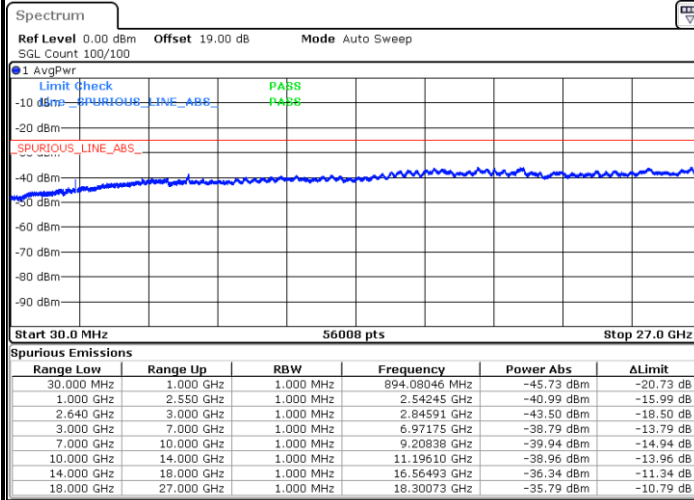




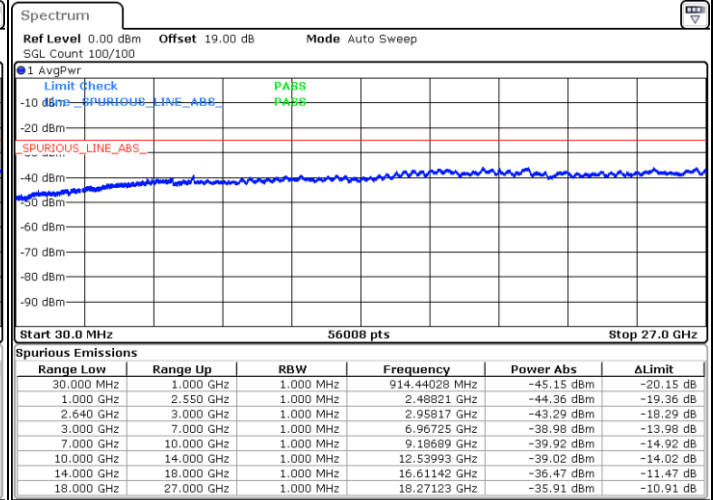
LTE Band 38 / 15MHz

Lowest Channel / QPSK



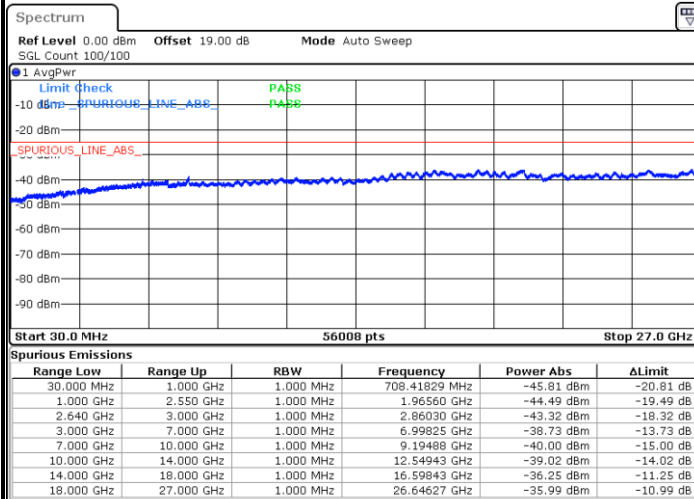
Date: 1.DEC.2019 00:10:11

Lowest Channel / 16QAM



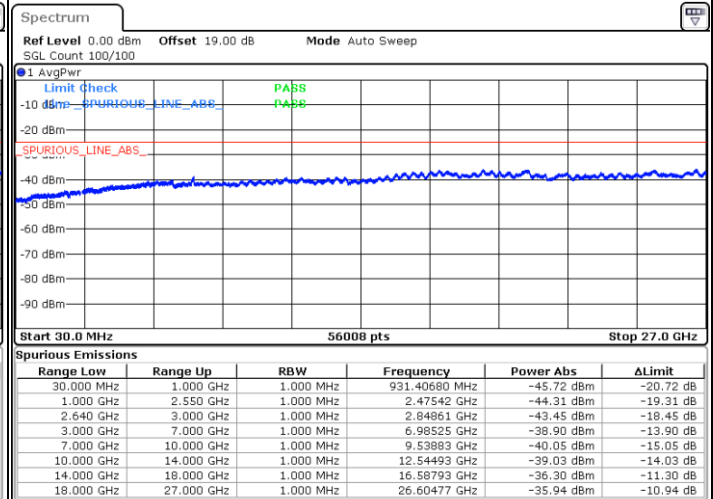
Date: 1.DEC.2019 00:09:19

Middle Channel / QPSK



Date: 1.DEC.2019 00:04:36

Middle Channel / 16QAM

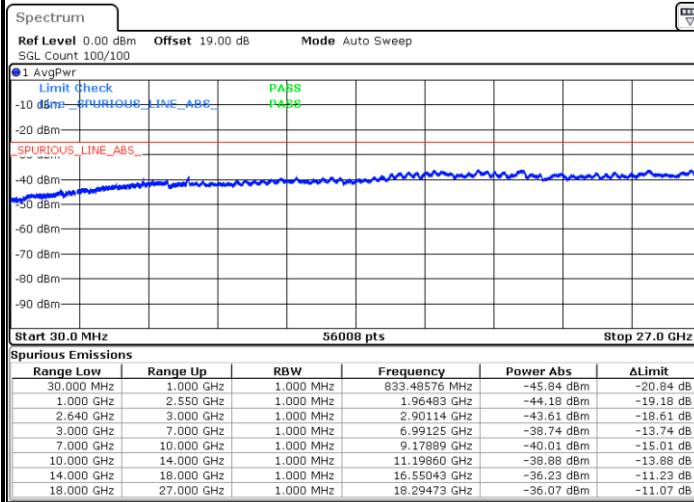


Date: 1.DEC.2019 00:06:01



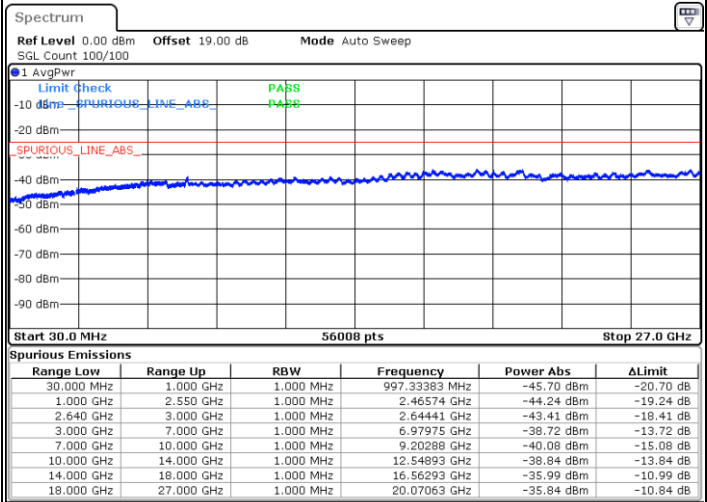
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 1.DEC.2019 00:11:26

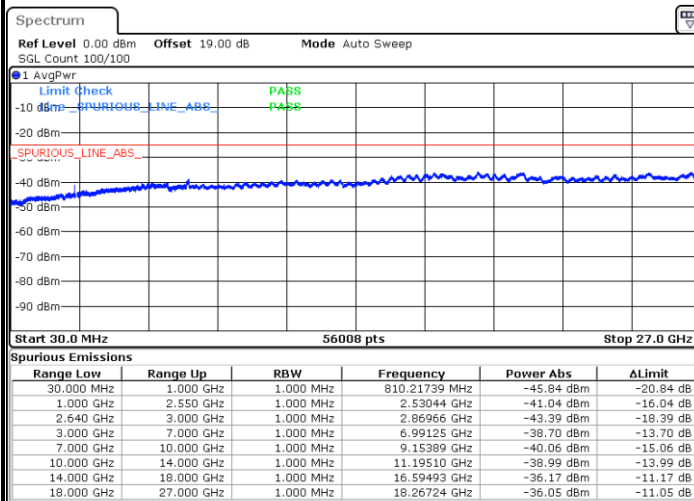
Highest Channel / 16QAM



Date: 1.DEC.2019 00:12:22

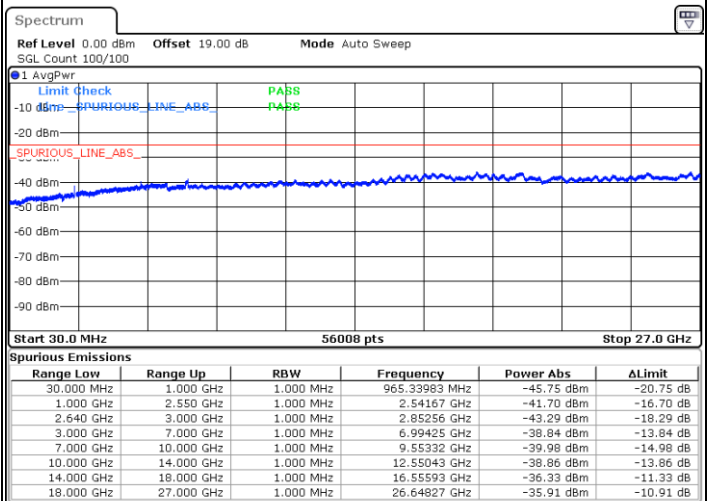
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 1.DEC.2019 00:22:14

Lowest Channel / 16QAM

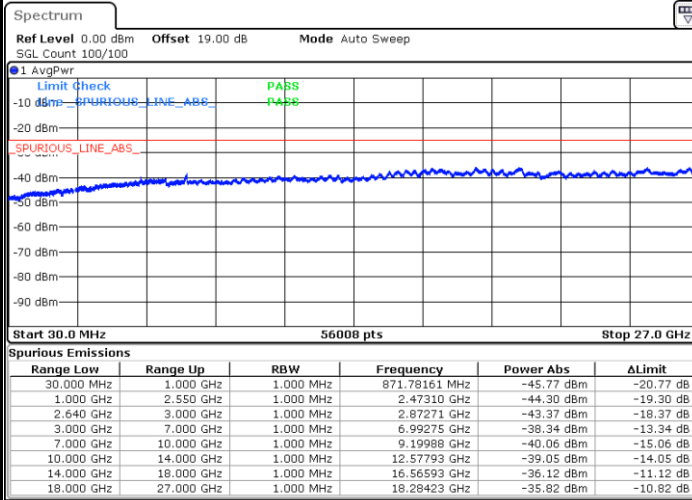


Date: 1.DEC.2019 00:21:12



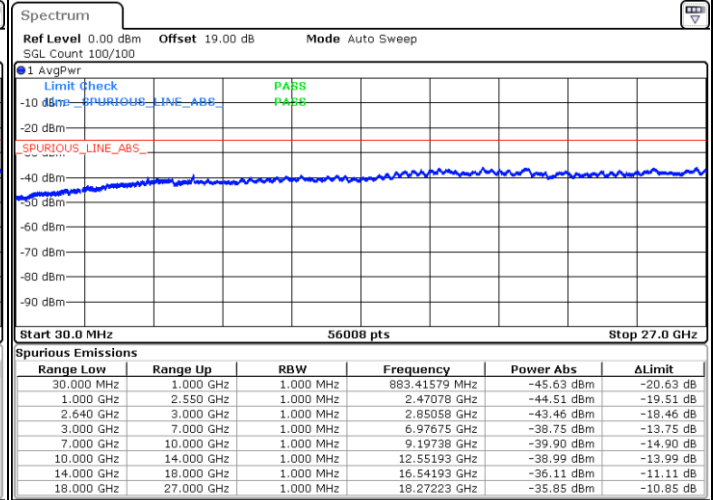
LTE Band 38 / 20MHz

Middle Channel / QPSK



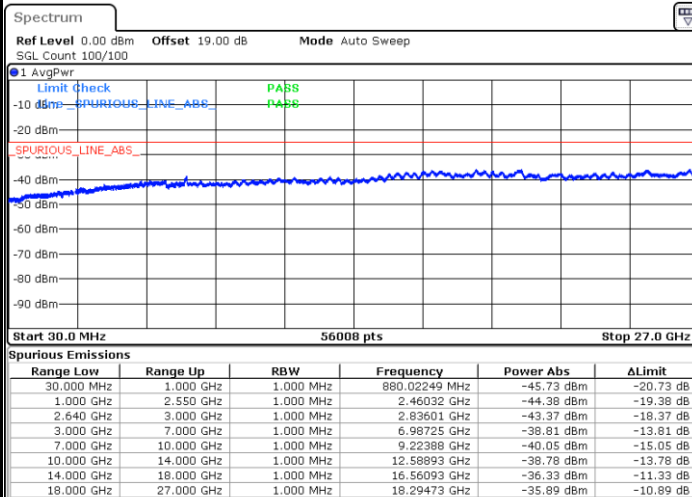
Date: 1.DEC.2019 00:15:01

Middle Channel / 16QAM



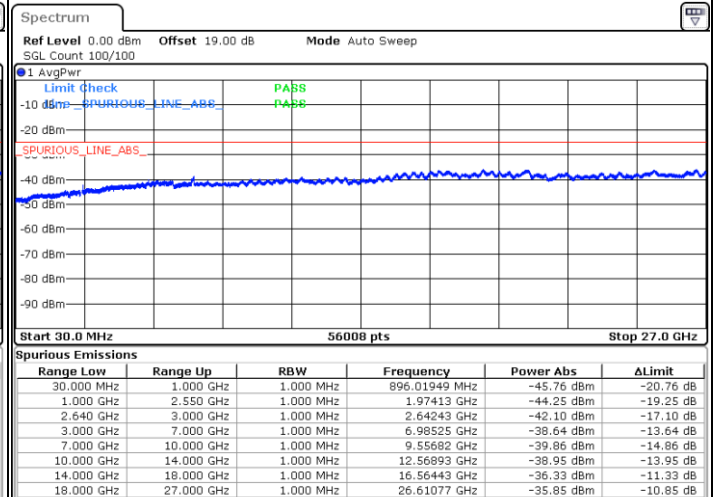
Date: 1.DEC.2019 00:16:12

Highest Channel / QPSK



Date: 1.DEC.2019 00:23:21

Highest Channel / 16QAM

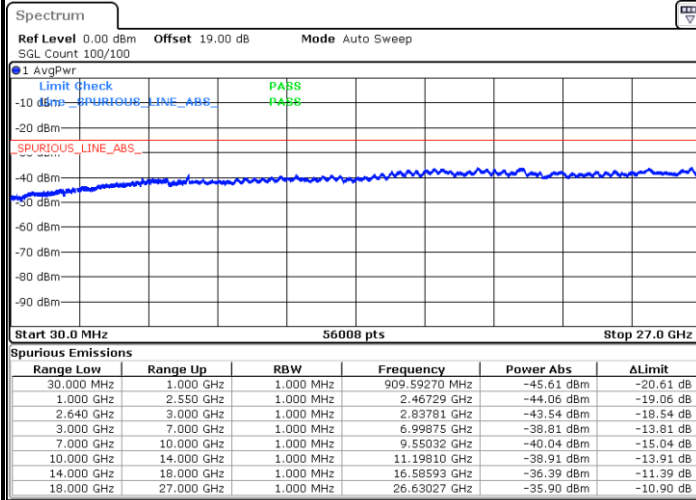


Date: 1.DEC.2019 00:24:35



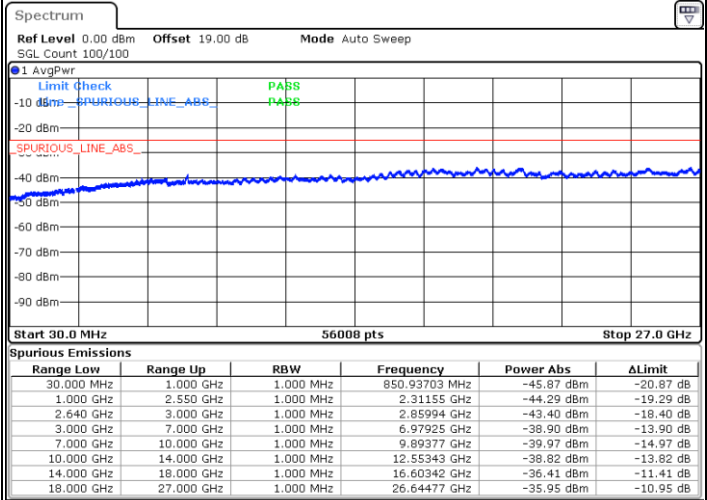
LTE Band 38 / 5MHz

Lowest Channel / 64QAM



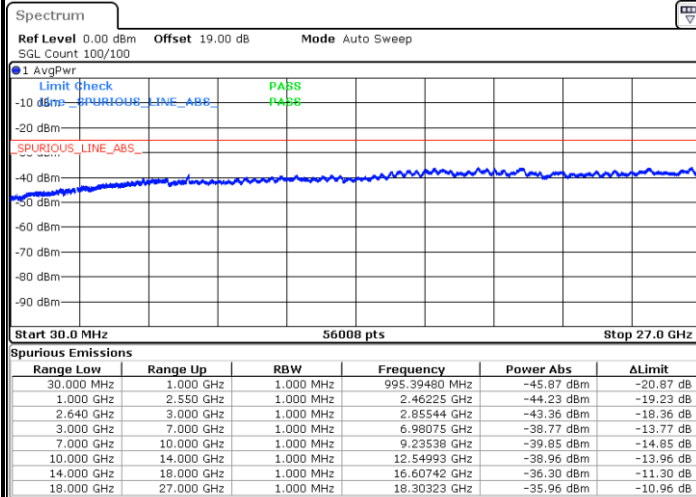
Date: 30.NOV.2019 23:46:11

Middle Channel / 64QAM



Date: 30.NOV.2019 23:45:12

Highest Channel / 64QAM

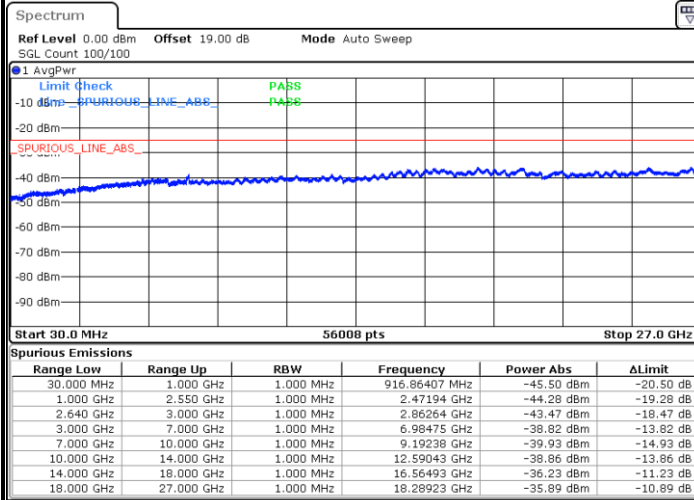


Date: 30.NOV.2019 23:51:59



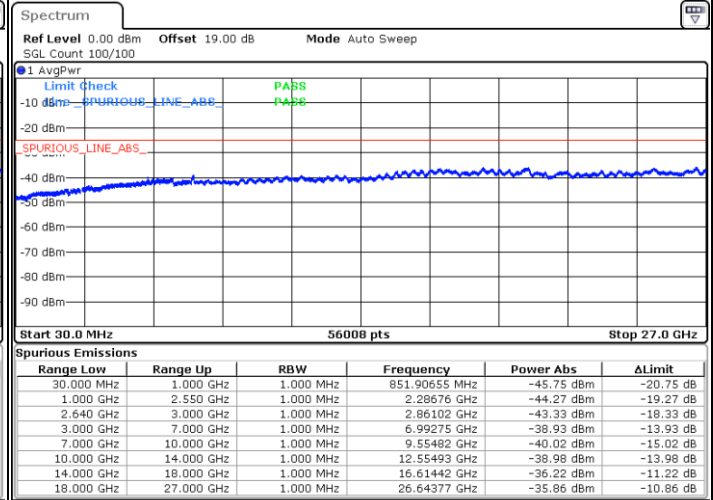
LTE Band 38 / 10MHz

Lowest Channel / 64QAM



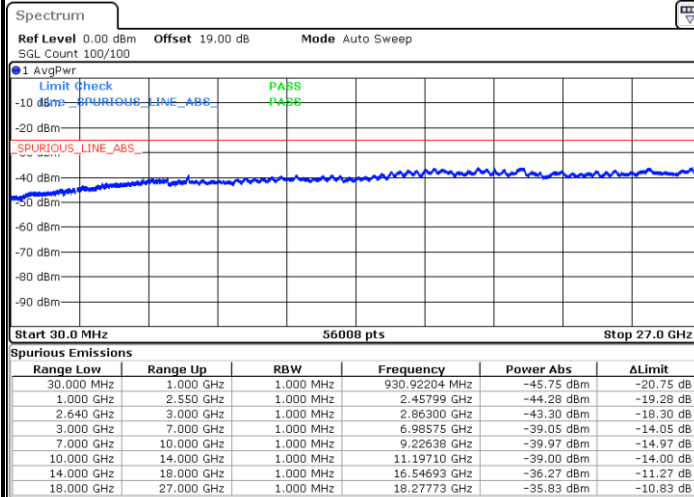
Date: 30.NOV.2019 23:56:20

Middle Channel / 64QAM



Date: 1.DEC.2019 00:03:09

Highest Channel / 64QAM

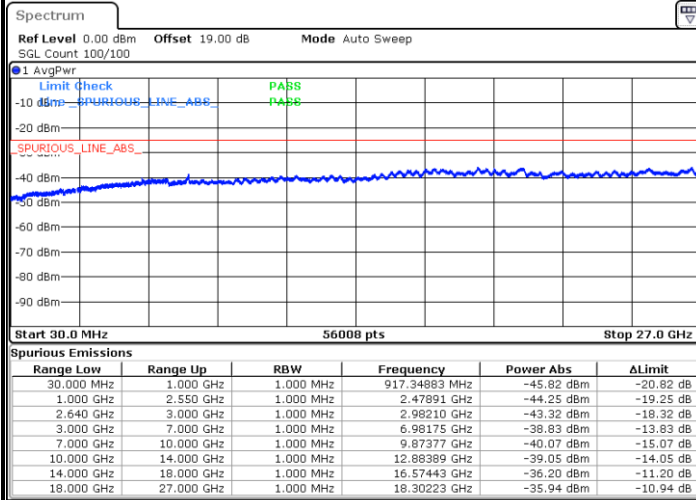


Date: 30.NOV.2019 23:57:29



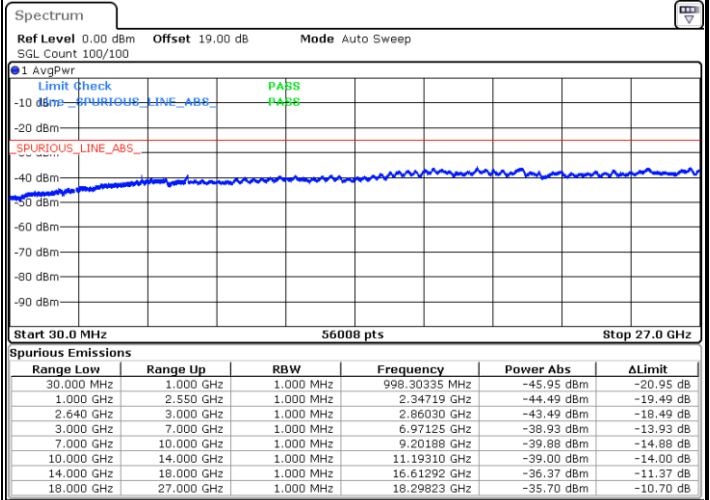
LTE Band 38 / 15MHz

Lowest Channel / 64QAM



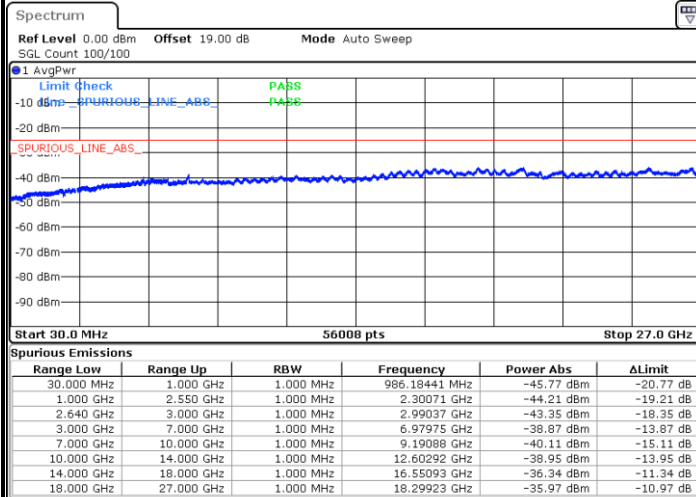
Date: 1.DEC.2019 00:08:10

Middle Channel / 64QAM



Date: 1.DEC.2019 00:07:03

Highest Channel / 64QAM

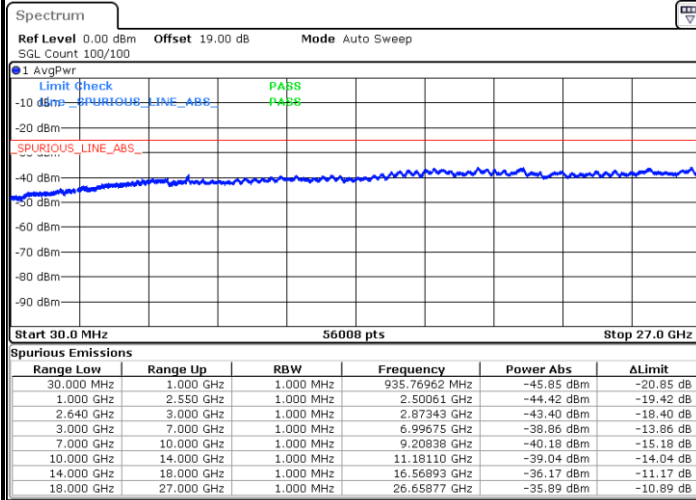


Date: 1.DEC.2019 00:13:27



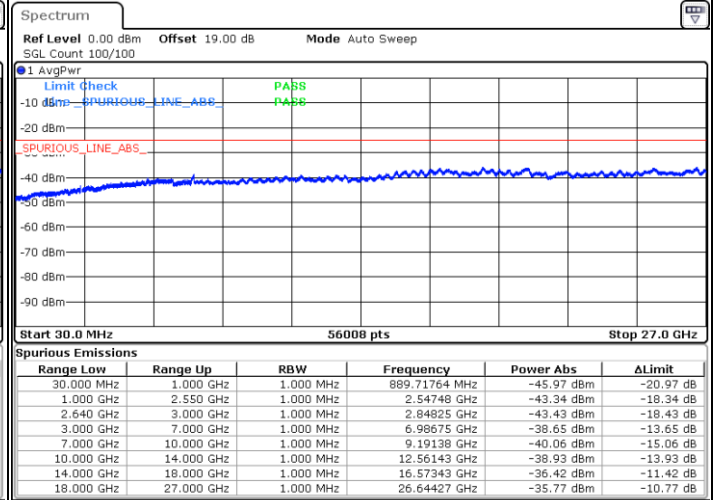
LTE Band 38 / 20MHz

Lowest Channel / 64QAM



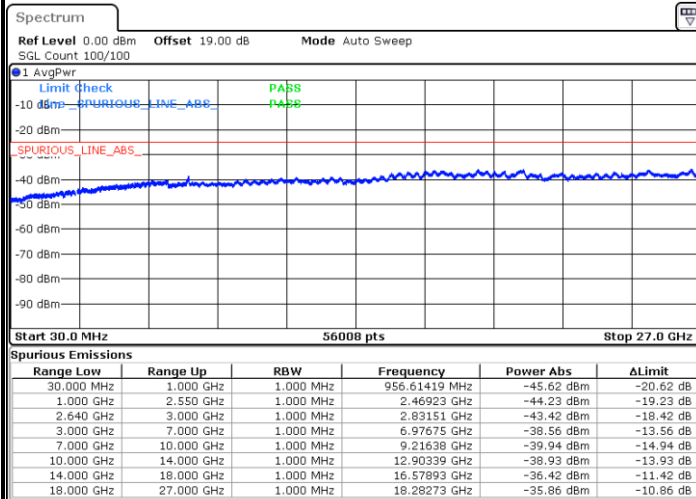
Date: 1.DEC.2019 00:19:40

Middle Channel / 64QAM



Date: 1.DEC.2019 00:18:43

Highest Channel / 64QAM



Date: 1.DEC.2019 00:25:29

**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	0.0002	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0062	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0057	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0045	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0017	

Note:

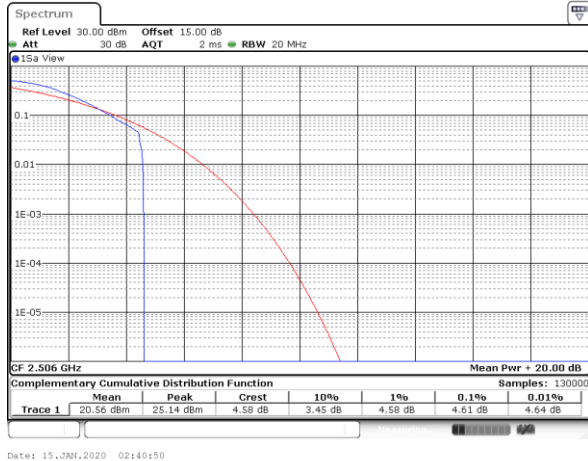
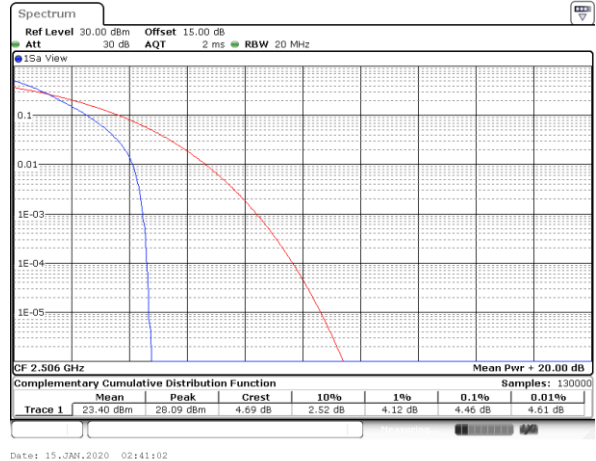
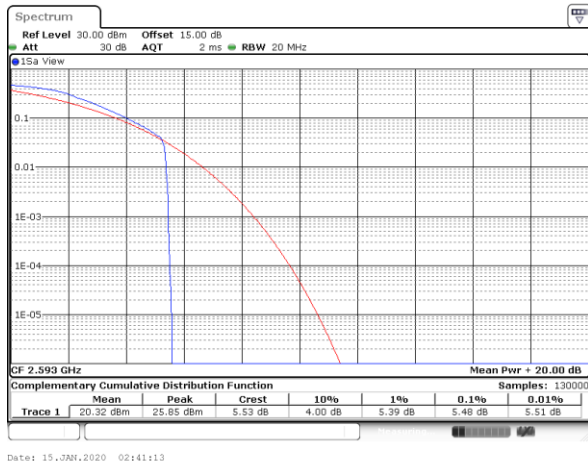
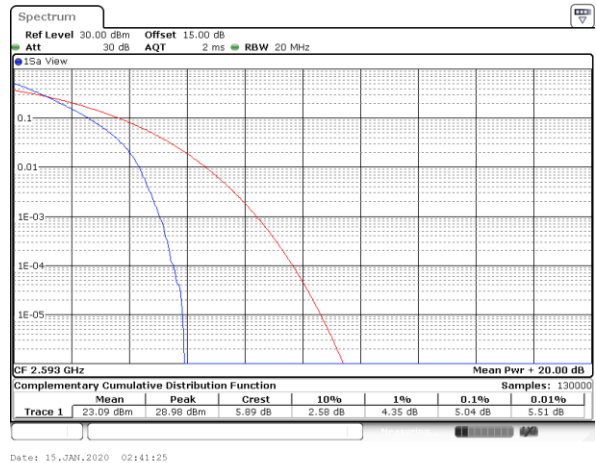
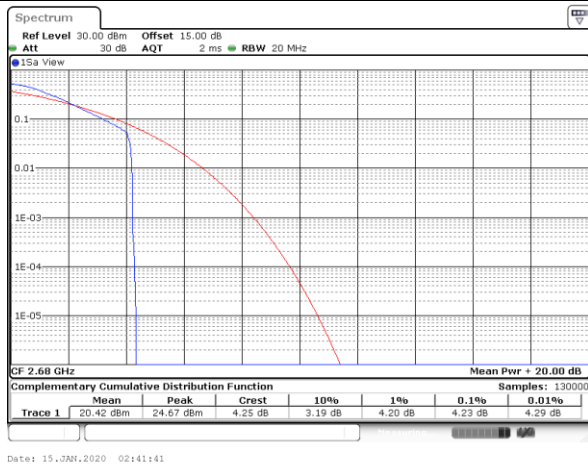
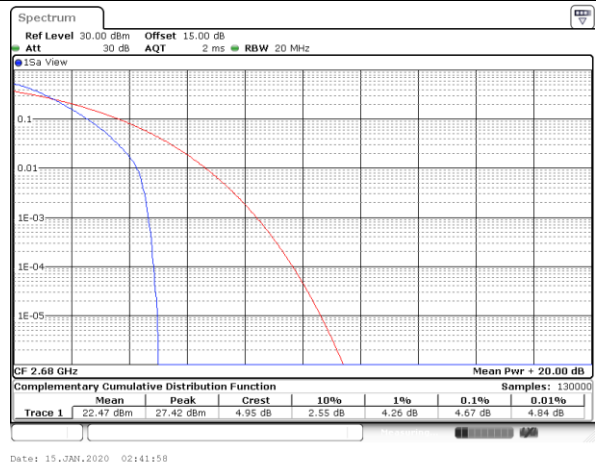
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

Peak-to-Average Ratio

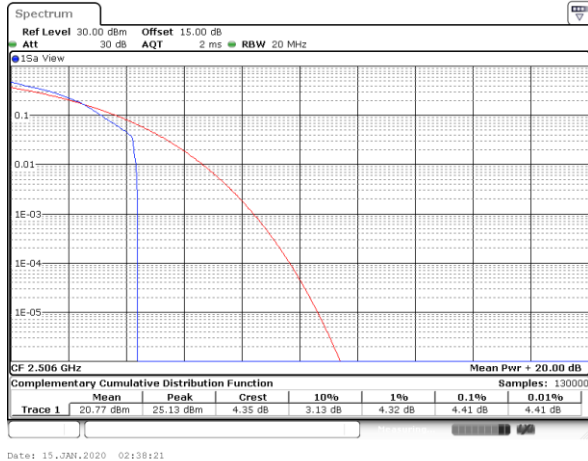
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.61	4.46	4.41	6.99	PASS
Middle CH	5.48	5.04	6.70	6.41	
Highest CH	4.23	4.67	4.84	6.81	
Mode	LTE Band 41 / 20MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	4.29	6.43	-	-	PASS
Middle CH	5.59	7.30	-	-	
Highest CH	4.52	5.57	-	-	

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


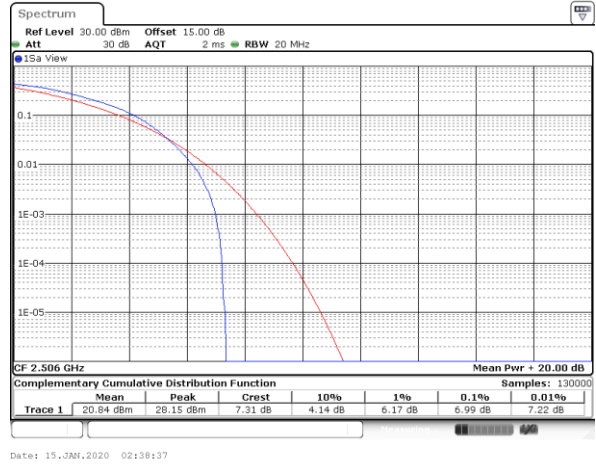


LTE Band 41 / 20MHz / 16QAM

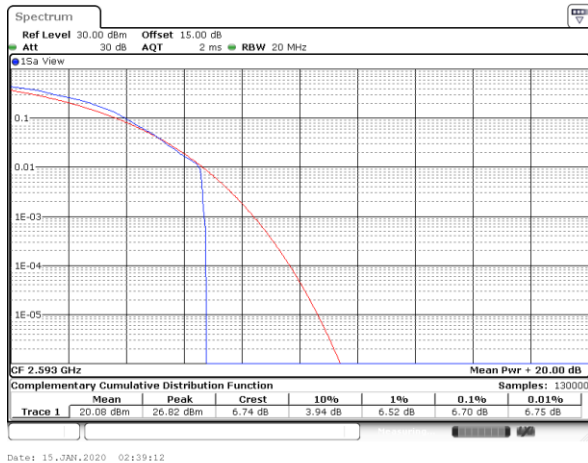
Lowest Channel / 1RB



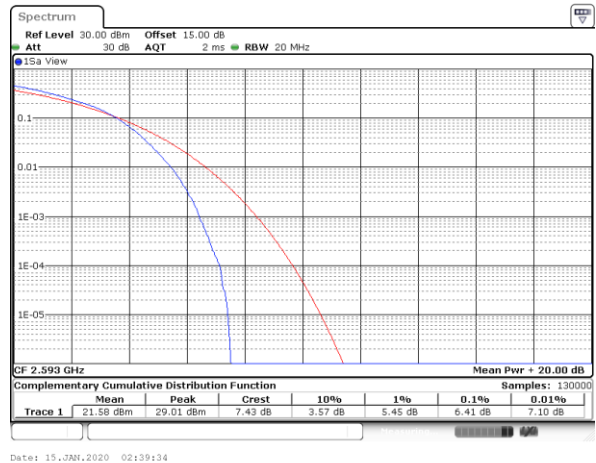
Lowest Channel / Full RB



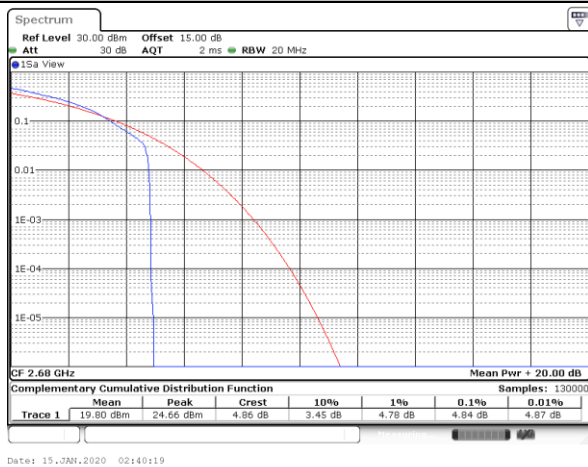
Middle Channel / 1RB



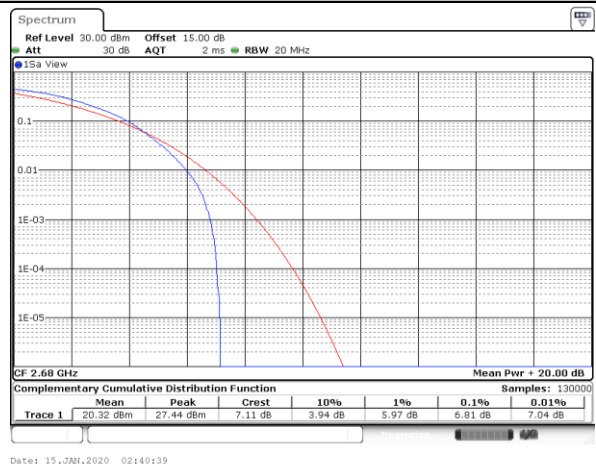
Middle Channel / Full RB



Highest Channel / 1RB



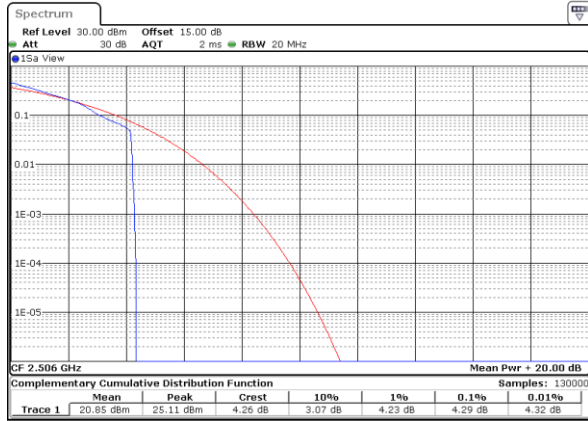
Highest Channel / Full RB



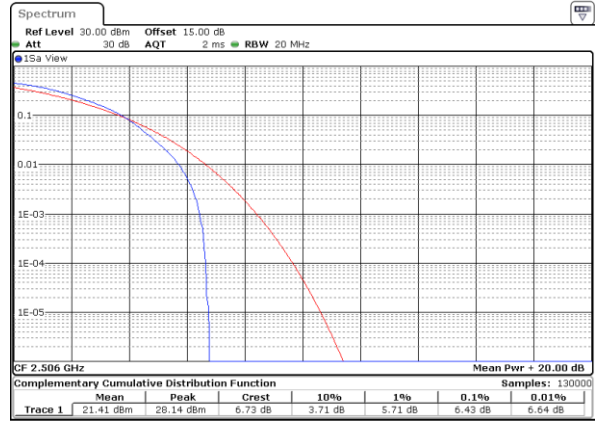


LTE Band 41 / 20MHz / 64QAM

Lowest Channel / 1RB



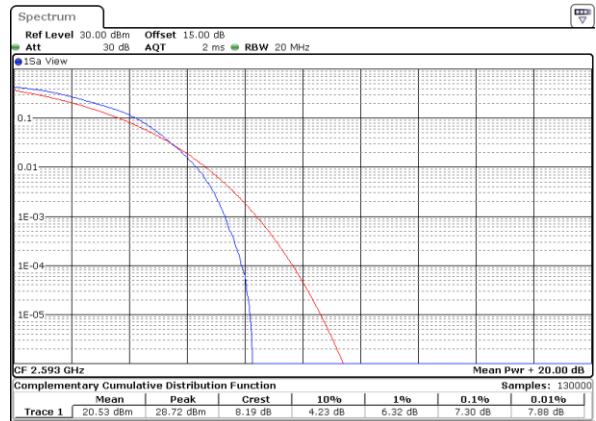
Lowest Channel / Full RB



Middle Channel / 1RB



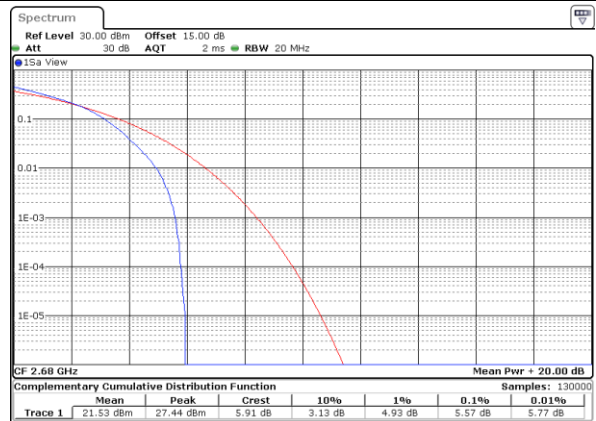
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



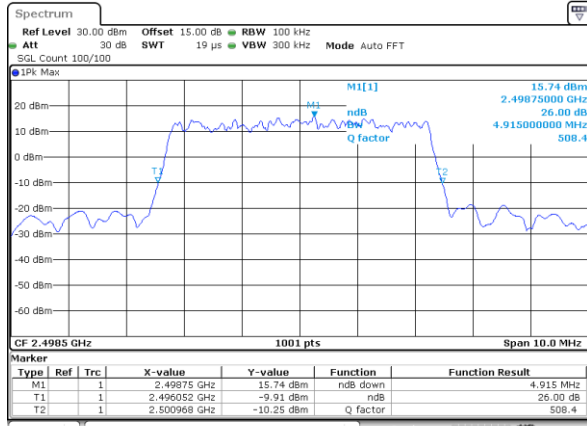
**26dB Bandwidth**

Mode	LTE Band 41 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.92	4.85	9.83	9.69	14.27	14.45	18.86	18.90
Middle CH	4.83	4.88	9.81	9.65	14.15	14.33	18.86	19.18
Highest CH	4.88	4.82	9.73	9.63	14.42	14.15	18.94	18.90
Mode	LTE Band 41 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	4.82		9.63		14.15		18.78	
Middle CH	4.87		9.77		14.18		19.02	
Highest CH	4.90		9.65		14.30		18.78	



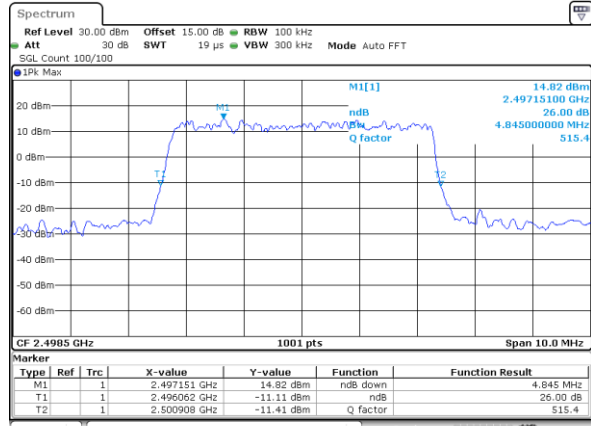
LTE Band 41

Lowest Channel / 5MHz / QPSK



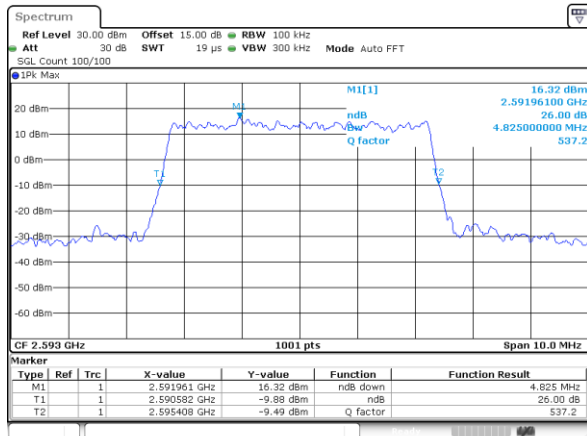
Date: 15.JAN.2020 02:20:27

Lowest Channel / 5MHz / 16QAM



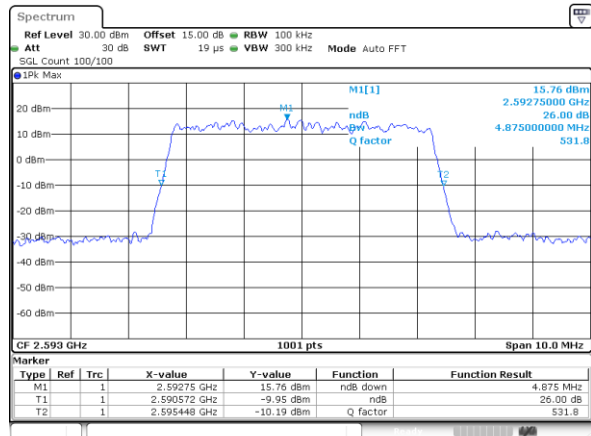
Date: 15.JAN.2020 02:20:38

Middle Channel / 5MHz / QPSK



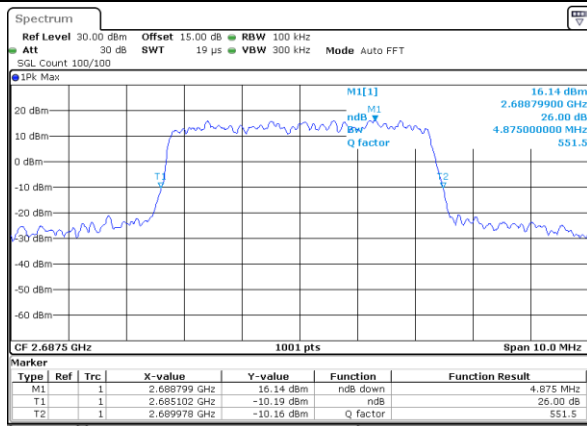
Date: 15.JAN.2020 02:21:11

Middle Channel / 5MHz / 16QAM



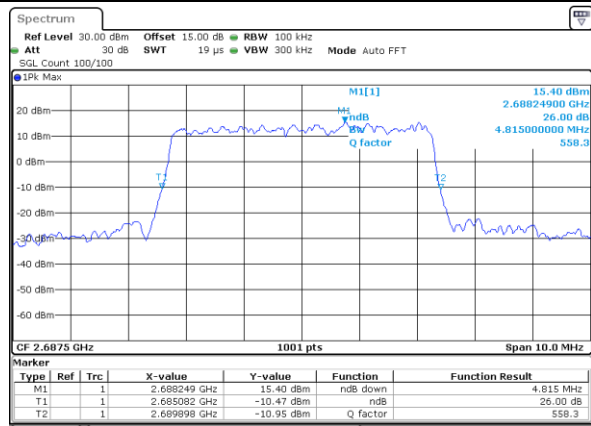
Date: 15.JAN.2020 02:21:22

Highest Channel / 5MHz / QPSK



Date: 15.JAN.2020 02:21:55

Highest Channel / 5MHz / 16QAM

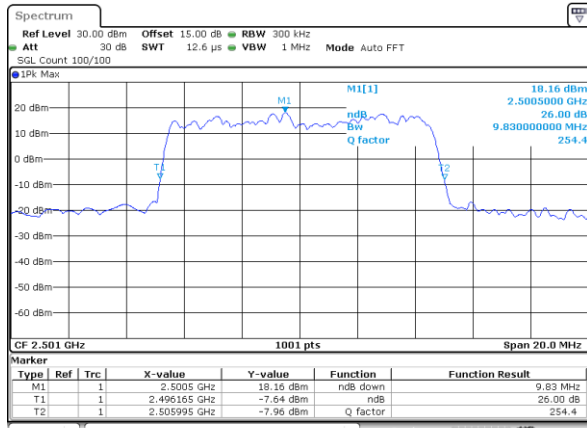


Date: 15.JAN.2020 02:22:06



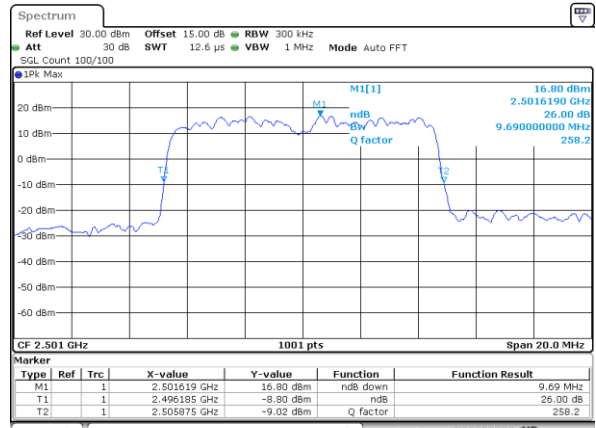
LTE Band 41

Lowest Channel / 10MHz / QPSK



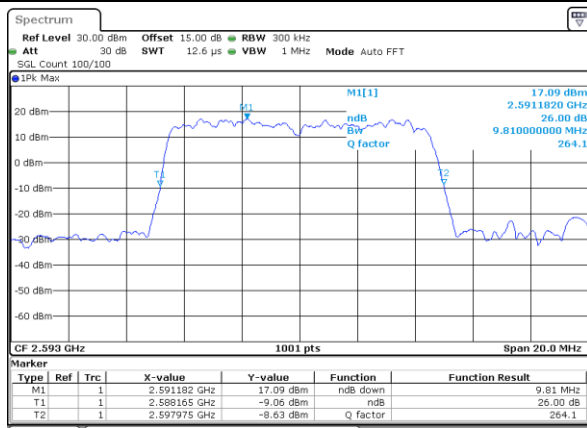
Date: 15.JAN.2020 02:22:40

Lowest Channel / 10MHz / 16QAM



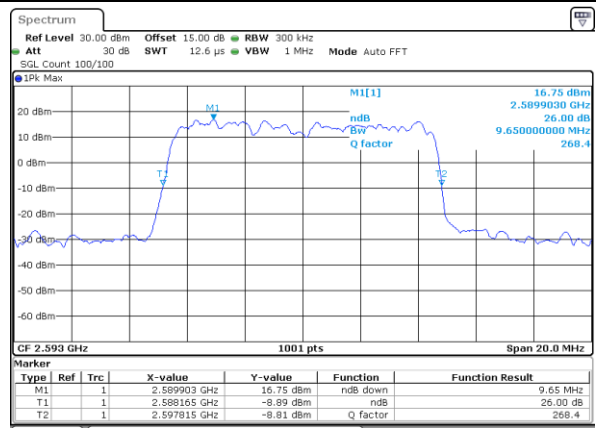
Date: 15.JAN.2020 02:22:51

Middle Channel / 10MHz / QPSK



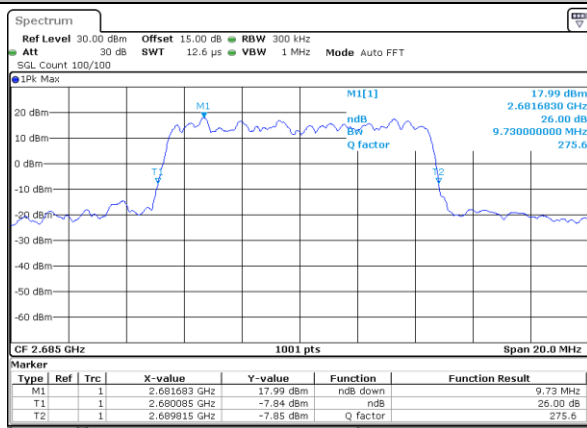
Date: 15.JAN.2020 02:23:24

Middle Channel / 10MHz / 16QAM



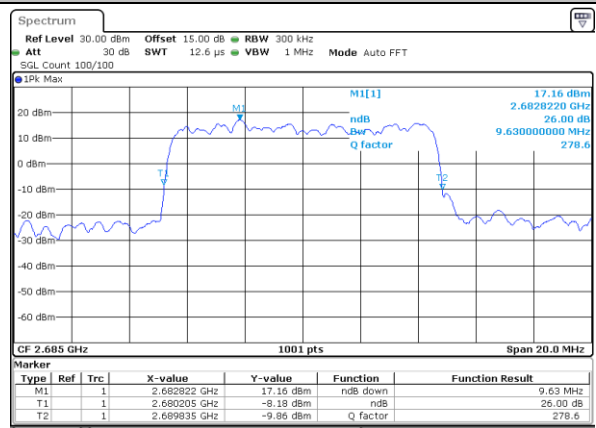
Date: 15.JAN.2020 02:23:35

Highest Channel / 10MHz / QPSK



Date: 15.JAN.2020 02:24:08

Highest Channel / 10MHz / 16QAM

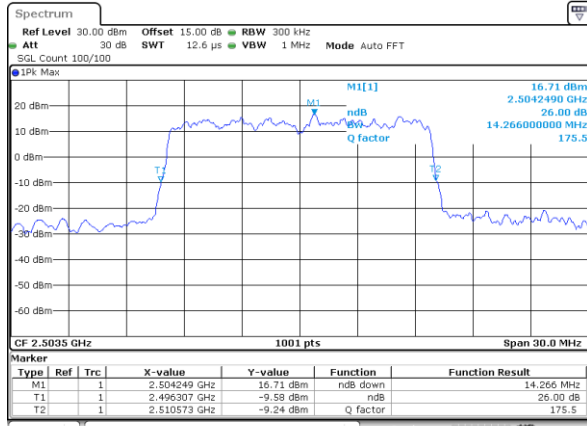


Date: 15.JAN.2020 02:24:19



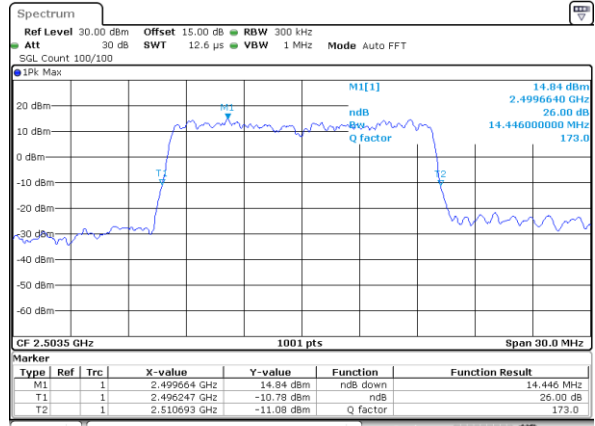
LTE Band 41

Lowest Channel / 15MHz / QPSK



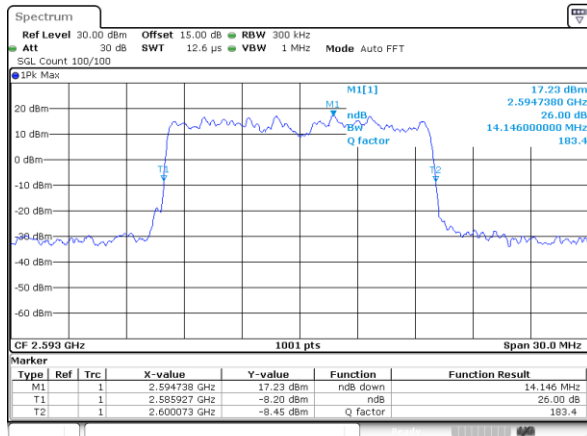
Date: 15.JAN.2020 02:24:52

Lowest Channel / 15MHz / 16QAM



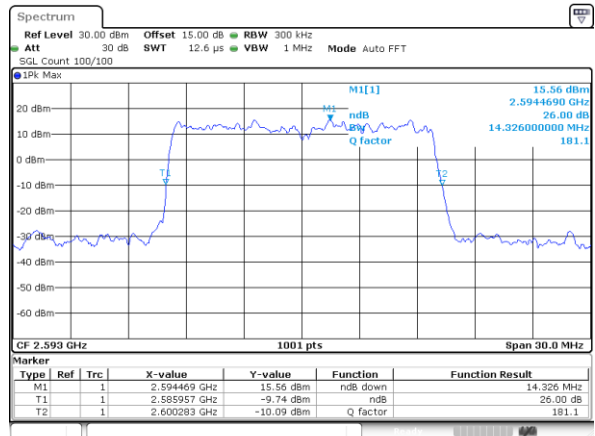
Date: 15.JAN.2020 02:25:03

Middle Channel / 15MHz / QPSK



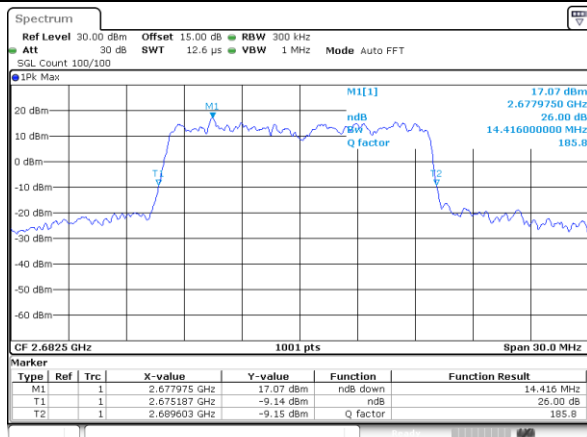
Date: 15.JAN.2020 02:25:36

Middle Channel / 15MHz / 16QAM



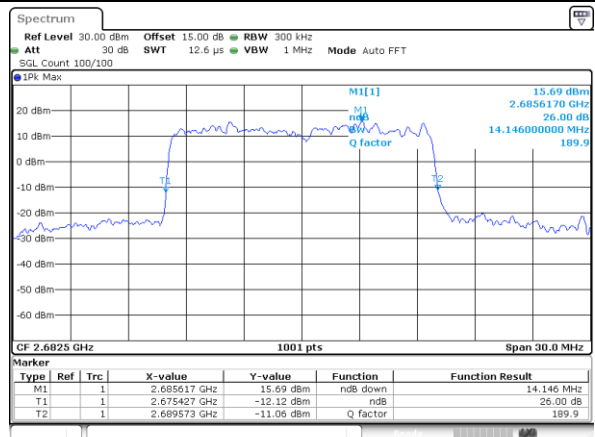
Date: 15.JAN.2020 02:25:47

Highest Channel / 15MHz / QPSK



Date: 15.JAN.2020 02:26:21

Highest Channel / 15MHz / 16QAM

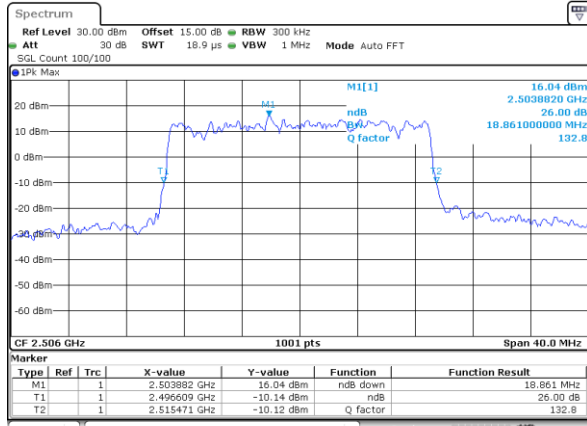


Date: 15.JAN.2020 02:26:32



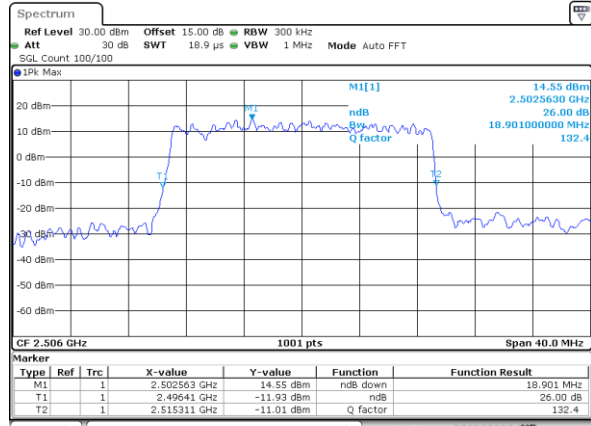
LTE Band 41

Lowest Channel / 20MHz / QPSK



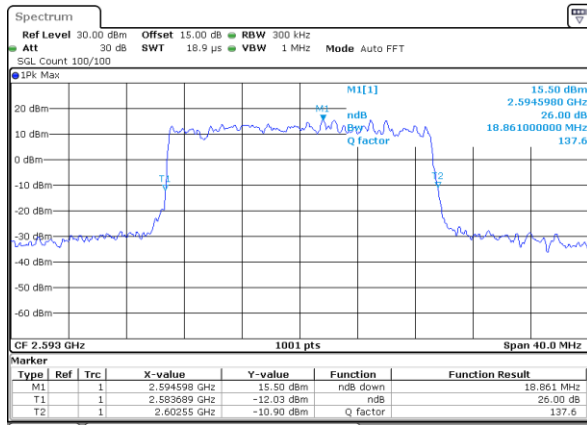
Date: 15.JAN.2020 02:27:06

Lowest Channel / 20MHz / 16QAM



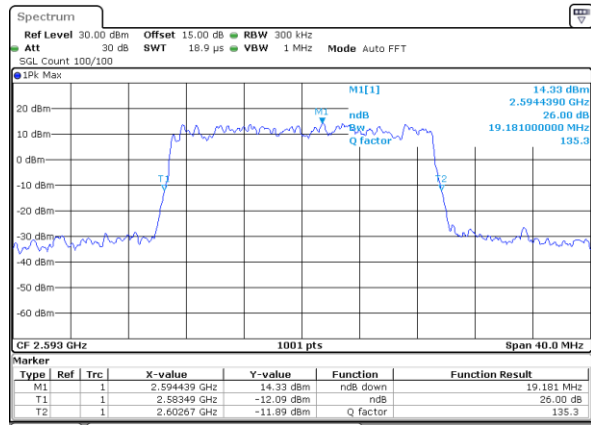
Date: 15.JAN.2020 02:27:17

Middle Channel / 20MHz / QPSK



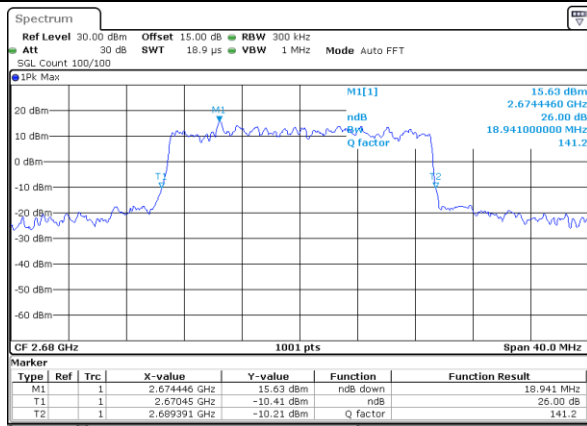
Date: 15.JAN.2020 02:27:50

Middle Channel / 20MHz / 16QAM



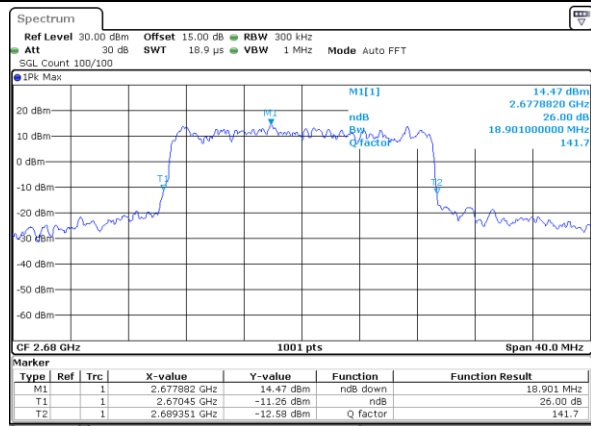
Date: 15.JAN.2020 02:28:01

Highest Channel / 20MHz / QPSK



Date: 15.JAN.2020 02:28:35

Highest Channel / 20MHz / 16QAM

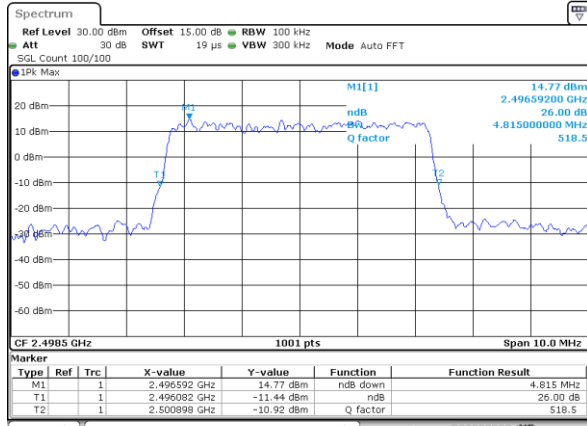


Date: 15.JAN.2020 02:28:46

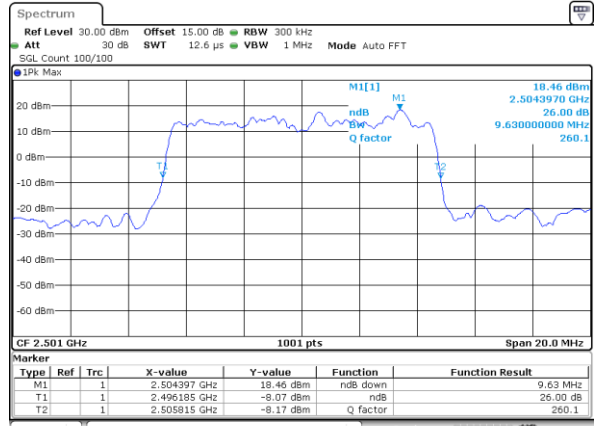


LTE Band 41

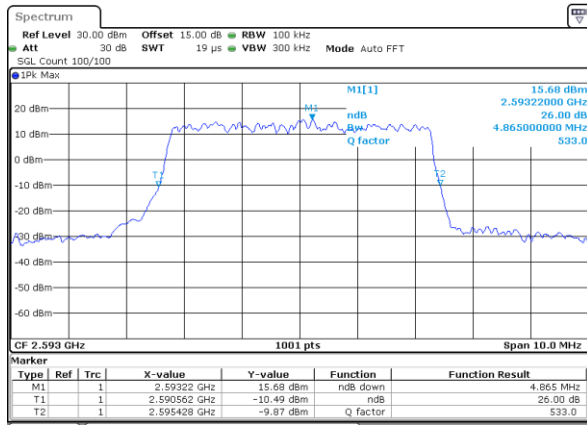
Lowest Channel / 5MHz / 64QAM



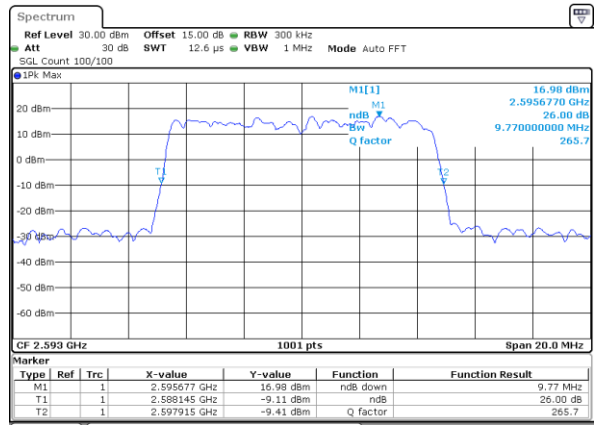
Lowest Channel / 10MHz / 64QAM



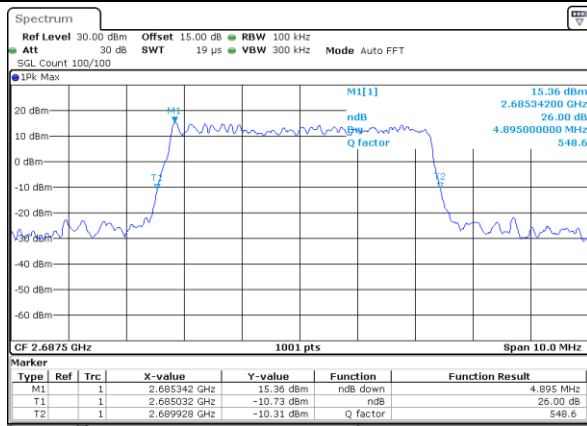
Middle Channel / 5MHz / 64QAM



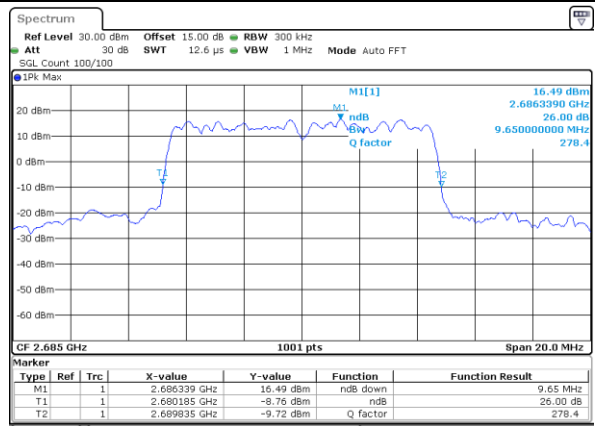
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



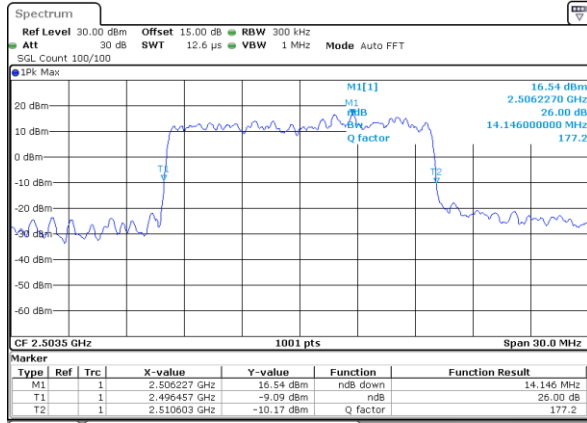
Highest Channel / 10MHz / 64QAM





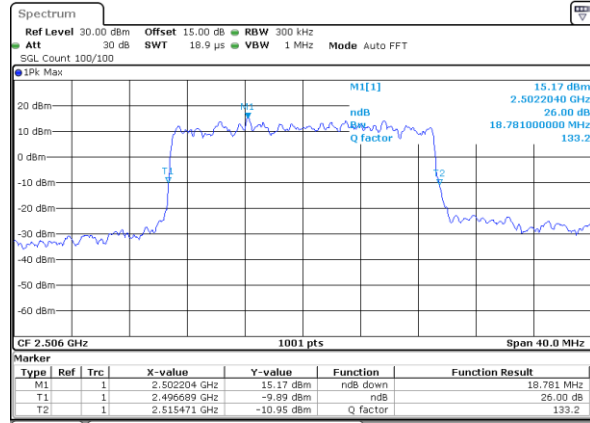
LTE Band 41

Lowest Channel / 15MHz / 64QAM



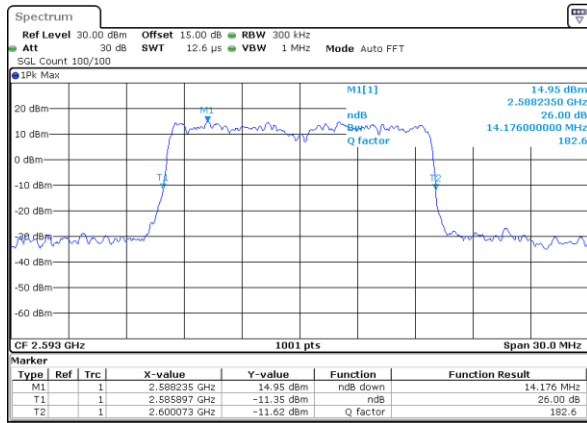
Date: 15.JAN.2020 02:31:21

Lowest Channel / 20MHz / 64QAM



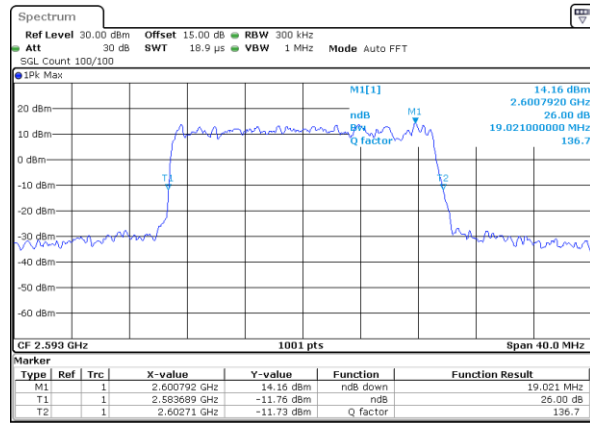
Date: 15.JAN.2020 02:32:27

Middle Channel / 15MHz / 64QAM



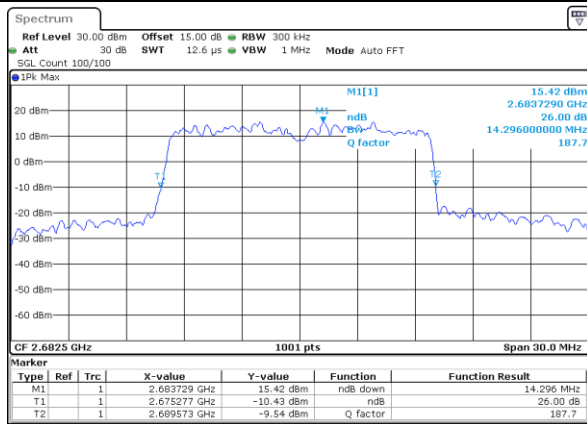
Date: 15.JAN.2020 02:31:43

Middle Channel / 20MHz / 64QAM



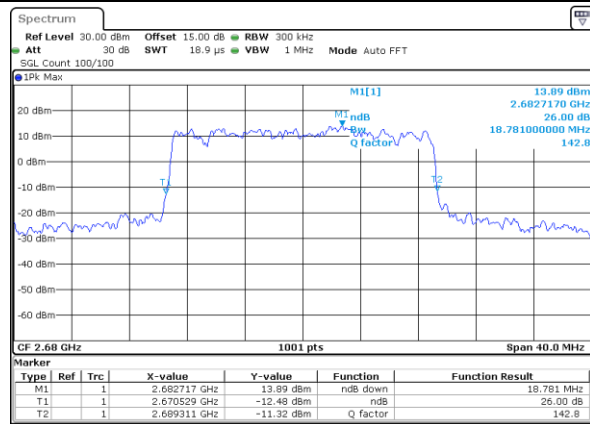
Date: 15.JAN.2020 02:32:49

Highest Channel / 15MHz / 64QAM



Date: 15.JAN.2020 02:32:04

Highest Channel / 20MHz / 64QAM



Date: 15.JAN.2020 02:33:11

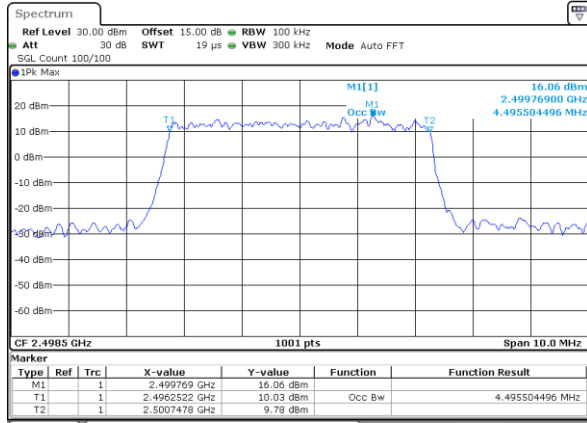
**Occupied Bandwidth**

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	4.48	9.07	8.97	13.43	13.46	17.90	17.74
Middle CH	4.48	4.51	9.03	9.01	13.43	13.40	17.82	17.86
Highest CH	4.49	4.50	9.03	9.03	13.46	13.49	17.94	17.86
Mode	LTE Band 41 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	4.47		9.09		13.34		17.94	
Middle CH	4.47		9.05		13.58		17.86	
Highest CH	4.50		8.97		13.49		17.90	



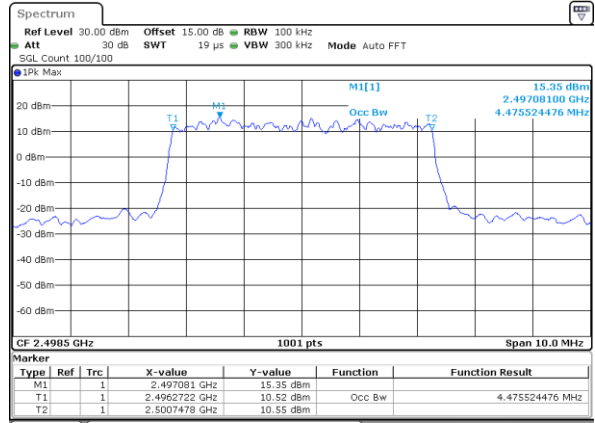
LTE Band 41

Lowest Channel / 5MHz / QPSK



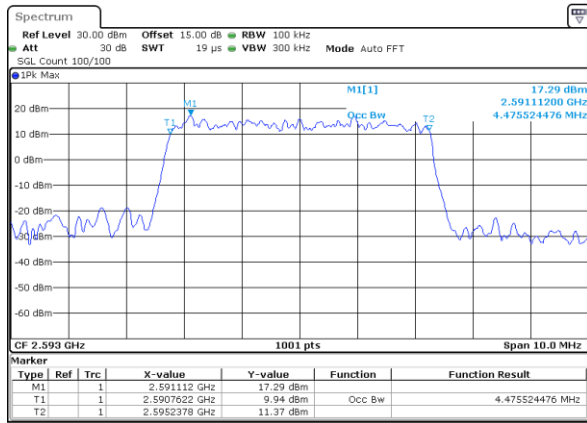
Date: 15.JAN.2020 02:20:04

Lowest Channel / 5MHz / 16QAM



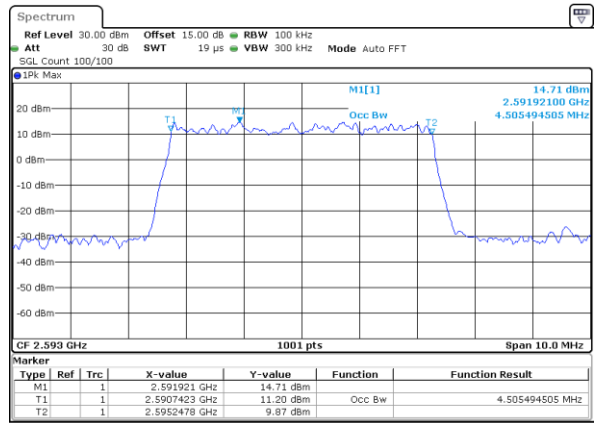
Date: 15.JAN.2020 02:20:16

Middle Channel / 5MHz / QPSK



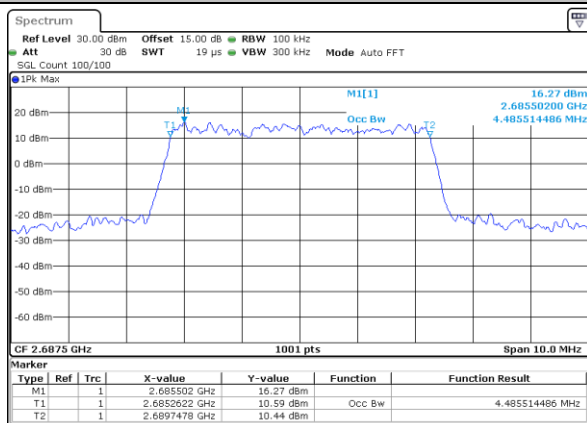
Date: 15.JAN.2020 02:20:49

Middle Channel / 5MHz / 16QAM



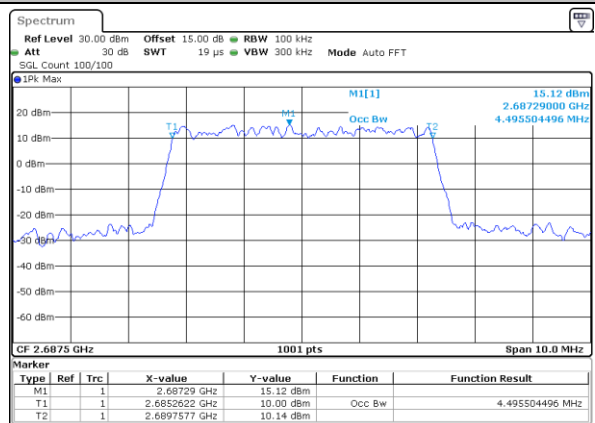
Date: 15.JAN.2020 02:21:00

Highest Channel / 5MHz / QPSK



Date: 15.JAN.2020 02:21:33

Highest Channel / 5MHz / 16QAM

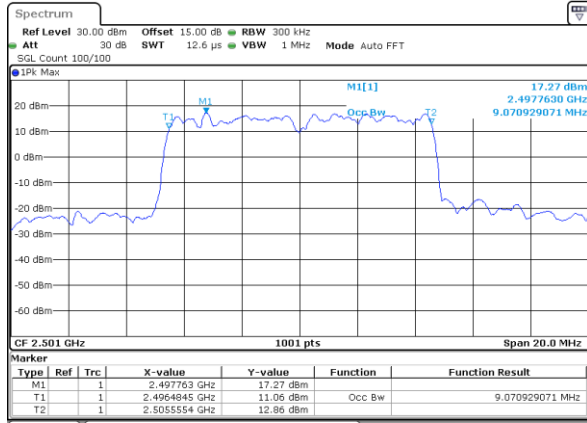


Date: 15.JAN.2020 02:21:44



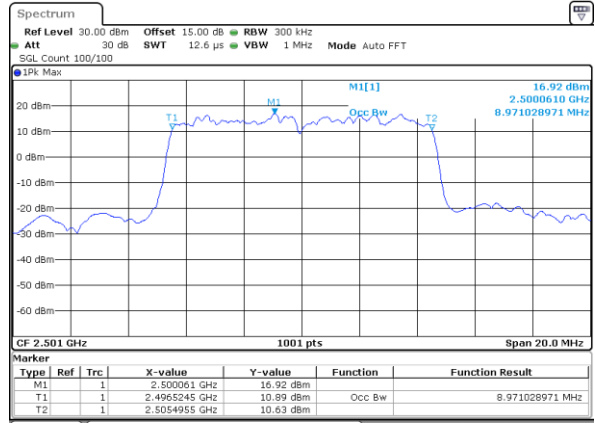
LTE Band 41

Lowest Channel / 10MHz / QPSK



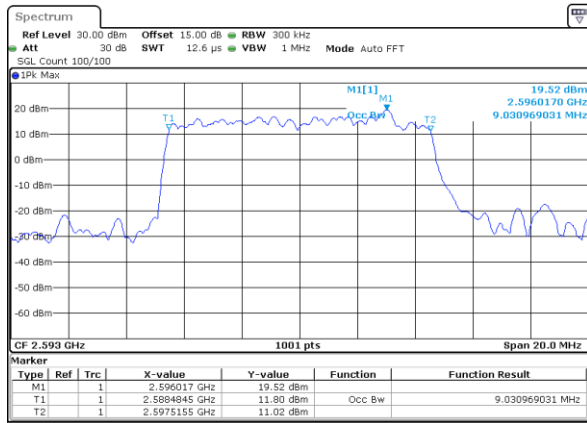
Date: 15_JAN_2020 02:22:17

Lowest Channel / 10MHz / 16QAM



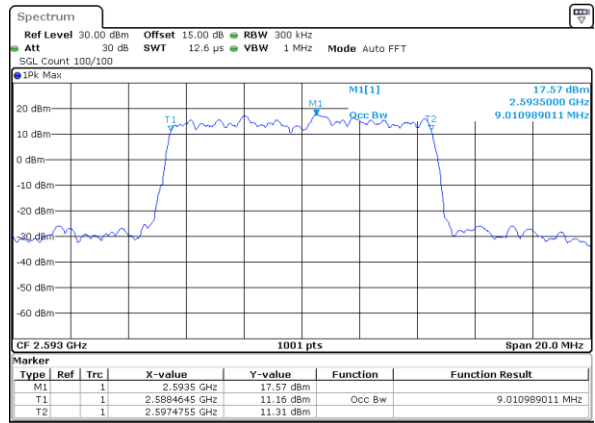
Date: 15_JAN_2020 02:22:29

Middle Channel / 10MHz / QPSK



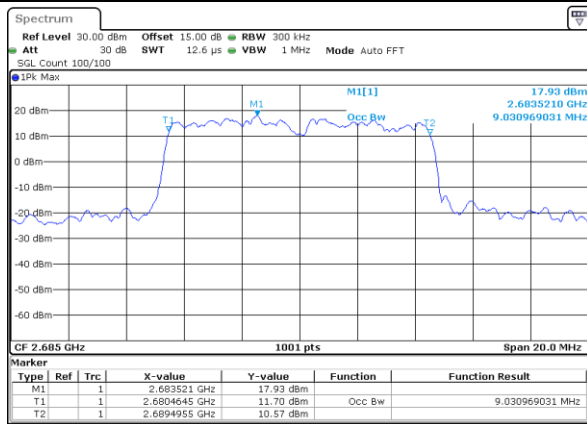
Date: 15_JAN_2020 02:23:02

Middle Channel / 10MHz / 16QAM



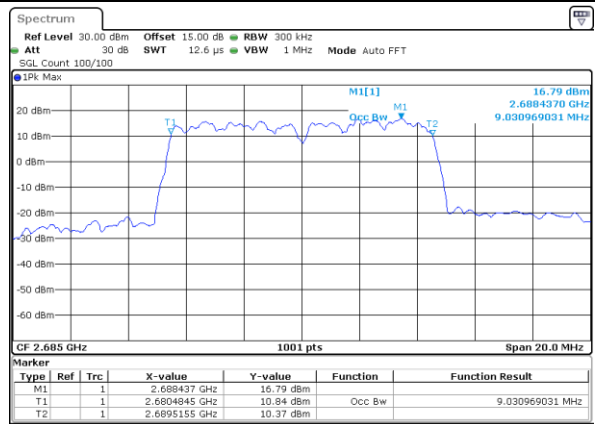
Date: 15_JAN_2020 02:23:13

Highest Channel / 10MHz / QPSK



Date: 15_JAN_2020 02:23:46

Highest Channel / 10MHz / 16QAM

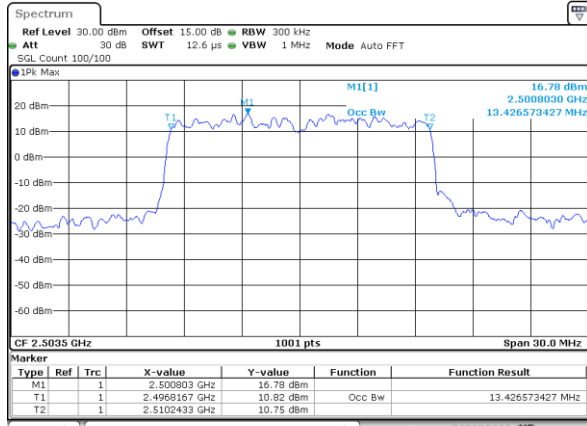


Date: 15_JAN_2020 02:23:57



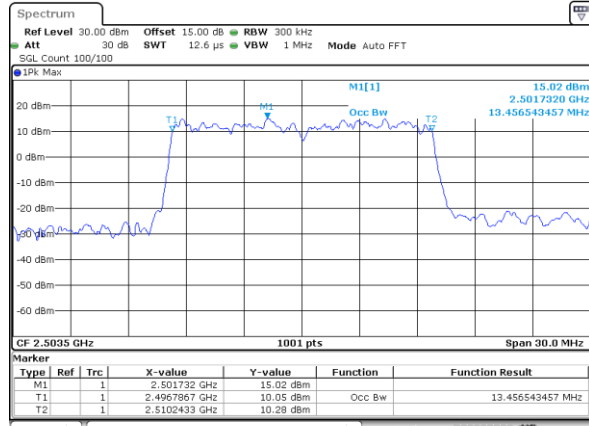
LTE Band 41

Lowest Channel / 15MHz / QPSK



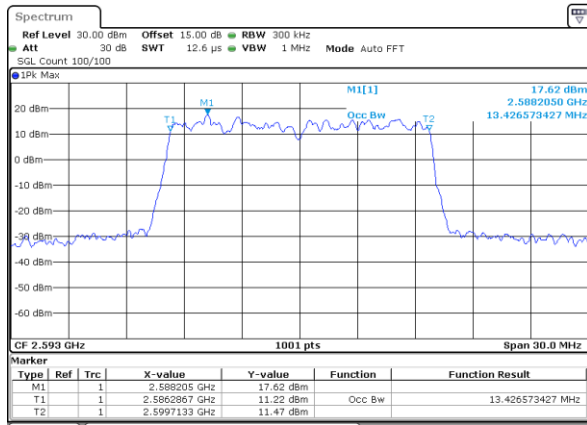
Date: 15.JAN.2020 02:24:30

Lowest Channel / 15MHz / 16QAM



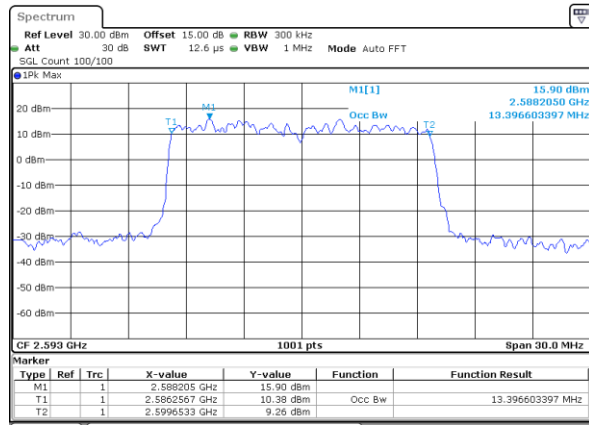
Date: 15.JAN.2020 02:24:41

Middle Channel / 15MHz / QPSK



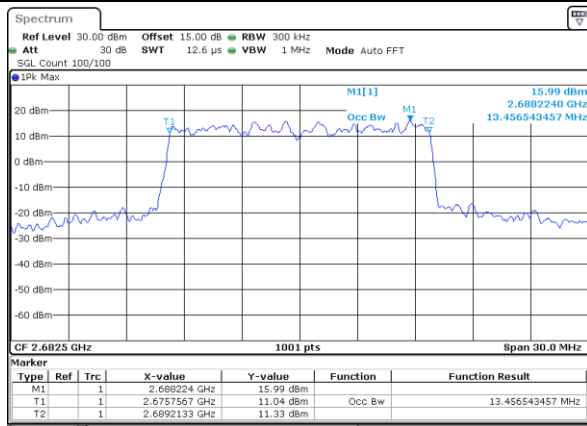
Date: 15.JAN.2020 02:25:14

Middle Channel / 15MHz / 16QAM



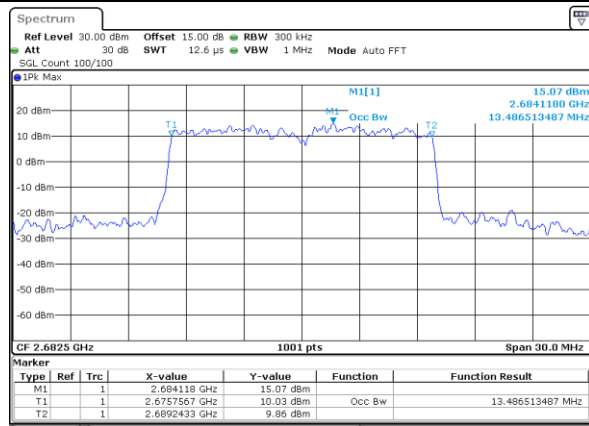
Date: 15.JAN.2020 02:25:25

Highest Channel / 15MHz / QPSK



Date: 15.JAN.2020 02:25:59

Highest Channel / 15MHz / 16QAM



Date: 15.JAN.2020 02:26:10