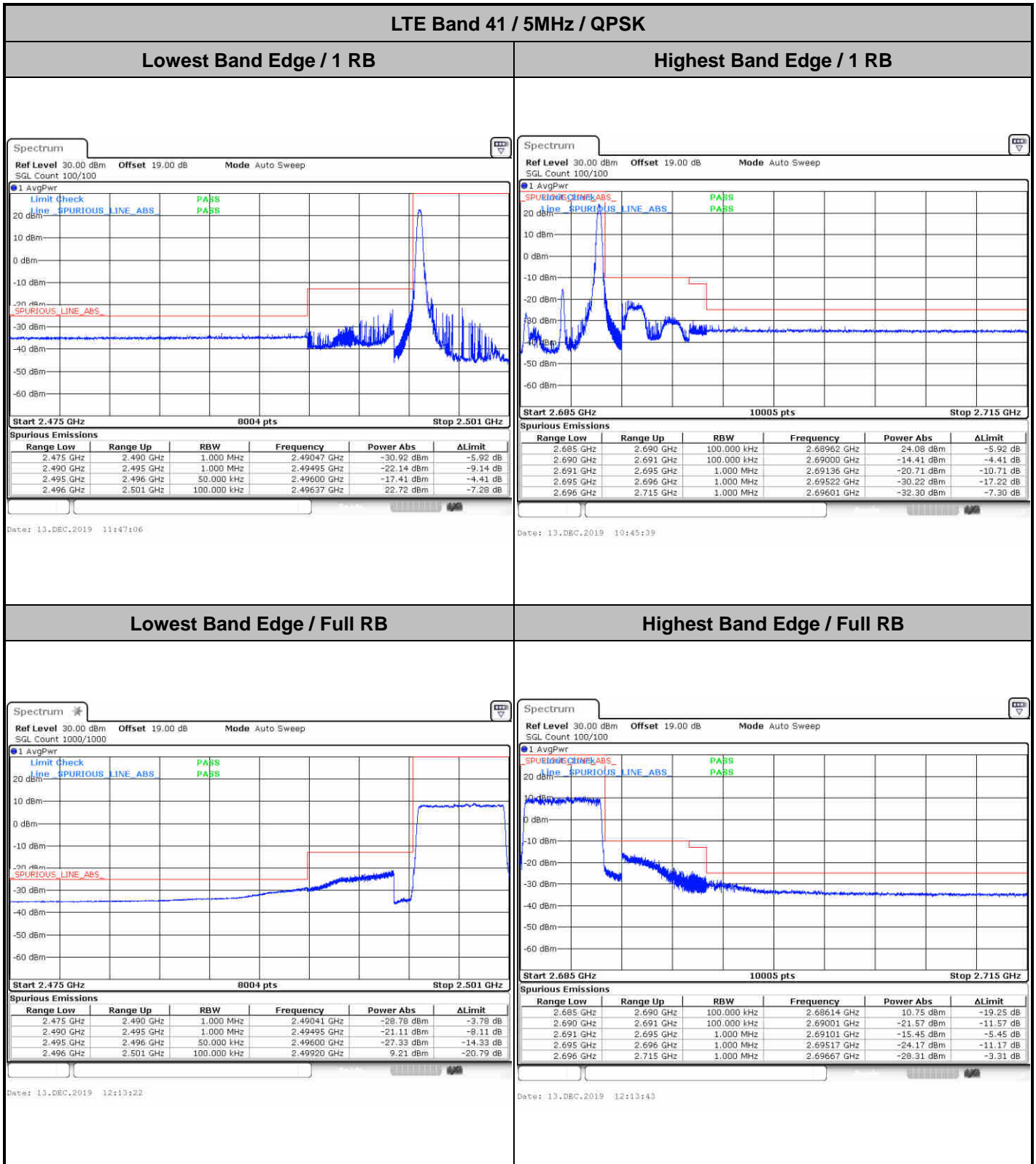
Highest Channel / 20MHz / 64QAM



Date: 13, DEC, 2019 12:50:59



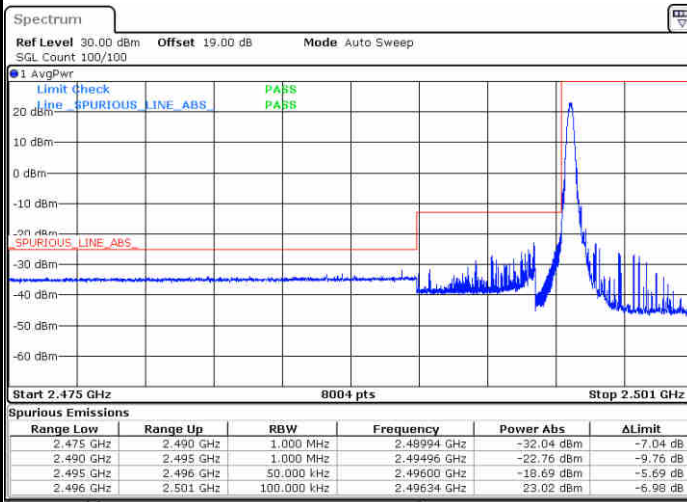
Conducted Band Edge





LTE Band 41 / 5MHz / 16QAM

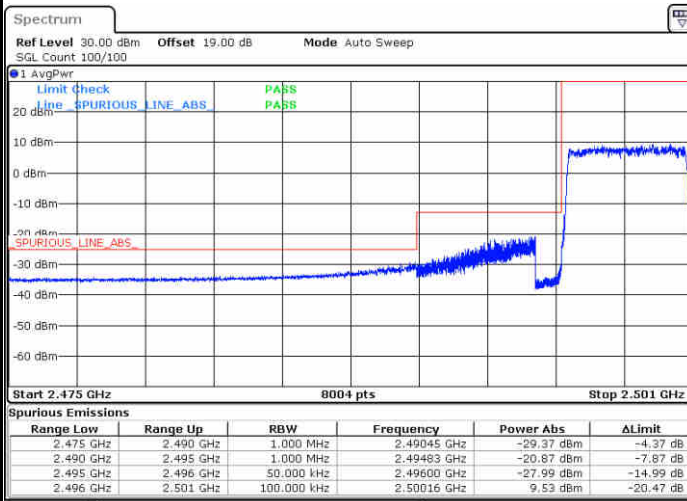
Lowest Band Edge / 1RB



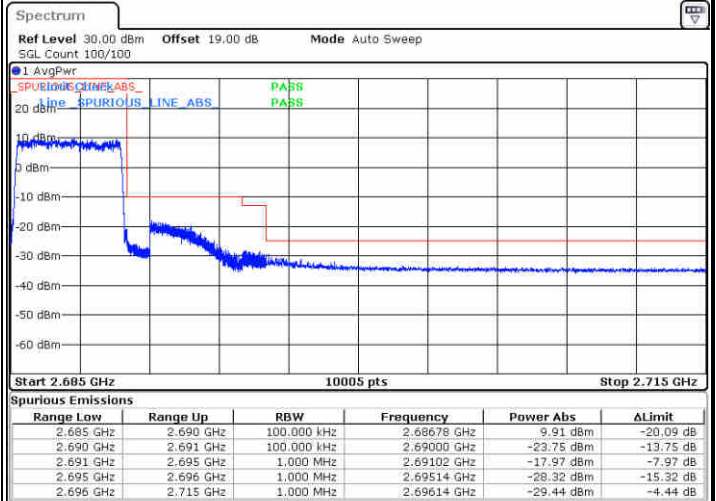
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



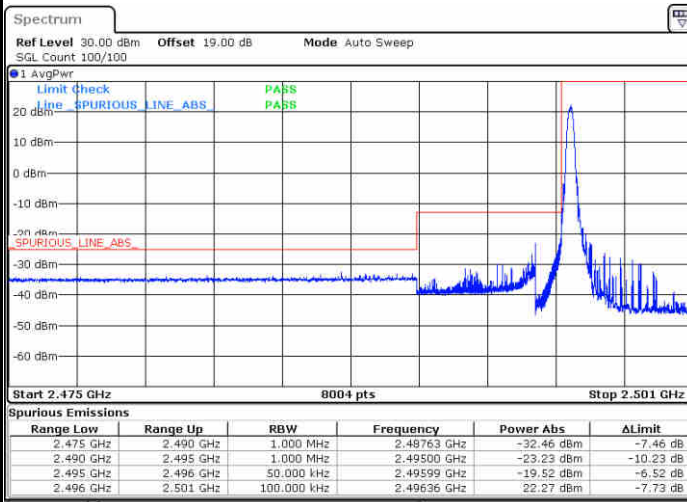
Highest Band Edge / Full RB





LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



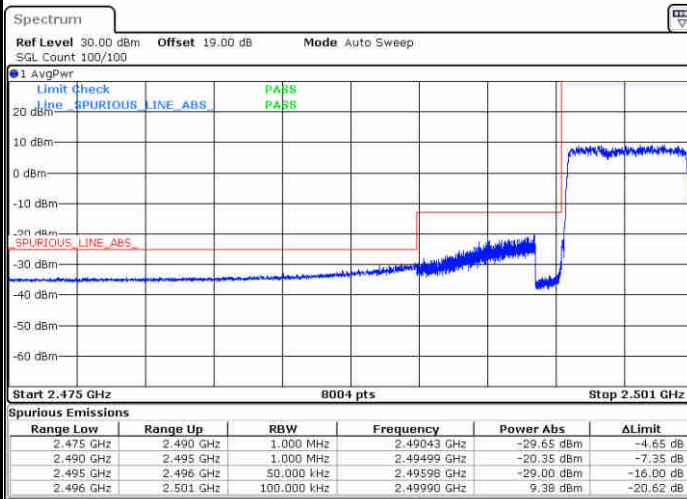
Date: 13.DEC.2019 10:49:40

Highest Band Edge / 1 RB



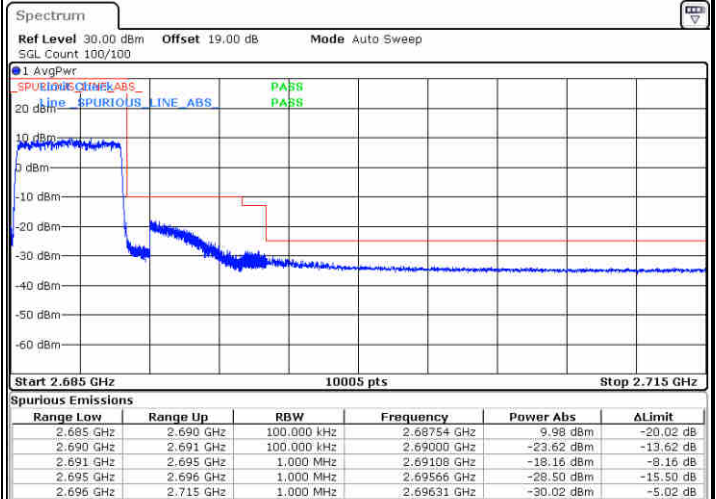
Date: 13.DEC.2019 10:51:39

Lowest Band Edge / Full RB



Date: 13.DEC.2019 10:50:40

Highest Band Edge / Full RB

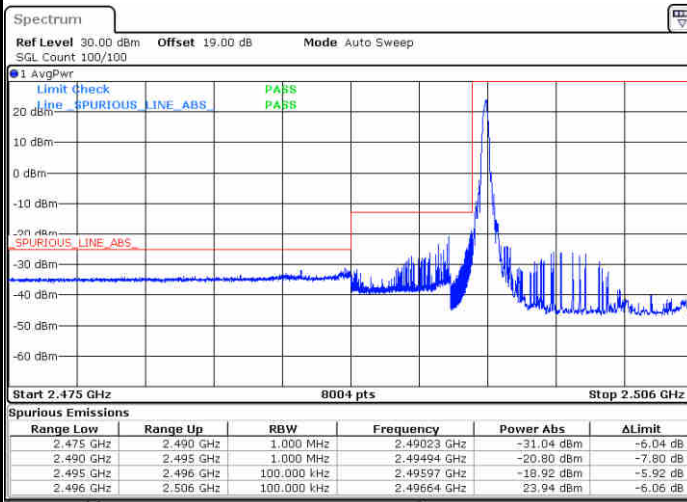


Date: 13.DEC.2019 10:52:39



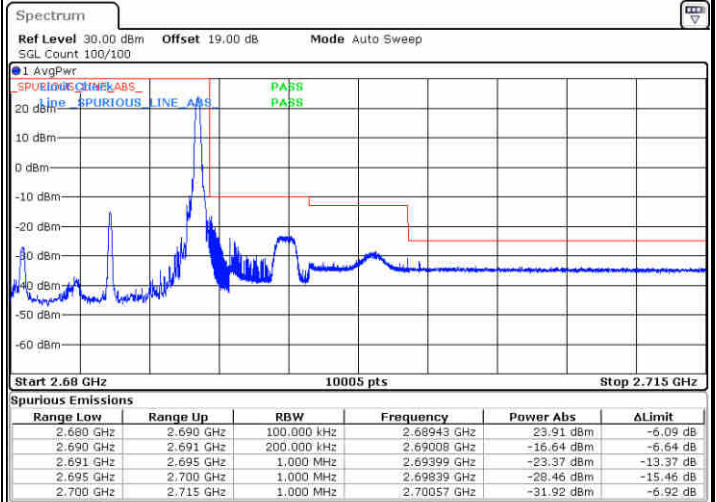
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



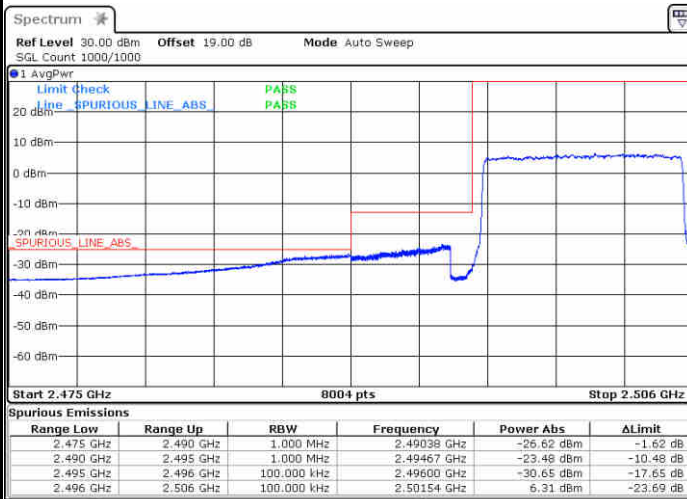
Date: 13.DEC.2019 11:59:54

Highest Band Edge / 1 RB



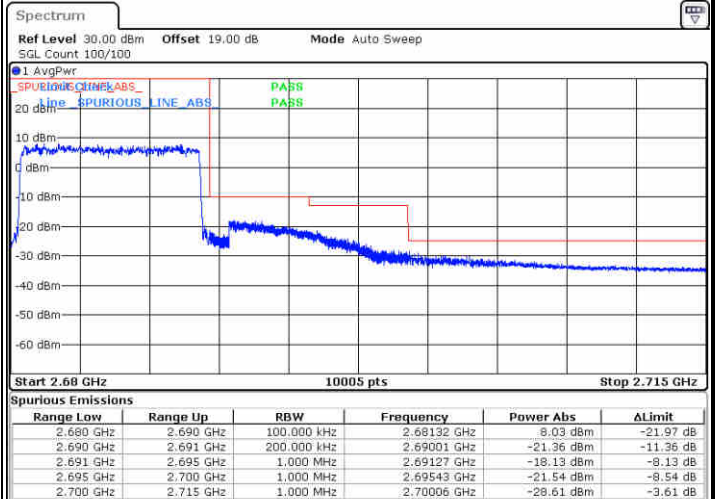
Date: 13.DEC.2019 10:57:38

Lowest Band Edge / Full RB



Date: 13.DEC.2019 12:08:40

Highest Band Edge / Full RB

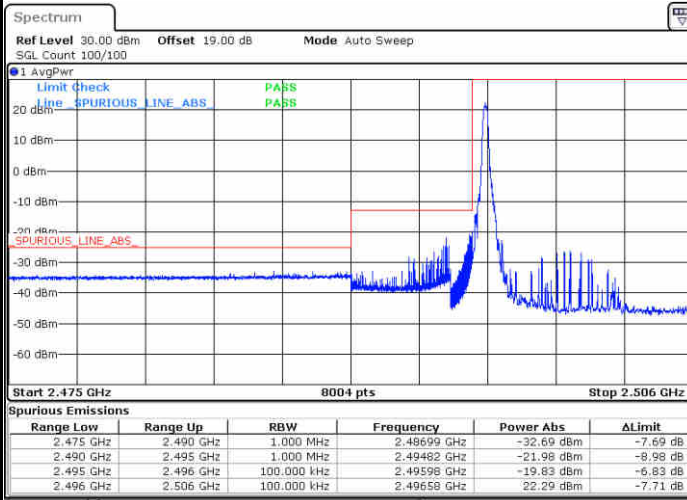


Date: 13.DEC.2019 10:58:38



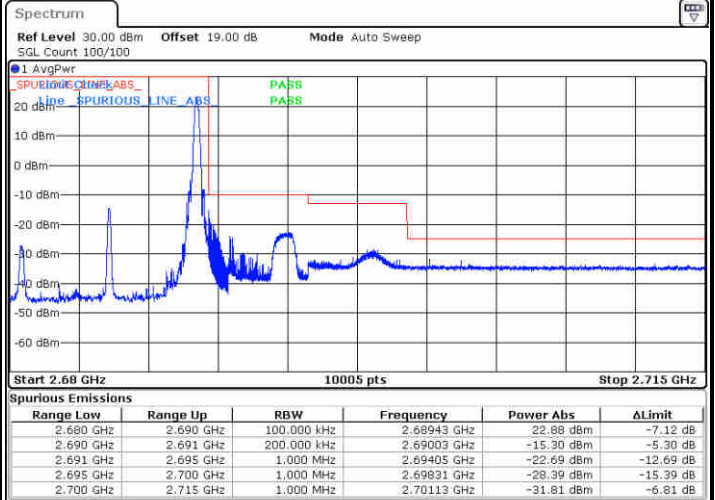
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 13.DEC.2019 10:54:39

Highest Band Edge / 1 RB



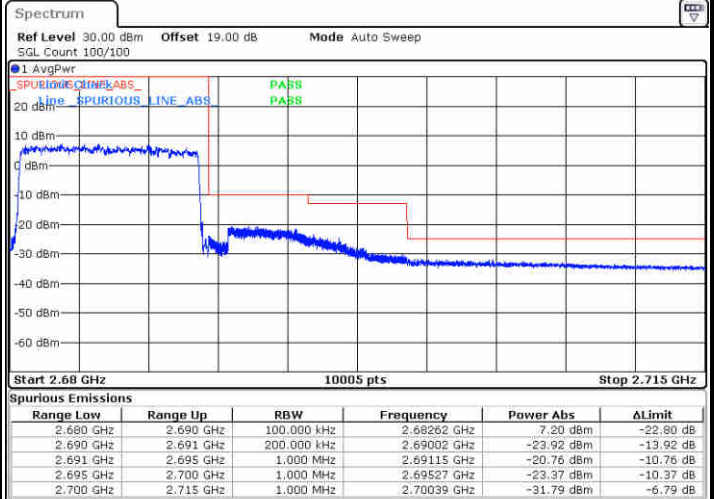
Date: 13.DEC.2019 10:58:38

Lowest Band Edge / Full RB



Date: 13.DEC.2019 12:09:39

Highest Band Edge / Full RB

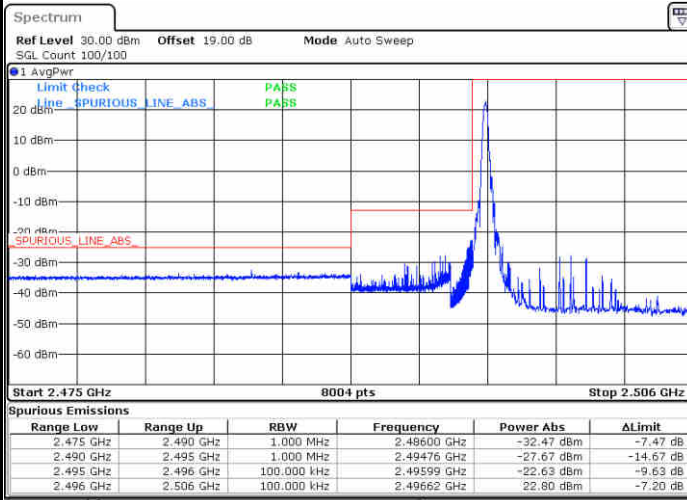


Date: 13.DEC.2019 11:00:38



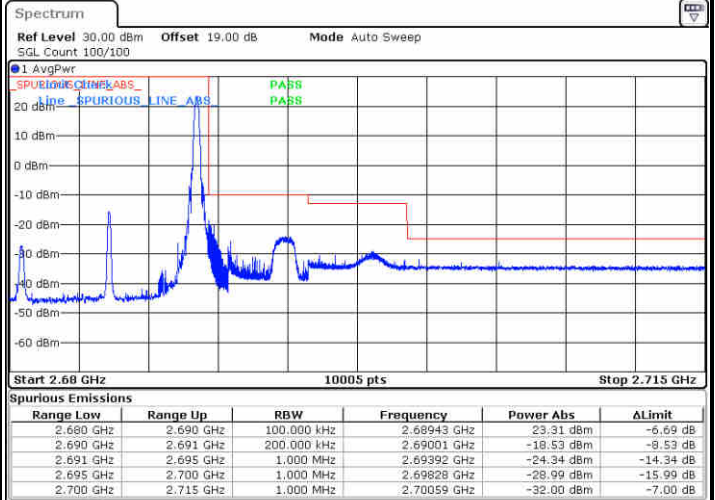
LTE Band 41 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



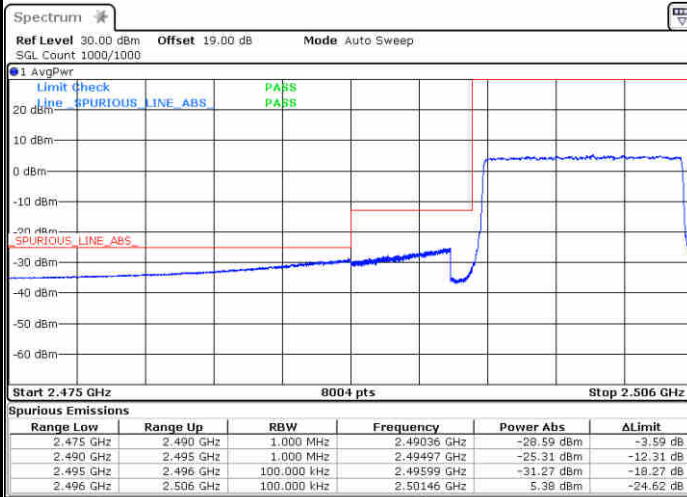
Date: 13.DEC.2019 11:01:39

Highest Band Edge / 1 RB



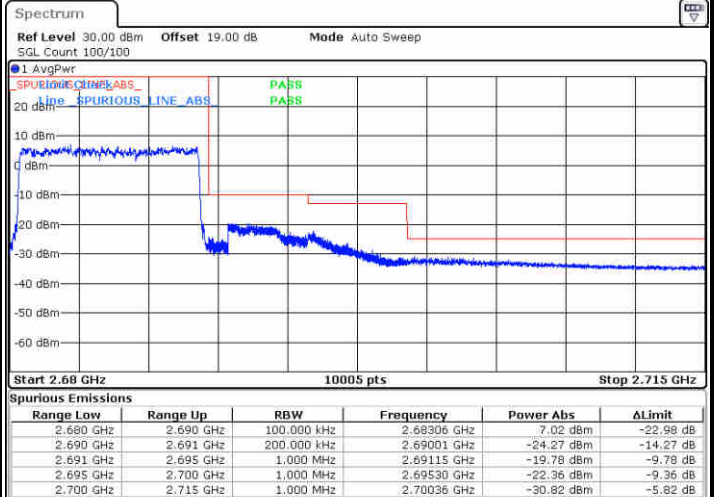
Date: 13.DEC.2019 11:03:38

Lowest Band Edge / Full RB



Date: 13.DEC.2019 12:10:47

Highest Band Edge / Full RB

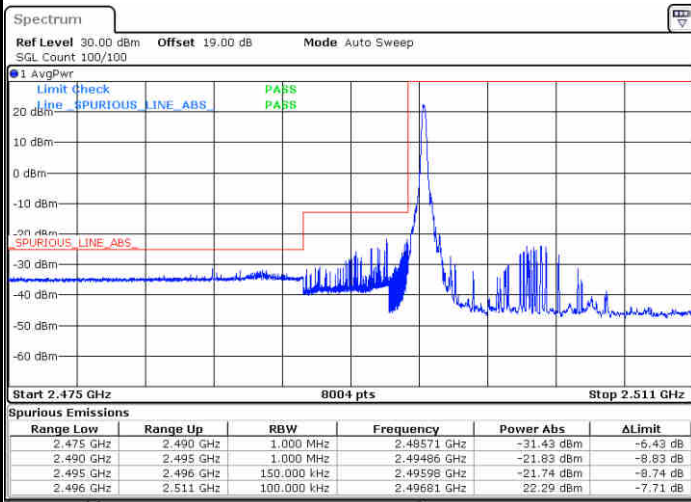


Date: 13.DEC.2019 11:04:38



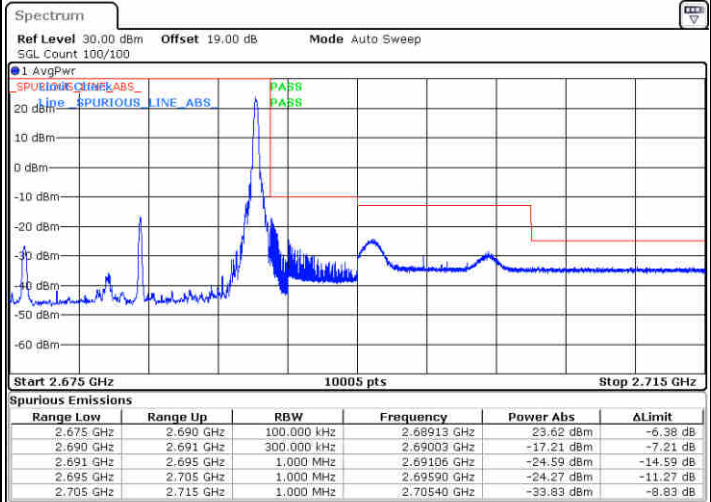
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



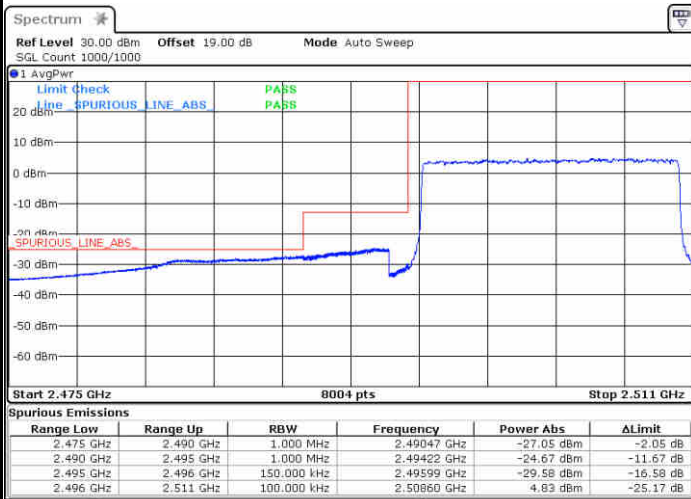
Date: 13.DEC.2019 11:09:38

Highest Band Edge / 1 RB



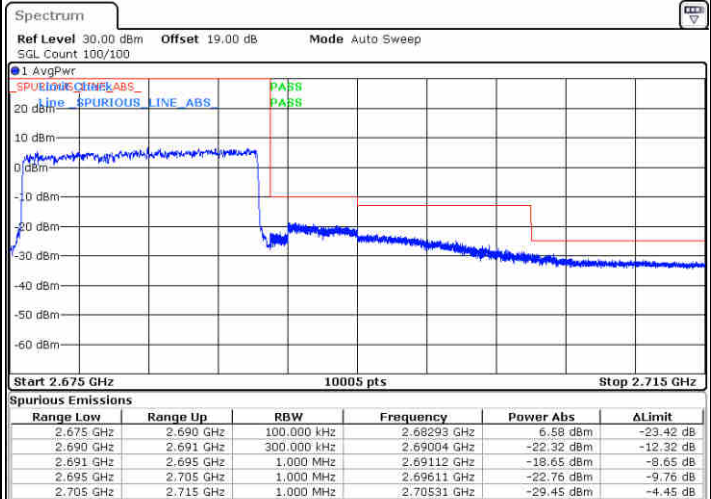
Date: 13.DEC.2019 11:13:36

Lowest Band Edge / Full RB



Date: 13.DEC.2019 12:58:43

Highest Band Edge / Full RB

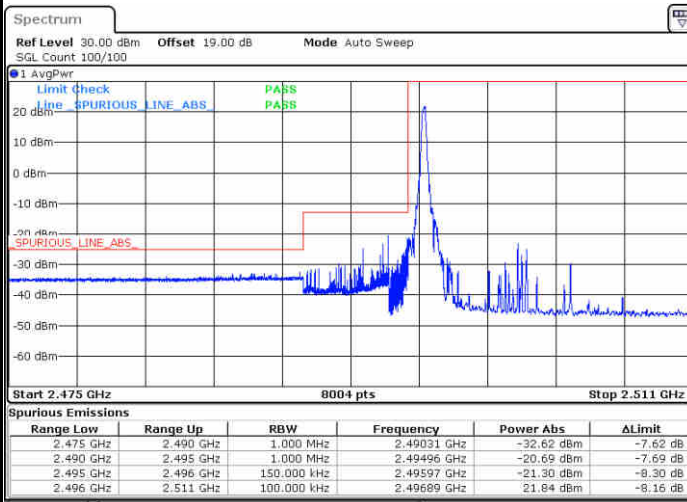


Date: 13.DEC.2019 11:15:36



LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



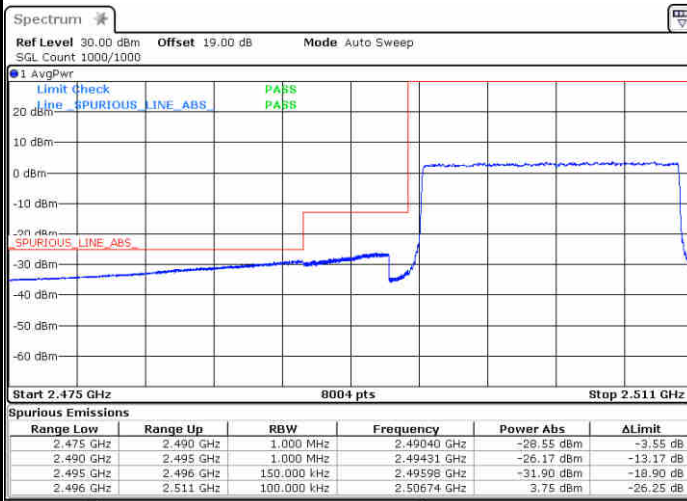
Date: 13.DEC.2019 11:10:37

Highest Band Edge / 1 RB



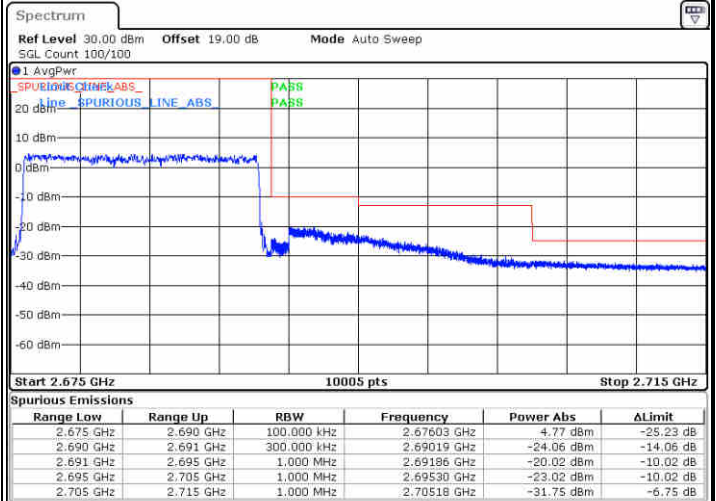
Date: 13.DEC.2019 11:14:36

Lowest Band Edge / Full RB



Date: 13.DEC.2019 12:19:11

Highest Band Edge / Full RB

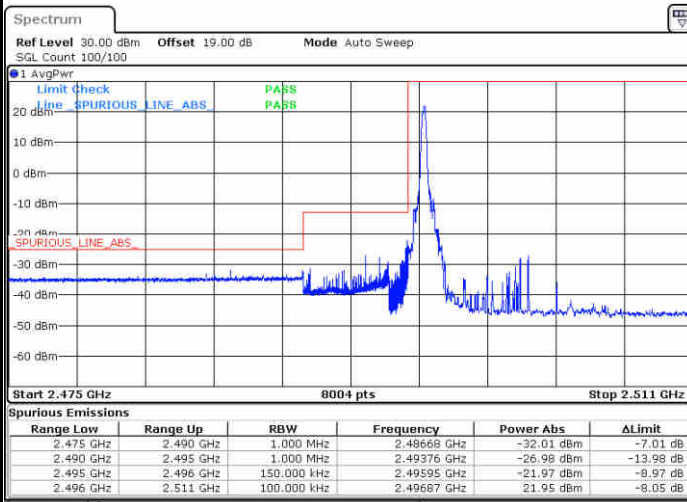


Date: 13.DEC.2019 11:16:36



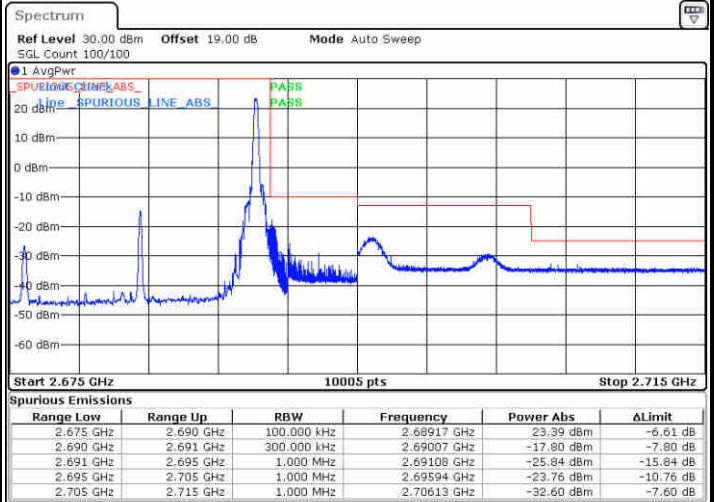
LTE Band 41 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



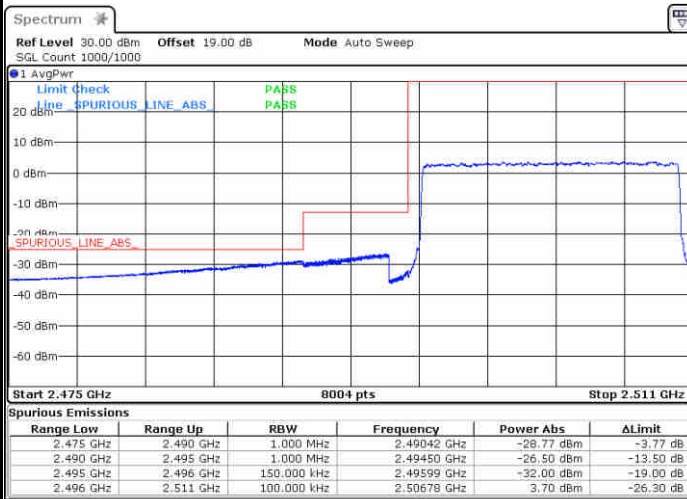
Date: 13.DEC.2019 11:05:38

Highest Band Edge / 1 RB



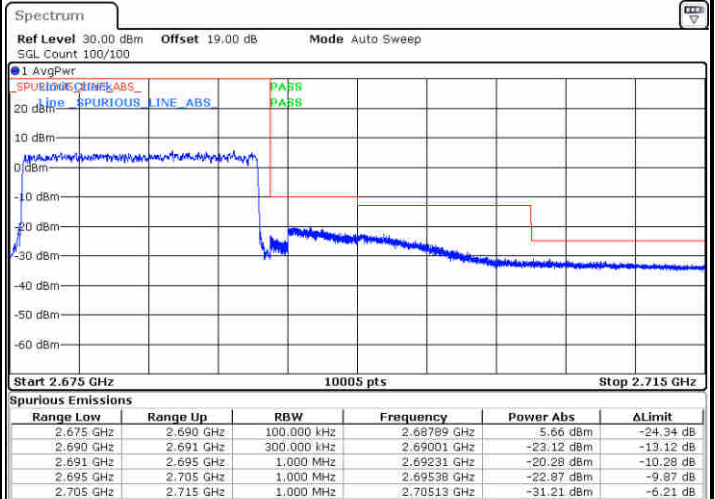
Date: 13.DEC.2019 11:07:37

Lowest Band Edge / Full RB



Date: 13.DEC.2019 12:20:10

Highest Band Edge / Full RB

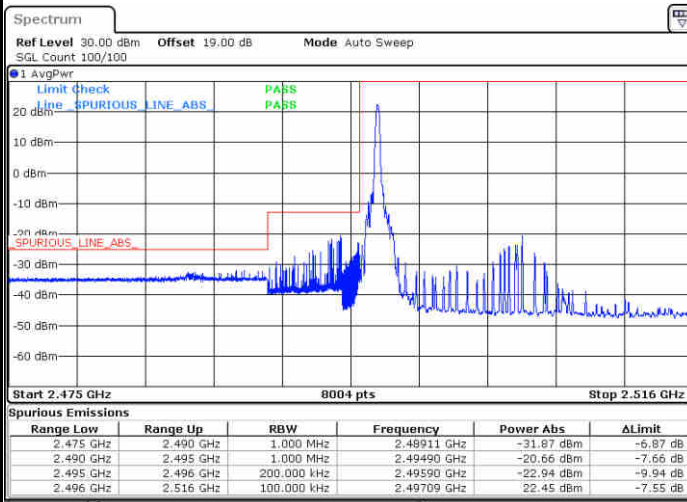


Date: 13.DEC.2019 11:08:37



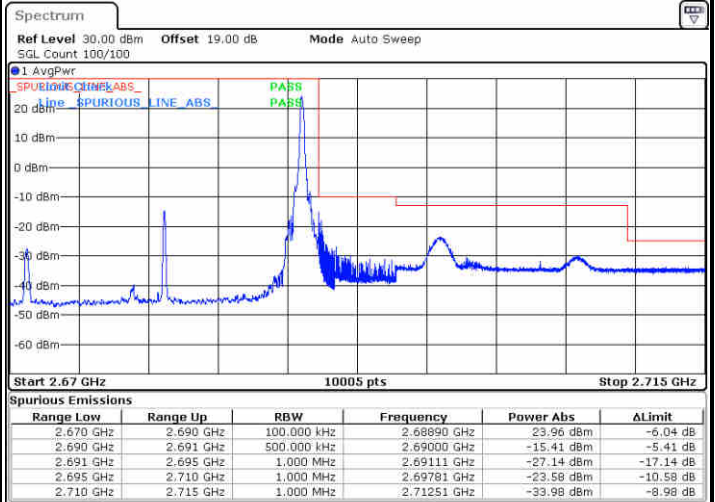
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



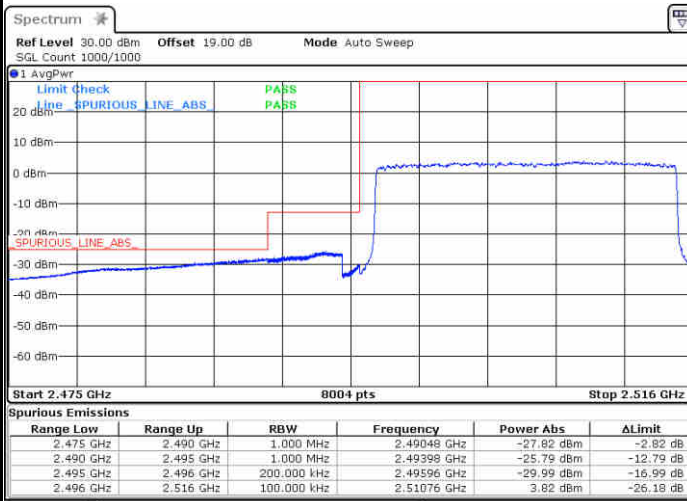
Date: 13.DEC.2019 11:17:37

Highest Band Edge / 1 RB



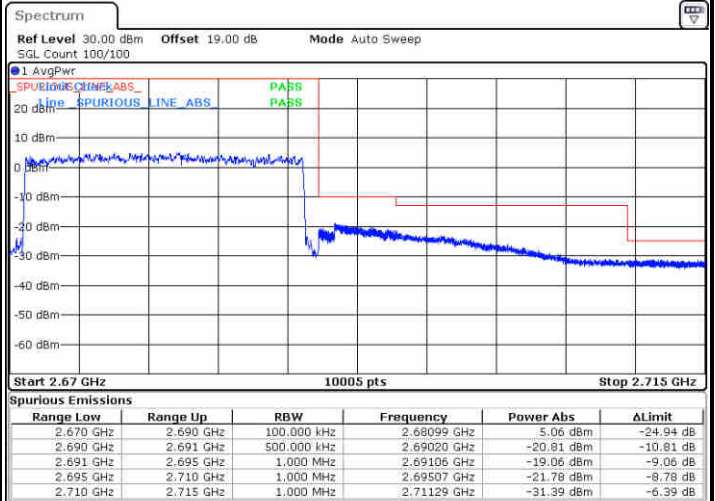
Date: 13.DEC.2019 11:21:36

Lowest Band Edge / Full RB



Date: 13.DEC.2019 12:27:54

Highest Band Edge / Full RB

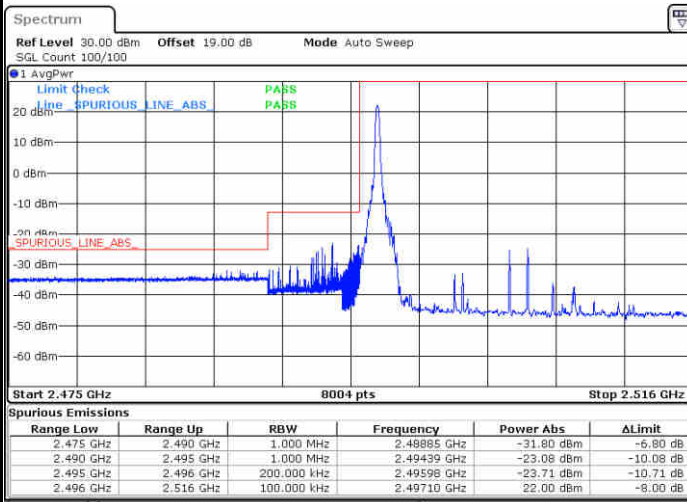


Date: 13.DEC.2019 11:24:36



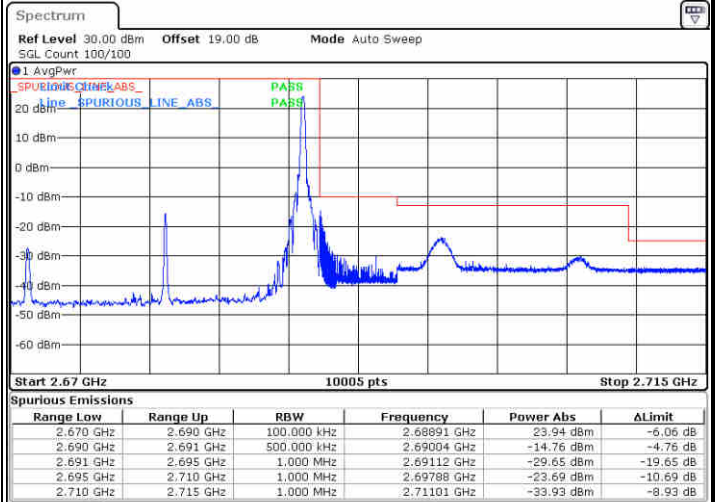
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



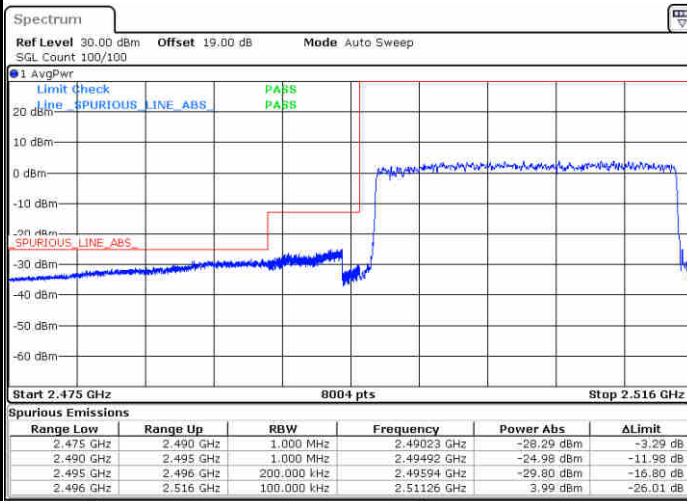
Date: 13.DEC.2019 11:18:37

Highest Band Edge / 1 RB



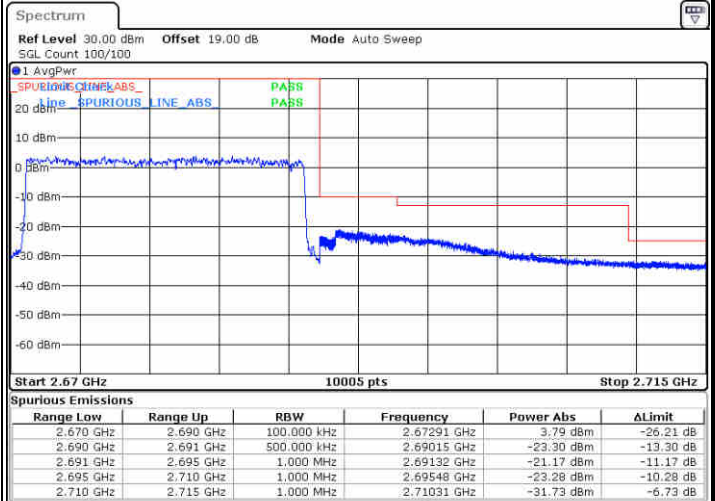
Date: 13.DEC.2019 11:22:36

Lowest Band Edge / Full RB



Date: 13.DEC.2019 11:20:36

Highest Band Edge / Full RB

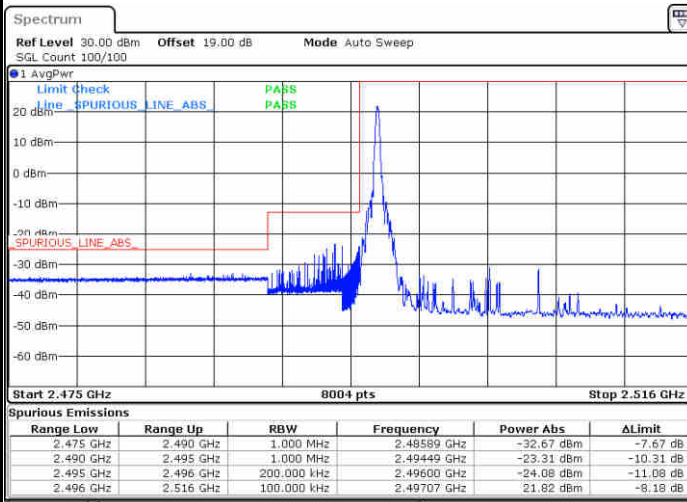


Date: 13.DEC.2019 11:23:36



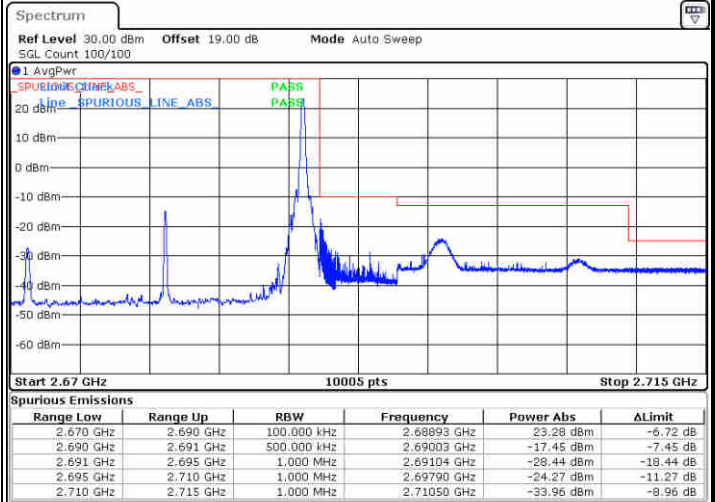
LTE Band 41 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



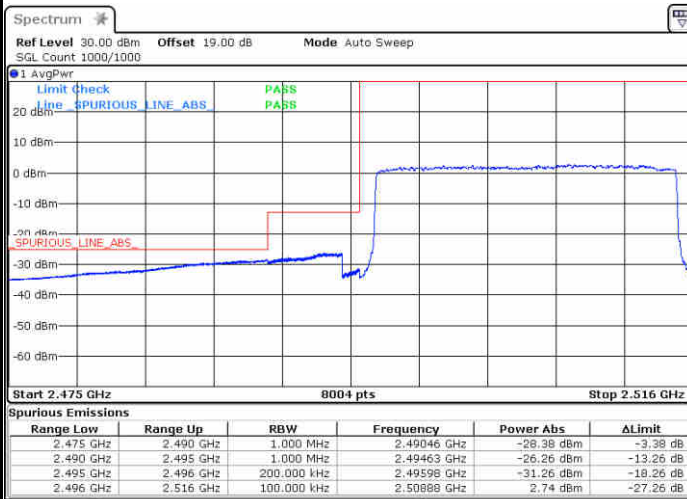
Date: 13.DEC.2019 11:25:36

Highest Band Edge / 1 RB



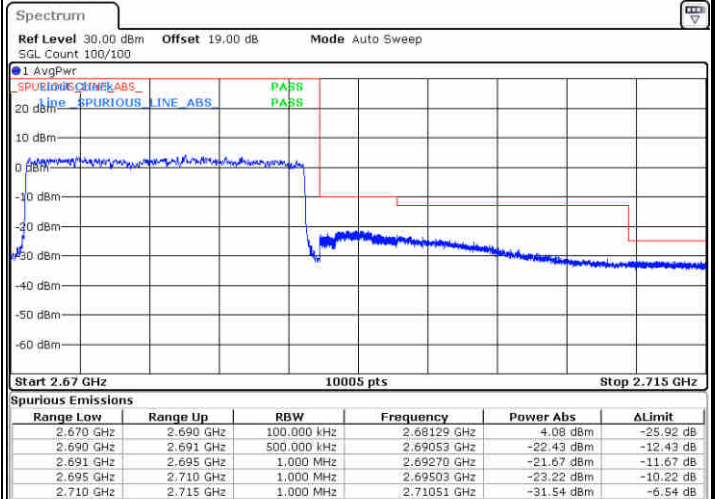
Date: 13.DEC.2019 11:27:35

Lowest Band Edge / Full RB



Date: 13.DEC.2019 12:28:52

Highest Band Edge / Full RB



Date: 13.DEC.2019 11:28:35



Conducted Spurious Emission

