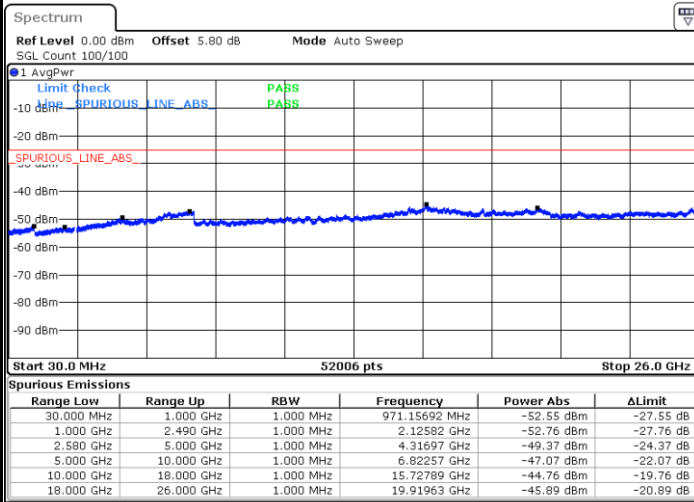




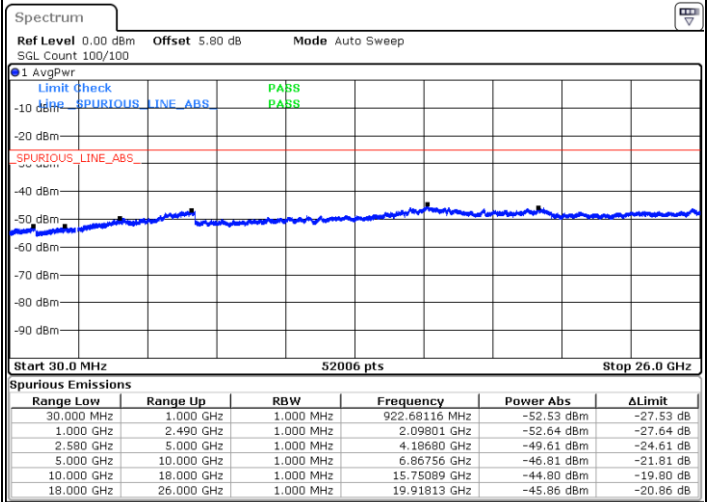
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



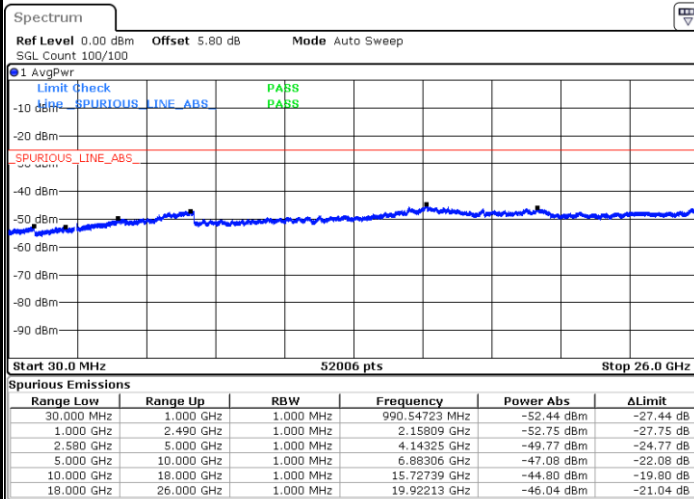
Date: 9.OCT.2019 19:24:16

Middle Channel / 64QAM



Date: 9.OCT.2019 19:25:10

Highest Channel / 64QAM

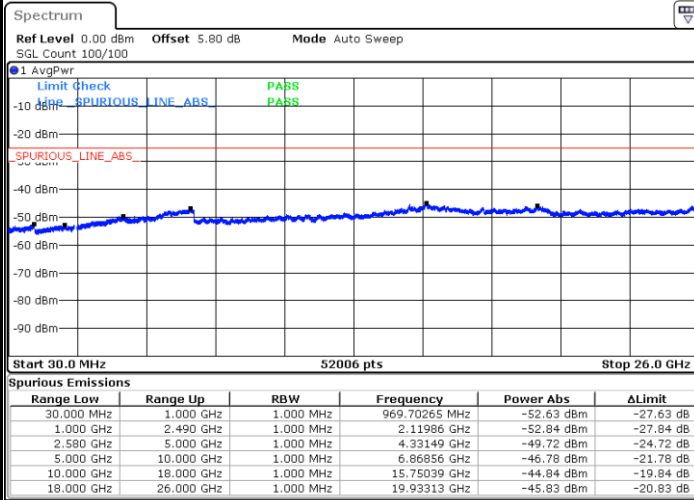


Date: 9.OCT.2019 19:26:04



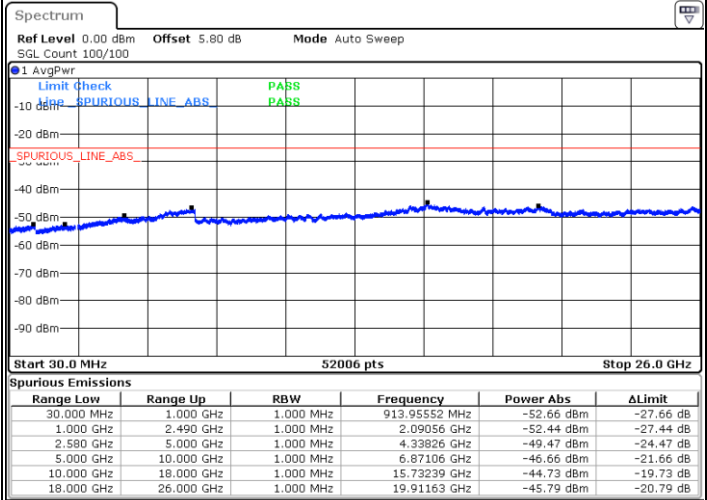
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



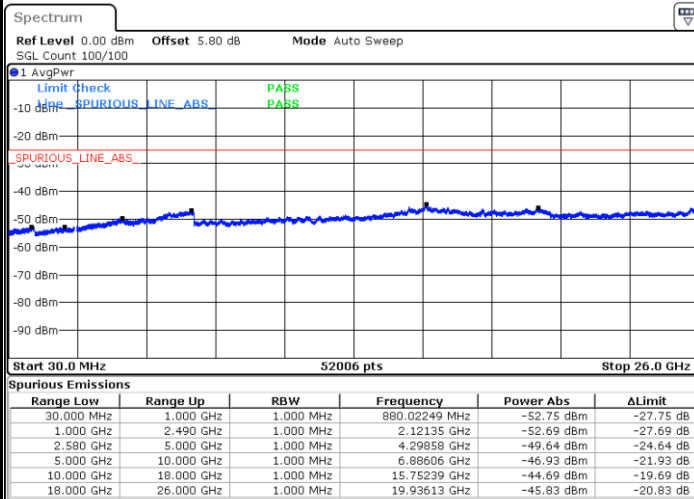
Date: 9.OCT.2019 19:32:32

Middle Channel / 64QAM



Date: 9.OCT.2019 19:33:27

Highest Channel / 64QAM



Date: 9.OCT.2019 19:34:21

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0023	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0027	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

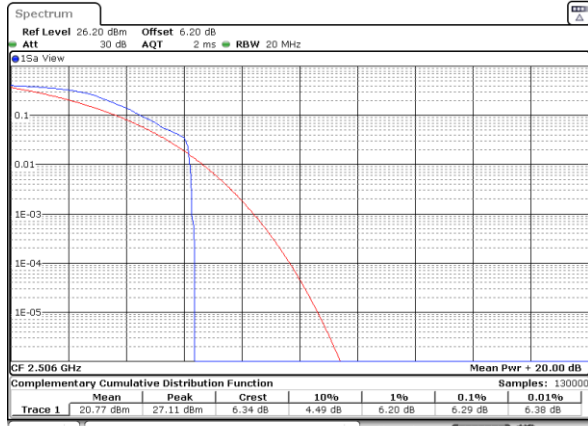
Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	6.29	9.10	8.61	9.42	PASS
Middle CH	4.67	4.96	6.35	9.04	
Highest CH	8.49	4.75	6.00	8.00	
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	8.84	7.77			PASS
Middle CH	7.68	6.43			
Highest CH	8.46	8.26			

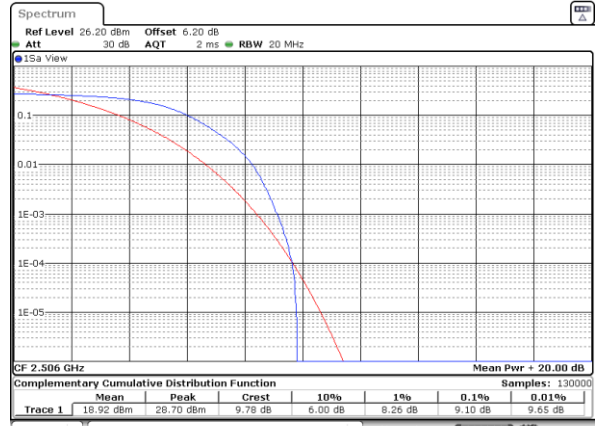


LTE Band 41 / 20MHz / QPSK

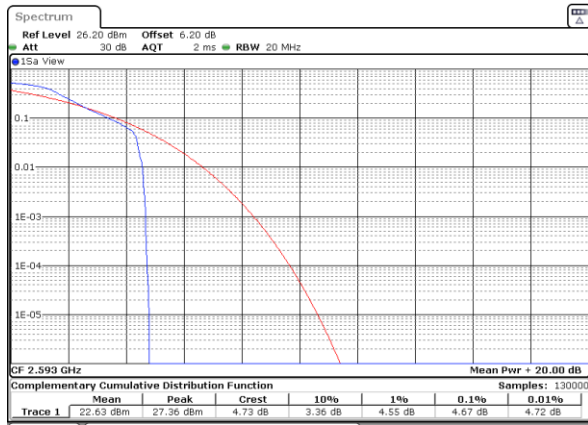
Lowest Channel / 1RB



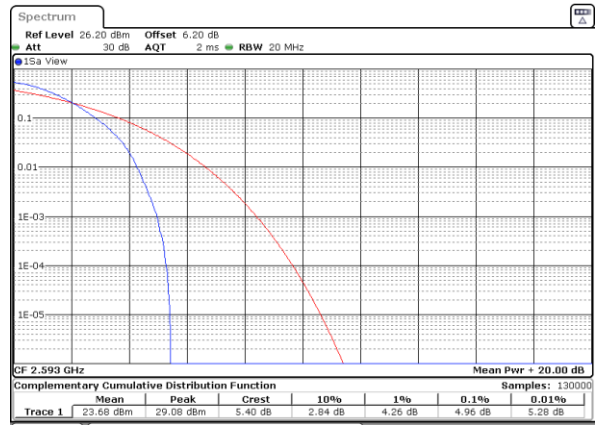
Lowest Channel / Full RB



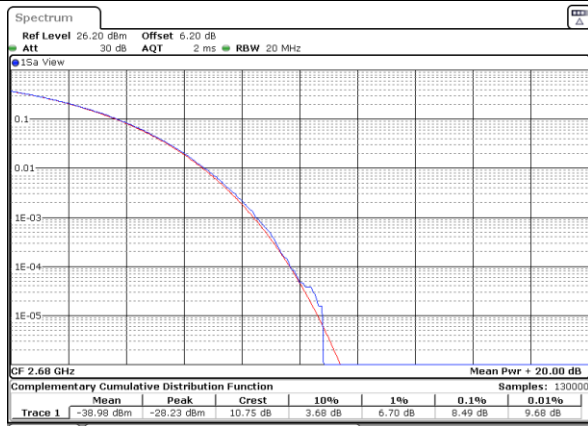
Middle Channel / 1RB



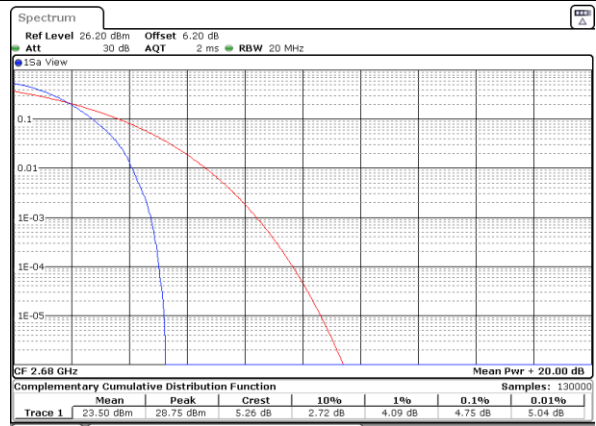
Middle Channel / Full RB



Highest Channel / 1RB



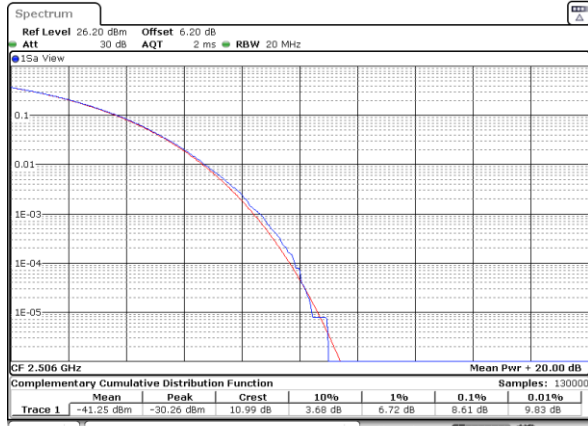
Highest Channel / Full RB





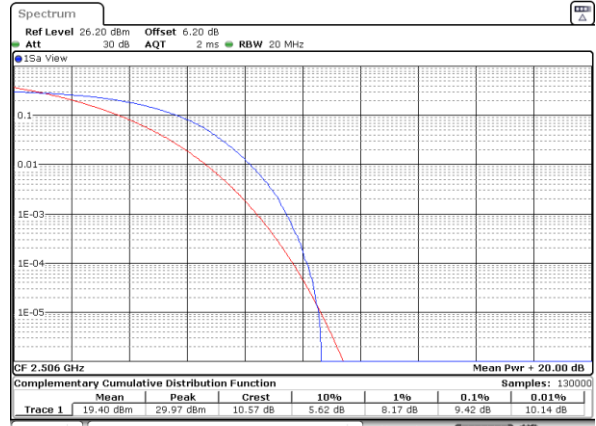
LTE Band 41 / 20MHz / 16QAM

Lowest Channel / 1RB



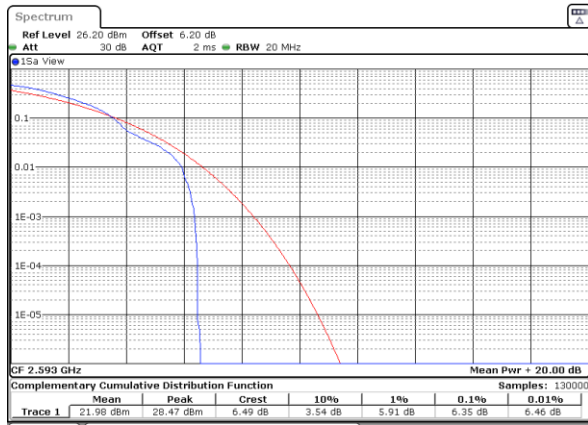
Date: 8 NOV 2019 16:14:41

Lowest Channel / Full RB



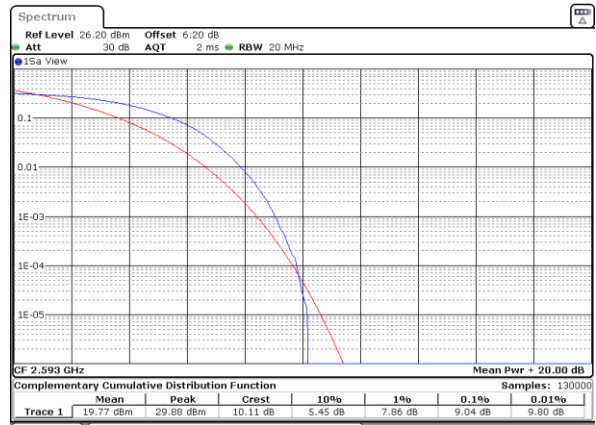
Date: 8 NOV 2019 16:03:26

Middle Channel / 1RB



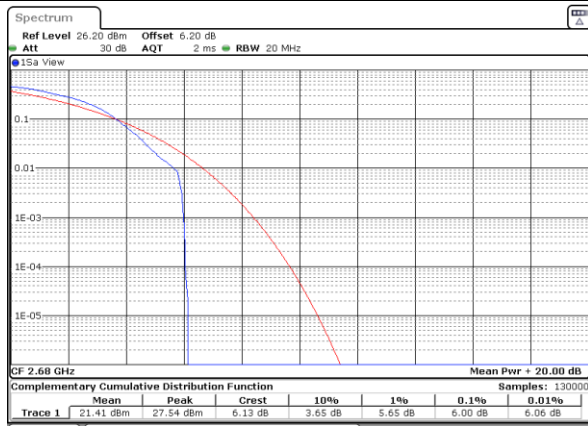
Date: 8 NOV 2019 16:03:36

Middle Channel / Full RB



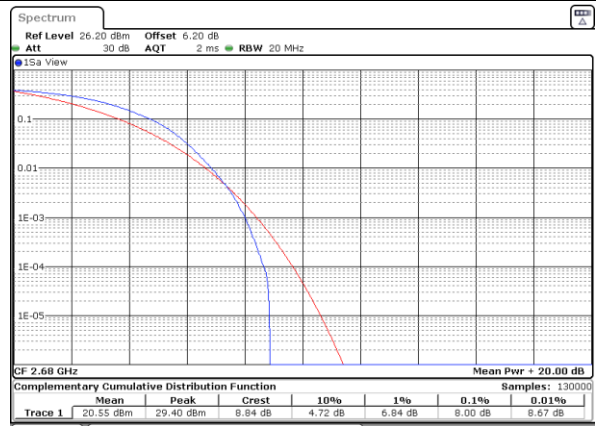
Date: 8 NOV 2019 16:13:14

Highest Channel / 1RB



Date: 8 NOV 2019 16:03:54

Highest Channel / Full RB

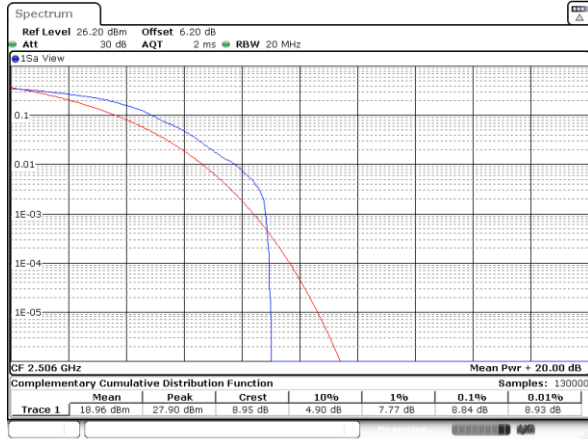


Date: 8 NOV 2019 16:14:17

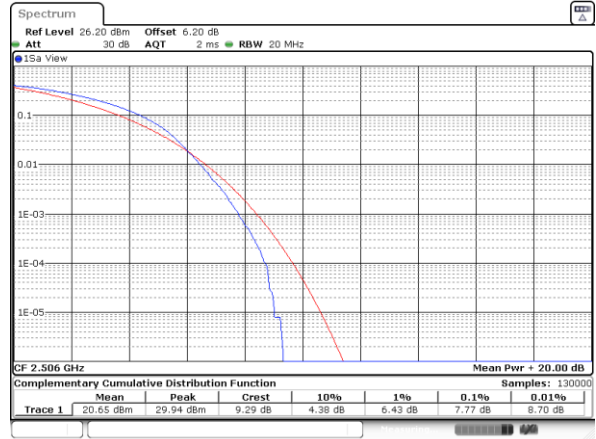


LTE Band 41 / 20MHz / 64QAM

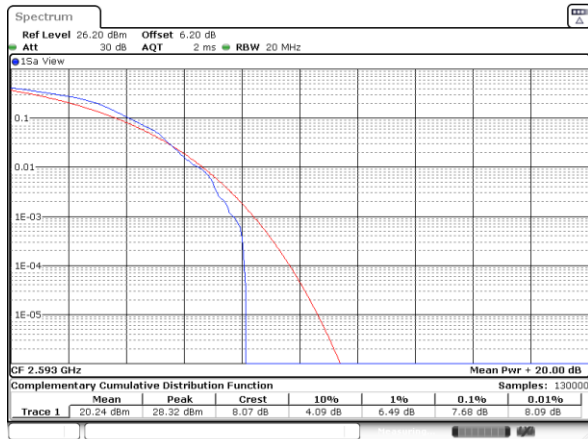
Lowest Channel / 1RB



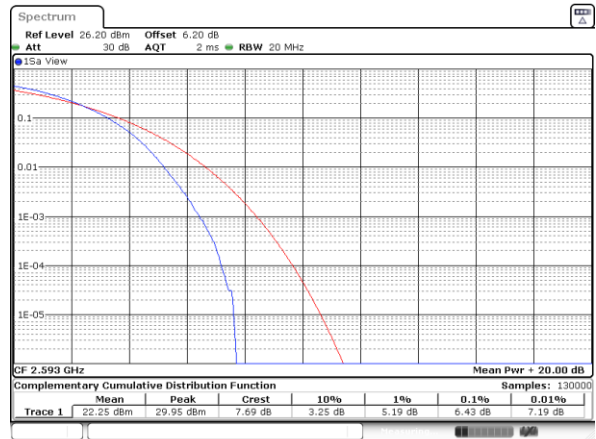
Lowest Channel / Full RB



Middle Channel / 1RB



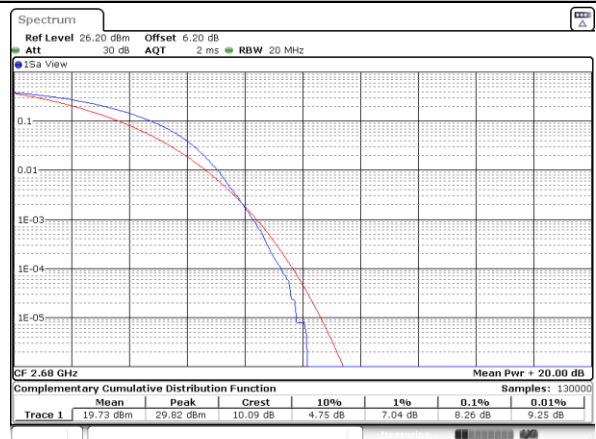
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



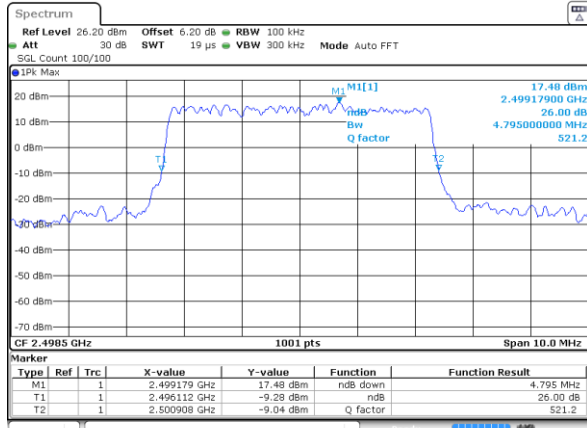
**26dB Bandwidth**

Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					4.795	4.755	9.65	9.63	14.505	14.086	20.14	20.1
Middle CH					4.745	4.955	9.85	9.63	14.356	14.116	20.06	20.1
Highest CH					4.925	5.025	9.71	9.67	14.356	14.446	19.98	20.02
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH					4.885		9.73		14.296		20.02	
Middle CH					4.905		9.69		14.416		20.18	
Highest CH					4.865		9.63		14.386		20.02	

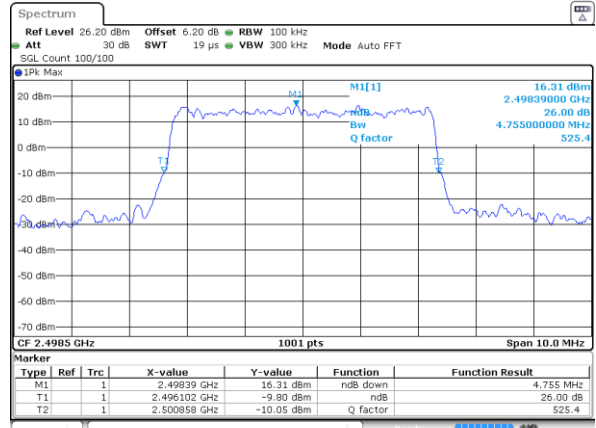


LTE Band 41

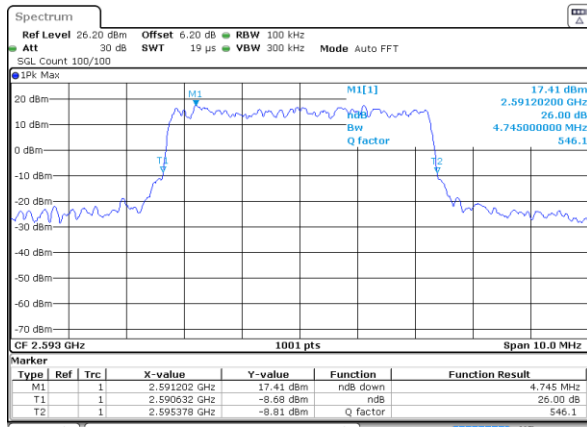
Lowest Channel / 5MHz / QPSK



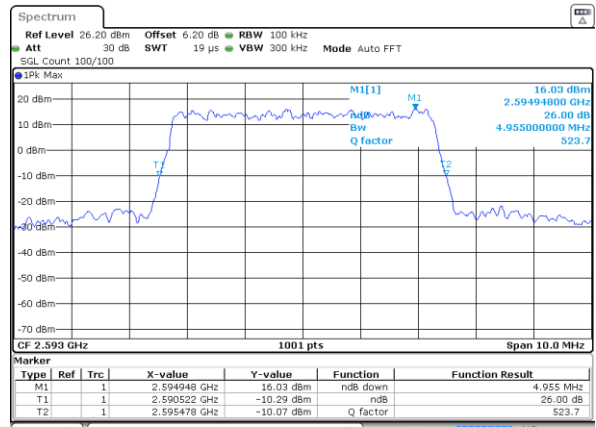
Lowest Channel / 5MHz / 16QAM



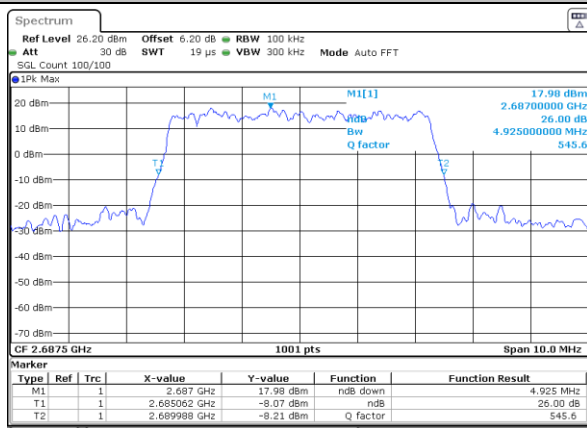
Middle Channel / 5MHz / QPSK



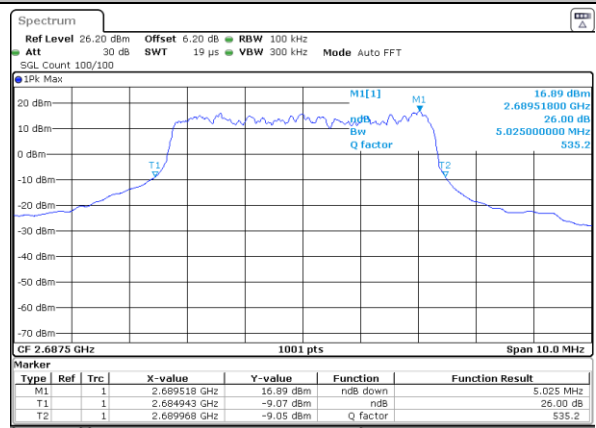
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



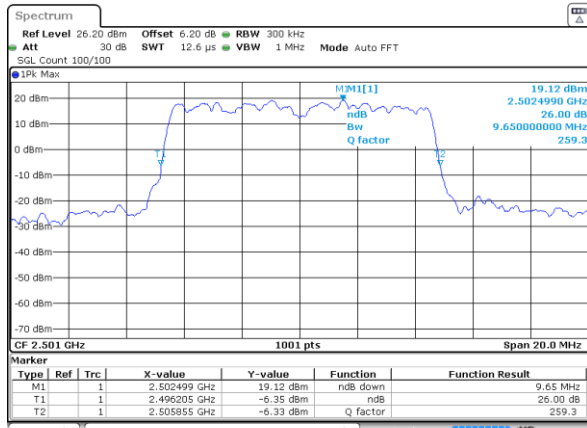
Highest Channel / 5MHz / 16QAM





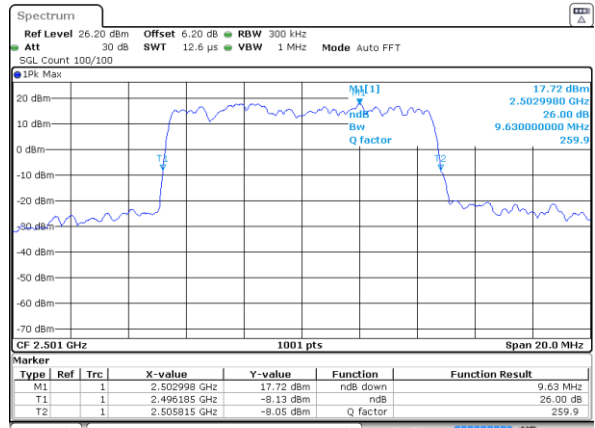
LTE Band 41

Lowest Channel / 10MHz / QPSK



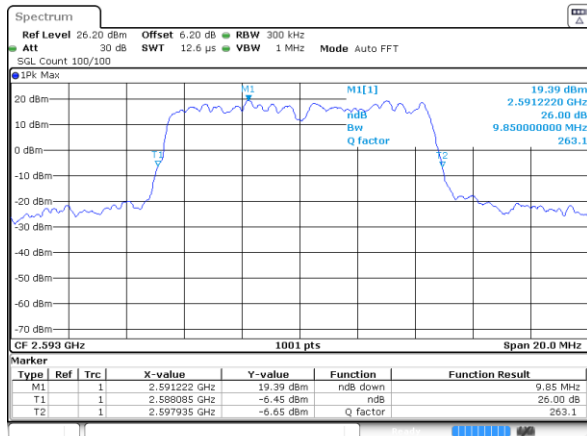
Date: 8 NOV 2019 15:55:30

Lowest Channel / 10MHz / 16QAM



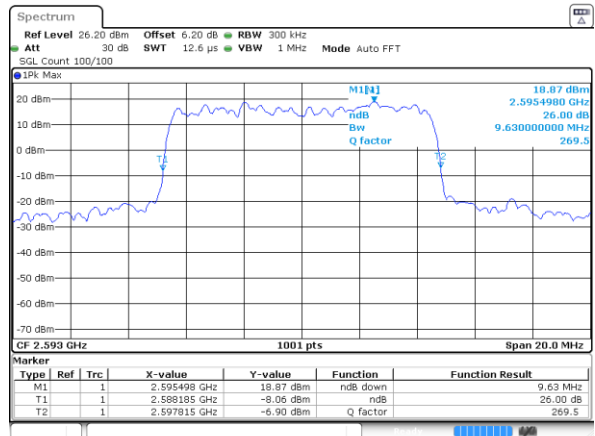
Date: 8 NOV 2019 15:55:40

Middle Channel / 10MHz / QPSK



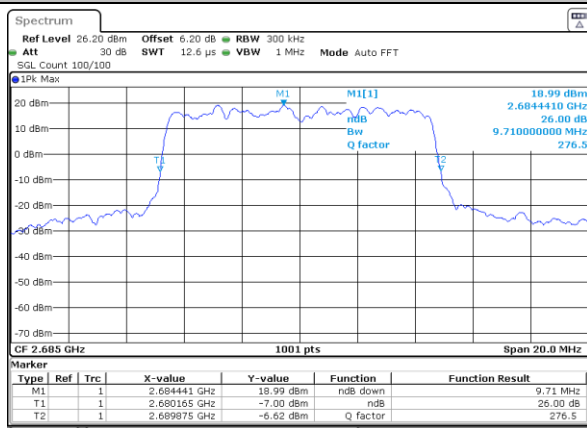
Date: 8 NOV 2019 15:56:10

Middle Channel / 10MHz / 16QAM



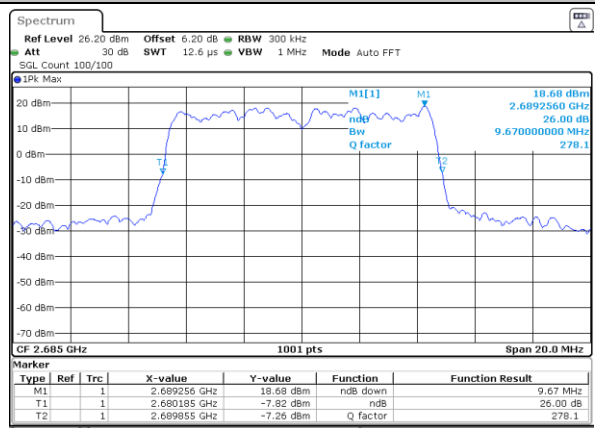
Date: 8 NOV 2019 15:56:20

Highest Channel / 10MHz / QPSK



Date: 8 NOV 2019 15:56:50

Highest Channel / 10MHz / 16QAM

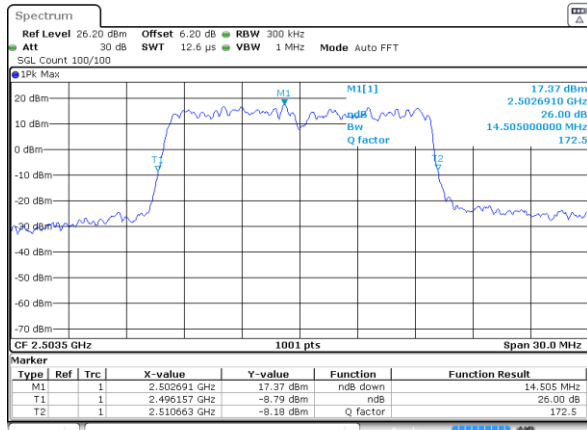


Date: 8 NOV 2019 15:57:00



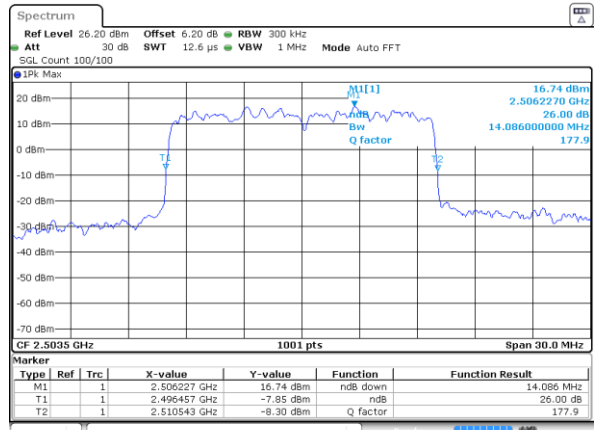
LTE Band 41

Lowest Channel / 15MHz / QPSK



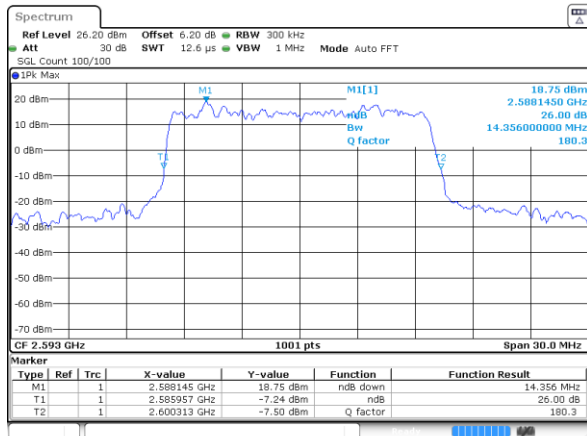
Date: 8 NOV 2019 15:57:30

Lowest Channel / 15MHz / 16QAM



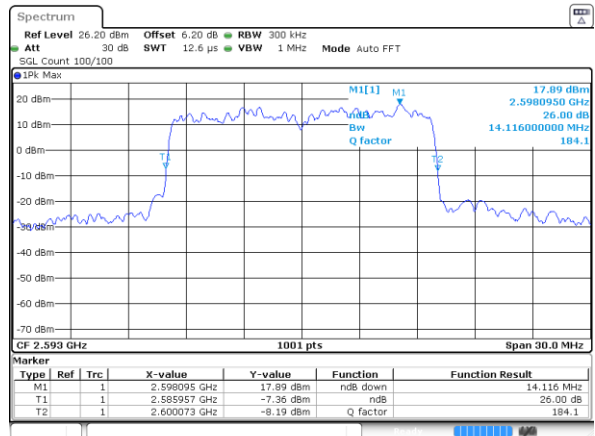
Date: 8 NOV 2019 15:57:40

Middle Channel / 15MHz / QPSK



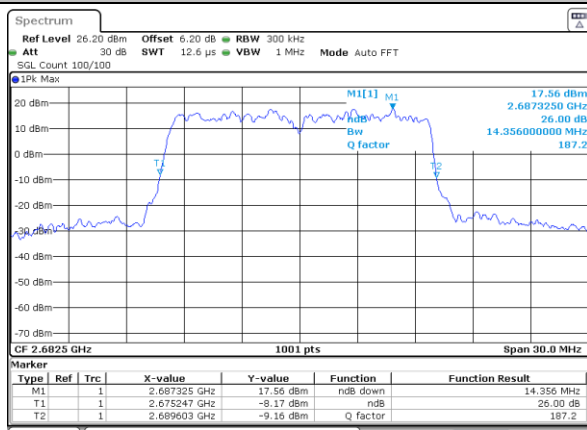
Date: 8 NOV 2019 15:58:11

Middle Channel / 15MHz / 16QAM



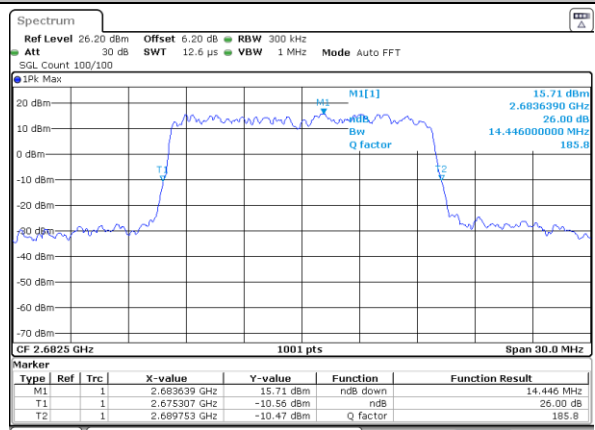
Date: 8 NOV 2019 15:58:21

Highest Channel / 15MHz / QPSK



Date: 8 NOV 2019 15:58:51

Highest Channel / 15MHz / 16QAM

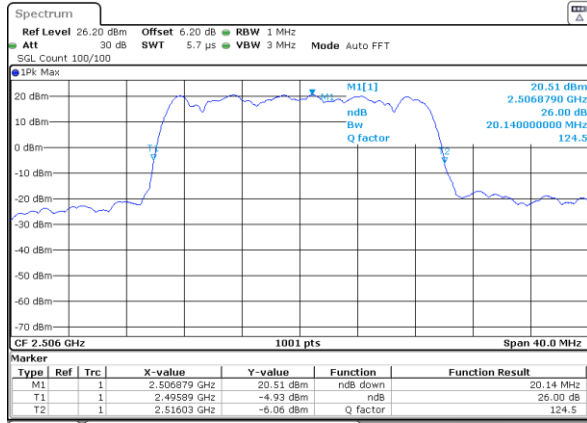


Date: 8 NOV 2019 15:59:01

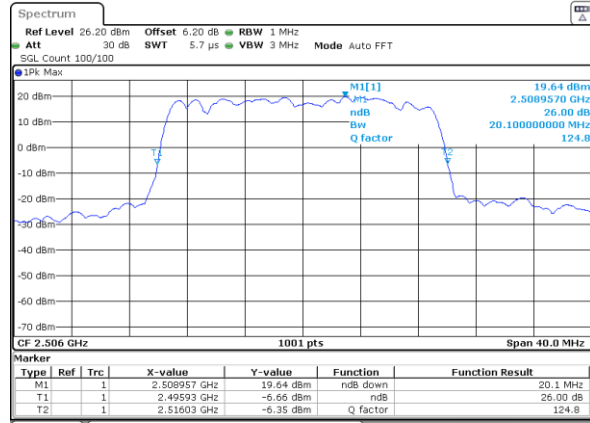


LTE Band 41

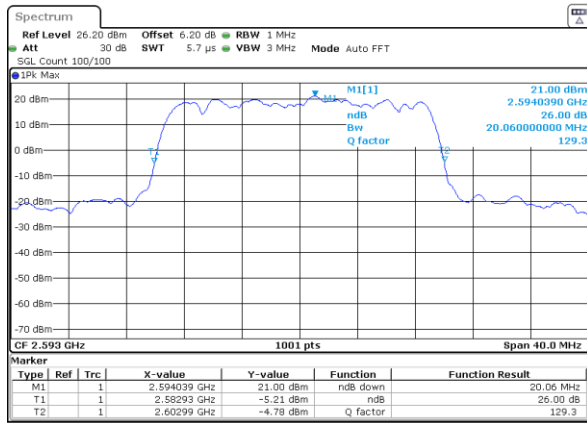
Lowest Channel / 20MHz / QPSK



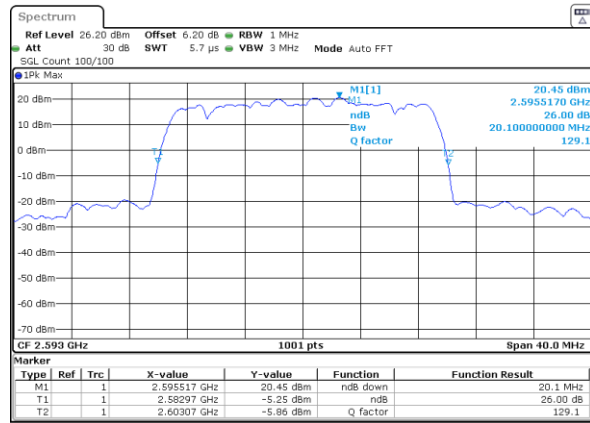
Lowest Channel / 20MHz / 16QAM



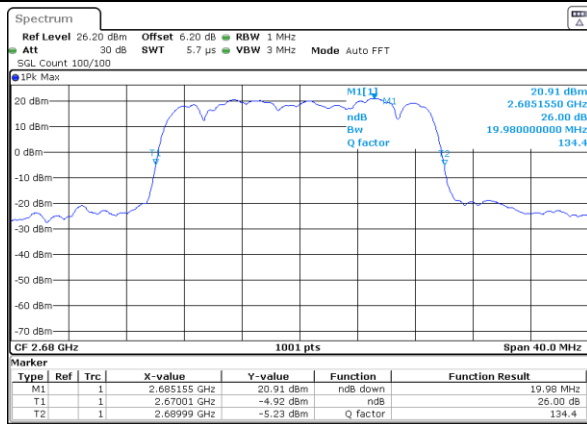
Middle Channel / 20MHz / QPSK



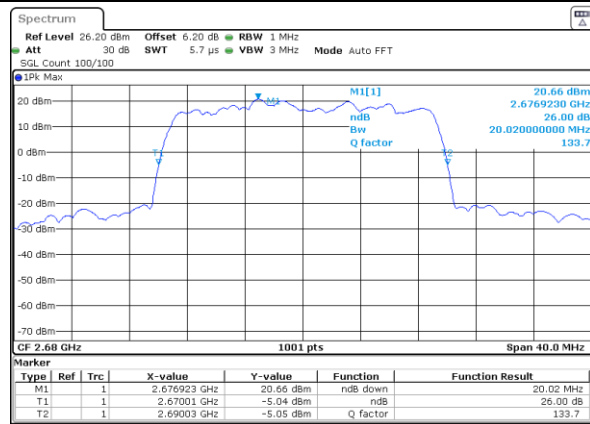
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



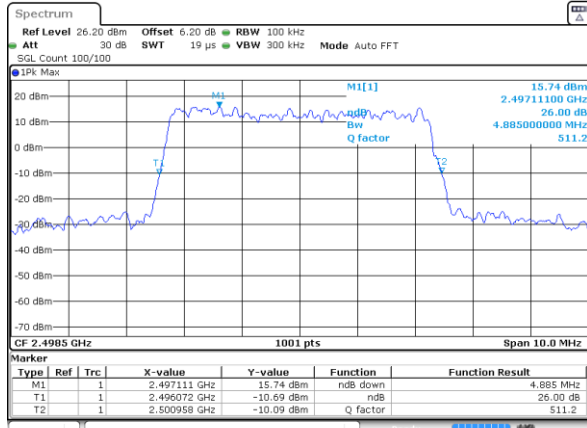
Highest Channel / 20MHz / 16QAM





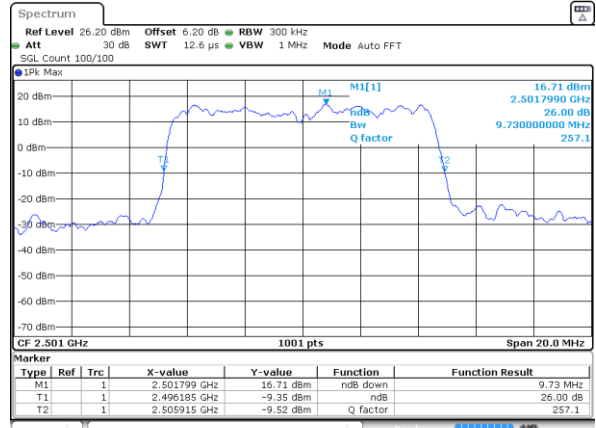
LTE Band 41

Lowest Channel / 5MHz / QPSK



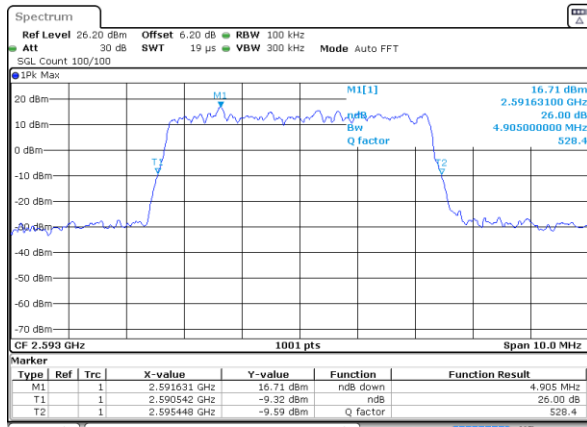
Date: 8 NOV 2019 16:07:30

Lowest Channel / 10MHz / 16QAM



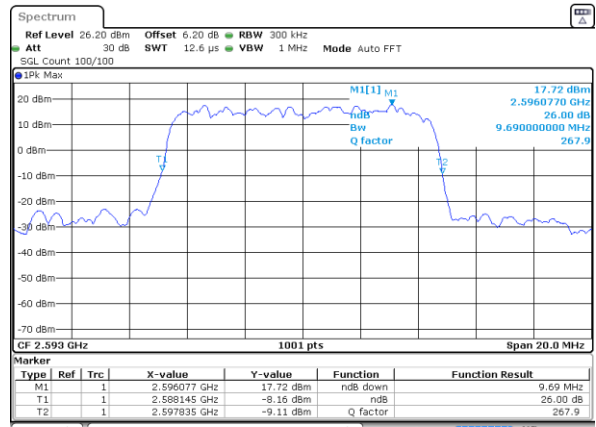
Date: 8 NOV 2019 16:08:31

Middle Channel / 5MHz / QPSK



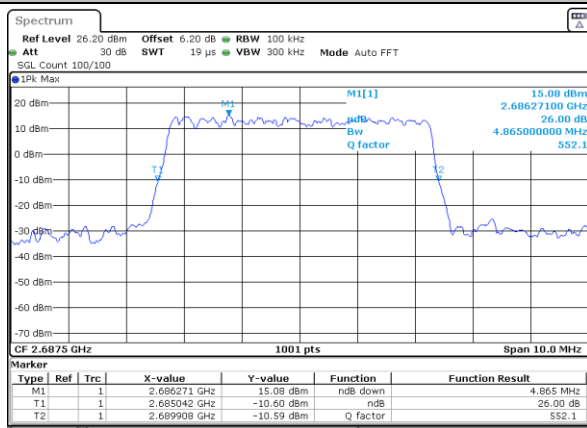
Date: 8 NOV 2019 16:07:51

Middle Channel / 10MHz / 16QAM



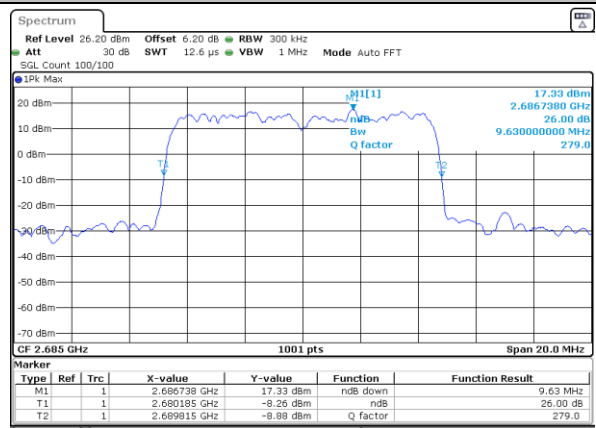
Date: 8 NOV 2019 16:08:51

Highest Channel / 5MHz / QPSK



Date: 8 NOV 2019 16:08:11

Highest Channel / 10MHz / 16QAM

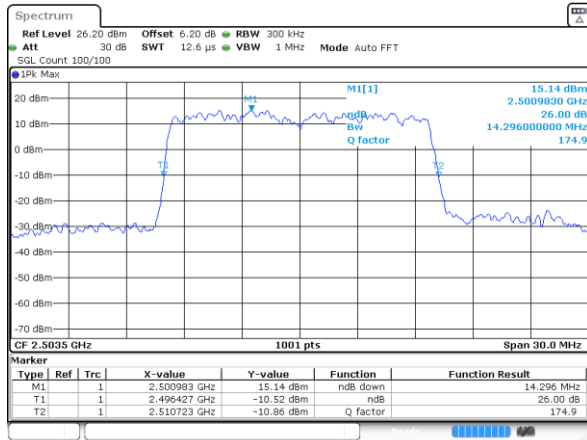


Date: 8 NOV 2019 16:09:11



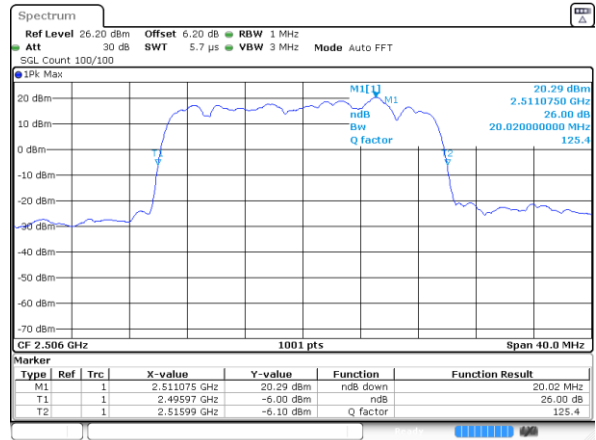
LTE Band 41

Lowest Channel / 15MHz / QPSK



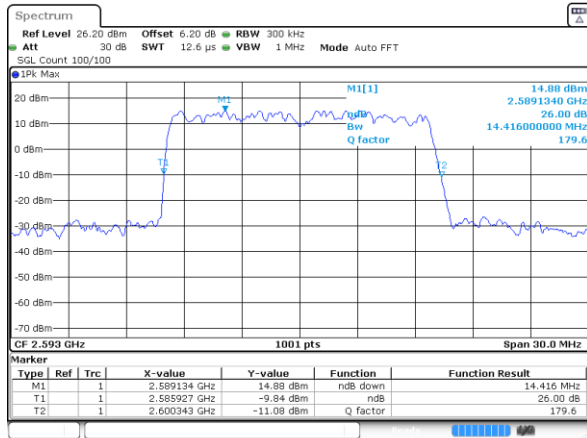
Date: 8 NOV 2019 16:09:31

Lowest Channel / 20MHz / 16QAM



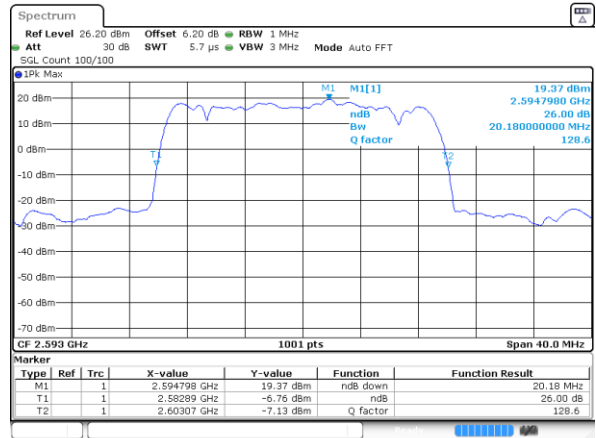
Date: 8 NOV 2019 16:10:32

Middle Channel / 15MHz / QPSK



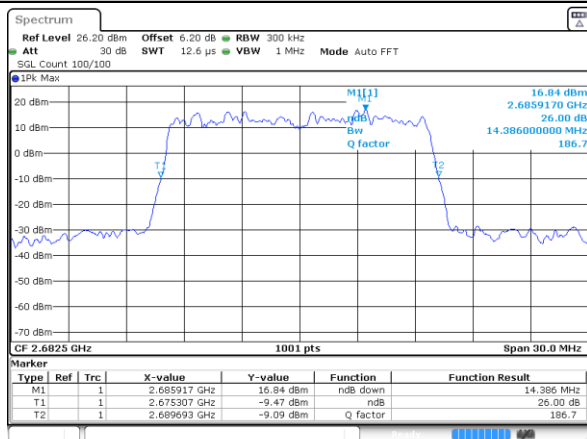
Date: 8 NOV 2019 16:09:51

Middle Channel / 20MHz / 16QAM



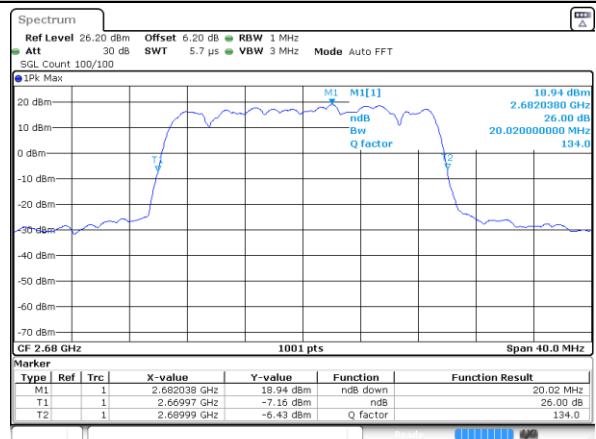
Date: 8 NOV 2019 16:10:52

Highest Channel / 15MHz / QPSK



Date: 8 NOV 2019 16:10:12

Highest Channel / 20MHz / 16QAM



Date: 8 NOV 2019 16:11:12

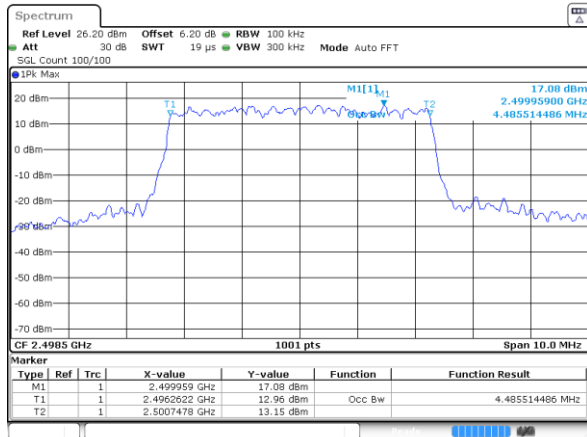
**Occupied Bandwidth**

Mode	LTE Band 41 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					4.486	4.476	9.051	9.071	13.457	13.367	18.222	18.382
Middle CH					4.466	4.476	9.031	9.011	13.427	13.427	18.422	18.262
Highest CH					4.466	4.486	9.051	8.931	13.427	13.427	18.142	18.182
Mode	LTE Band 41 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					4.496		9.031		13.427		18.382	
Middle CH					4.496		8.971		13.337		18.142	
Highest CH					4.525		9.011		13.397		18.262	



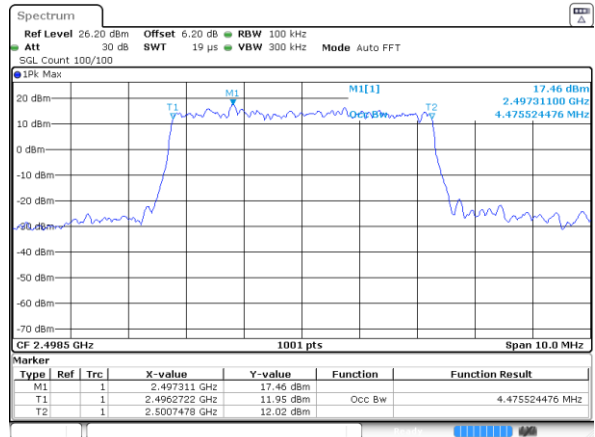
LTE Band 41

Lowest Channel / 5MHz / QPSK



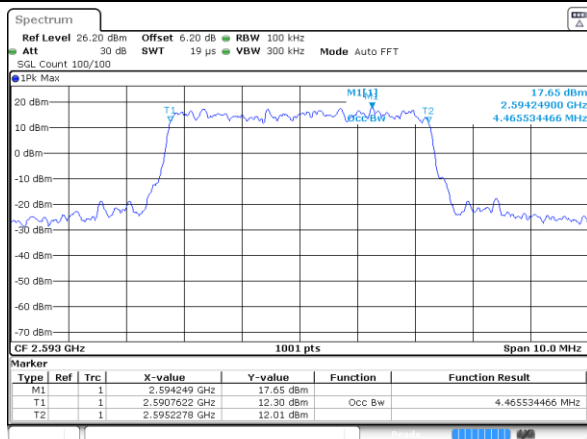
Date: 8 NOV 2019 15:53:08

Lowest Channel / 5MHz / 16QAM



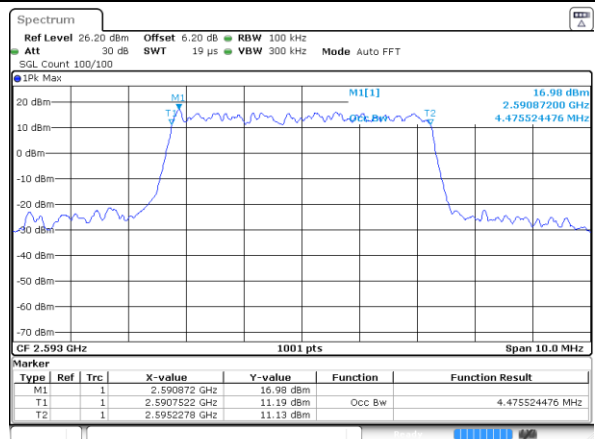
Date: 8 NOV 2019 15:53:18

Middle Channel / 5MHz / QPSK



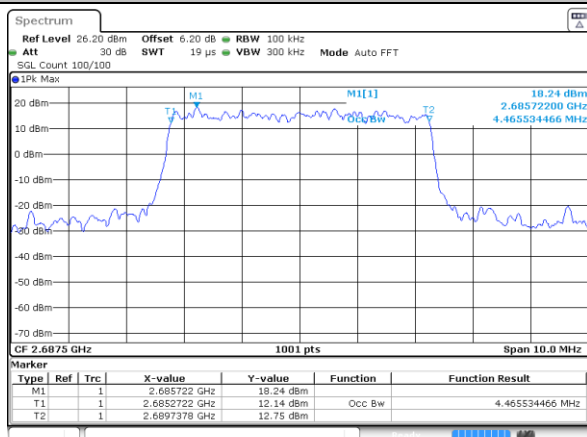
Date: 8 NOV 2019 15:53:49

Middle Channel / 5MHz / 16QAM



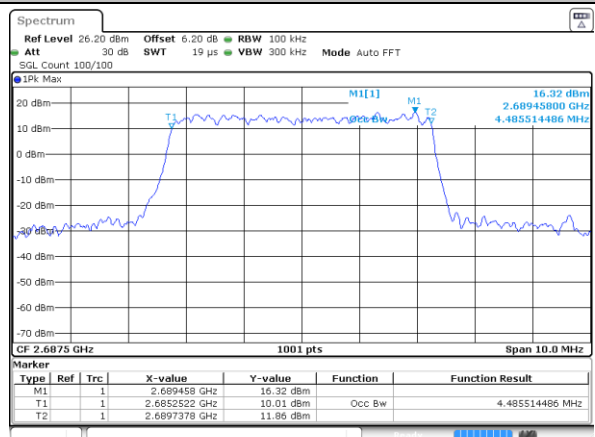
Date: 8 NOV 2019 15:53:59

Highest Channel / 5MHz / QPSK



Date: 8 NOV 2019 15:54:29

Highest Channel / 5MHz / 16QAM

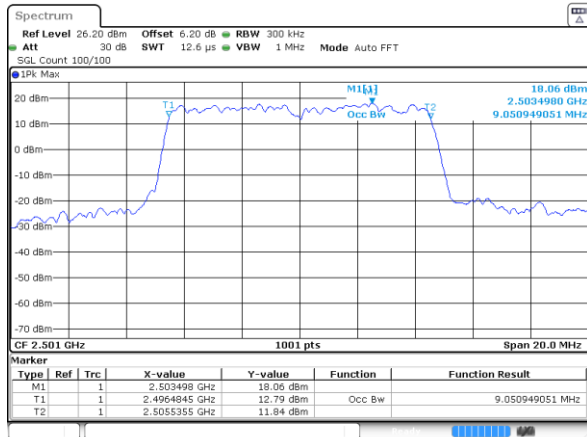


Date: 8 NOV 2019 15:54:39

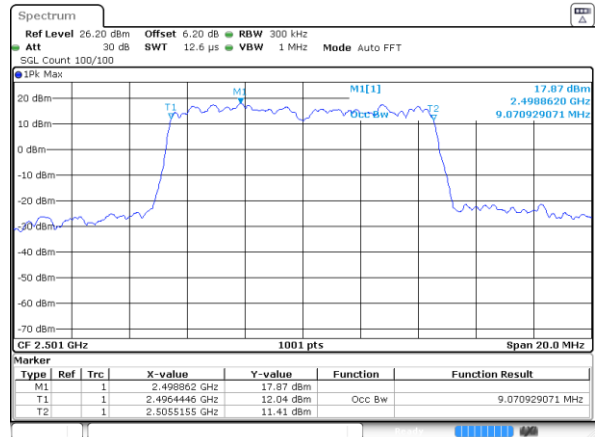


LTE Band 41

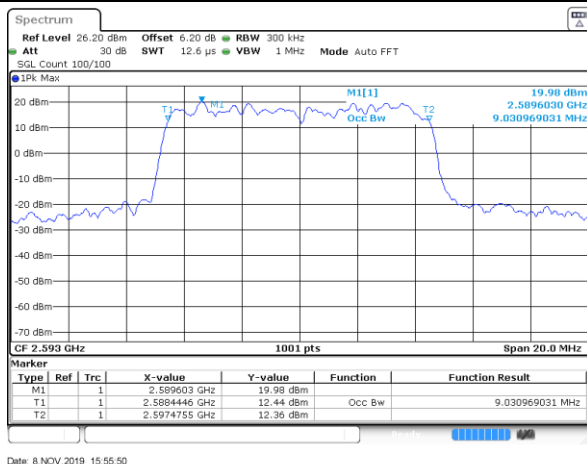
Lowest Channel / 10MHz / QPSK



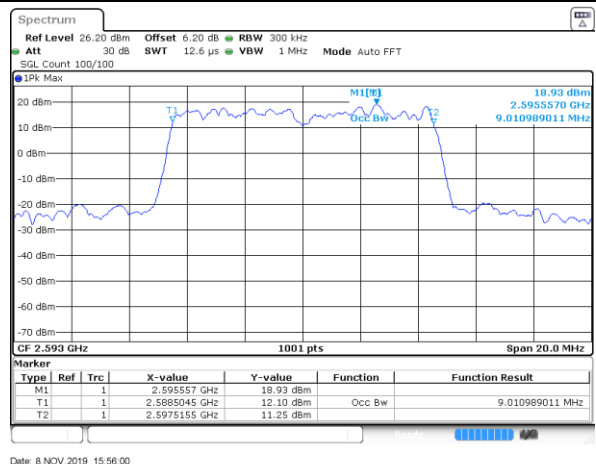
Lowest Channel / 10MHz / 16QAM



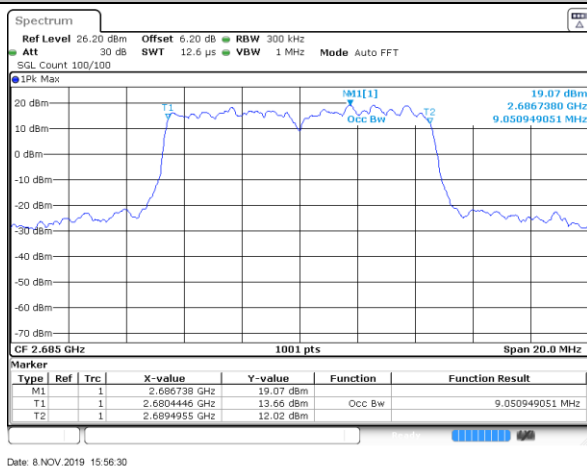
Middle Channel / 10MHz / QPSK



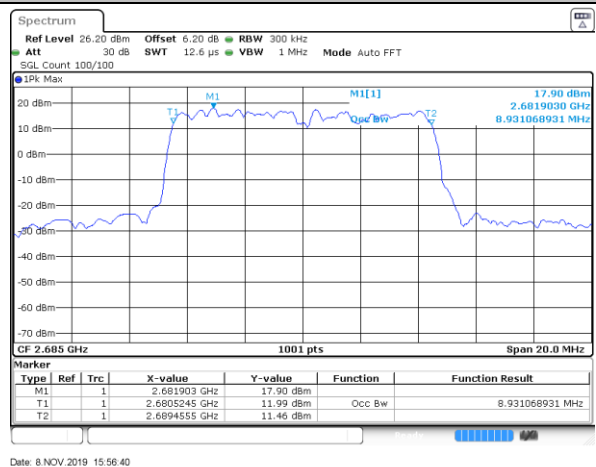
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



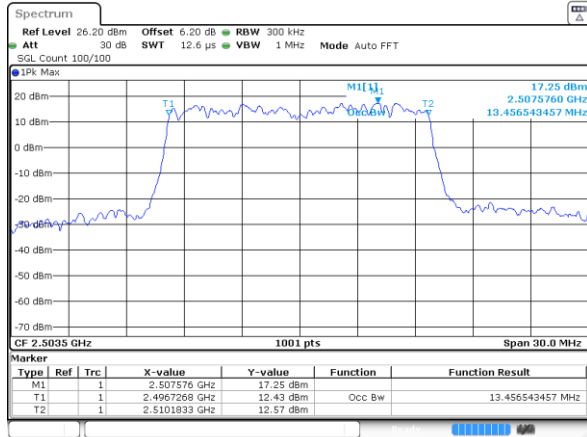
Highest Channel / 10MHz / 16QAM



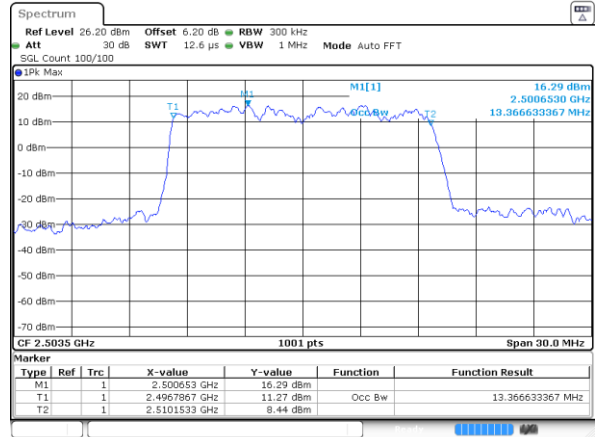


LTE Band 41

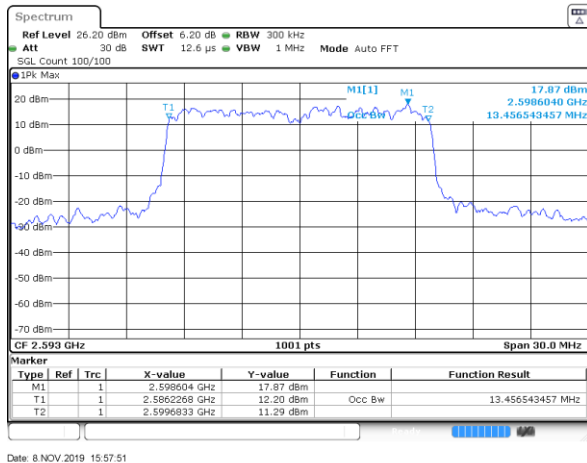
Lowest Channel / 15MHz / QPSK



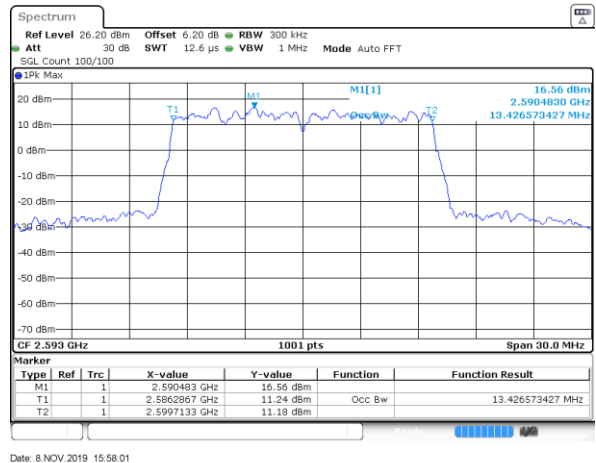
Lowest Channel / 15MHz / 16QAM



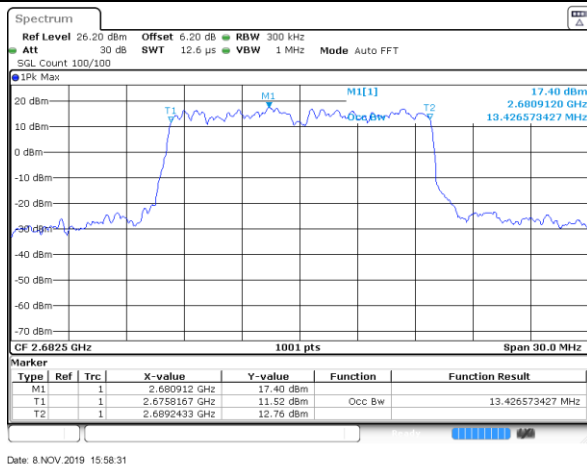
Middle Channel / 15MHz / QPSK



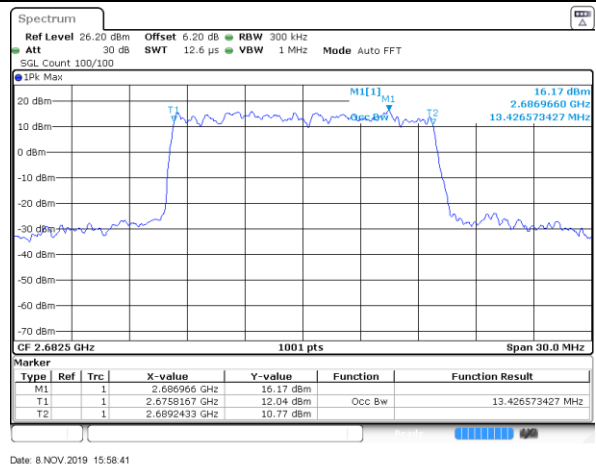
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



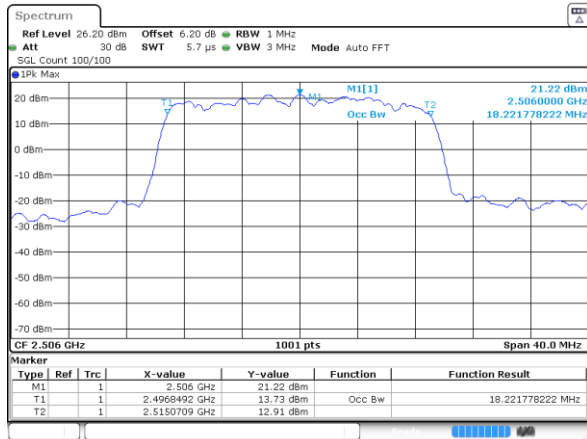
Highest Channel / 15MHz / 16QAM





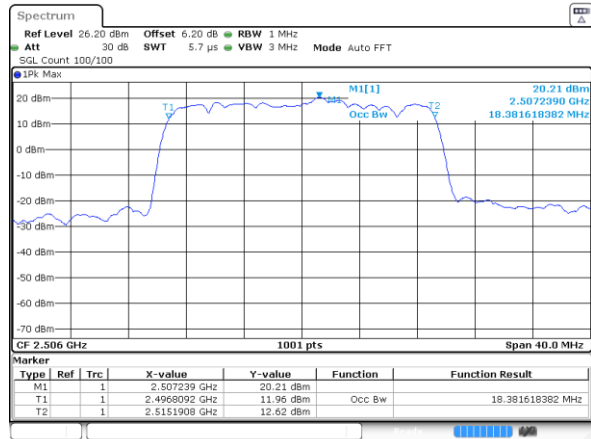
LTE Band 41

Lowest Channel / 20MHz / QPSK



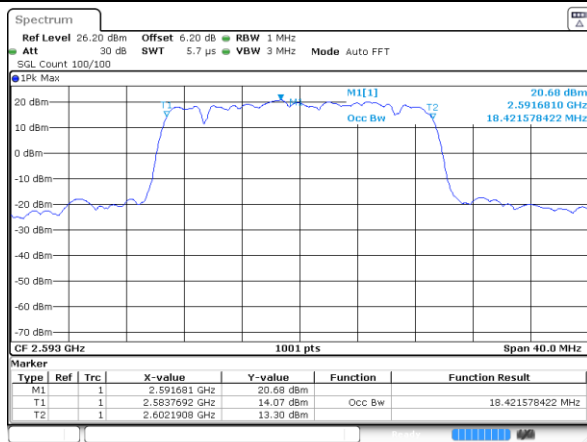
Date: 8 NOV 2019 15:59:11

Lowest Channel / 20MHz / 16QAM



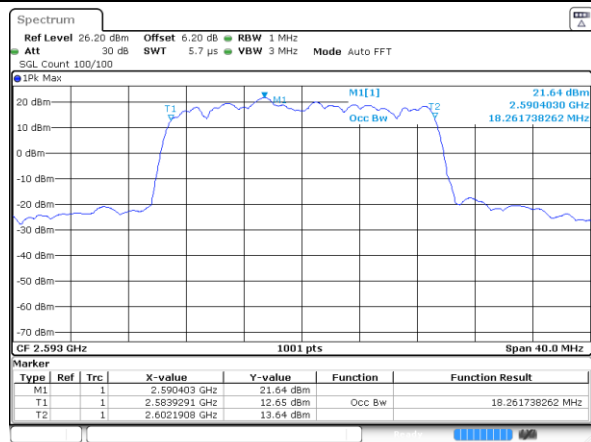
Date: 8 NOV 2019 15:59:21

Middle Channel / 20MHz / QPSK



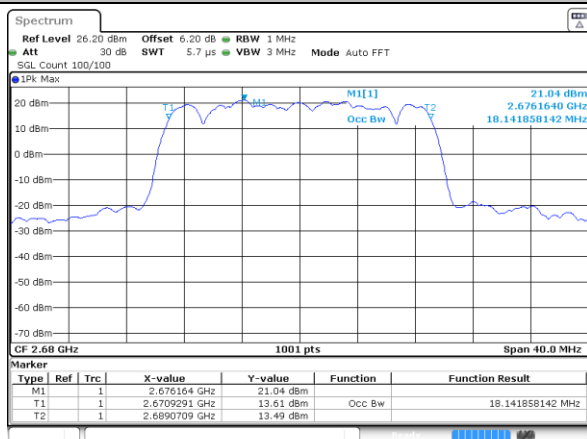
Date: 8 NOV 2019 15:59:52

Middle Channel / 20MHz / 16QAM



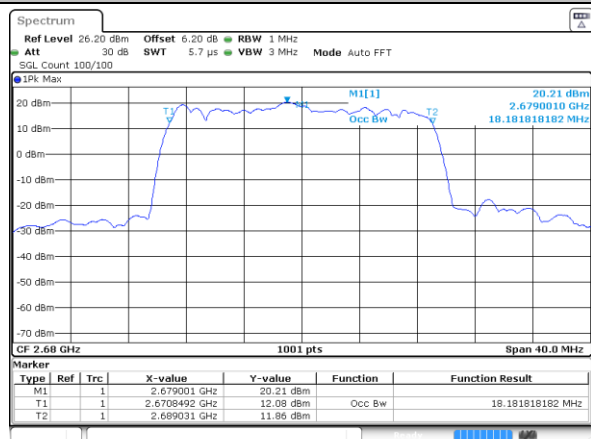
Date: 8 NOV 2019 16:00:02

Highest Channel / 20MHz / QPSK



Date: 8 NOV 2019 16:00:32

Highest Channel / 20MHz / 16QAM

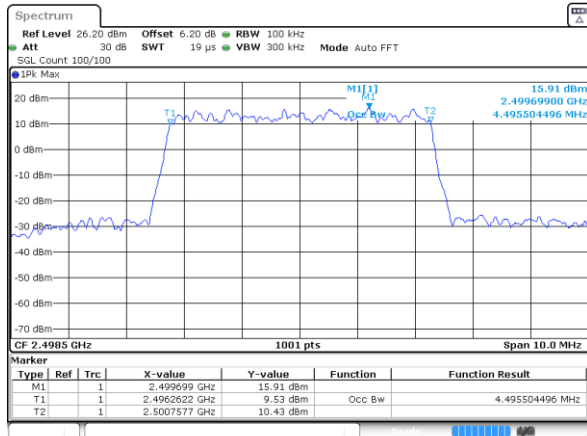


Date: 8 NOV 2019 16:00:43

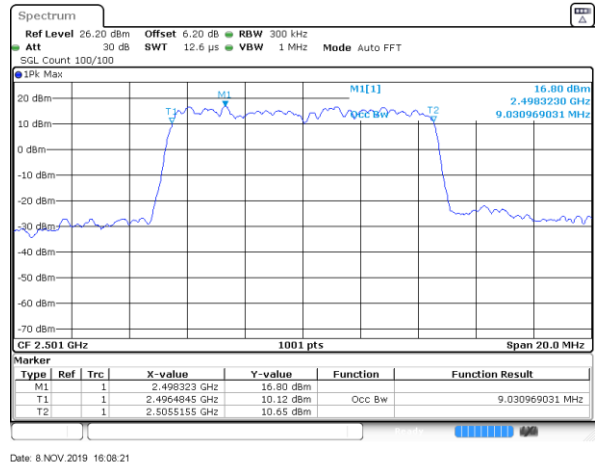


LTE Band 41

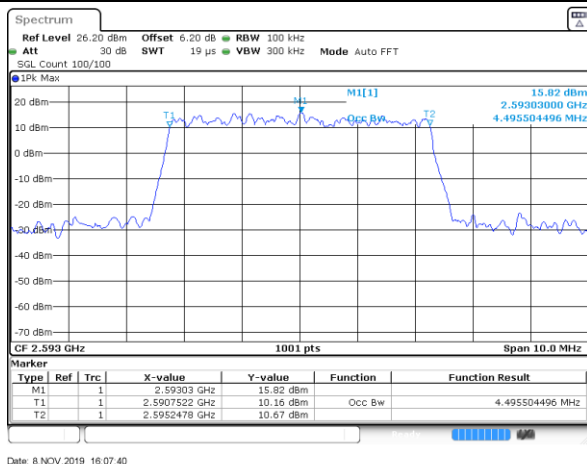
Lowest Channel / 5MHz / 64QAM



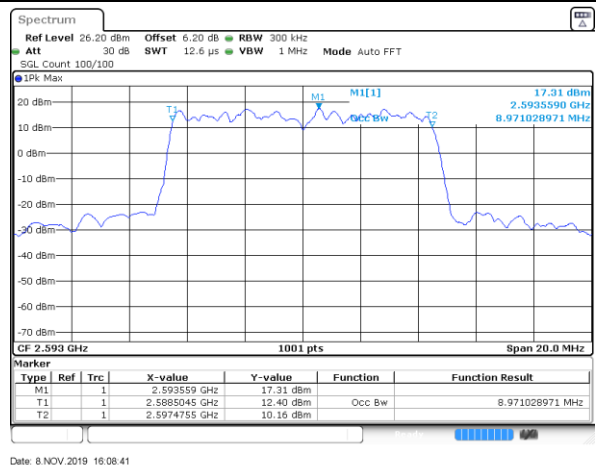
Lowest Channel / 10MHz / 64QAM



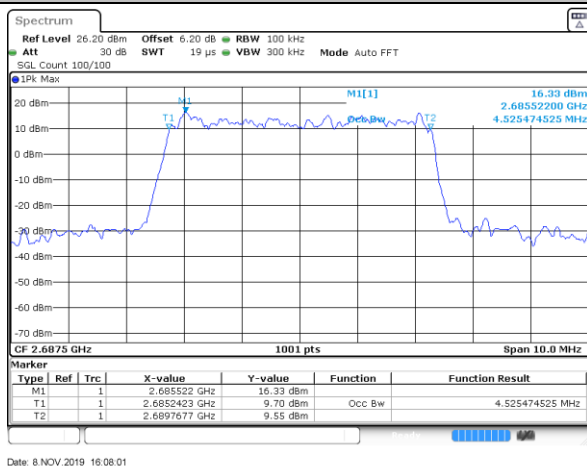
Middle Channel / 5MHz / 64QAM



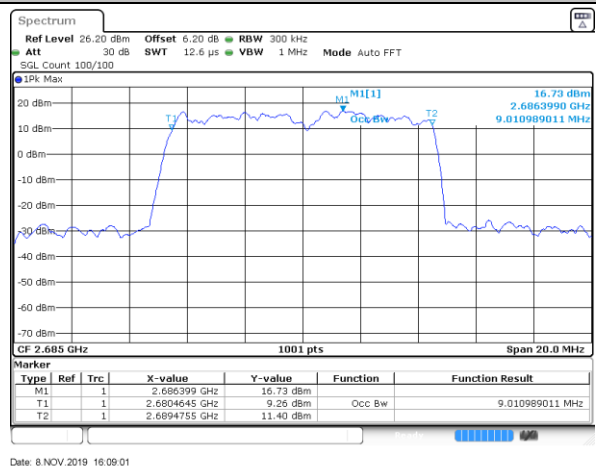
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



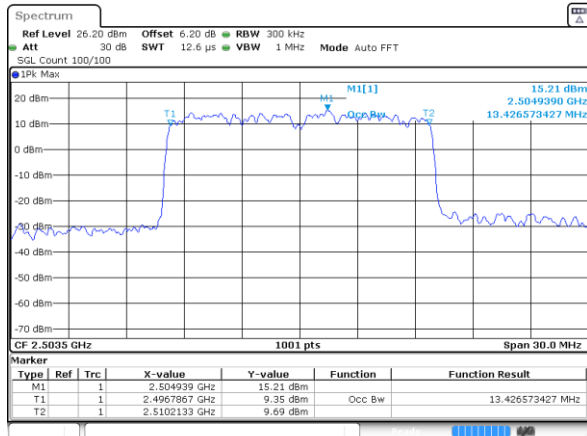
Highest Channel / 10MHz / 64QAM



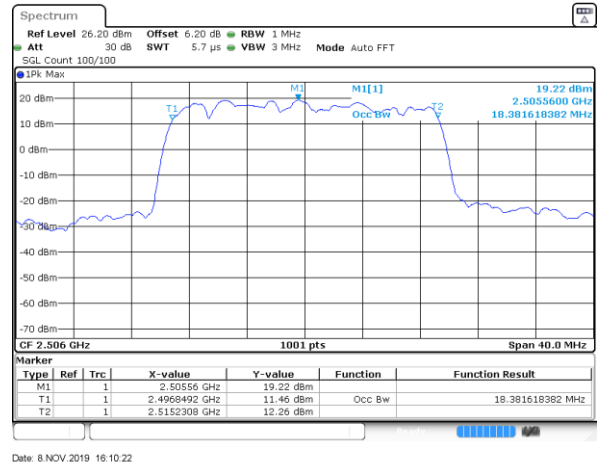


LTE Band 41

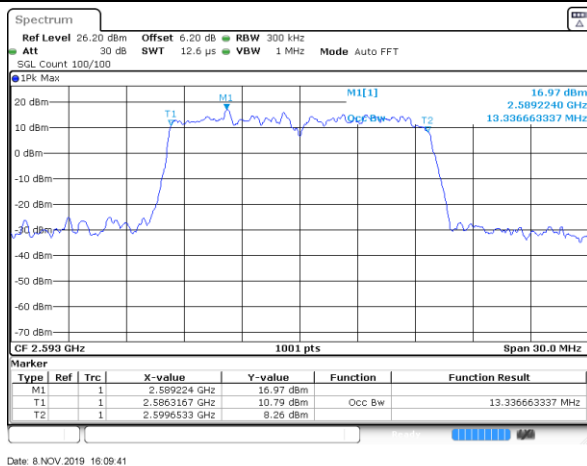
Lowest Channel / 15MHz / 64QAM



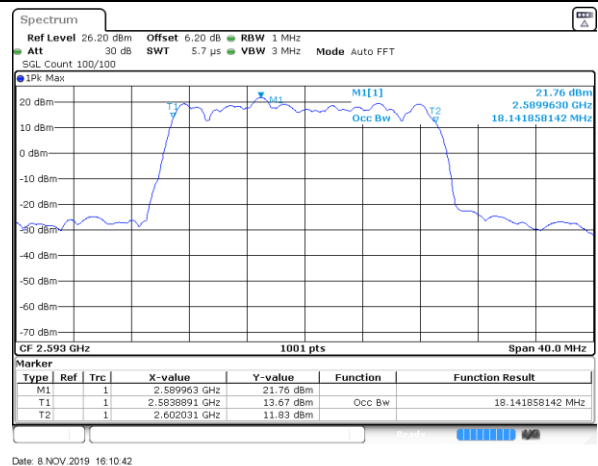
Lowest Channel / 20MHz / 64QAM



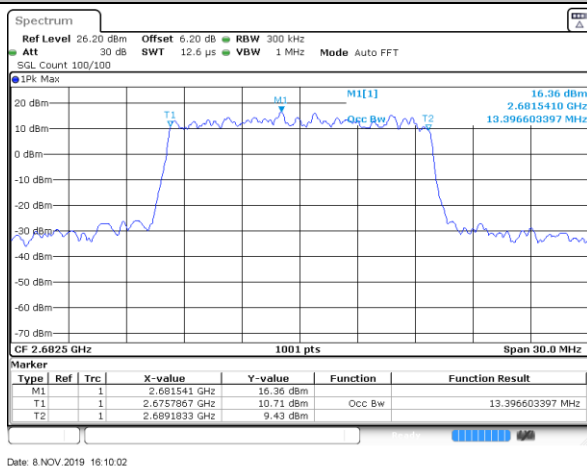
Middle Channel / 15MHz / 64QAM



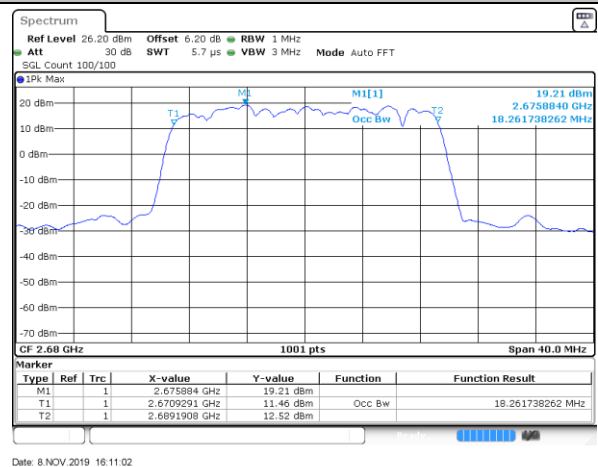
Middle Channel / 20MHz / 64QAM



Highest Channel / 15MHz / 64QAM



Highest Channel / 20MHz / 64QAM

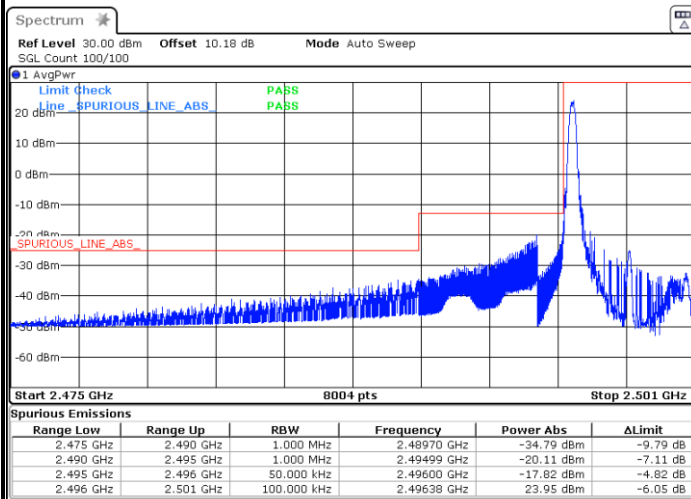




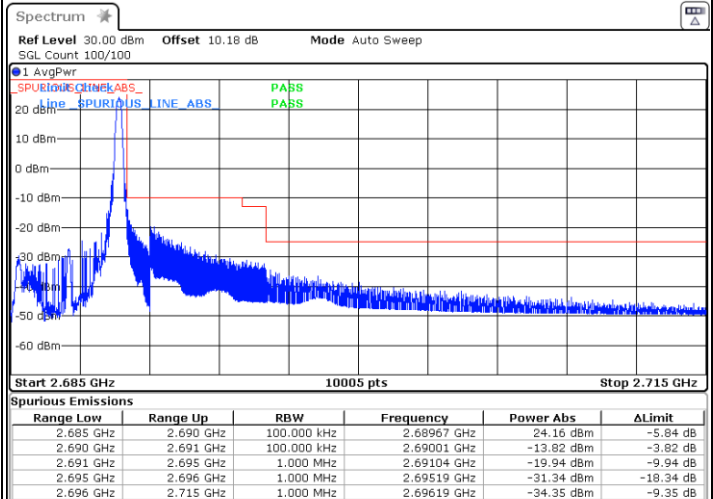
Conducted Band Edge

LTE Band 41 / 5MHz / QPSK

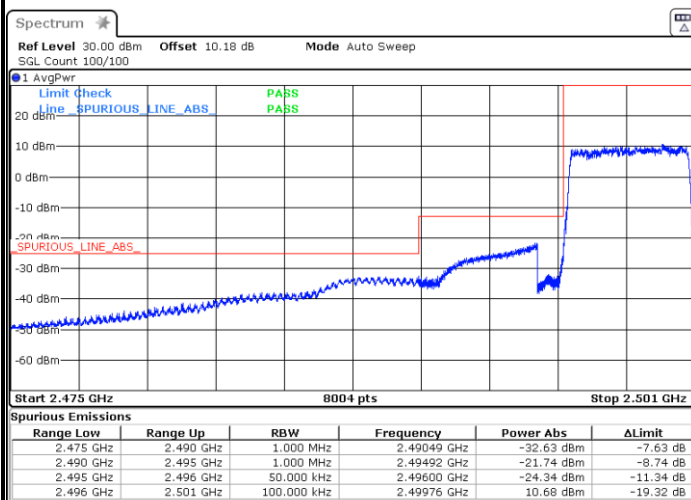
Lowest Band Edge / 1 RB



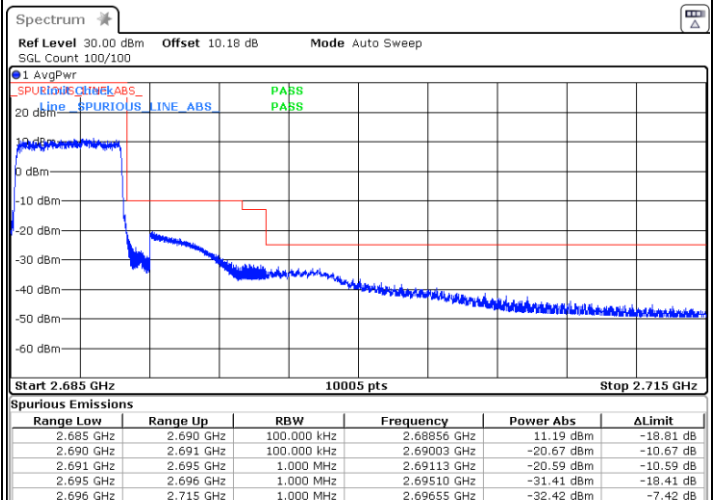
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



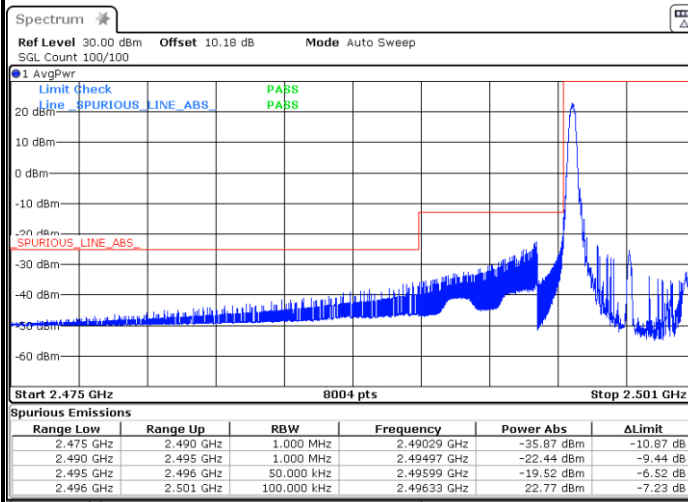
Highest Band Edge / Full RB



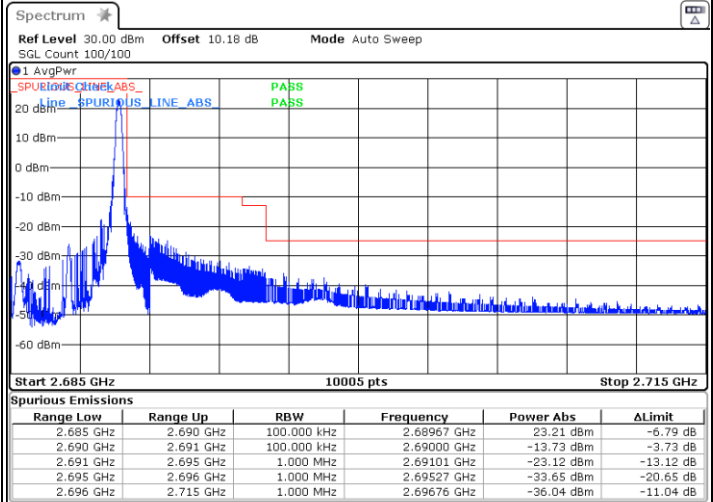


LTE Band 41 / 5MHz / 16QAM

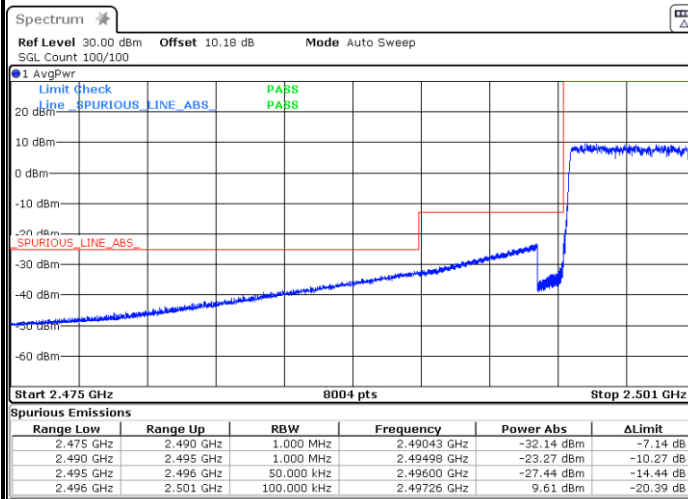
Lowest Band Edge / 1RB



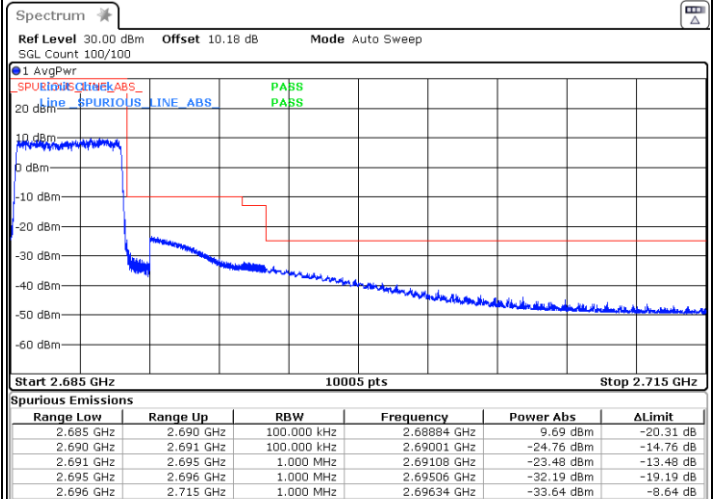
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



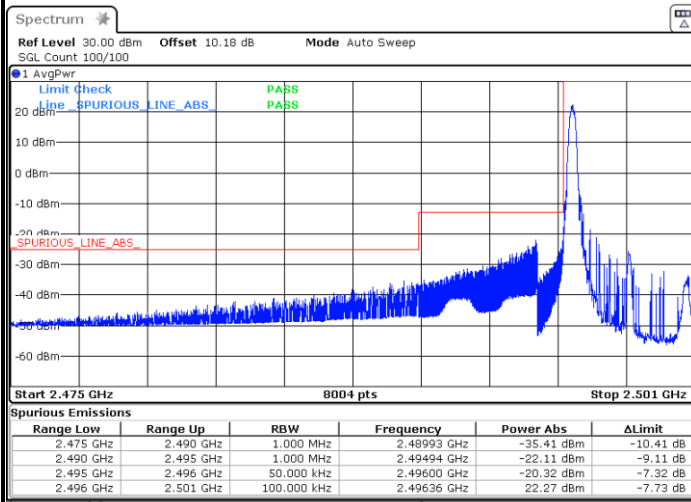
Highest Band Edge / Full RB





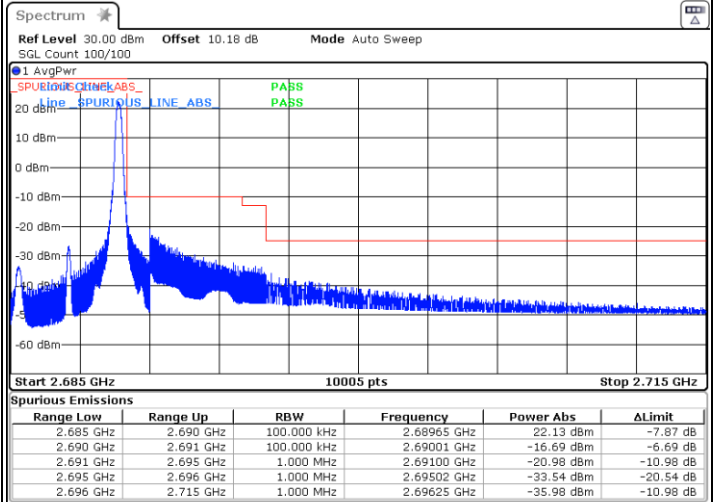
LTE Band 41 / 5MHz / 674QAM

Lowest Band Edge / 1RB



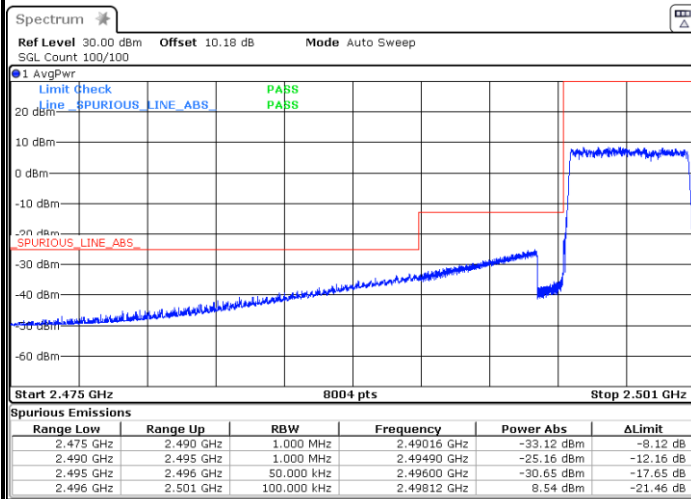
Date: 8 NOV 2019 14:59:20

Highest Band Edge / 1 RB



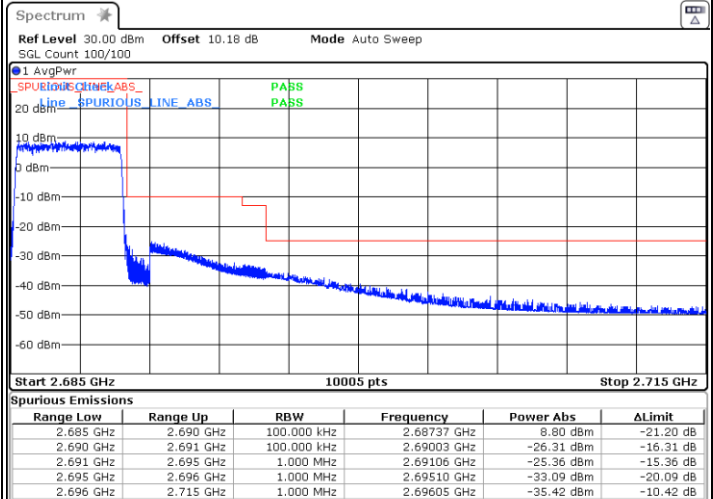
Date: 8 NOV 2019 15:03:43

Lowest Band Edge / Full RB



Date: 8 NOV 2019 15:00:14

Highest Band Edge / Full RB

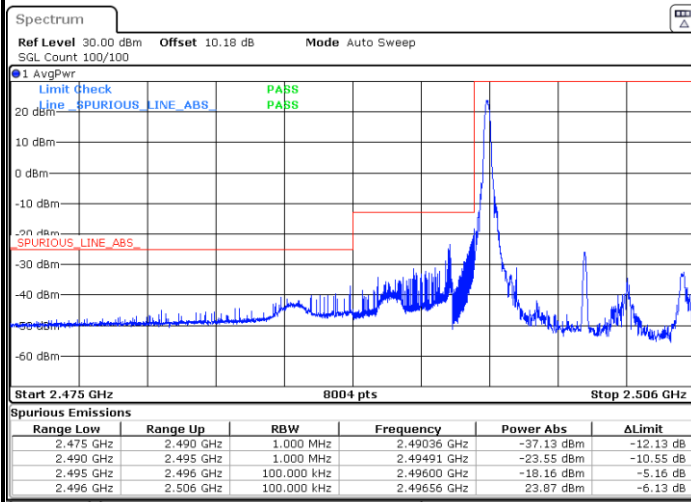


Date: 8 NOV 2019 15:09:04

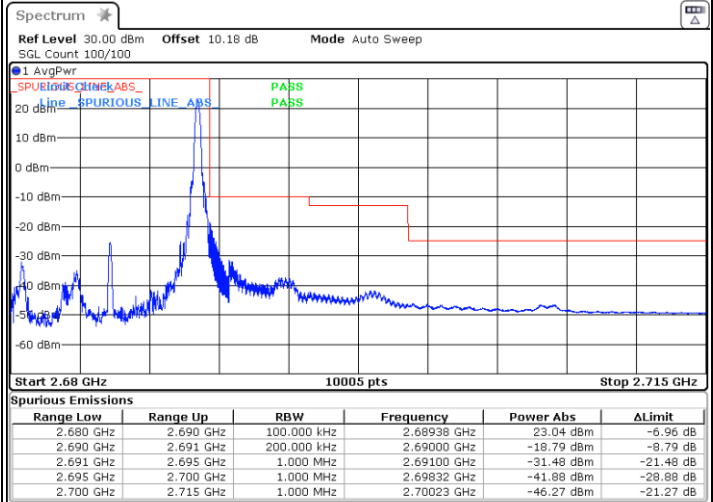


LTE Band 41 / 10MHz / QPSK

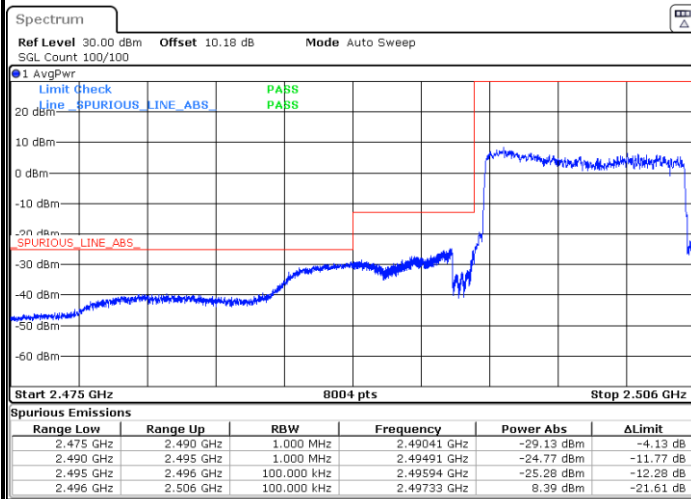
Lowest Band Edge / 1 RB



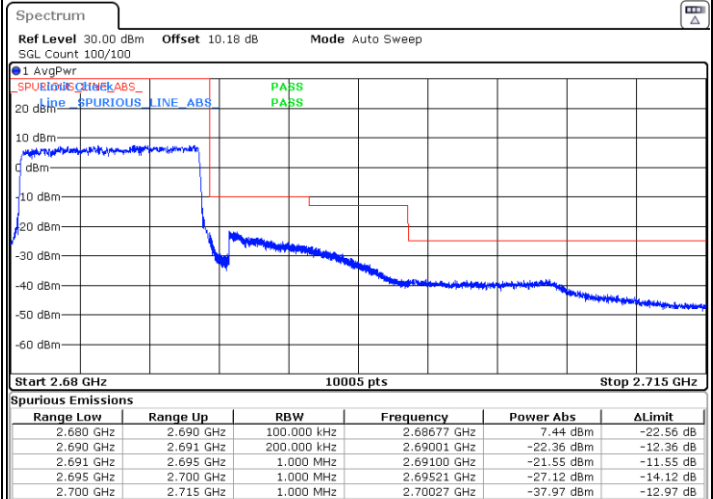
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



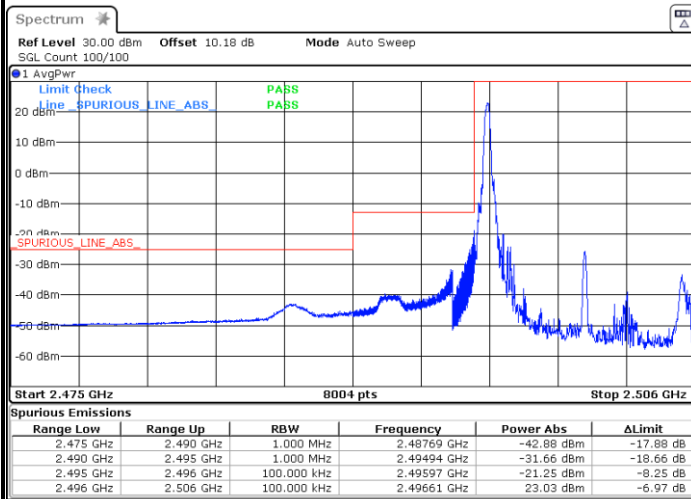
Highest Band Edge / Full RB



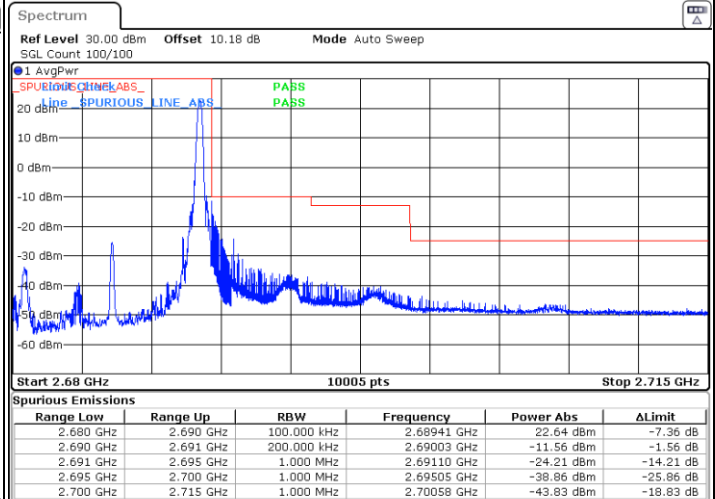


LTE Band 41 / 10MHz / 16QAM

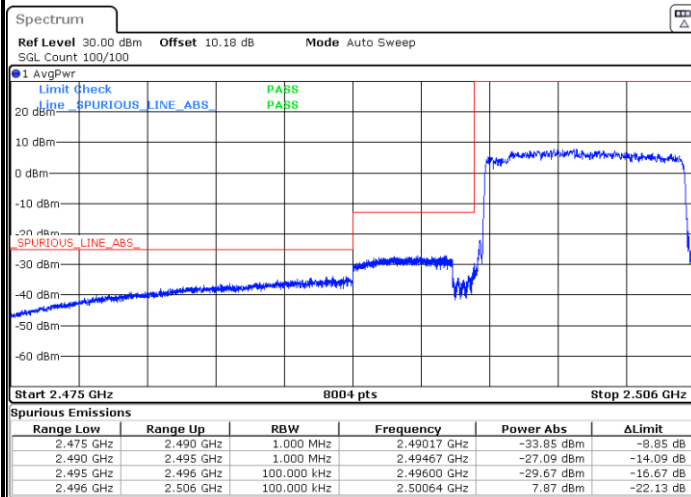
Lowest Band Edge / 1 RB



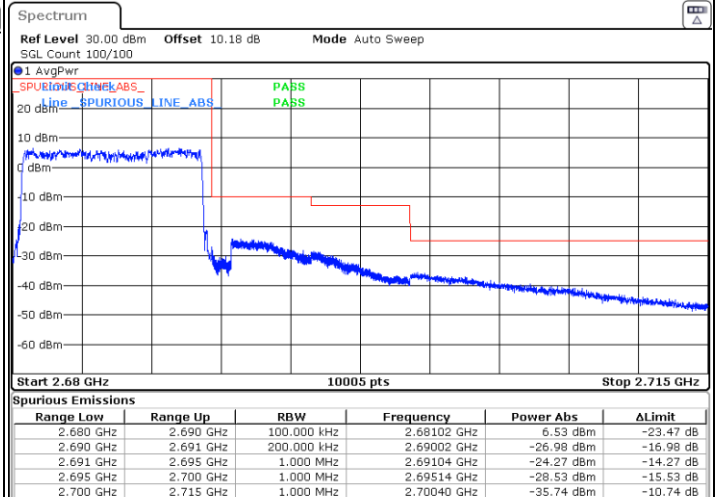
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



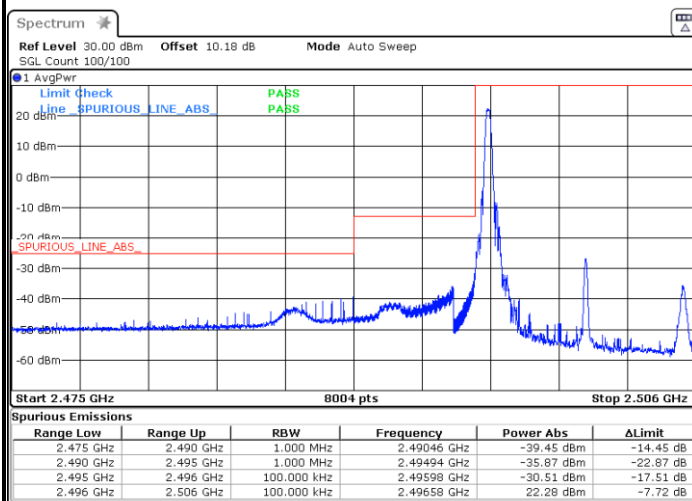
Highest Band Edge / Full RB



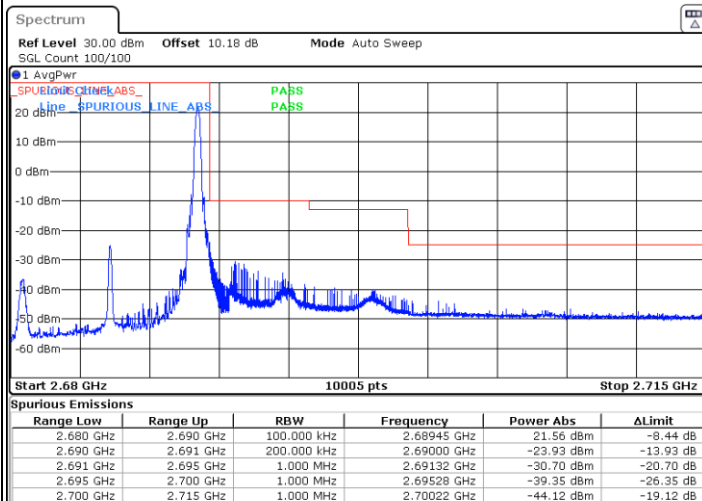


LTE Band 41 / 10MHz / 64QAM

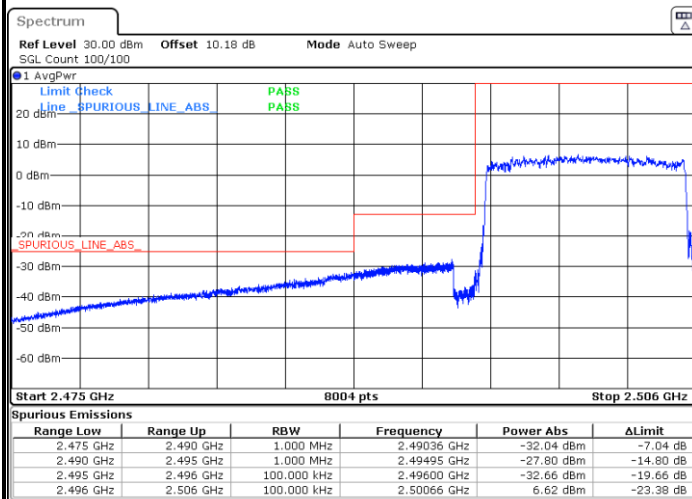
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

