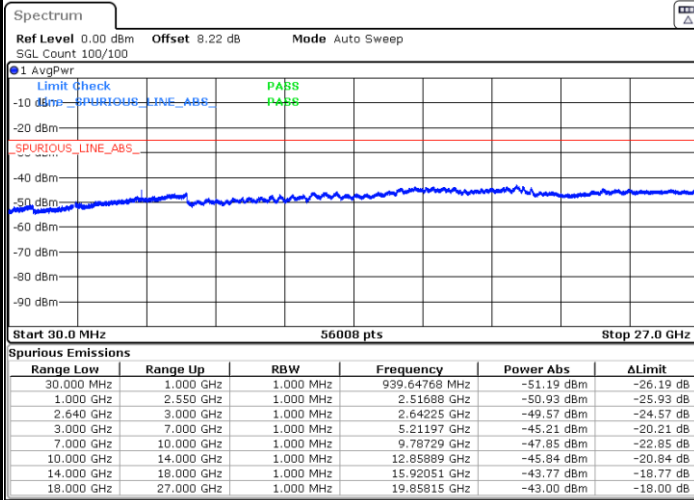




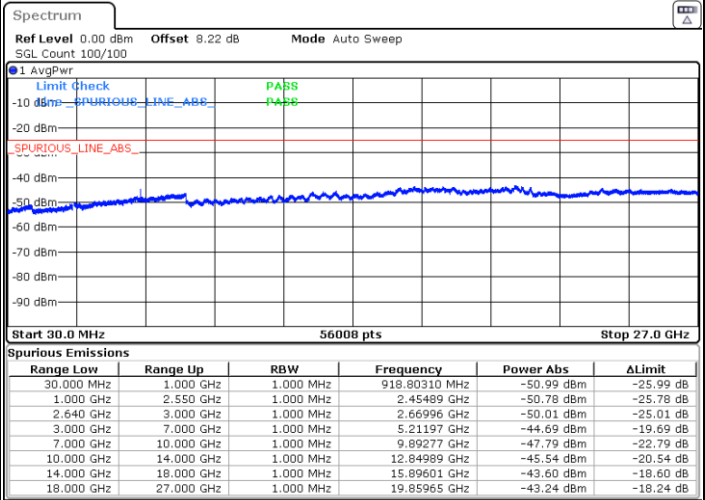
LTE Band 38 / 15MHz

Highest Channel / QPSK



Date: 5 JAN 2020 00:19:32

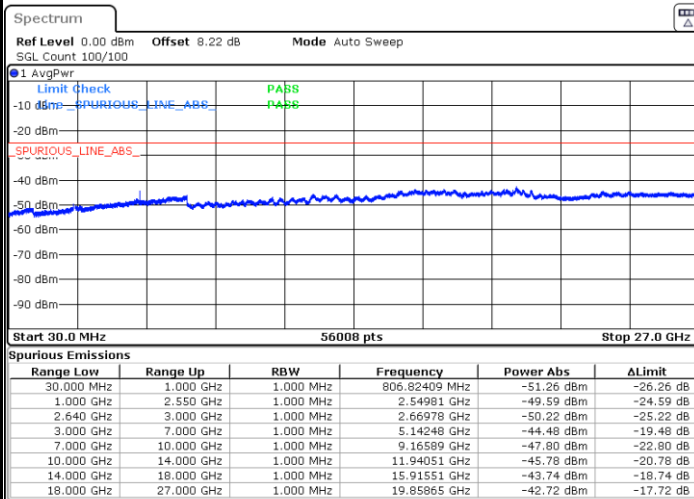
Highest Channel / 16QAM



Date: 5 JAN 2020 00:20:26

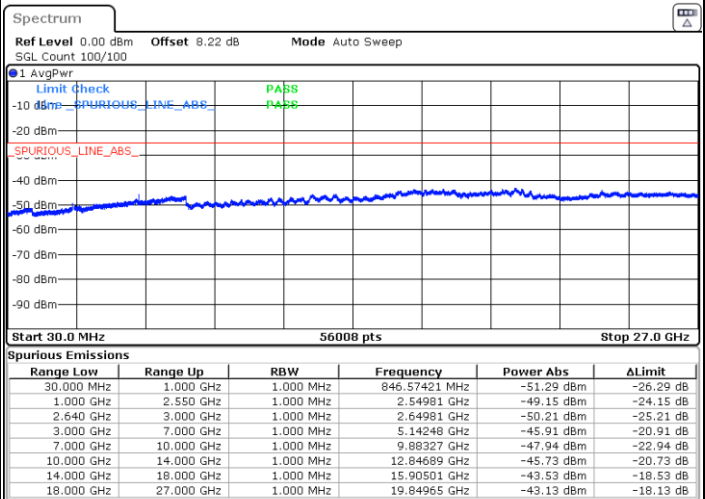
LTE Band 38 / 20MHz

Lowest Channel / QPSK



Date: 5 JAN 2020 00:21:21

Lowest Channel / 16QAM

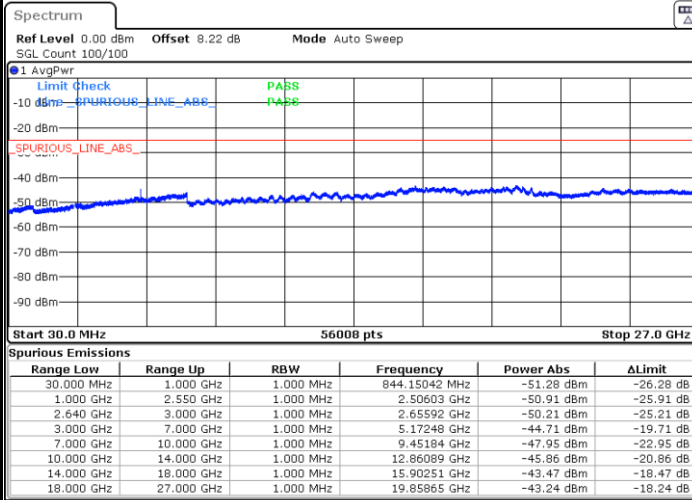


Date: 5 JAN 2020 00:22:16



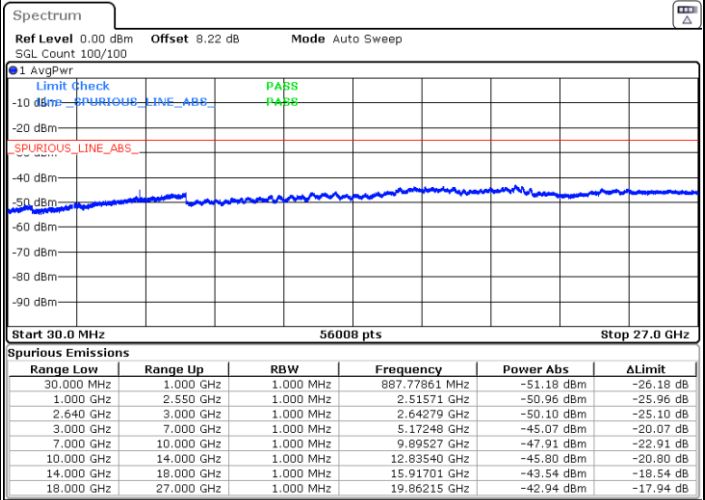
LTE Band 38 / 20MHz

Middle Channel / QPSK



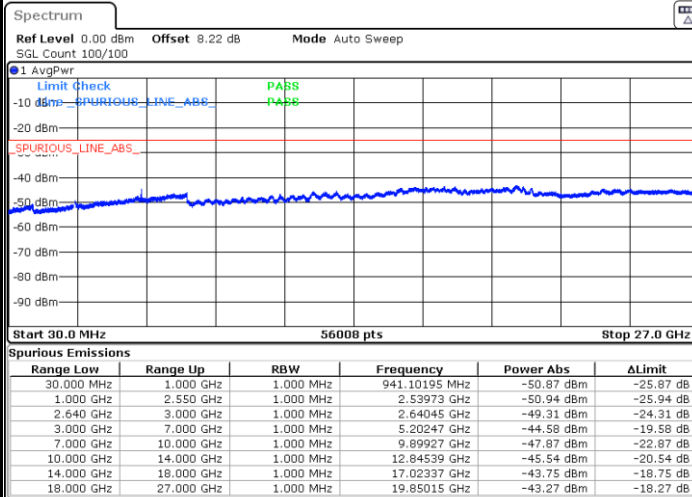
Date: 5 JAN 2020 00:23:10

Middle Channel / 16QAM



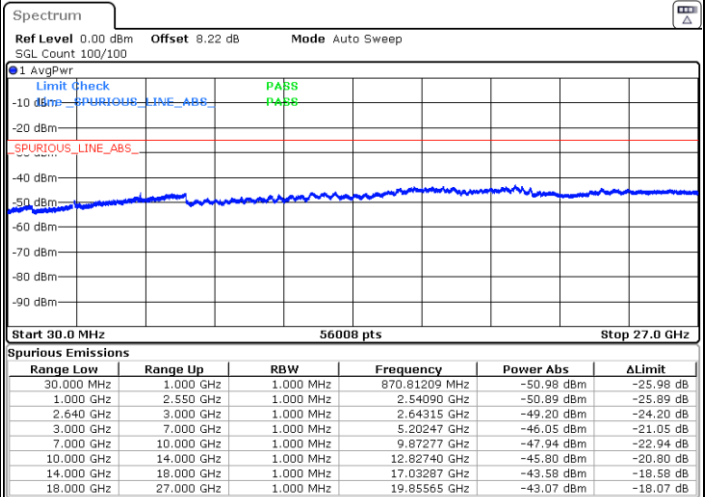
Date: 5 JAN 2020 00:24:05

Highest Channel / QPSK



Date: 5 JAN 2020 00:25:00

Highest Channel / 16QAM

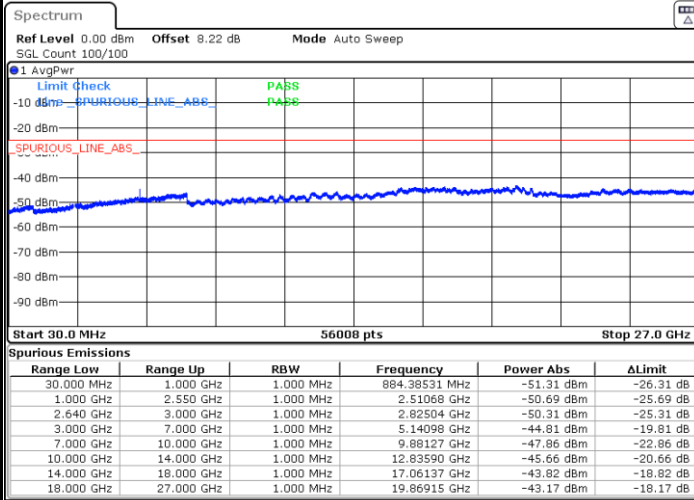


Date: 5 JAN 2020 00:25:54



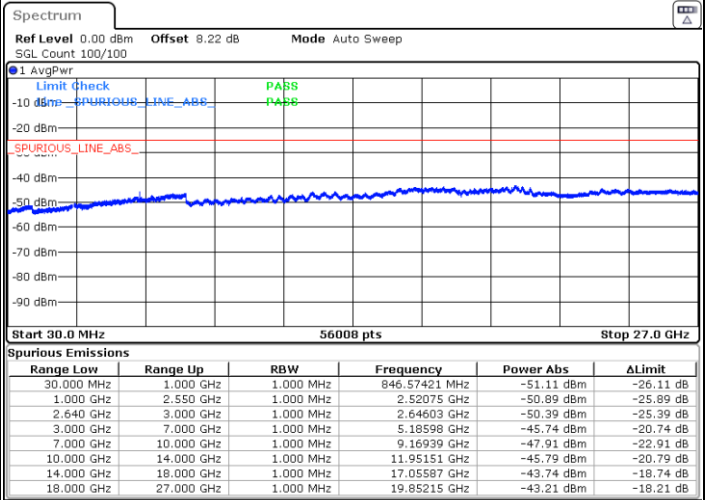
LTE Band 38 / 5MHz

Lowest Channel / 64QAM



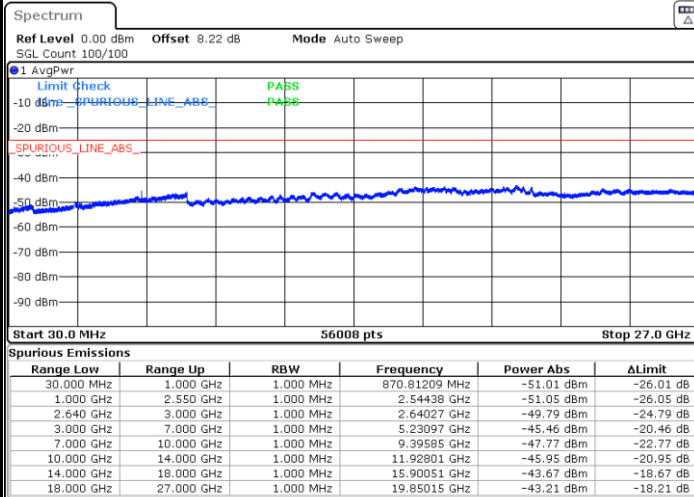
Date: 5 JAN 2020 00:26:49

Middle Channel / 64QAM



Date: 5 JAN 2020 00:27:44

Highest Channel / 64QAM

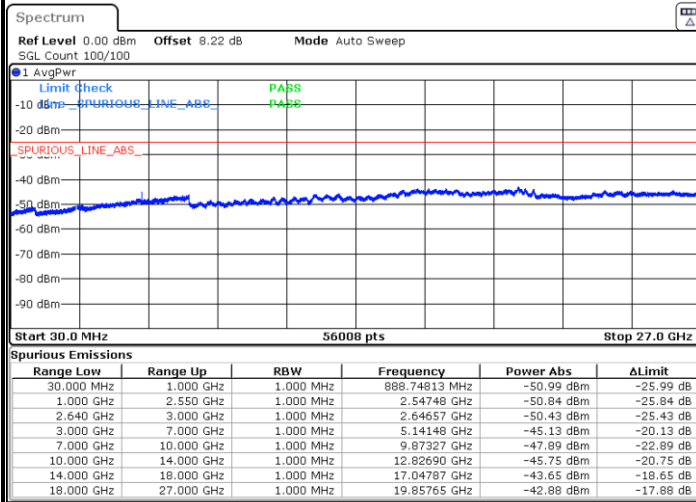


Date: 5 JAN 2020 00:28:38



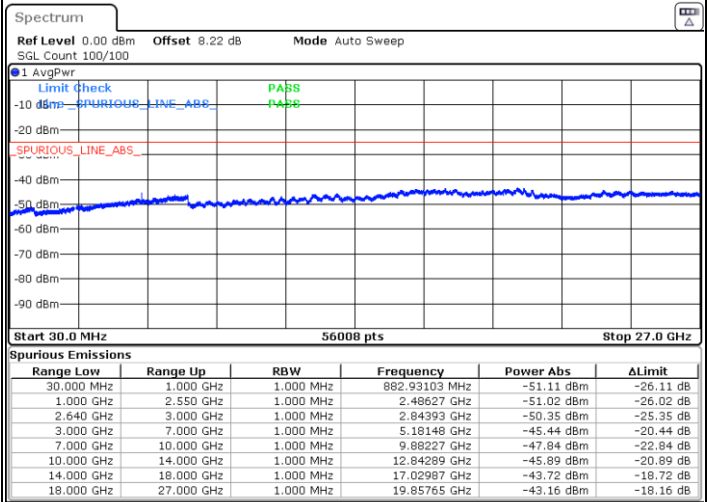
LTE Band 38 / 10MHz

Lowest Channel / 64QAM



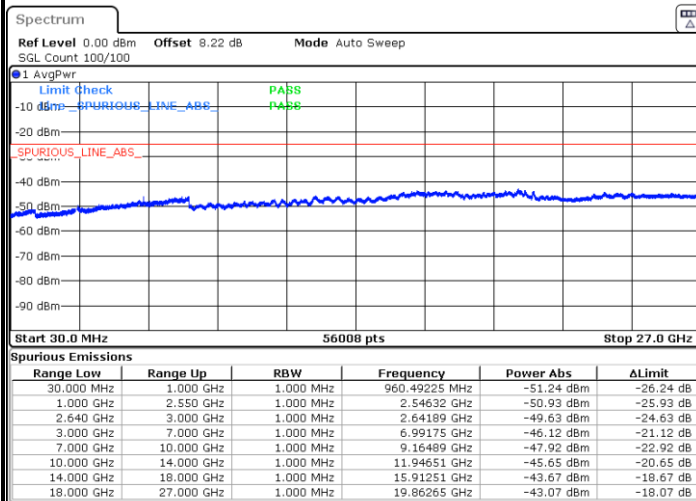
Date: 5 JAN 2020 00:29:33

Middle Channel / 64QAM



Date: 5 JAN 2020 00:30:28

Highest Channel / 64QAM

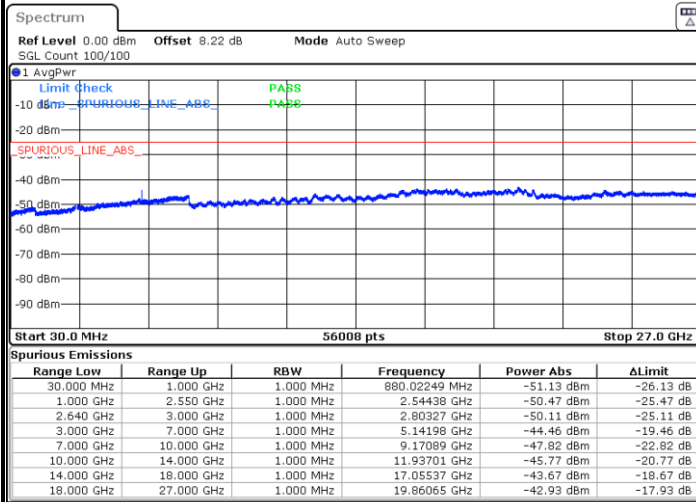


Date: 5 JAN 2020 00:31:22



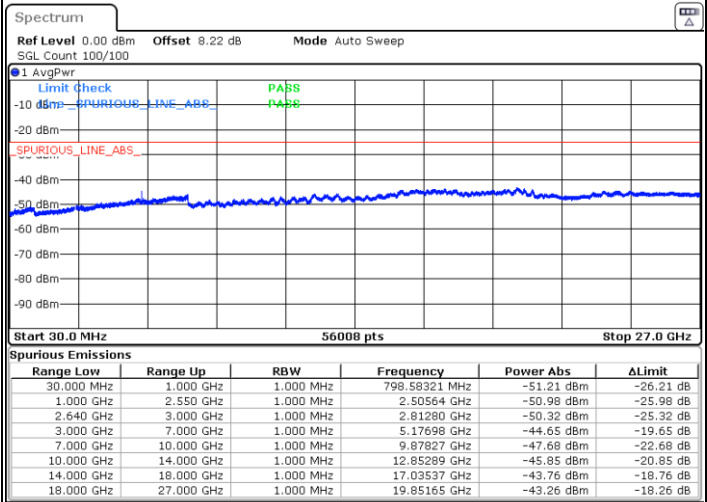
LTE Band 38 / 15MHz

Lowest Channel / 64QAM



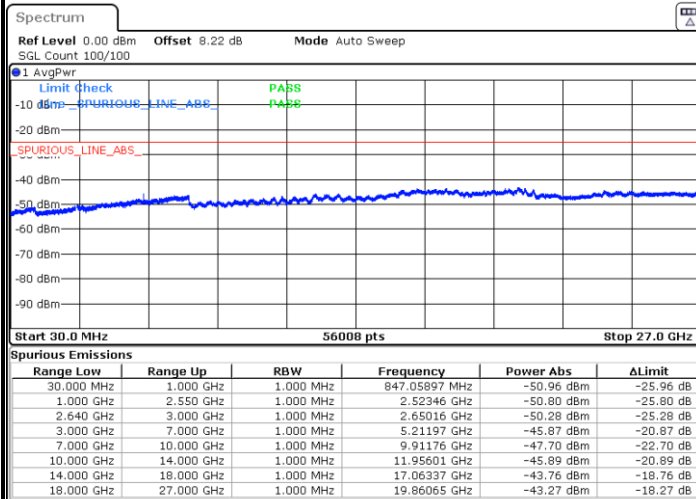
Date: 5 JAN 2020 00:32:17

Middle Channel / 64QAM



Date: 5 JAN 2020 00:33:12

Highest Channel / 64QAM

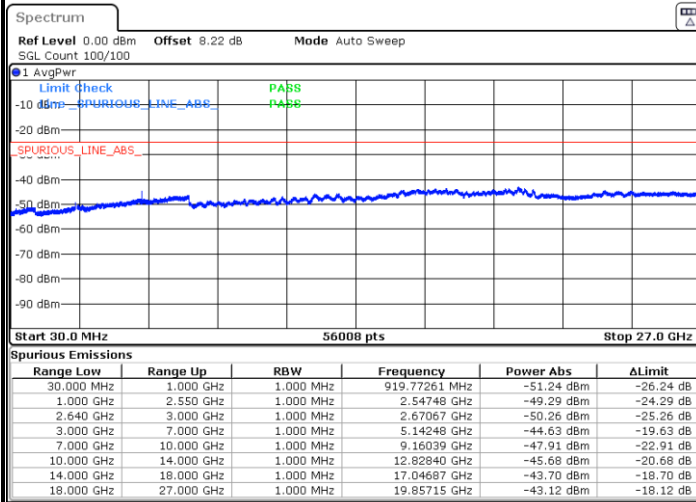


Date: 5 JAN 2020 00:34:06



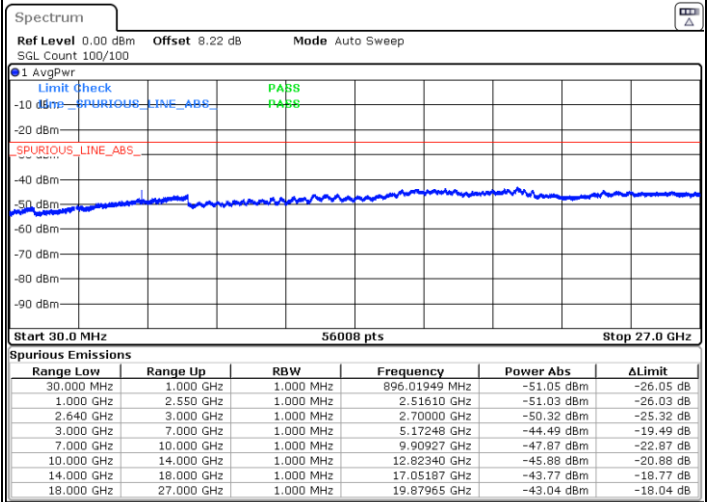
LTE Band 38 / 20MHz

Lowest Channel / 64QAM



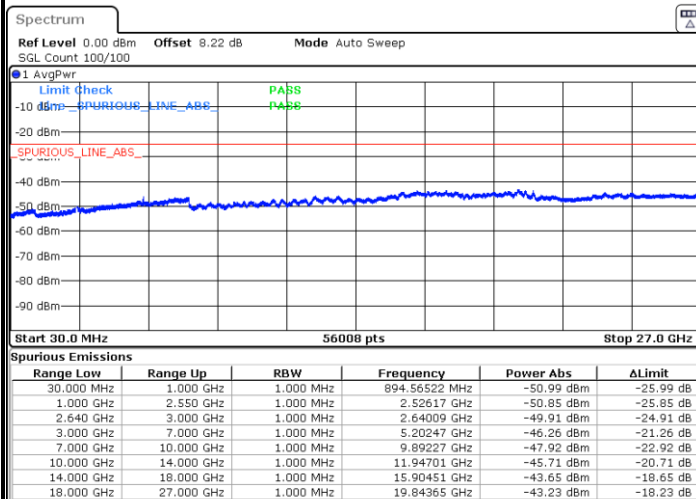
Date: 5.JAN.2020 00:35:01

Middle Channel / 64QAM



Date: 5.JAN.2020 00:35:56

Highest Channel / 64QAM



Date: 5.JAN.2020 00:36:50

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	0.0008	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0026	
20	Normal Voltage	0.0001	
20	Battery End Point	0.0024	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.0 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

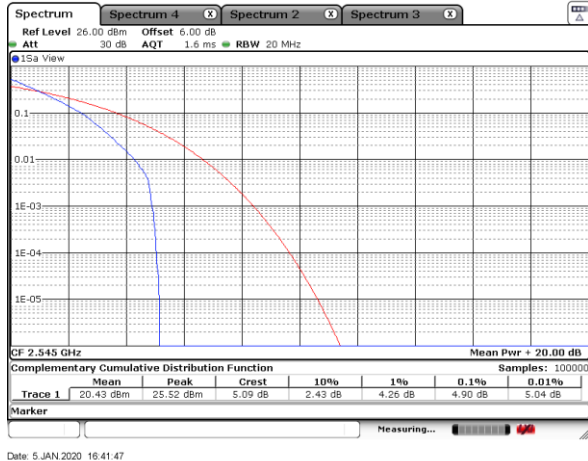
Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.90	6.70	6.20	6.2	PASS
Middle CH	4.81	4.90	5.25	6.23	
Highest CH	7.97	6.64	6.61	7.33	
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH	5.36	5.74	PASS		
Middle CH	5.04	5.74			
Highest CH	5.91	7.07			

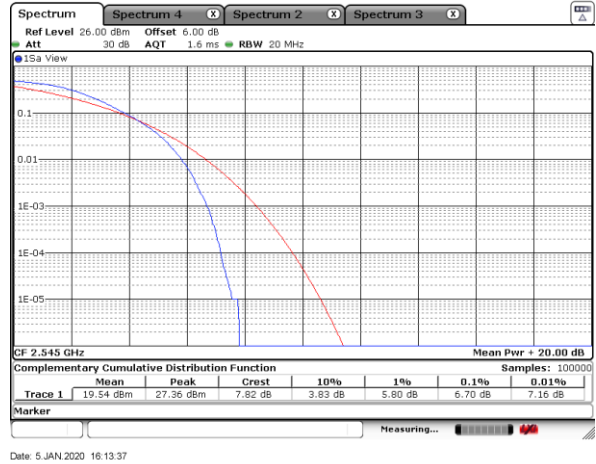


LTE Band 41 / 20MHz / QPSK

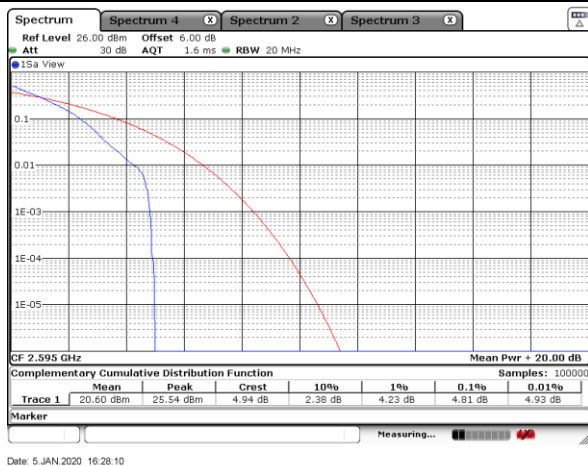
Lowest Channel / 1RB



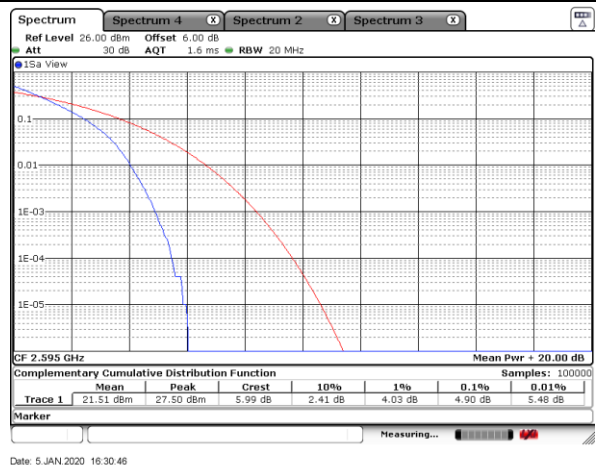
Lowest Channel / Full RB



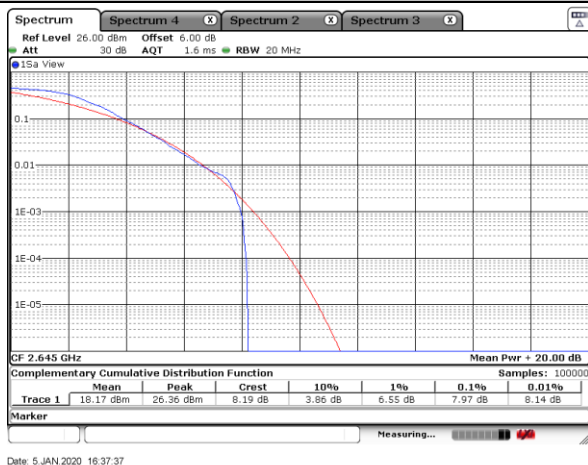
Middle Channel / 1RB



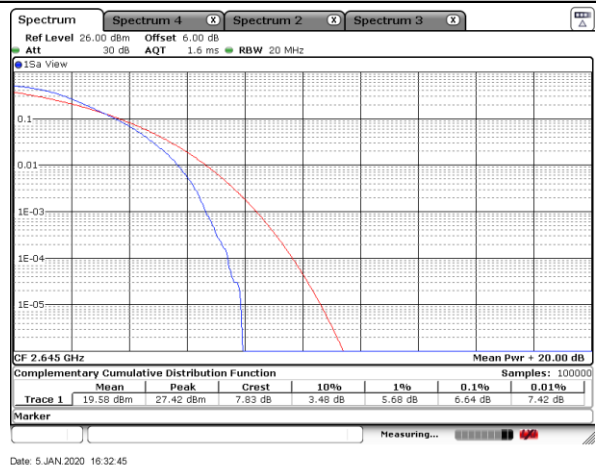
Middle Channel / Full RB



Highest Channel / 1RB



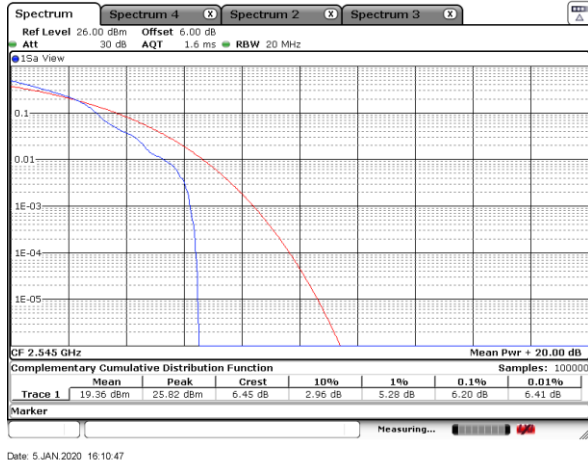
Highest Channel / Full RB



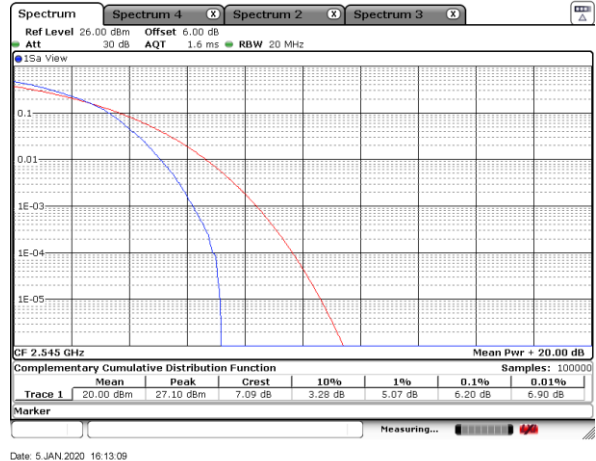


LTE Band 41 / 20MHz / 16QAM

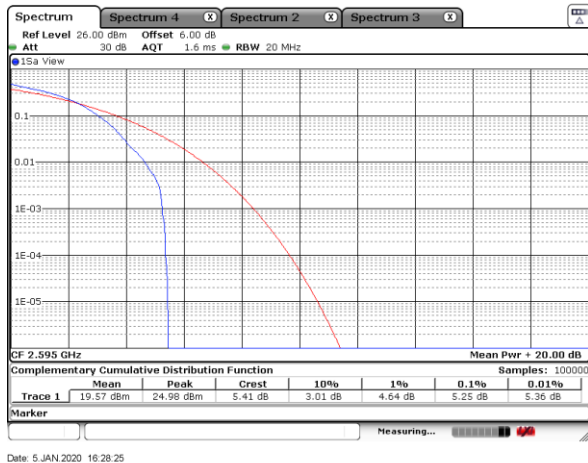
Lowest Channel / 1RB



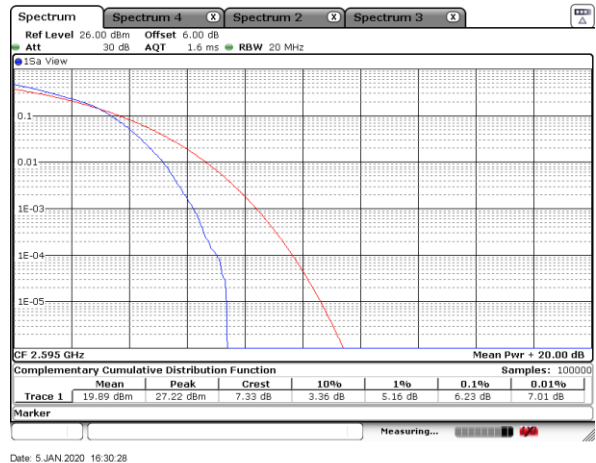
Lowest Channel / Full RB



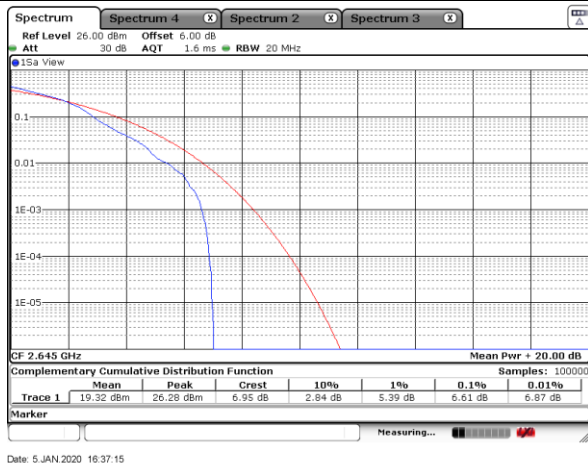
Middle Channel / 1RB



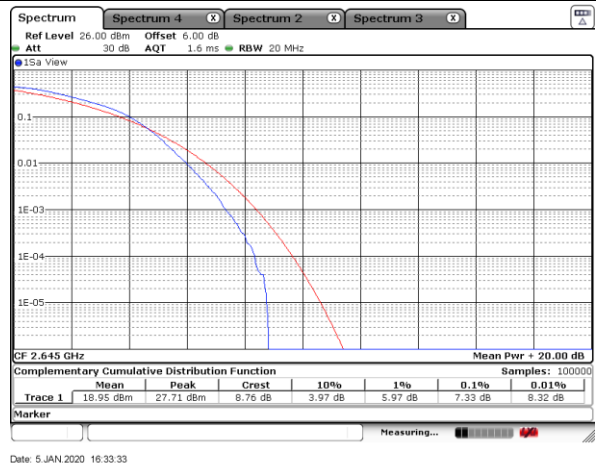
Middle Channel / Full RB



Highest Channel / 1RB



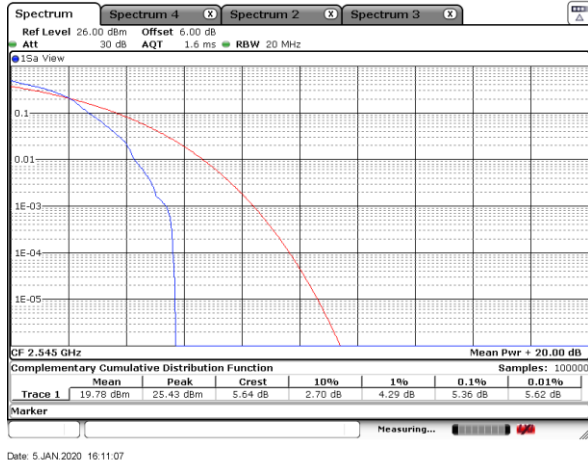
Highest Channel / Full RB



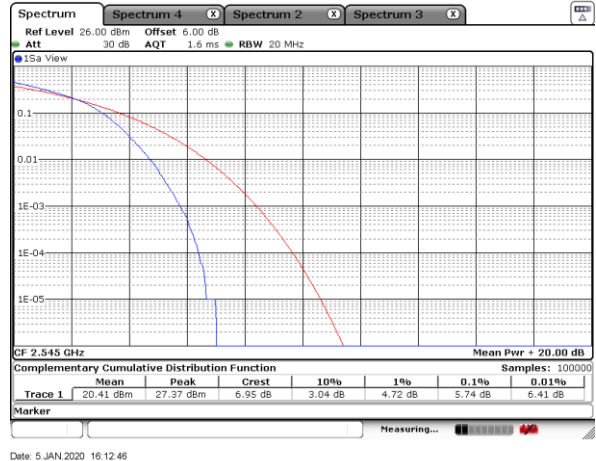


LTE Band 41 / 20MHz / 64QAM

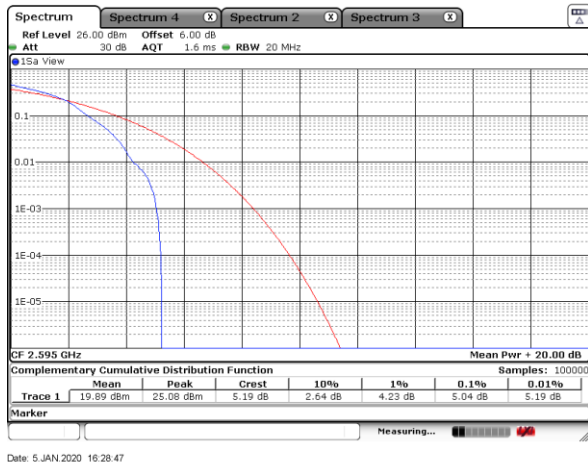
Lowest Channel / 1RB



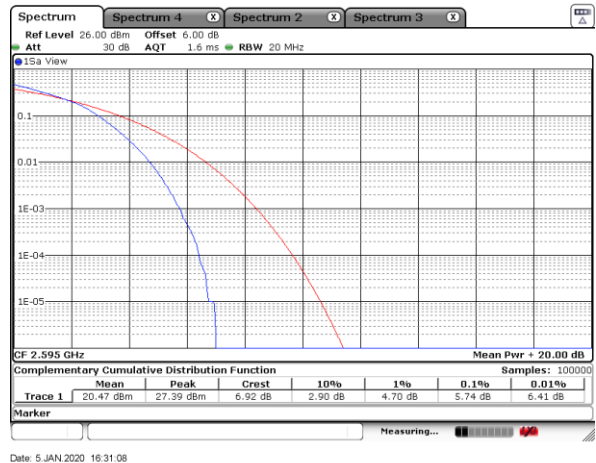
Lowest Channel / Full RB



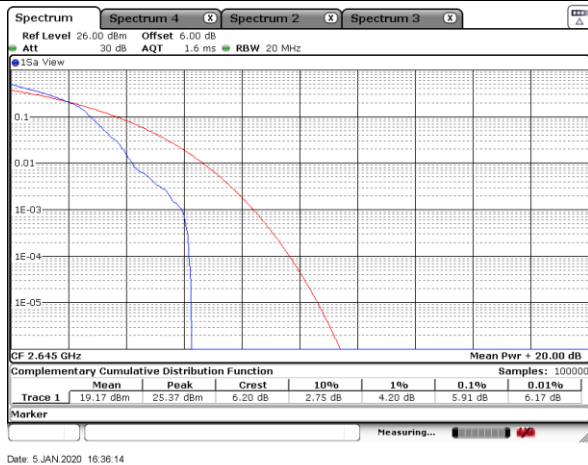
Middle Channel / 1RB



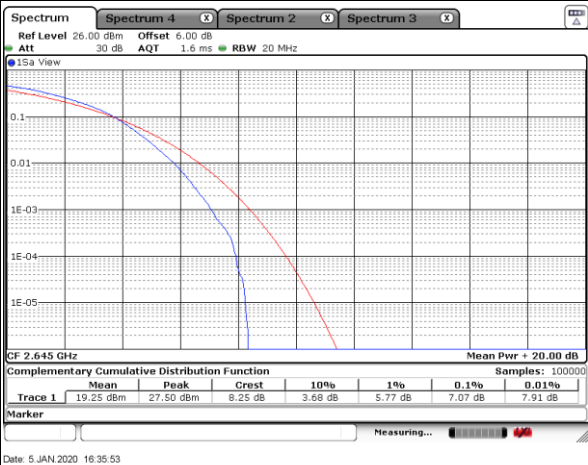
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



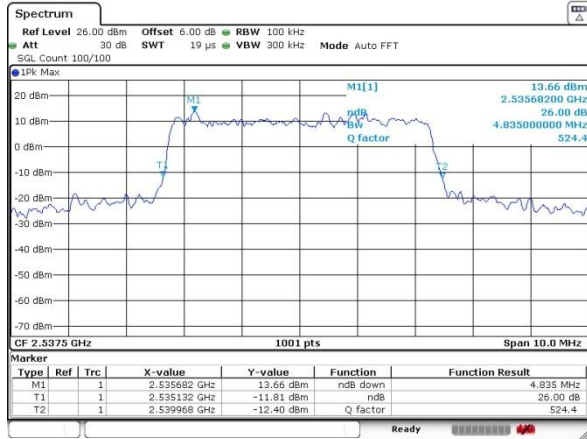
**26dB Bandwidth**

Mode	LTE Band 41 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.835	4.845	9.371	9.491	14.056	13.996	18.382	18.382
Middle CH	4.805	4.825	9.471	9.411	14.056	13.996	18.861	18.462
Highest CH	4.815	4.835	9.411	9.471	13.966	13.966	18.302	18.342
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	4.825		9.311		14.086		18.661	
Middle CH	4.875		9.491		14.086		18.941	
Highest CH	4.865		9.311		14.026		18.541	



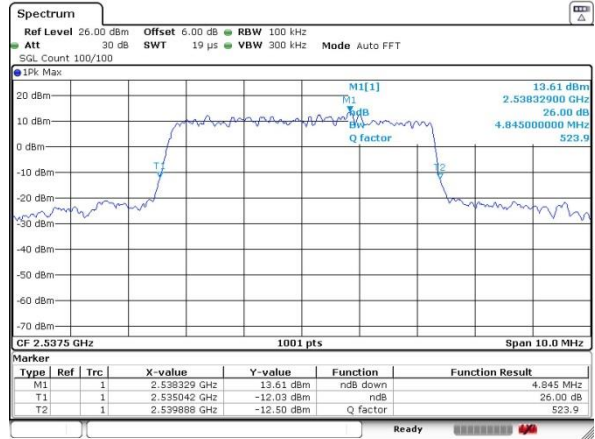
LTE Band 41

Lowest Channel / 5MHz / QPSK



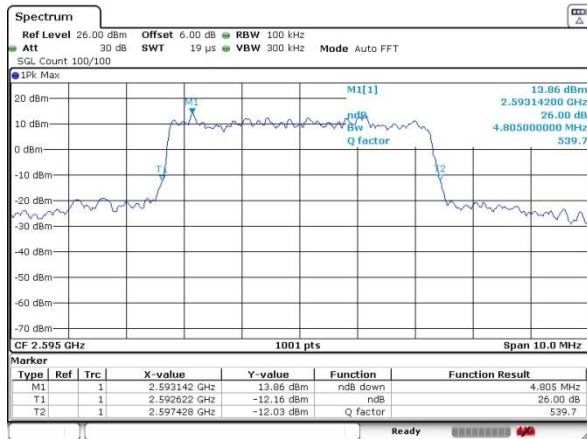
Date: 8 JAN 2020 03:18:12

Lowest Channel / 5MHz / 16QAM



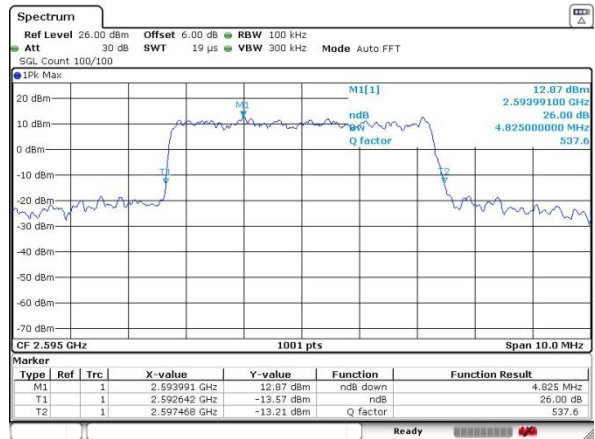
Date: 8 JAN 2020 03:18:52

Middle Channel / 5MHz / QPSK



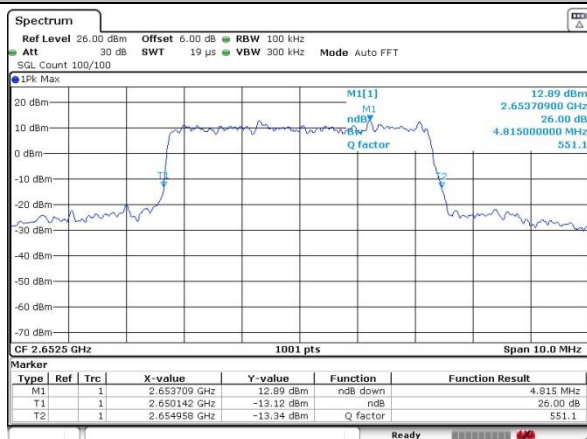
Date: 8 JAN 2020 03:19:23

Middle Channel / 5MHz / 16QAM



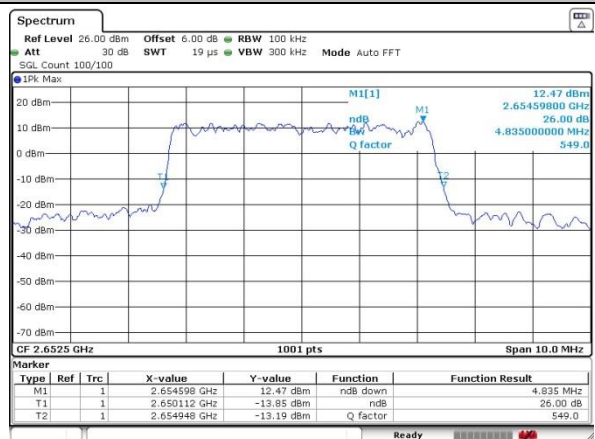
Date: 8 JAN 2020 03:19:35

Highest Channel / 5MHz / QPSK



Date: 8 JAN 2020 03:20:15

Highest Channel / 5MHz / 16QAM

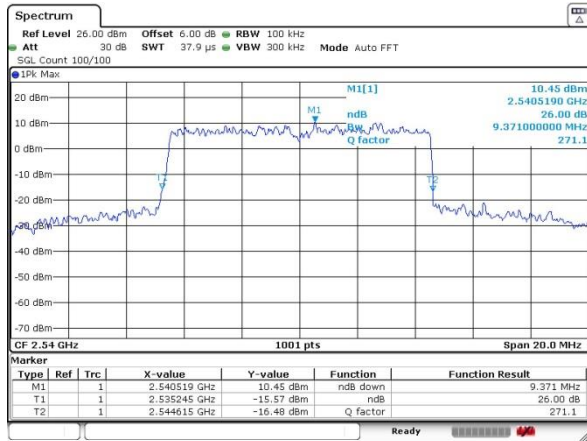


Date: 8 JAN 2020 03:20:30



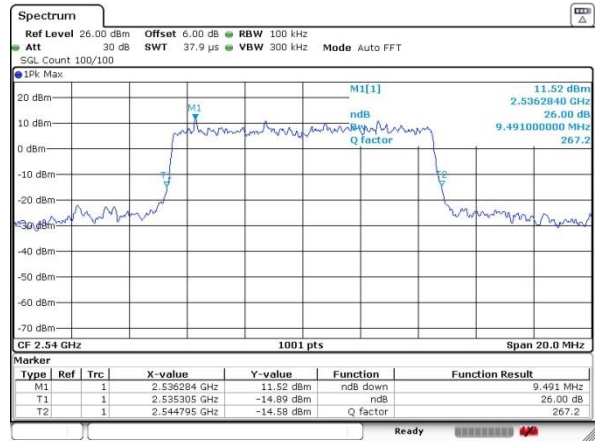
LTE Band 41

Lowest Channel / 10MHz / QPSK



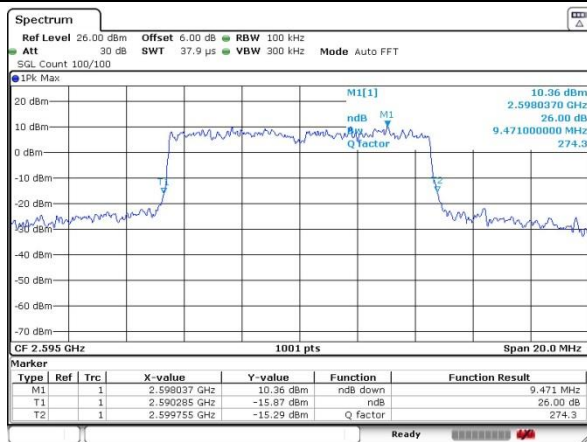
Date: 8 JAN 2020 03:21:23

Lowest Channel / 10MHz / 16QAM



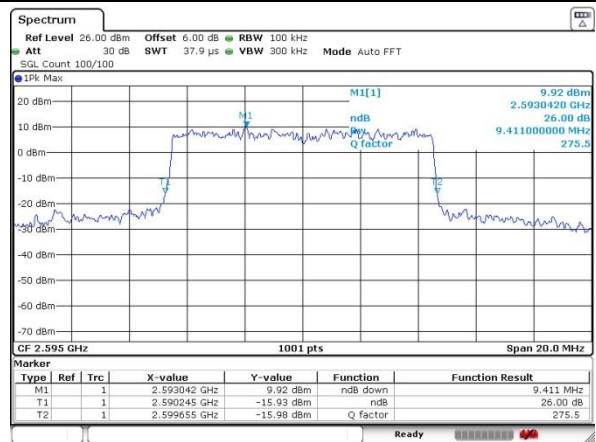
Date: 8 JAN 2020 03:21:41

Middle Channel / 10MHz / QPSK



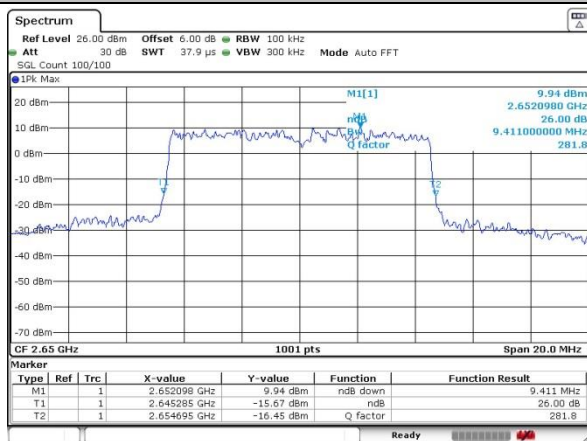
Date: 8 JAN 2020 03:22:14

Middle Channel / 10MHz / 16QAM



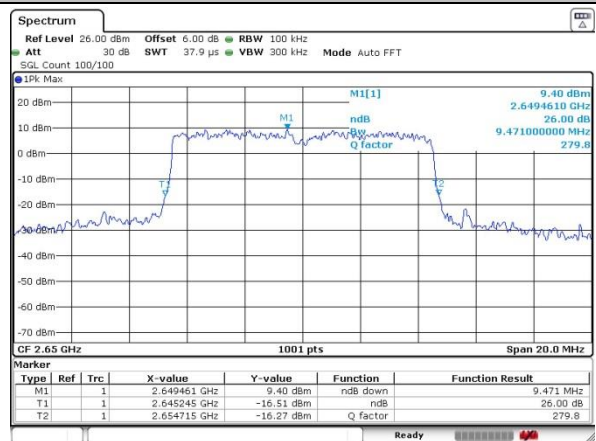
Date: 8 JAN 2020 03:22:31

Highest Channel / 10MHz / QPSK



Date: 8 JAN 2020 03:23:15

Highest Channel / 10MHz / 16QAM

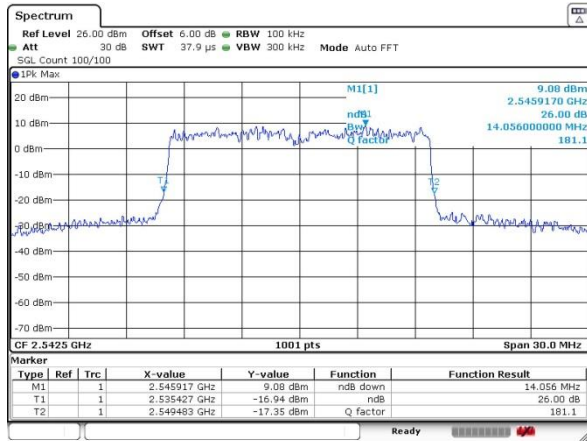


Date: 8 JAN 2020 03:23:28



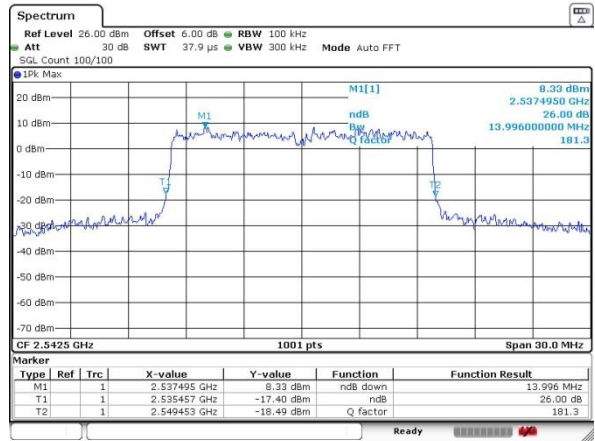
LTE Band 41

Lowest Channel / 15MHz / QPSK



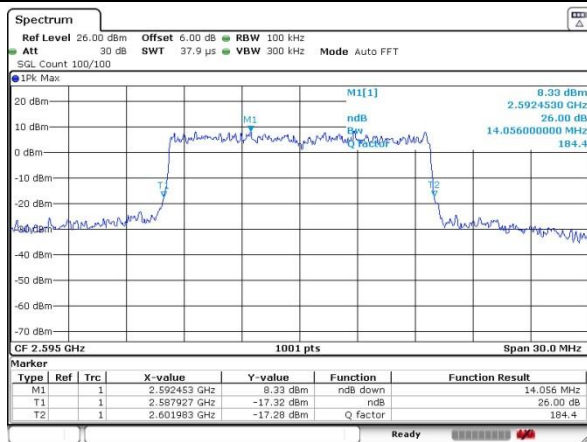
Date: 8 JAN 2020 03:25:42

Lowest Channel / 15MHz / 16QAM



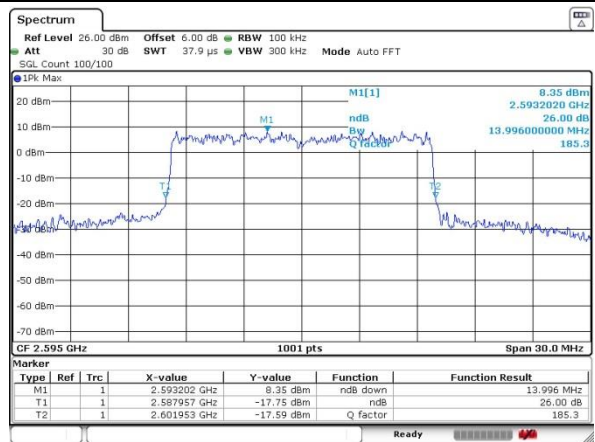
Date: 8 JAN 2020 03:25:58

Middle Channel / 15MHz / QPSK



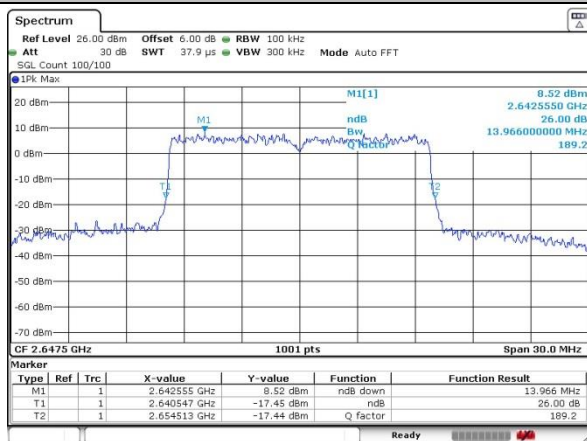
Date: 8 JAN 2020 03:26:31

Middle Channel / 15MHz / 16QAM



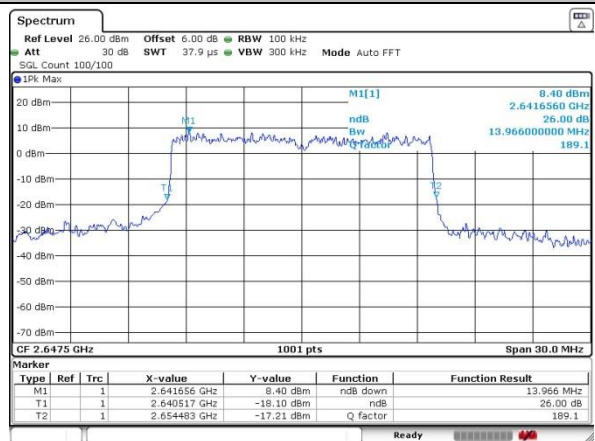
Date: 8 JAN 2020 03:26:46

Highest Channel / 15MHz / QPSK



Date: 8 JAN 2020 03:27:35

Highest Channel / 15MHz / 16QAM

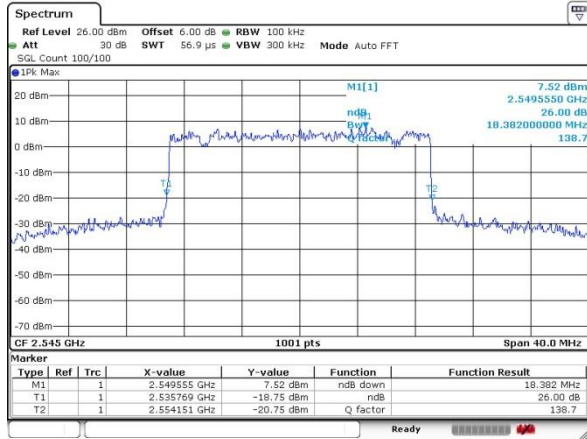


Date: 8 JAN 2020 03:27:49



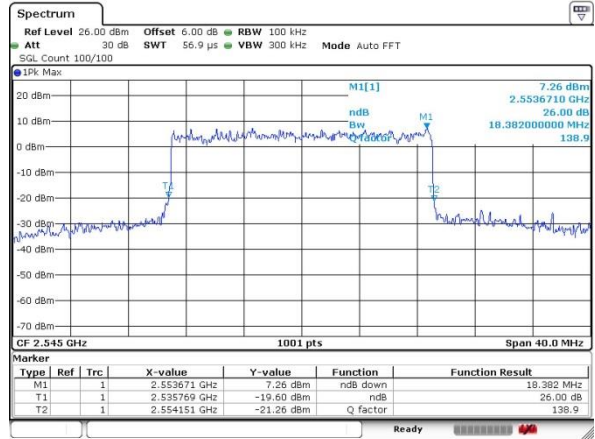
LTE Band 41

Lowest Channel / 20MHz / QPSK



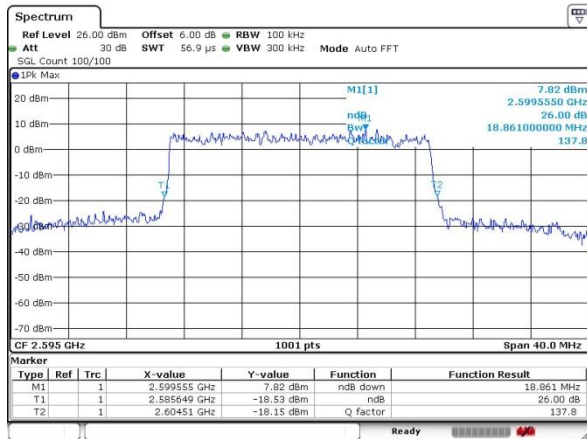
Date: 8 JAN 2020 03:28:57

Lowest Channel / 20MHz / 16QAM



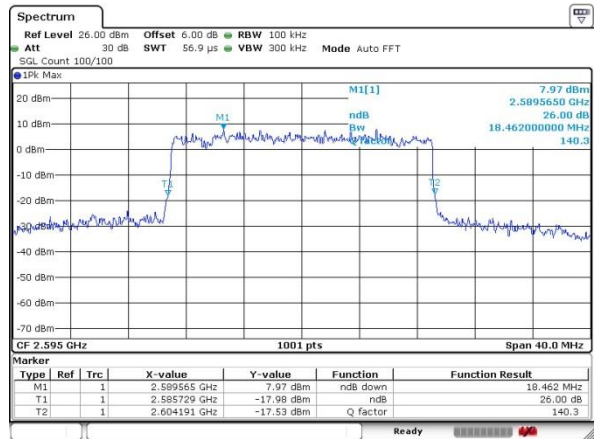
Date: 8 JAN 2020 03:29:10

Middle Channel / 20MHz / QPSK



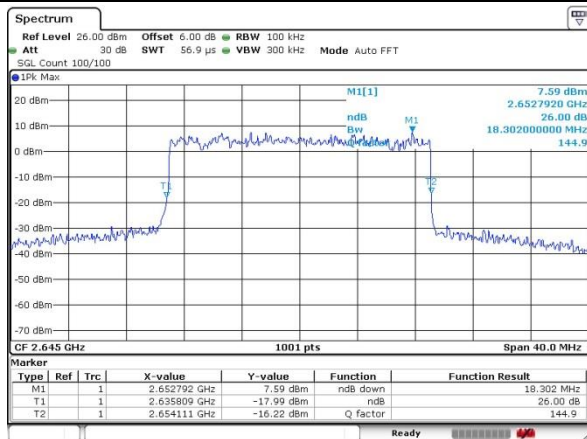
Date: 8 JAN 2020 03:29:54

Middle Channel / 20MHz / 16QAM



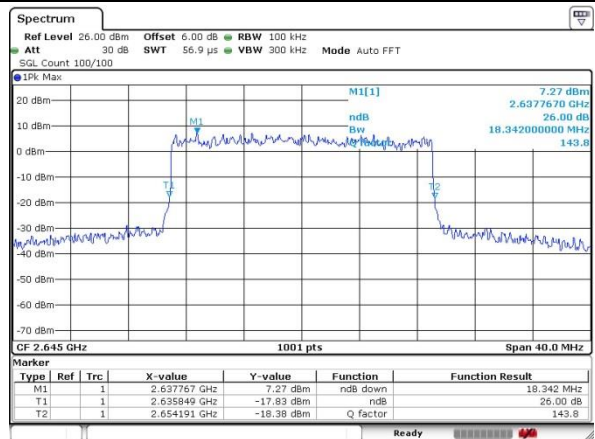
Date: 8 JAN 2020 03:30:07

Highest Channel / 20MHz / QPSK



Date: 8 JAN 2020 03:30:50

Highest Channel / 20MHz / 16QAM

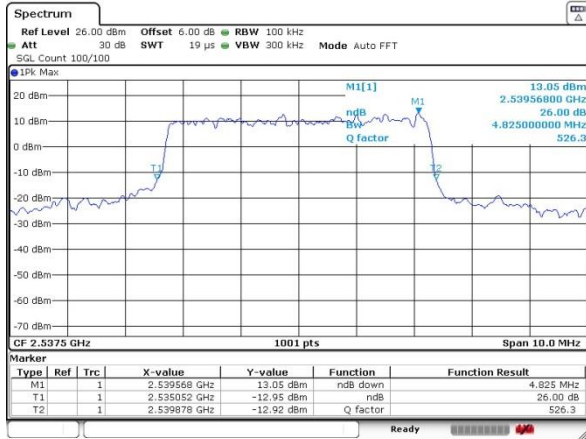


Date: 8 JAN 2020 03:31:03



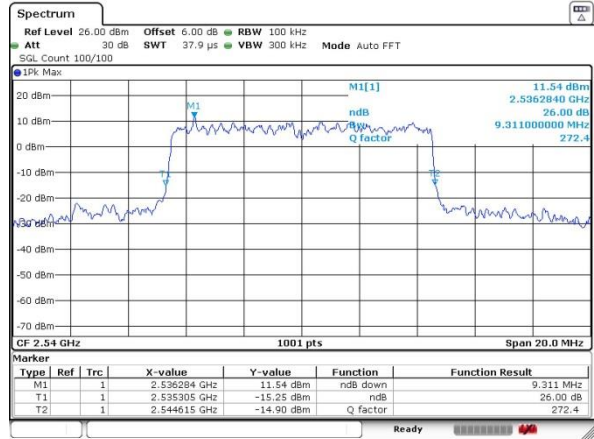
LTE Band 41

Lowest Channel / 5MHz / 64QAM



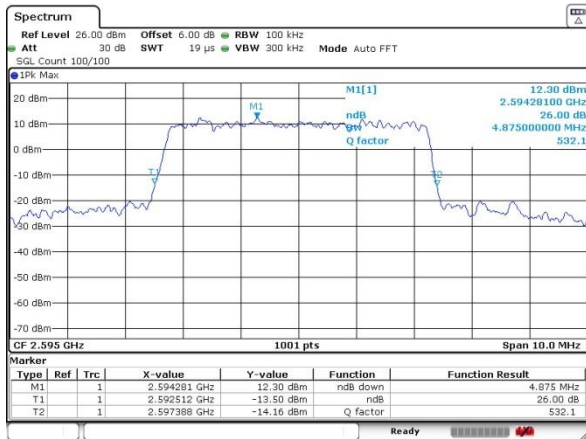
Date: 8 JAN 2020 03:19:03

Lowest Channel / 10MHz / 64QAM



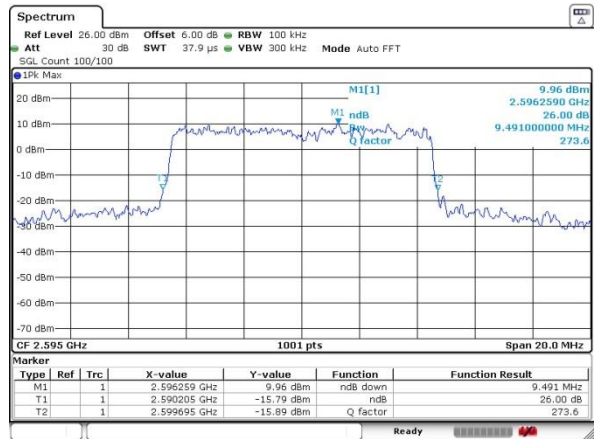
Date: 8 JAN 2020 03:21:52

Middle Channel / 5MHz / 64QAM



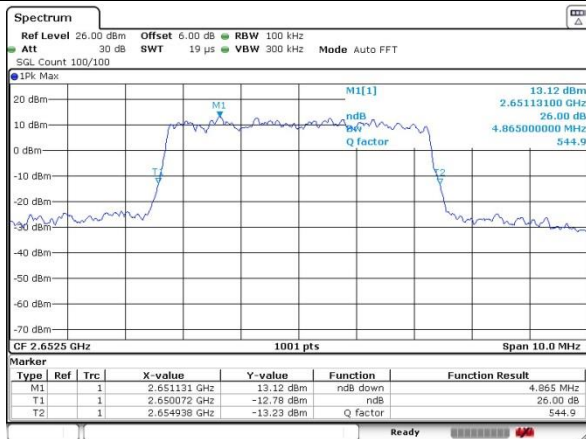
Date: 8 JAN 2020 03:19:44

Middle Channel / 10MHz / 64QAM



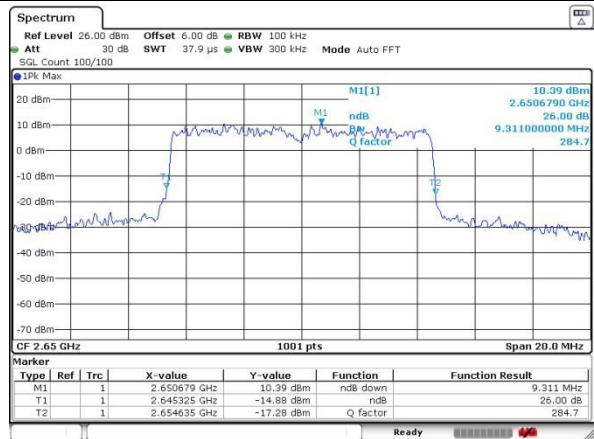
Date: 8 JAN 2020 03:22:43

Highest Channel / 5MHz / 64QAM



Date: 8 JAN 2020 03:20:44

Highest Channel / 10MHz / 64QAM

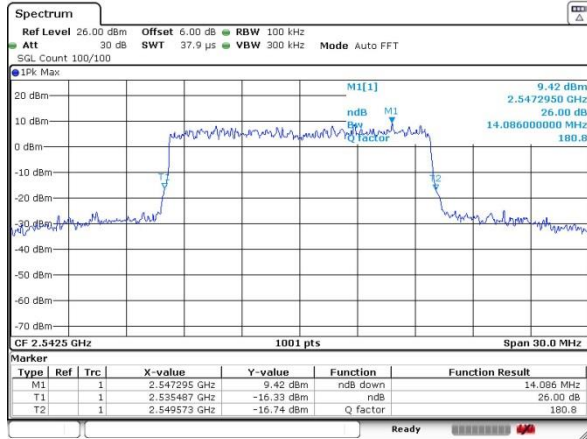


Date: 8 JAN 2020 03:23:39



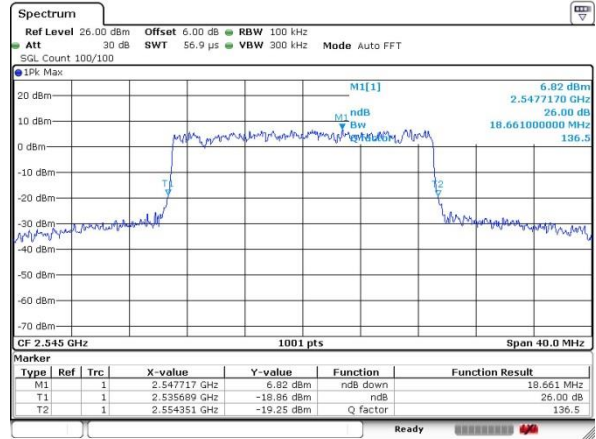
LTE Band 41

Lowest Channel / 15MHz / 64QAM



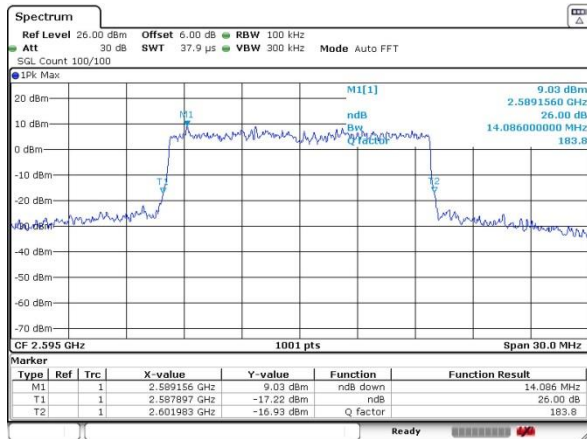
Date: 8 JAN 2020 03:26:10

Lowest Channel / 20MHz / 64QAM



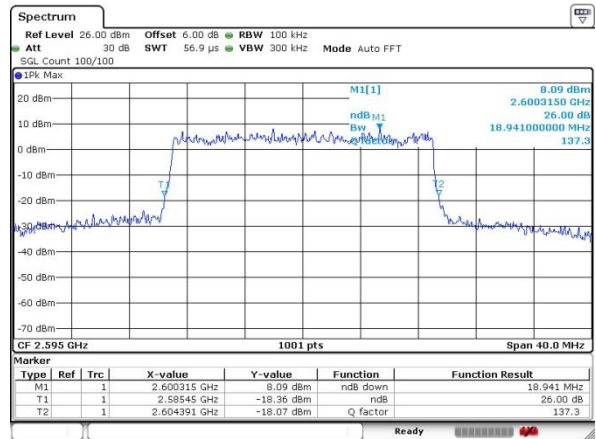
Date: 8 JAN 2020 03:29:23

Middle Channel / 15MHz / 64QAM



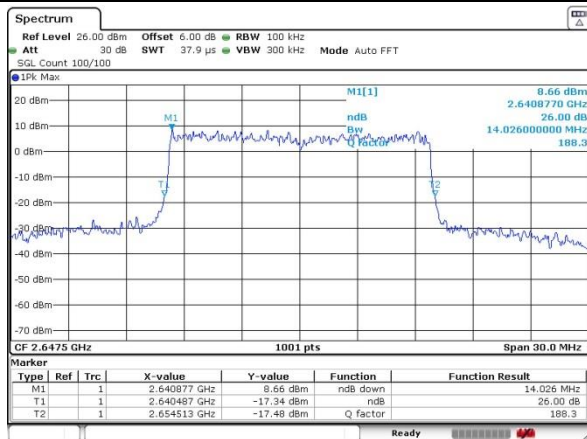
Date: 8 JAN 2020 03:27:02

Middle Channel / 20MHz / 64QAM



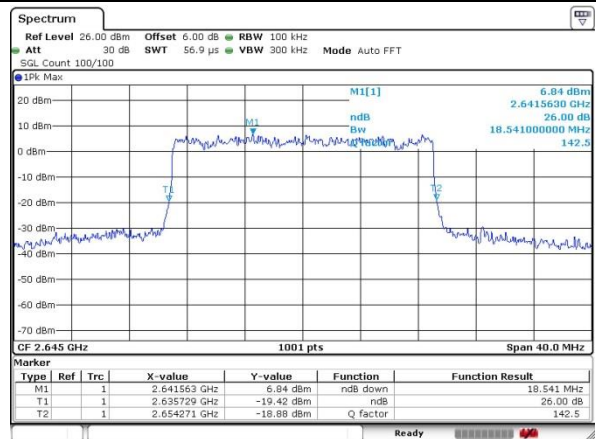
Date: 8 JAN 2020 03:30:28

Highest Channel / 15MHz / 64QAM



Date: 8 JAN 2020 03:28:02

Highest Channel / 20MHz / 64QAM



Date: 8 JAN 2020 03:31:19

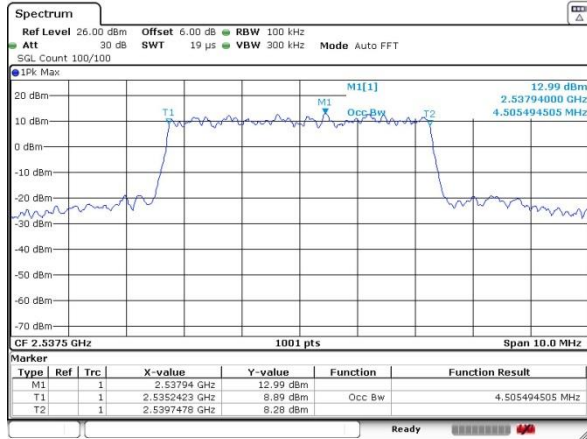
**Occupied Bandwidth**

Mode	LTE Band 41 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.505	4.505	8.931	8.951	13.397	13.367	17.862	17.862
Middle CH	4.476	4.476	8.931	8.931	13.427	13.367	17.862	17.862
Highest CH	4.476	4.476	8.931	8.931	13.397	13.367	17.862	17.822
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	4.476		8.931		13.397		17.822	
Middle CH	4.486		8.911		13.397		17.862	
Highest CH	4.476		8.951		13.367		17.862	



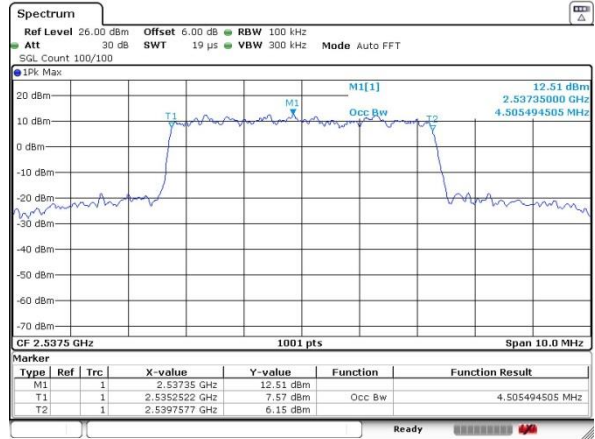
LTE Band 41

Lowest Channel / 5MHz / QPSK



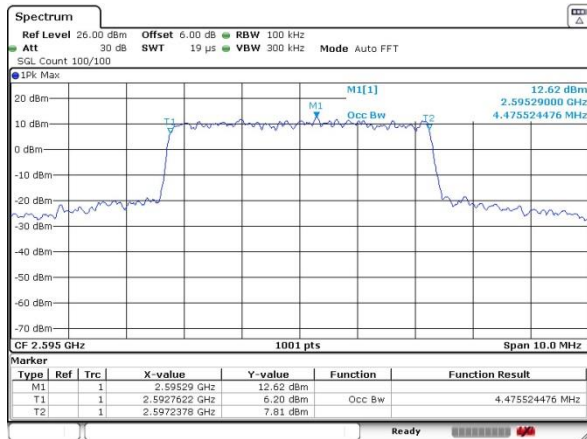
Date: 8 JAN 2020 02:59:33

Lowest Channel / 5MHz / 16QAM



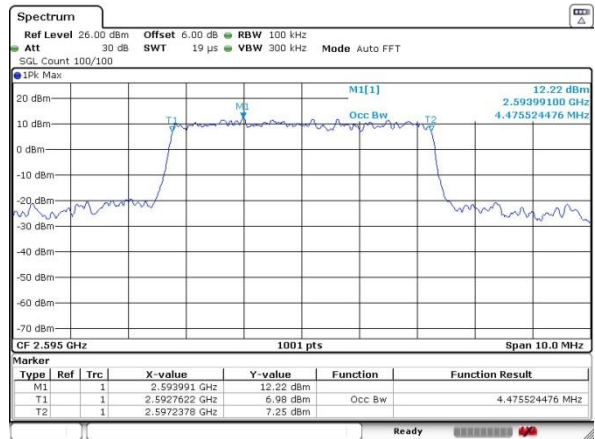
Date: 8 JAN 2020 02:59:54

Middle Channel / 5MHz / QPSK



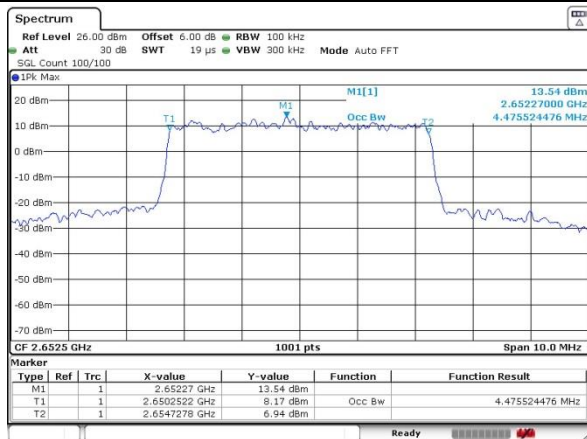
Date: 8 JAN 2020 03:00:30

Middle Channel / 5MHz / 16QAM



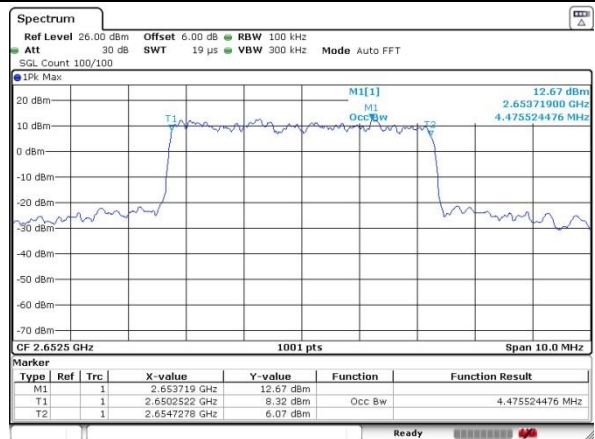
Date: 8 JAN 2020 03:00:45

Highest Channel / 5MHz / QPSK



Date: 8 JAN 2020 03:01:30

Highest Channel / 5MHz / 16QAM

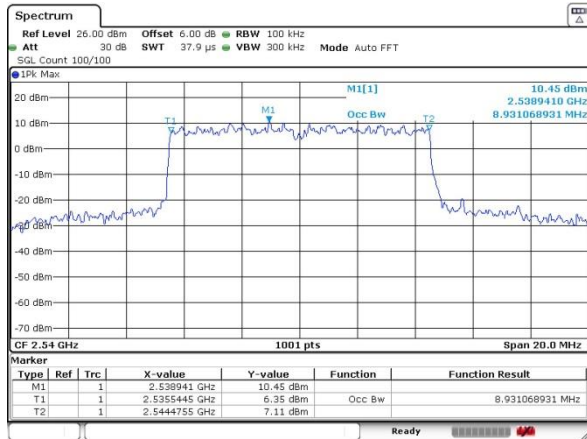


Date: 8 JAN 2020 03:01:44



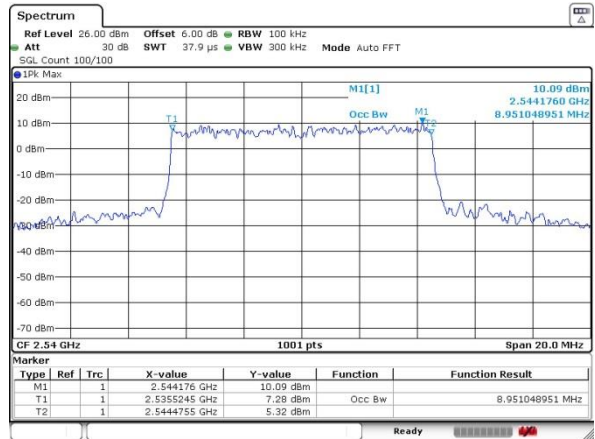
LTE Band 41

Lowest Channel / 10MHz / QPSK



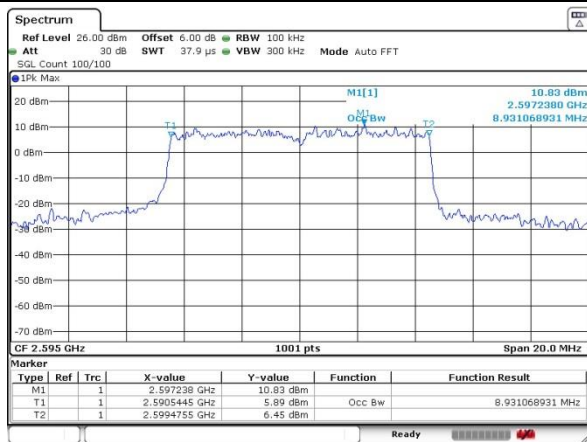
Date: 8 JAN 2020 03:02:49

Lowest Channel / 10MHz / 16QAM



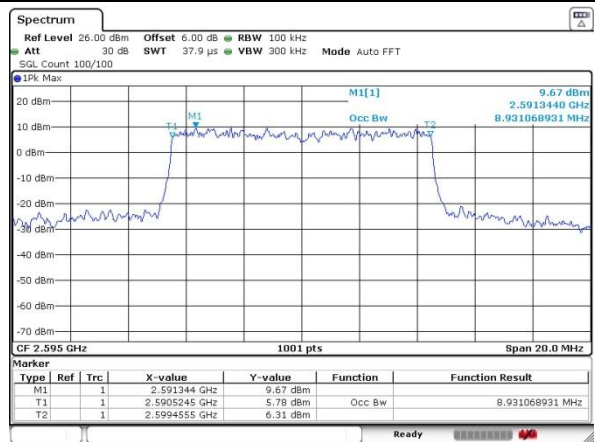
Date: 8 JAN 2020 03:03:01

Middle Channel / 10MHz / QPSK



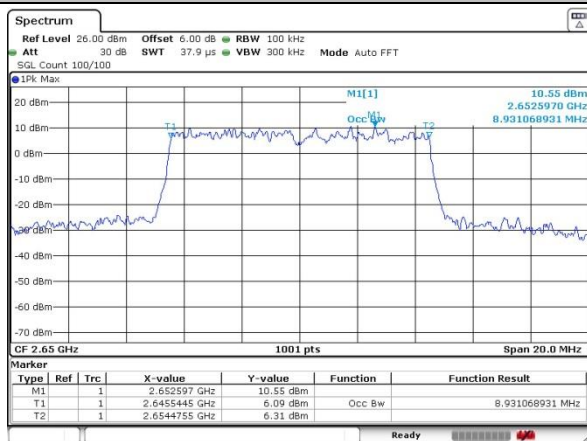
Date: 8 JAN 2020 03:03:41

Middle Channel / 10MHz / 16QAM



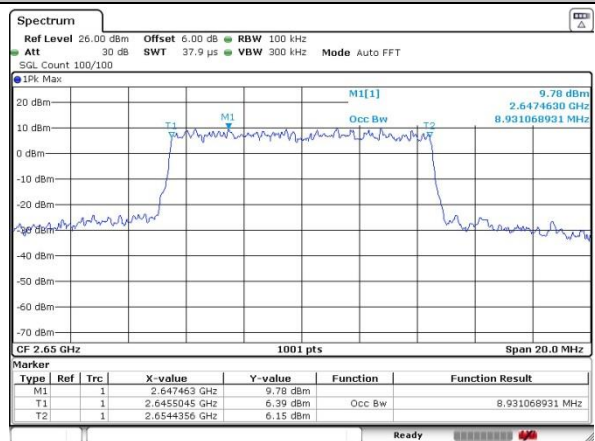
Date: 8 JAN 2020 03:03:57

Highest Channel / 10MHz / QPSK



Date: 8 JAN 2020 03:04:34

Highest Channel / 10MHz / 16QAM

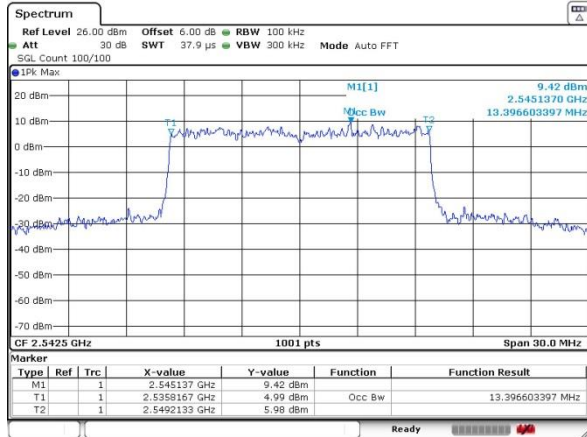


Date: 8 JAN 2020 03:05:26



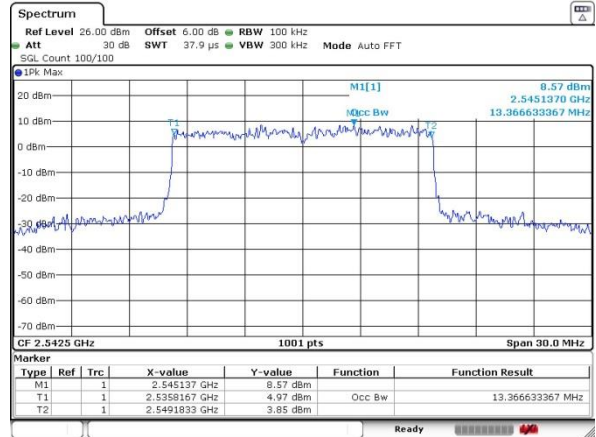
LTE Band 41

Lowest Channel / 15MHz / QPSK



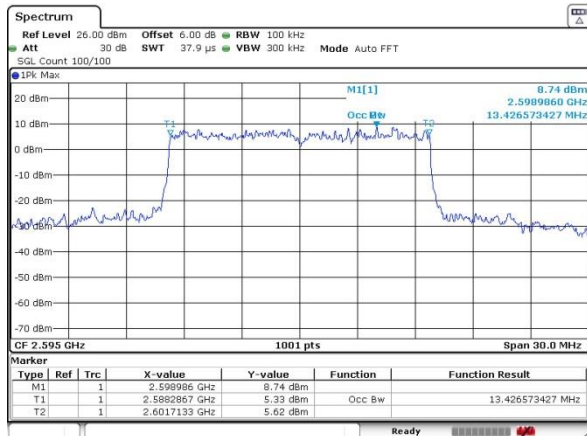
Date: 8 JAN 2020 03:08:38

Lowest Channel / 15MHz / 16QAM



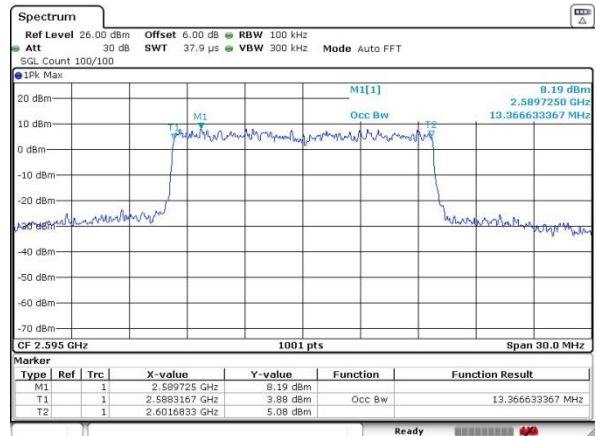
Date: 8 JAN 2020 03:08:46

Middle Channel / 15MHz / QPSK



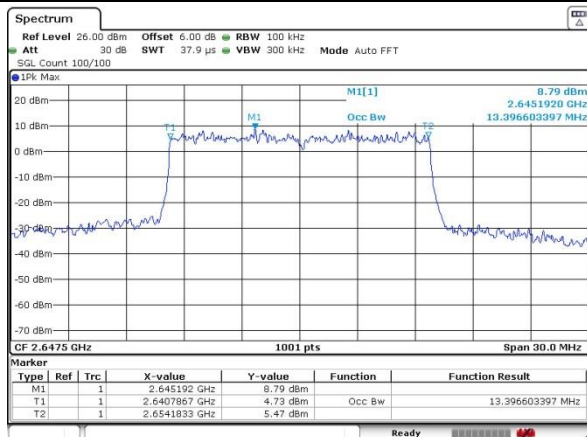
Date: 8 JAN 2020 03:09:37

Middle Channel / 15MHz / 16QAM



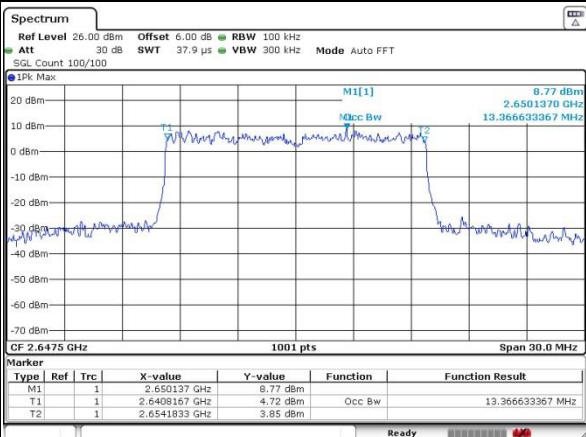
Date: 8 JAN 2020 03:09:48

Highest Channel / 15MHz / QPSK



Date: 8 JAN 2020 03:10:23

Highest Channel / 15MHz / 16QAM



Date: 8 JAN 2020 03:10:34