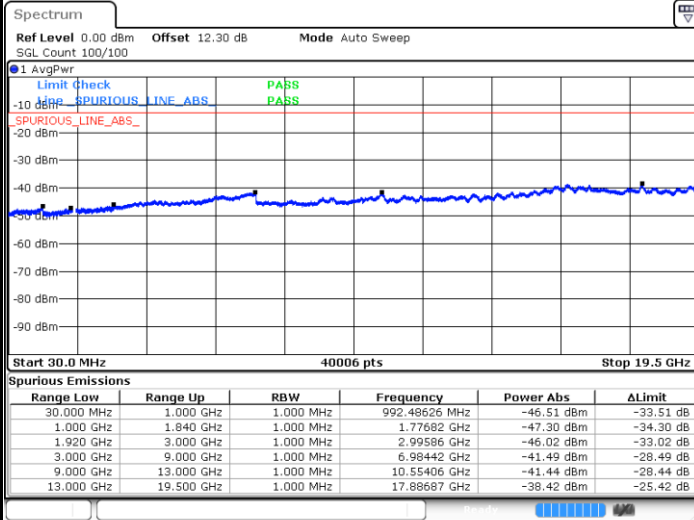




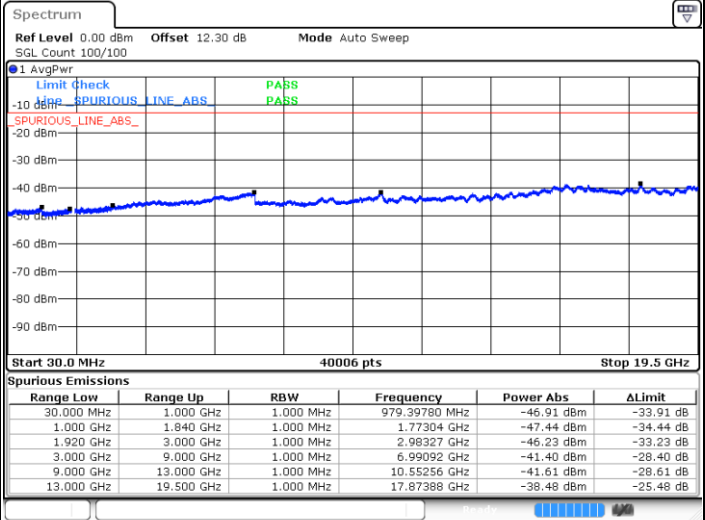
LTE Band 2 / 10MHz

Middle Channel / QPSK



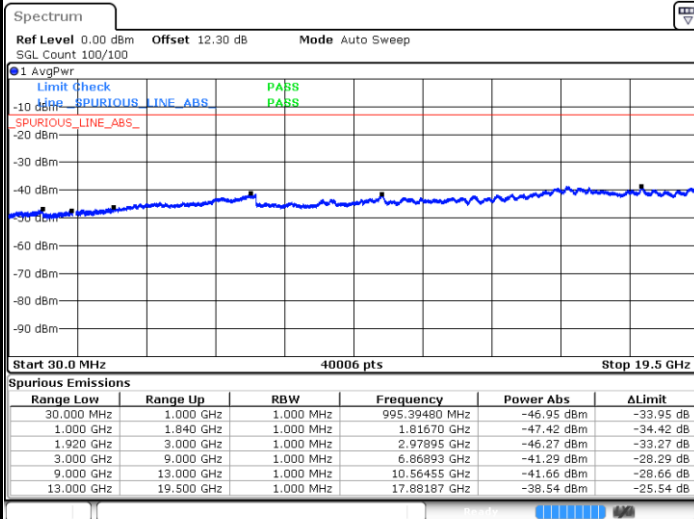
Date: 11.AUG.2020 14:38:46

Middle Channel / 16QAM



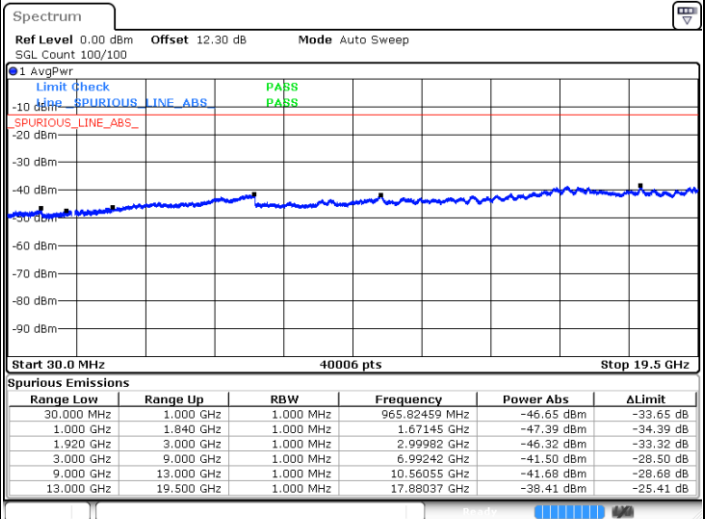
Date: 11.AUG.2020 14:39:47

Highest Channel / QPSK



Date: 11.AUG.2020 14:46:58

Highest Channel / 16QAM

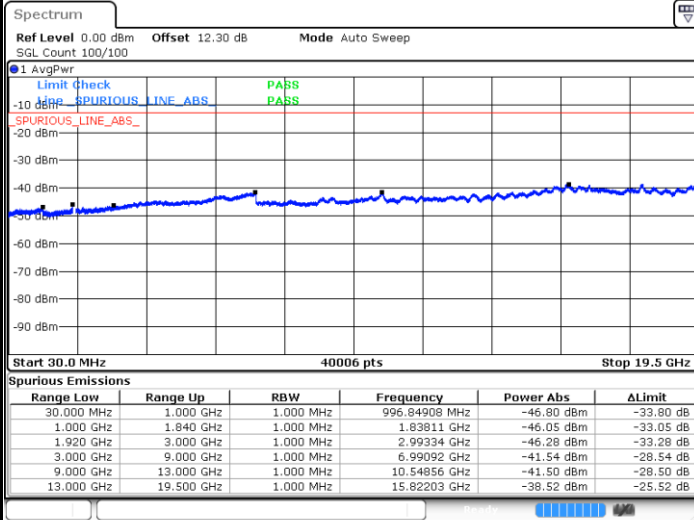


Date: 11.AUG.2020 14:47:59



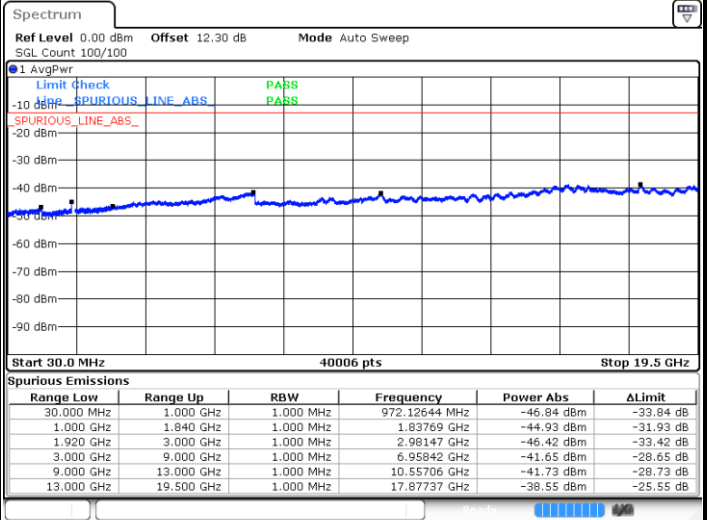
LTE Band 2 / 15MHz

Lowest Channel / QPSK



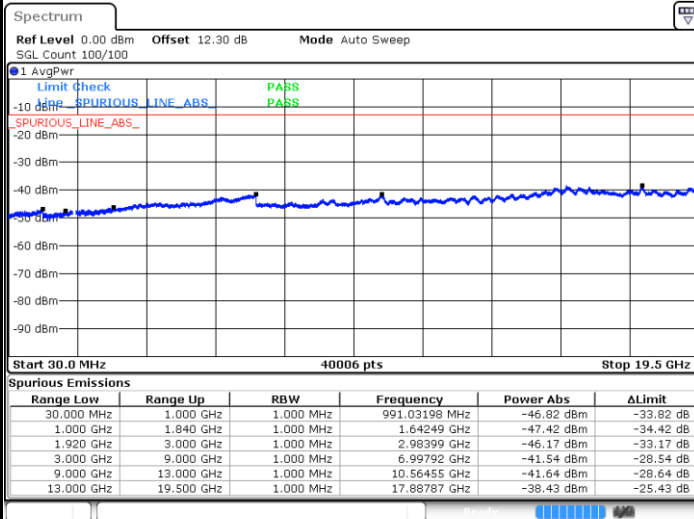
Date: 11.AUG.2020 14:55:12

Lowest Channel / 16QAM



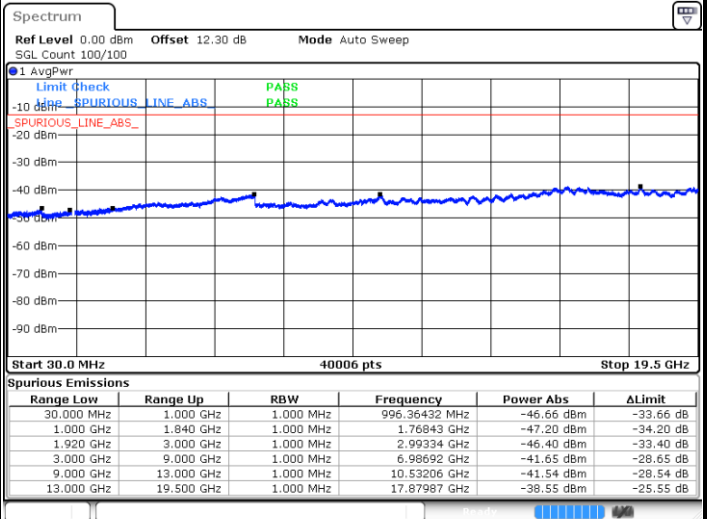
Date: 11.AUG.2020 14:56:13

Middle Channel / QPSK



Date: 11.AUG.2020 14:58:01

Middle Channel / 16QAM

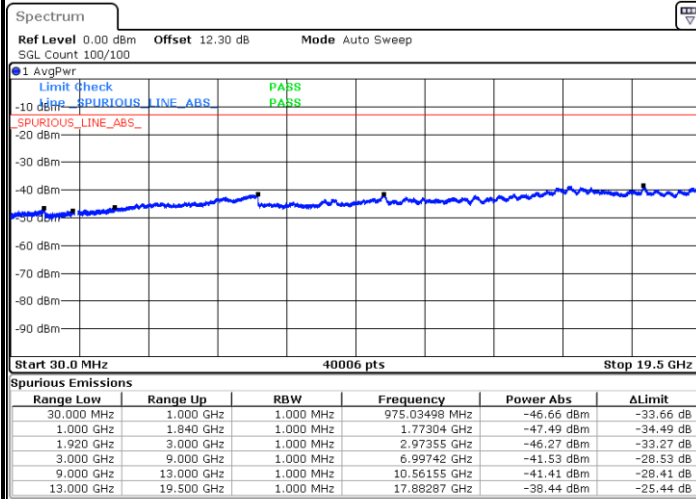


Date: 11.AUG.2020 14:59:01



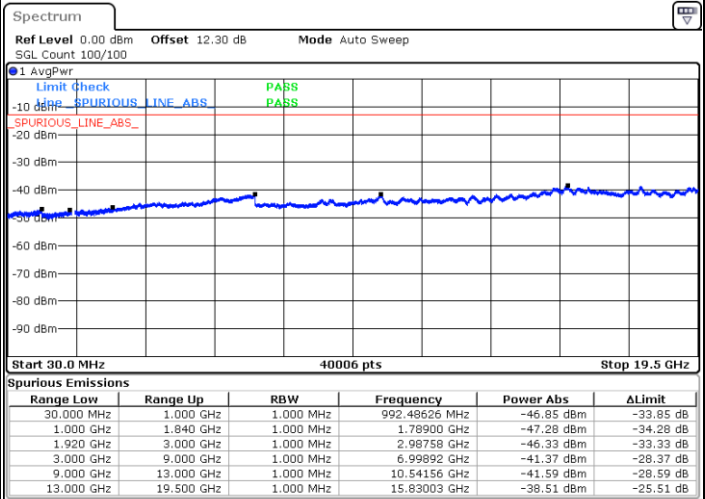
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 11.AUG.2020 15:06:13

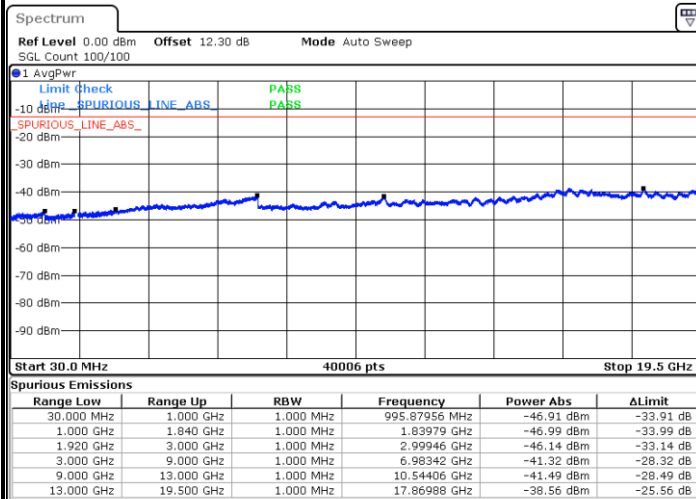
Highest Channel / 16QAM



Date: 11.AUG.2020 15:07:14

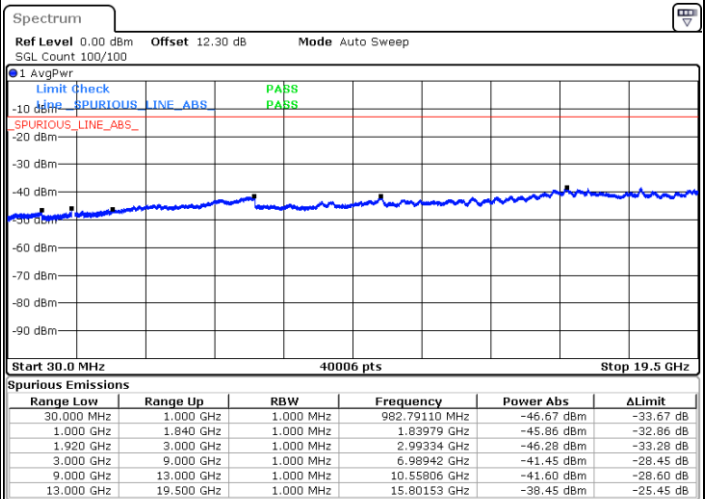
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 11.AUG.2020 15:14:28

Lowest Channel / 16QAM

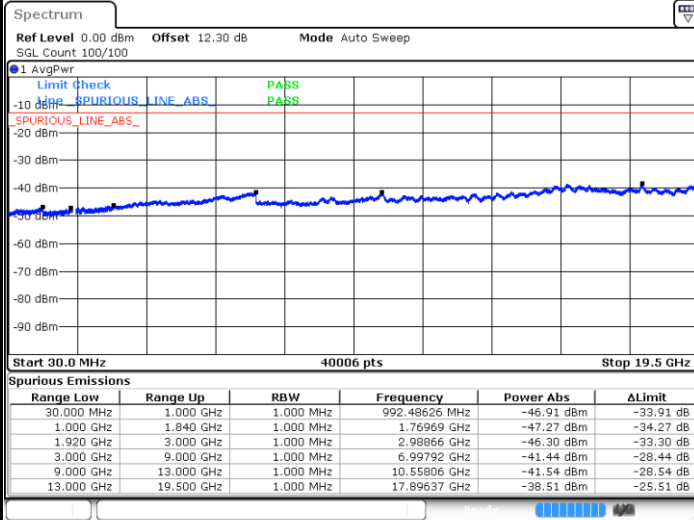


Date: 11.AUG.2020 15:15:29



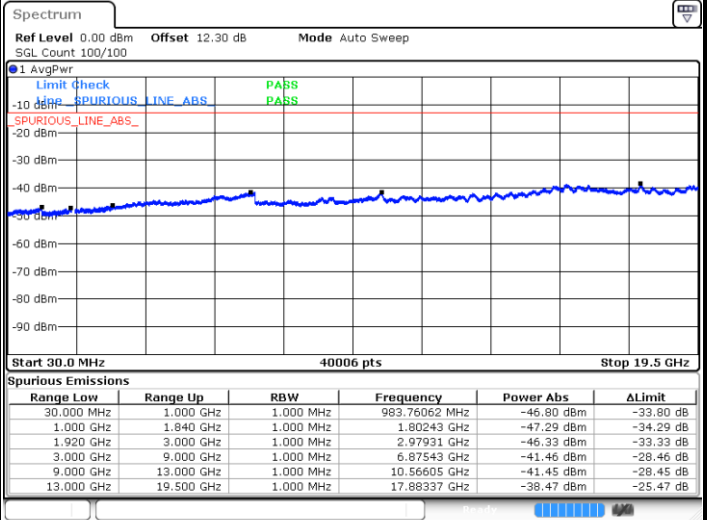
LTE Band 2 / 20MHz

Middle Channel / QPSK



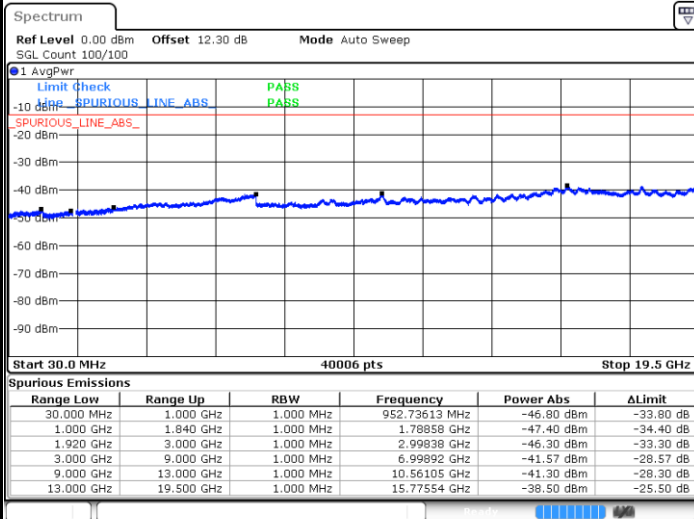
Date: 11.AUG.2020 15:17:15

Middle Channel / 16QAM



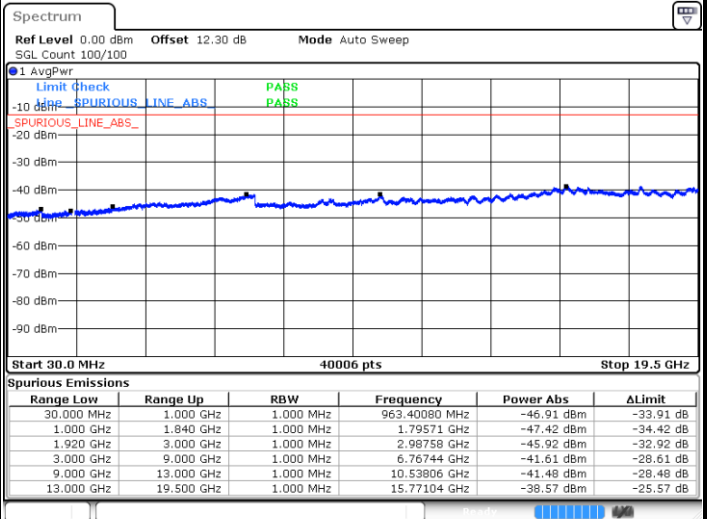
Date: 11.AUG.2020 15:18:16

Highest Channel / QPSK



Date: 11.AUG.2020 15:25:28

Highest Channel / 16QAM

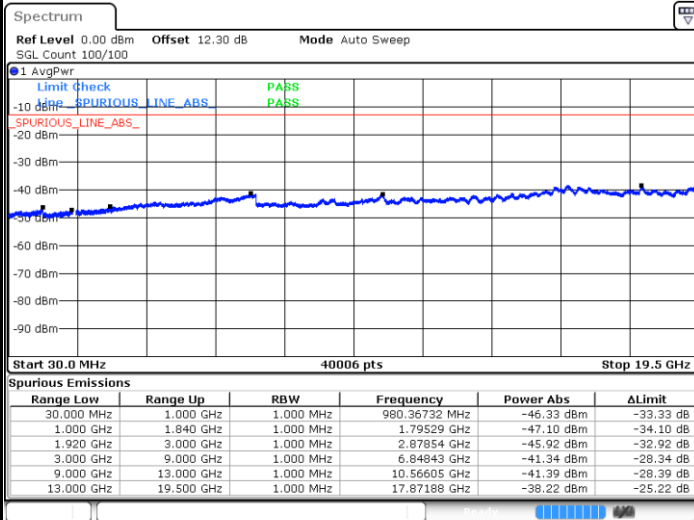


Date: 11.AUG.2020 15:26:29



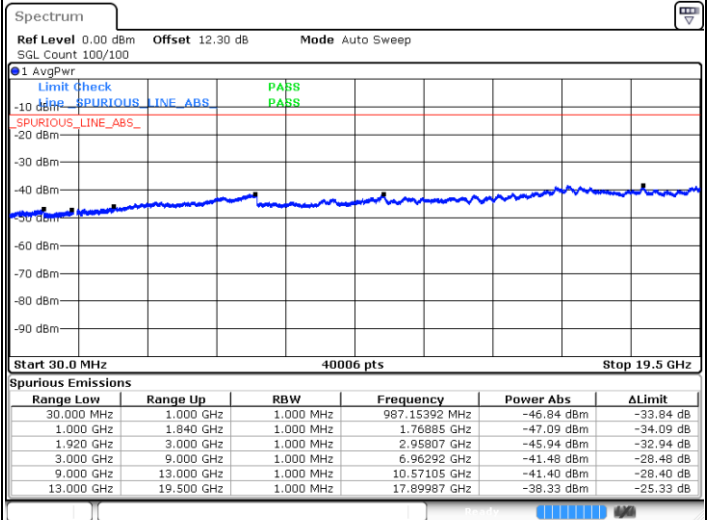
LTE Band 2 / 1.4MHz

Lowest Channel / 64QAM



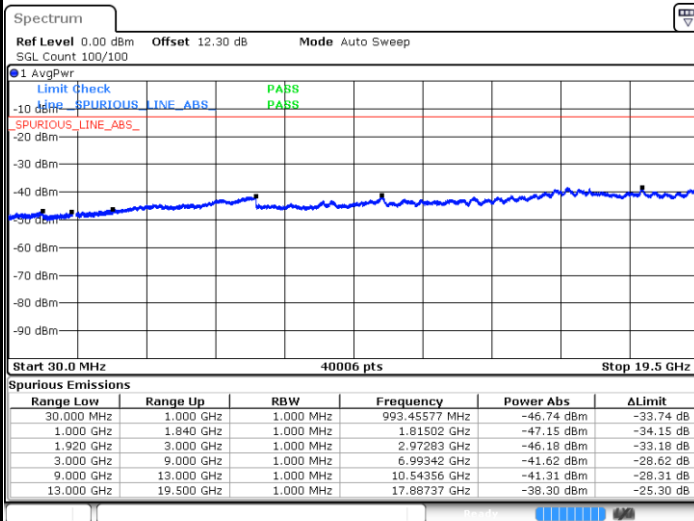
Date: 11.AUG.2020 13:40:34

Middle Channel / 64QAM



Date: 11.AUG.2020 13:41:57

Highest Channel / 64QAM

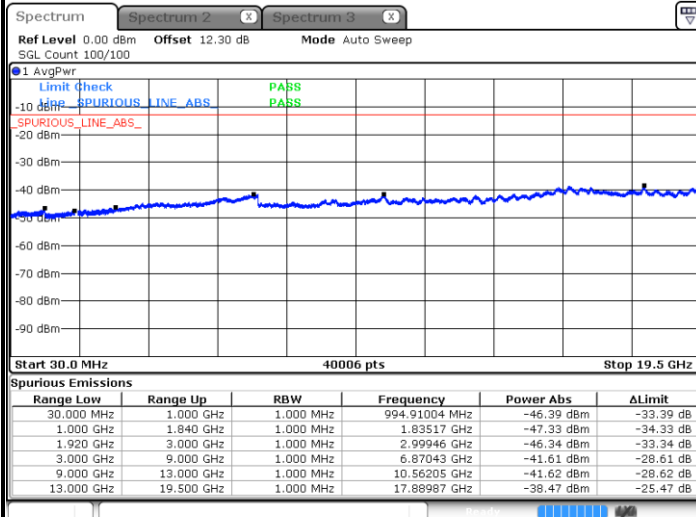


Date: 11.AUG.2020 13:46:03



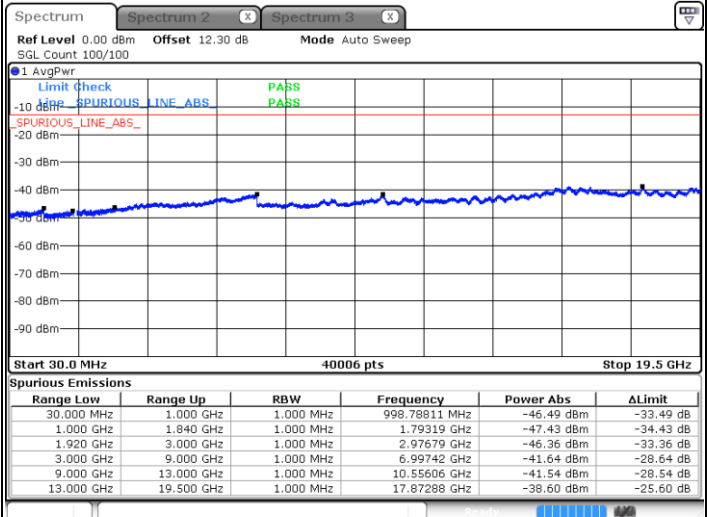
LTE Band 2 / 3MHz

Lowest Channel / 64QAM



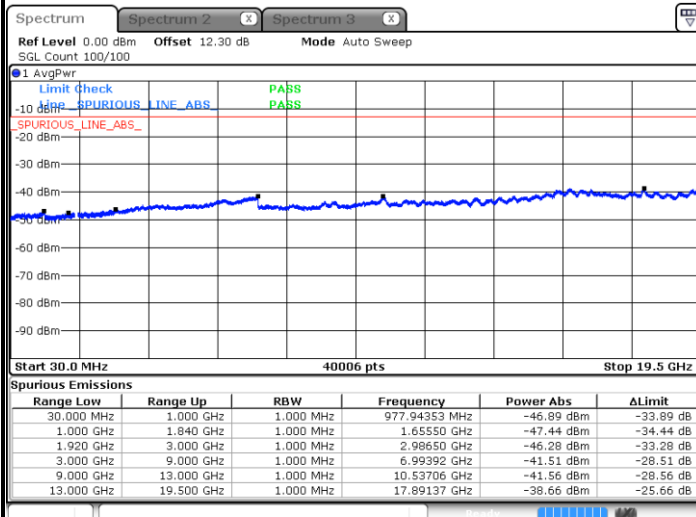
Date: 11.AUG.2020 11:16:22

Middle Channel / 64QAM



Date: 11.AUG.2020 11:17:46

Highest Channel / 64QAM

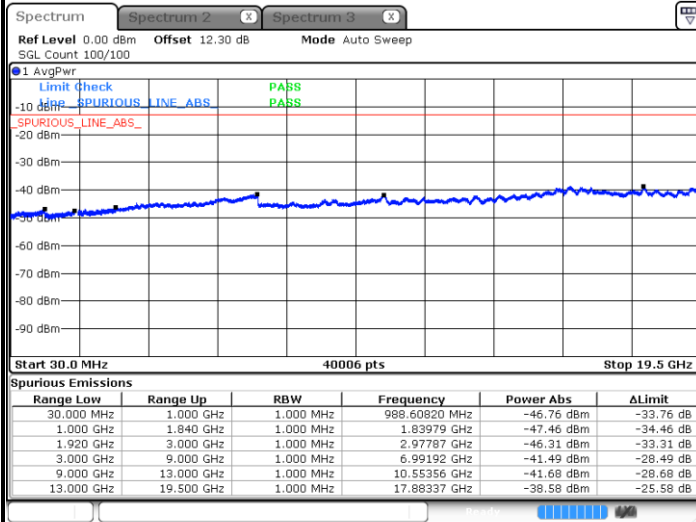


Date: 11.AUG.2020 11:21:52



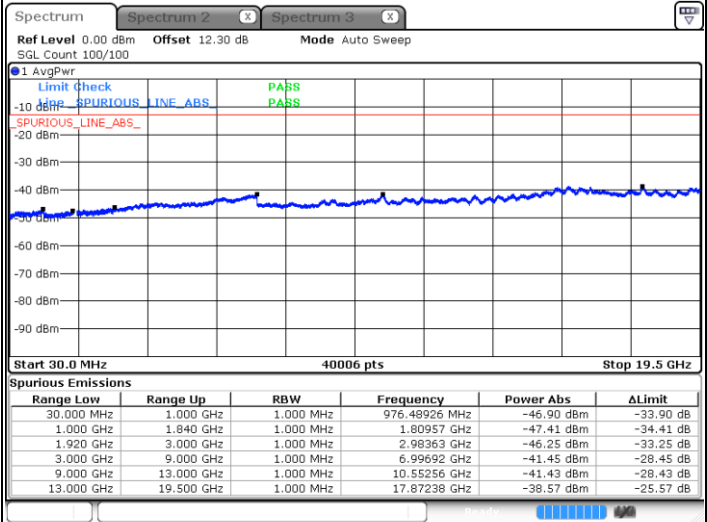
LTE Band 2 / 5MHz

Lowest Channel / 64QAM



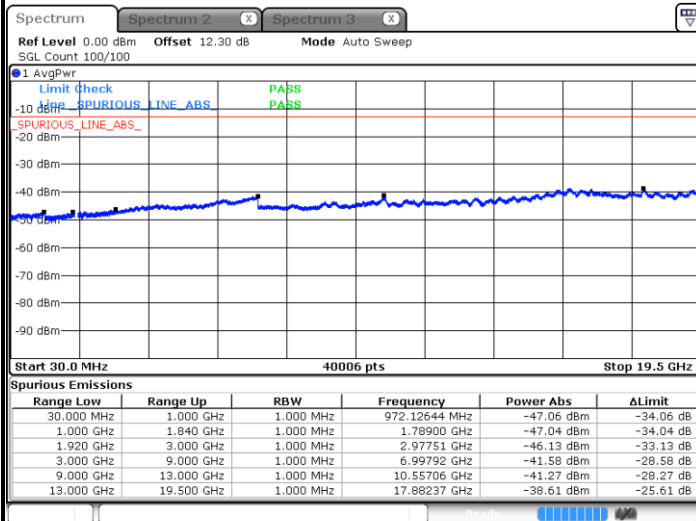
Date: 11.AUG.2020 11:25:59

Middle Channel / 64QAM



Date: 11.AUG.2020 11:27:23

Highest Channel / 64QAM

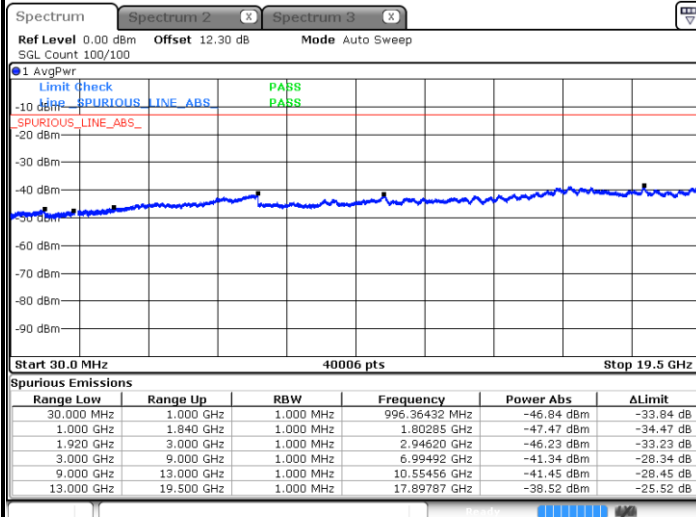


Date: 11.AUG.2020 11:31:30



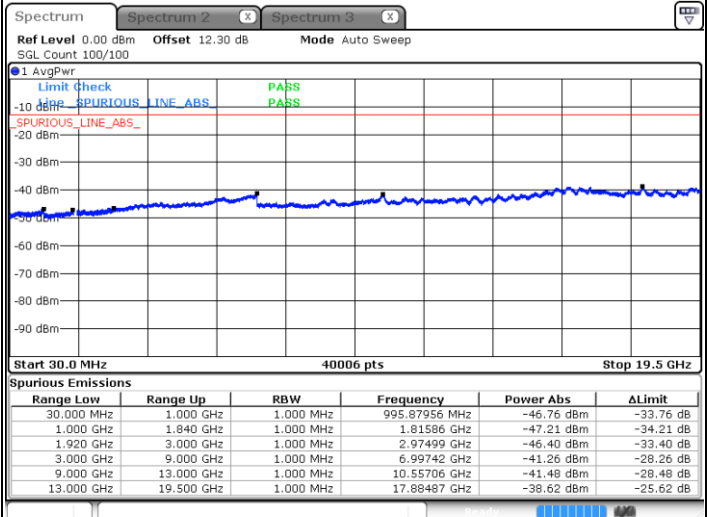
LTE Band 2 / 10MHz

Lowest Channel / 64QAM



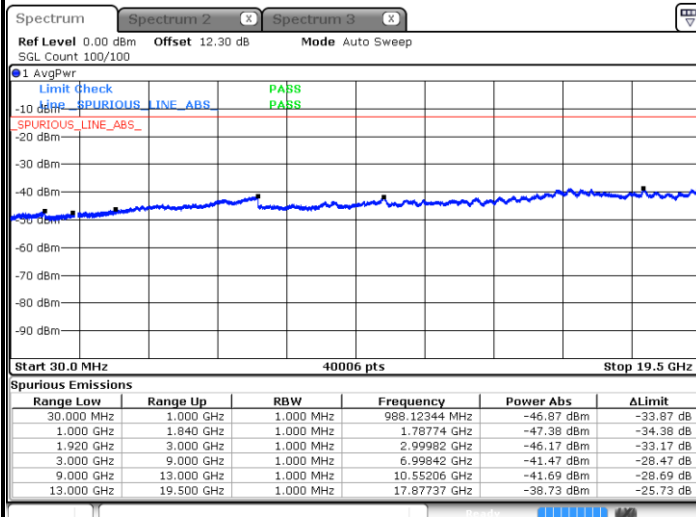
Date: 11.AUG.2020 11:35:37

Middle Channel / 64QAM



Date: 11.AUG.2020 11:37:01

Highest Channel / 64QAM

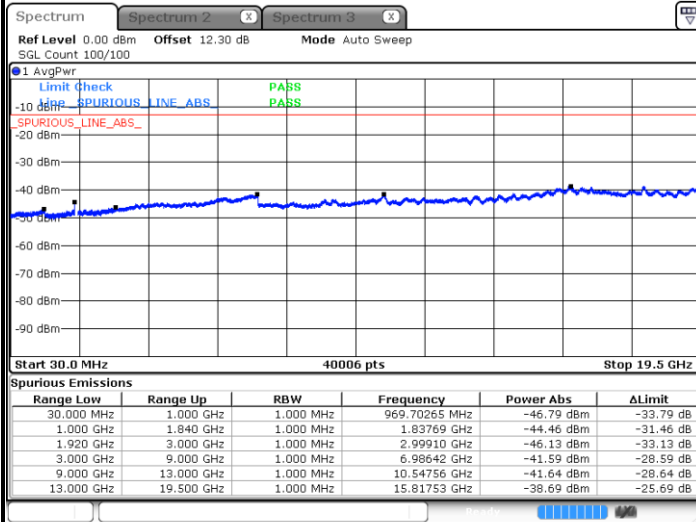


Date: 11.AUG.2020 11:41:07



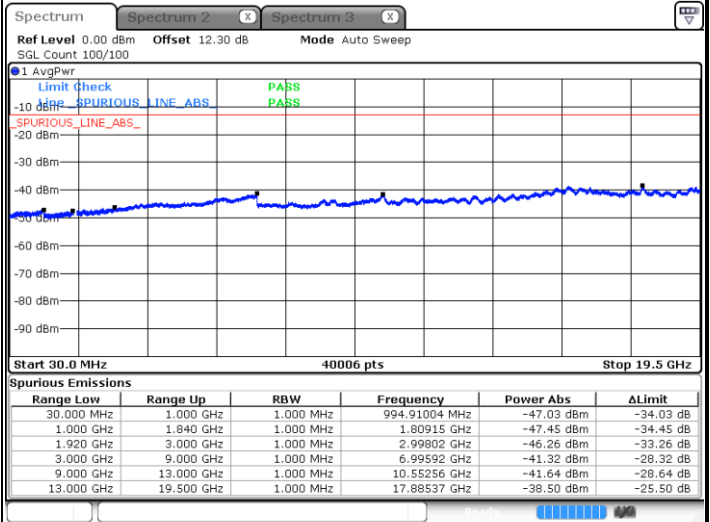
LTE Band 2 / 15MHz

Lowest Channel / 64QAM



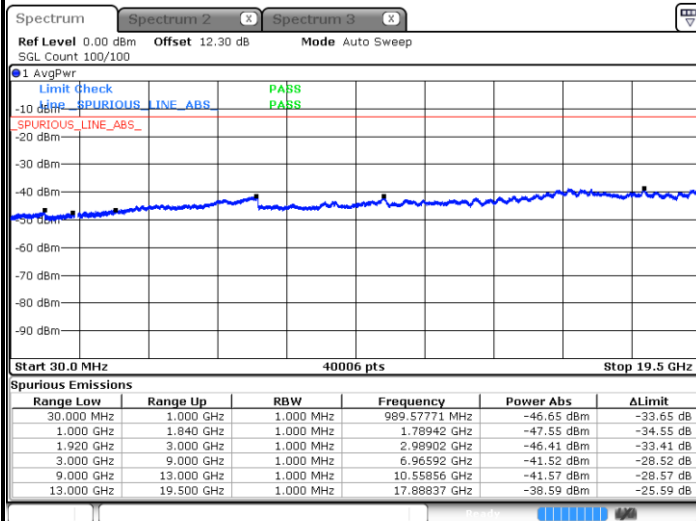
Date: 11.AUG.2020 11:45:14

Middle Channel / 64QAM



Date: 11.AUG.2020 11:46:37

Highest Channel / 64QAM

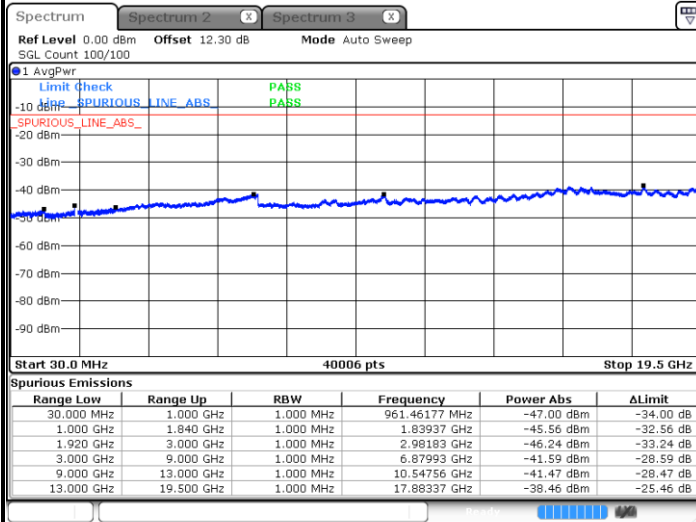


Date: 11.AUG.2020 11:50:43



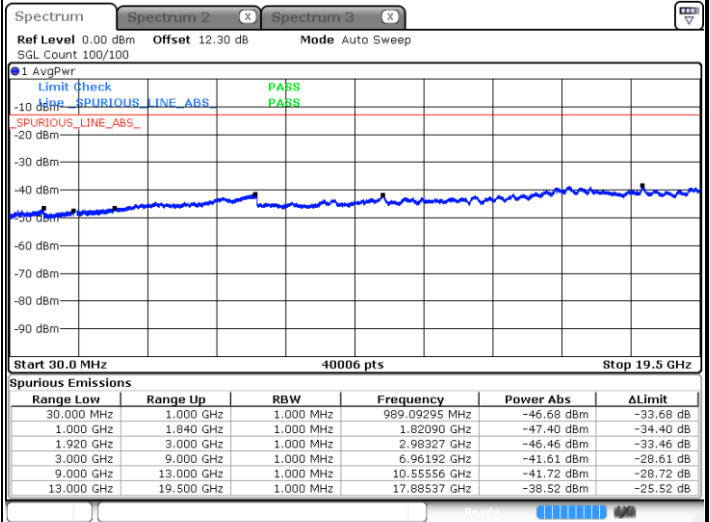
LTE Band 2 / 20MHz

Lowest Channel / 64QAM



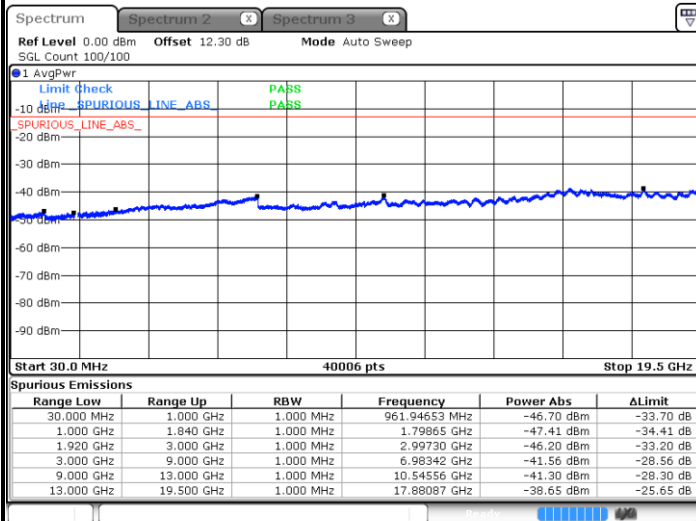
Date: 11.AUG.2020 11:54:49

Middle Channel / 64QAM



Date: 11.AUG.2020 11:56:13

Highest Channel / 64QAM



Date: 11.AUG.2020 12:00:19

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0030	PASS
40	Normal Voltage	0.0047	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0060	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0076	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0037	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.25 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



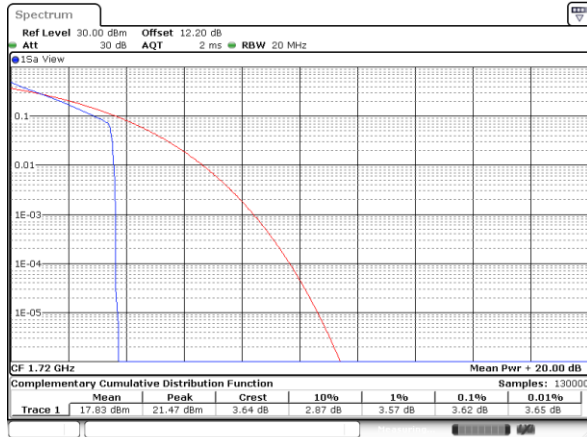
LTE Band 4

Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.62	4.99	5.51	5.91	PASS
Middle CH	3.51	4.96	6.32	5.91	
Highest CH	3.59	5.22	5.19	6.06	
Mode	LTE Band 4 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.93	6.55	-	-	PASS
Middle CH	6.64	6.55	-	-	
Highest CH	6.46	6.52	-	-	

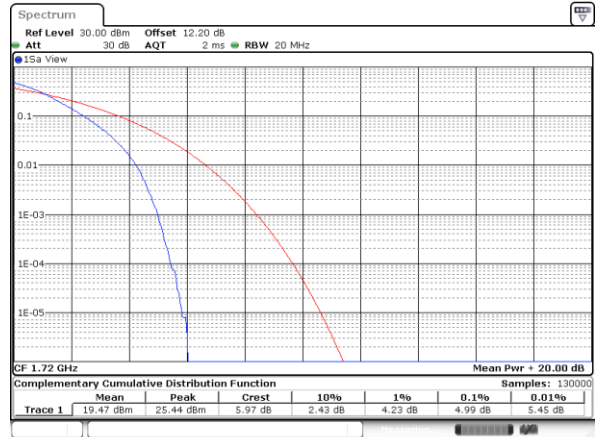
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



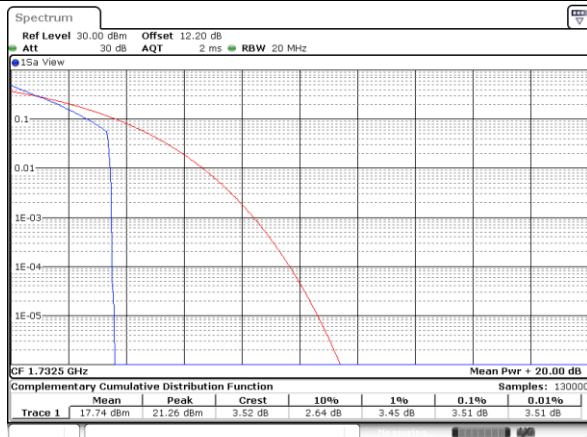
Date: 11 AUG 2020 19:29:50

Lowest Channel / Full RB



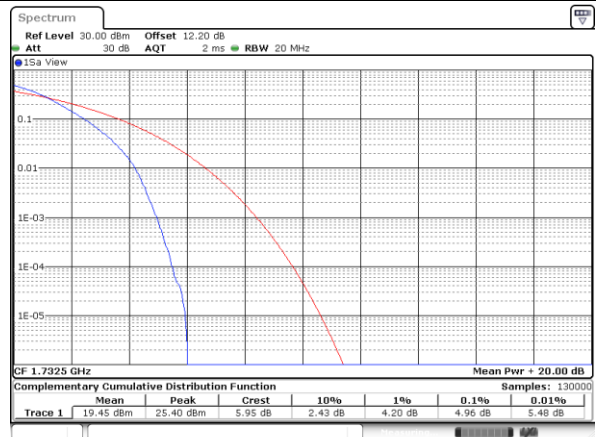
Date: 11 AUG 2020 19:30:14

Middle Channel / 1RB



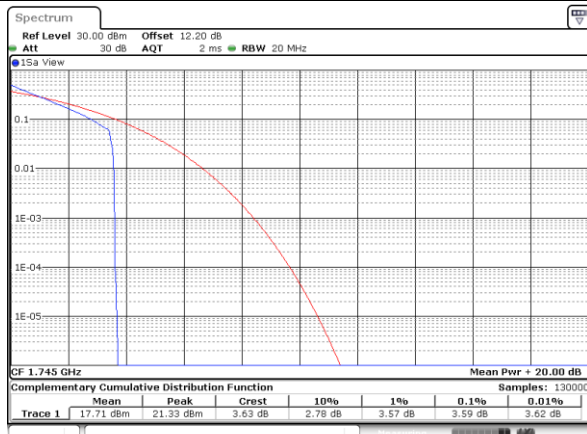
Date: 11 AUG 2020 19:30:25

Middle Channel / Full RB



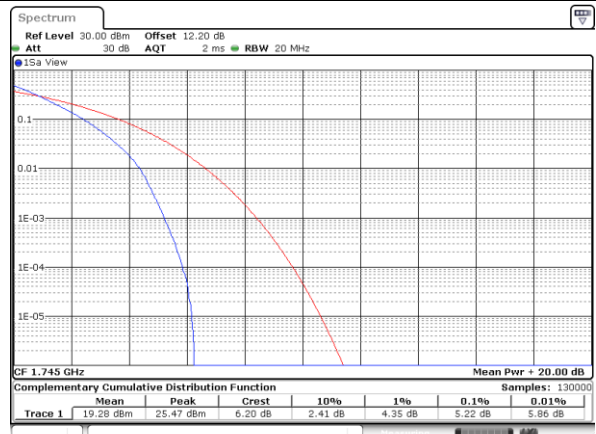
Date: 11 AUG 2020 19:30:38

Highest Channel / 1RB



Date: 11 AUG 2020 19:30:50

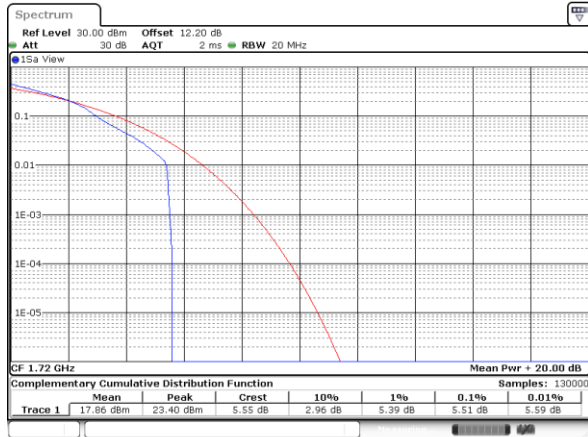
Highest Channel / Full RB



Date: 11 AUG 2020 19:31:12

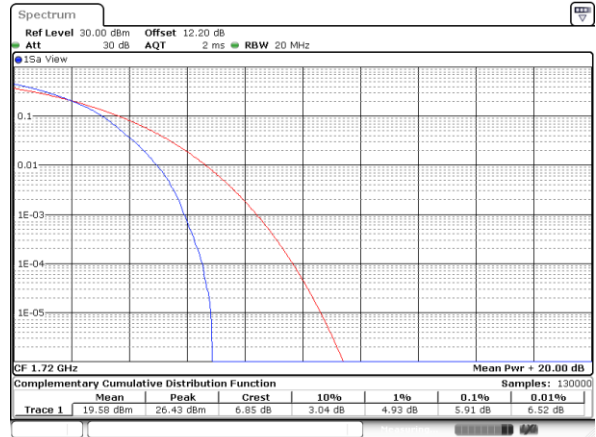
LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



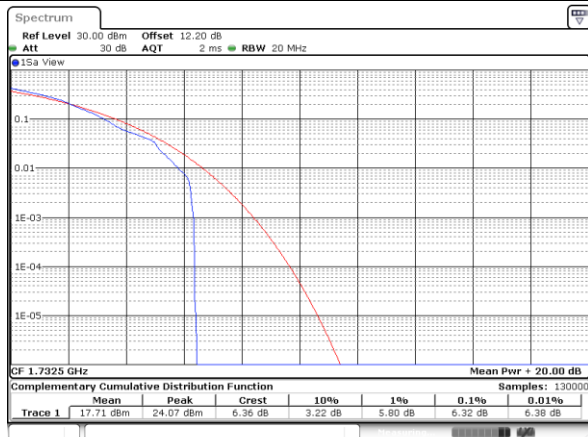
Date: 11 AUG 2020 19:28:34

Lowest Channel / Full RB



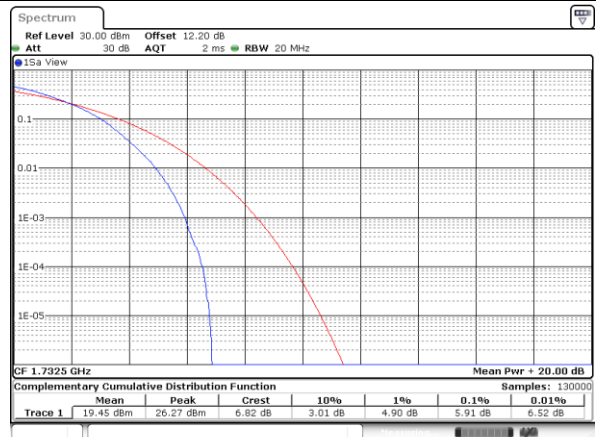
Date: 11 AUG 2020 19:28:46

Middle Channel / 1RB



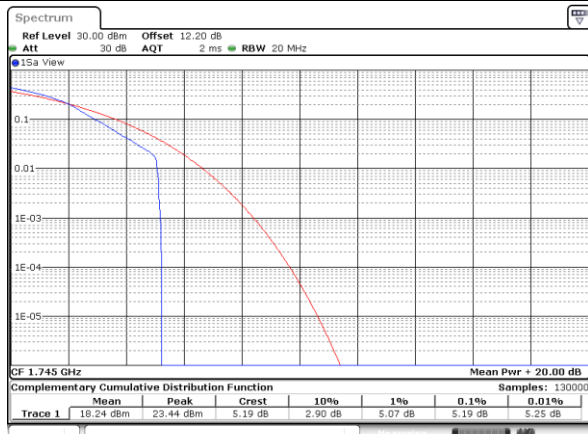
Date: 11 AUG 2020 19:28:57

Middle Channel / Full RB



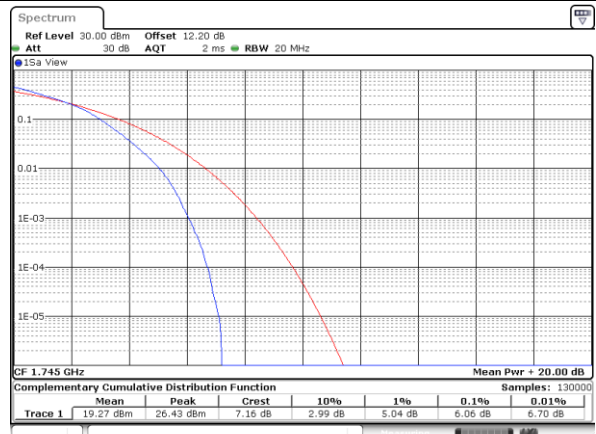
Date: 11 AUG 2020 19:29:08

Highest Channel / 1RB



Date: 11 AUG 2020 19:29:28

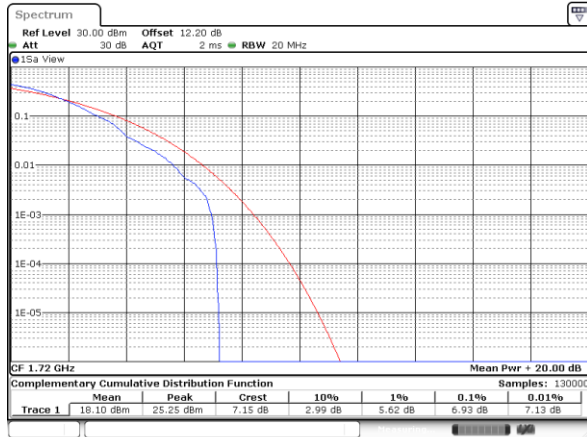
Highest Channel / Full RB



Date: 11 AUG 2020 19:29:39

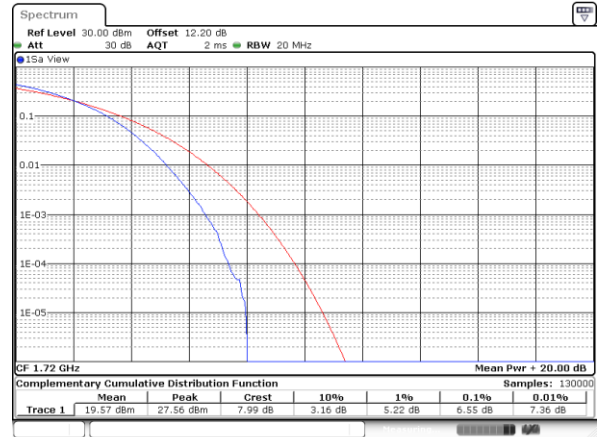
LTE Band 4 / 20MHz / 64QAM

Lowest Channel / 1RB



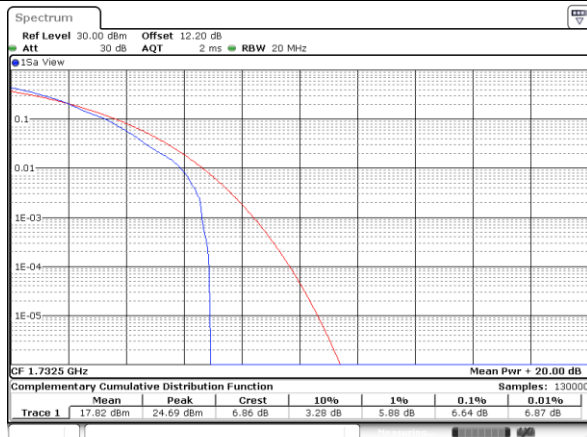
Date: 11 AUG 2020 19:31:25

Lowest Channel / Full RB



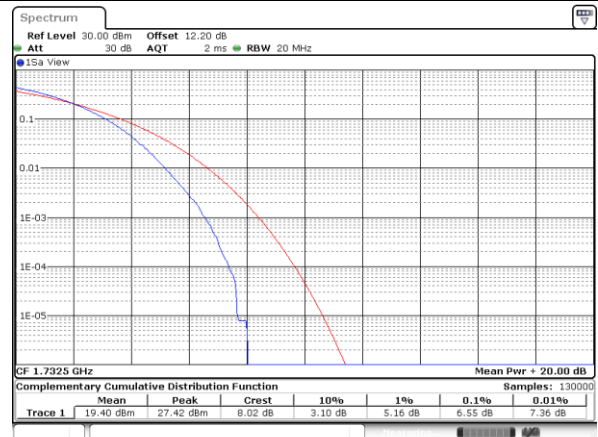
Date: 11 AUG 2020 19:31:37

Middle Channel / 1RB



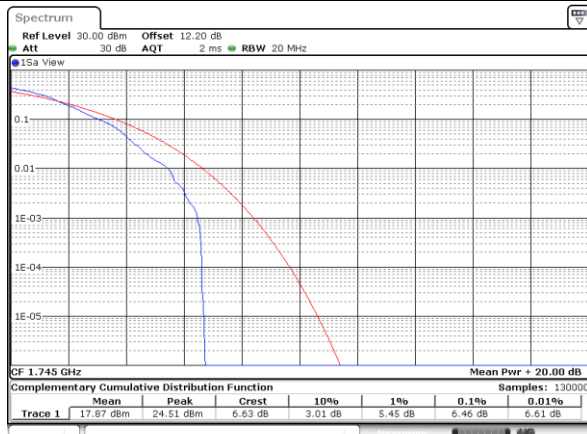
Date: 12 AUG 2020 02:32:06

Middle Channel / Full RB



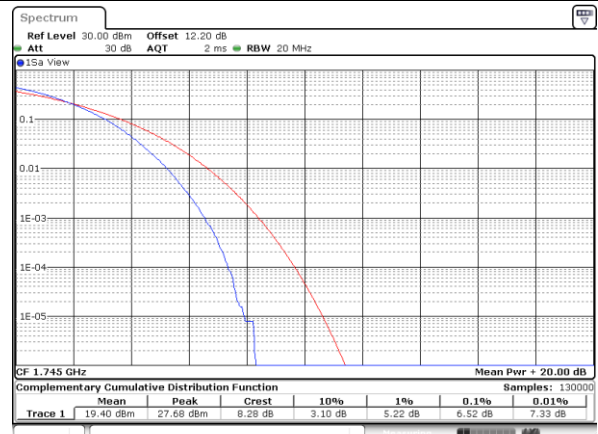
Date: 11 AUG 2020 19:40:25

Highest Channel / 1RB



Date: 11 AUG 2020 19:41:29

Highest Channel / Full RB



Date: 11 AUG 2020 19:41:16

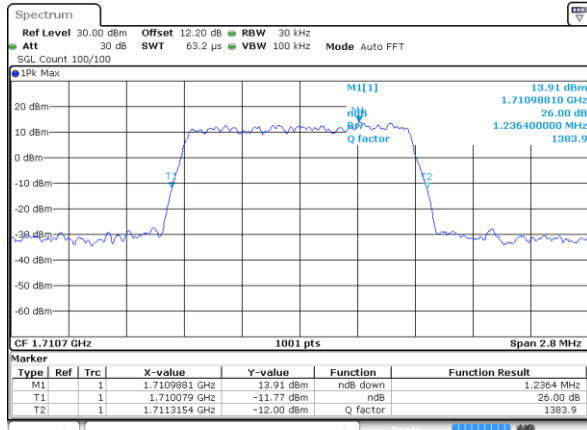
**26dB Bandwidth**

Mode	LTE Band 4 : 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	1.24	1.23	3.00	3.00	4.91	4.86	9.73	9.71	14.42	14.54	19.02	18.86
Middle CH	1.23	1.22	3.03	3.02	4.91	4.90	9.75	9.81	14.30	14.45	19.14	18.86
Highest CH	1.22	1.22	3.02	3.00	4.94	4.90	9.75	9.63	14.45	14.51	19.14	19.18
Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.24	-	3.02	-	4.89	-	9.67	-	14.57	-	19.06	-
Middle CH	1.24	-	3.06	-	4.94	-	9.75	-	14.18	-	18.98	-
Highest CH	1.21	-	2.96	-	4.95	-	9.77	-	14.57	-	19.46	-



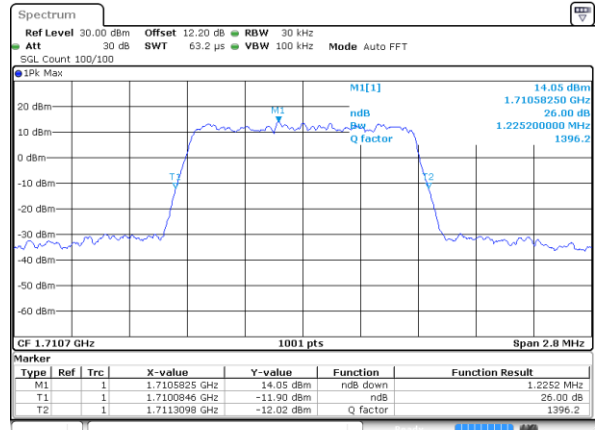
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



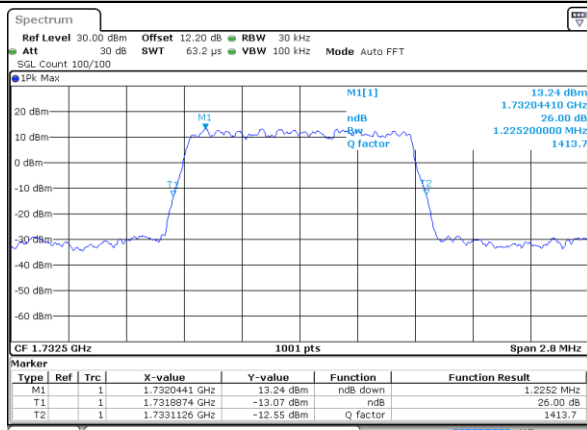
Date: 11 AUG 2020 19:03:29

Lowest Channel / 1.4MHz / 16QAM



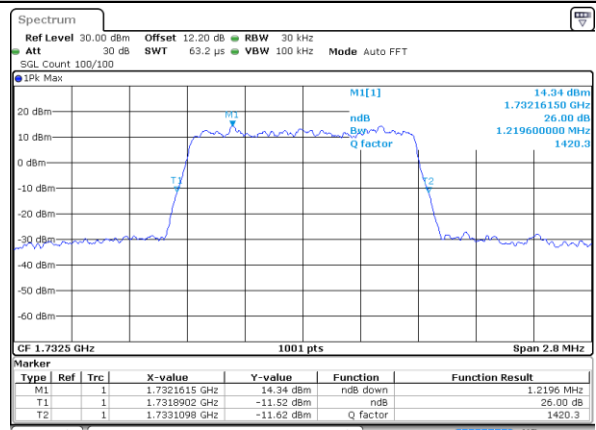
Date: 11 AUG 2020 19:03:41

Middle Channel / 1.4MHz / QPSK



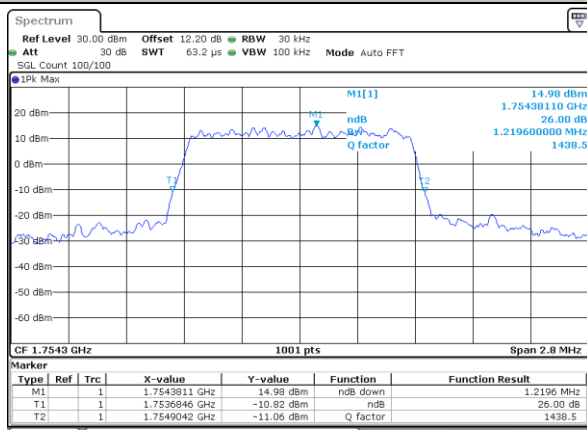
Date: 11 AUG 2020 19:09:53

Middle Channel / 1.4MHz / 16QAM



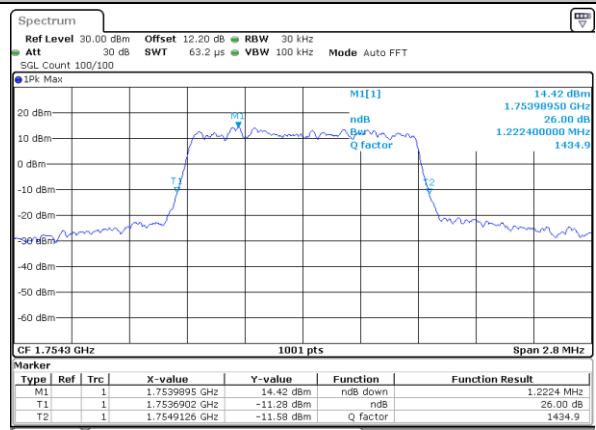
Date: 11 AUG 2020 19:10:04

Highest Channel / 1.4MHz / QPSK



Date: 11 AUG 2020 19:12:01

Highest Channel / 1.4MHz / 16QAM

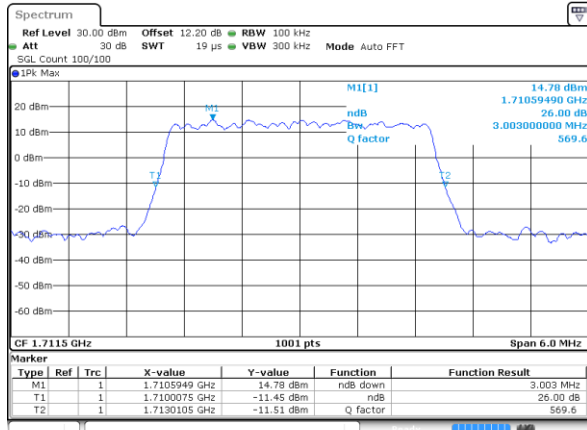


Date: 11 AUG 2020 19:12:13



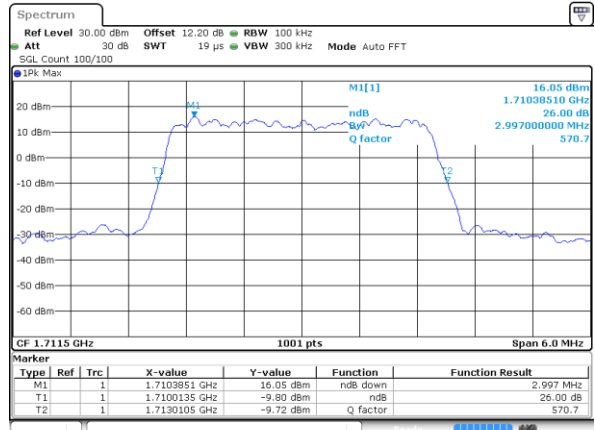
LTE Band 4

Lowest Channel / 3MHz / QPSK



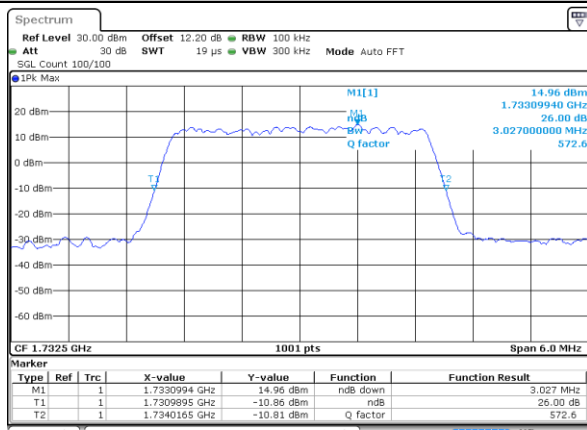
Date: 11 AUG 2020 17:06:50

Lowest Channel / 3MHz / 16QAM



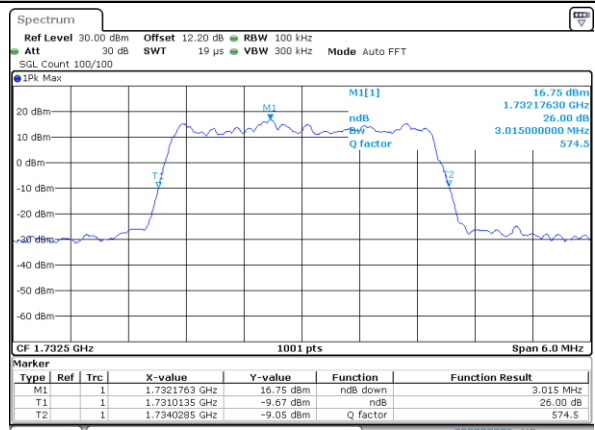
Date: 11 AUG 2020 17:07:02

Middle Channel / 3MHz / QPSK



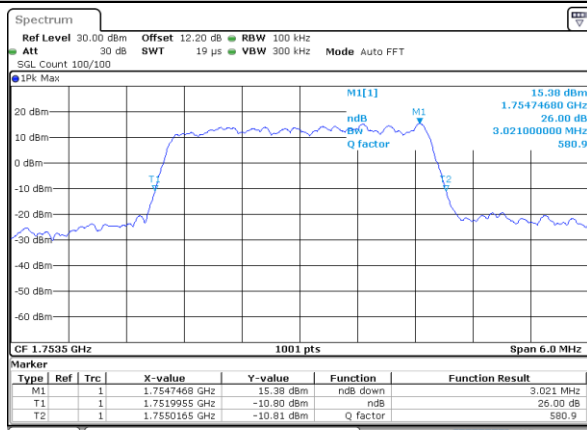
Date: 11 AUG 2020 17:13:02

Middle Channel / 3MHz / 16QAM



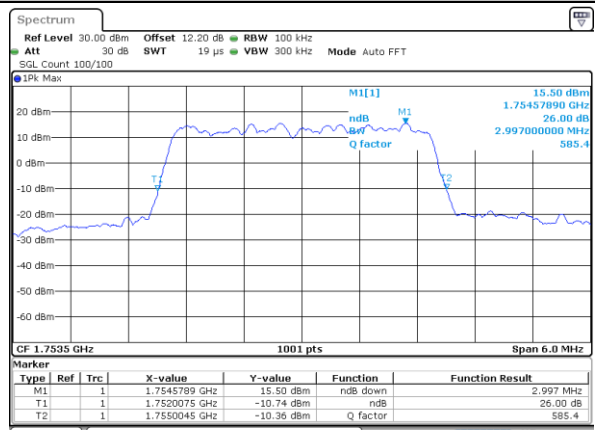
Date: 11 AUG 2020 17:13:13

Highest Channel / 3MHz / QPSK



Date: 11 AUG 2020 17:15:11

Highest Channel / 3MHz / 16QAM

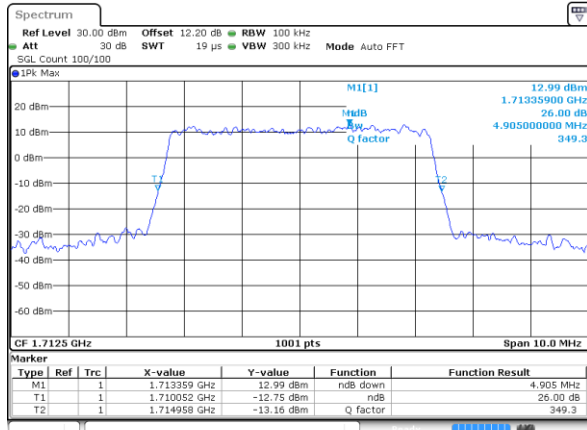


Date: 11 AUG 2020 17:15:23



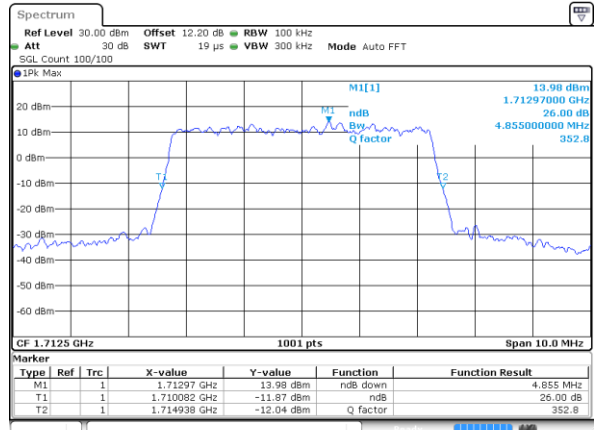
LTE Band 4

Lowest Channel / 5MHz / QPSK



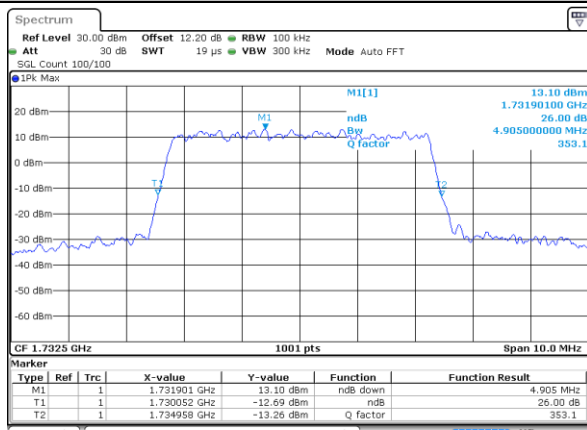
Date: 11 AUG 2020 17:21:24

Lowest Channel / 5MHz / 16QAM



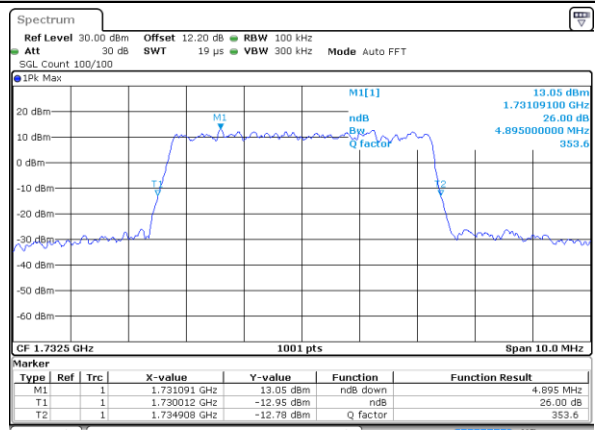
Date: 11 AUG 2020 17:21:36

Middle Channel / 5MHz / QPSK



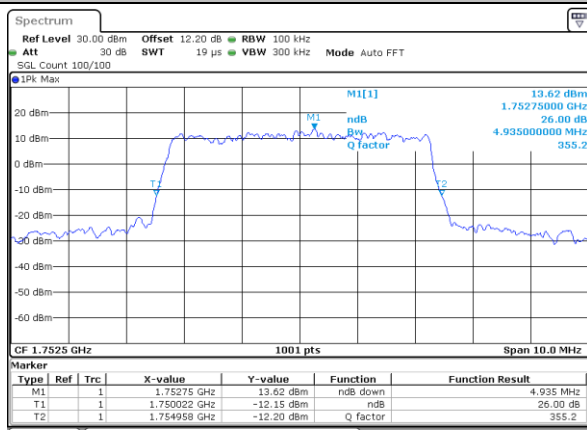
Date: 11 AUG 2020 17:27:36

Middle Channel / 5MHz / 16QAM



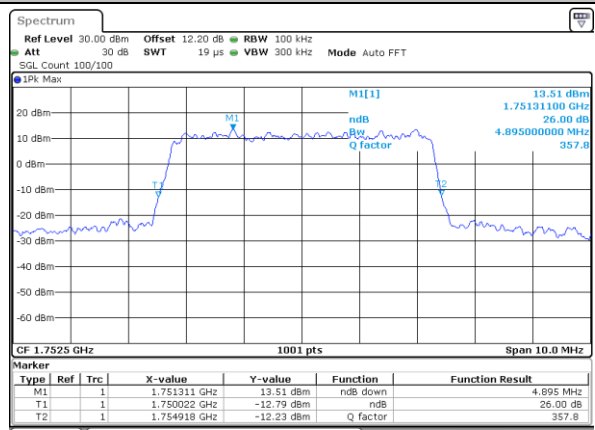
Date: 11 AUG 2020 17:27:48

Highest Channel / 5MHz / QPSK



Date: 11 AUG 2020 17:29:44

Highest Channel / 5MHz / 16QAM

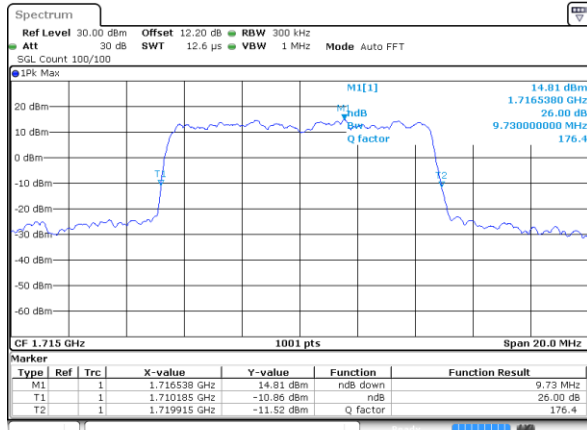


Date: 11 AUG 2020 17:29:56



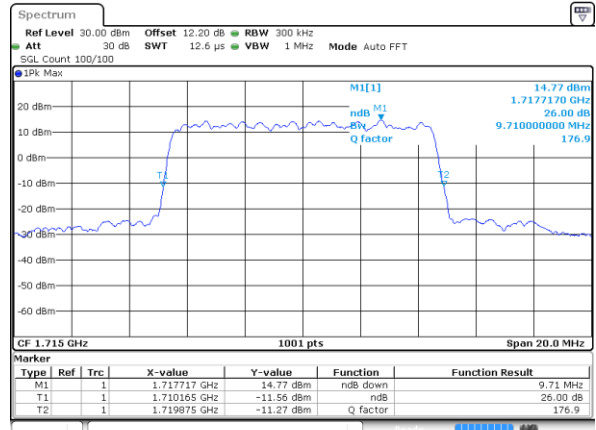
LTE Band 4

Lowest Channel / 10MHz / QPSK



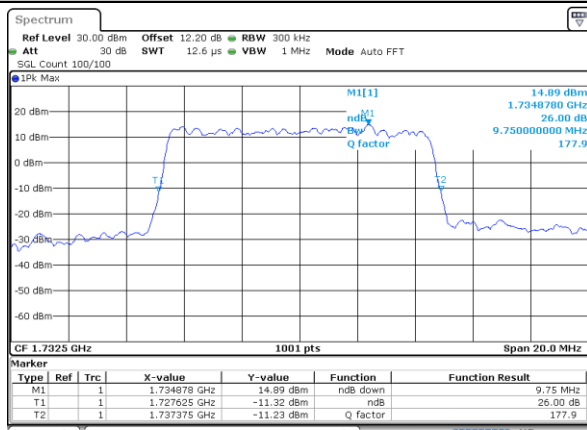
Date: 11 AUG 2020 17:35:58

Lowest Channel / 10MHz / 16QAM



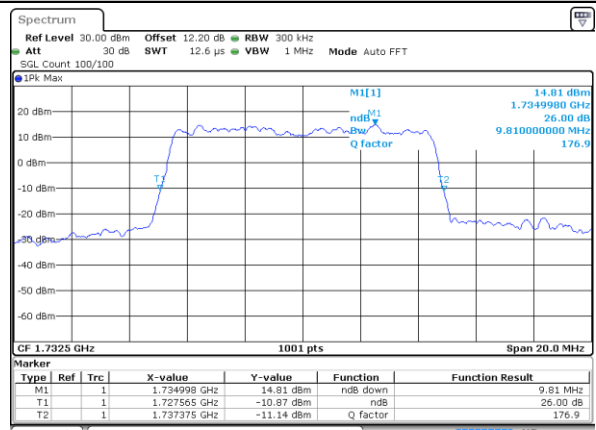
Date: 11 AUG 2020 17:36:10

Middle Channel / 10MHz / QPSK



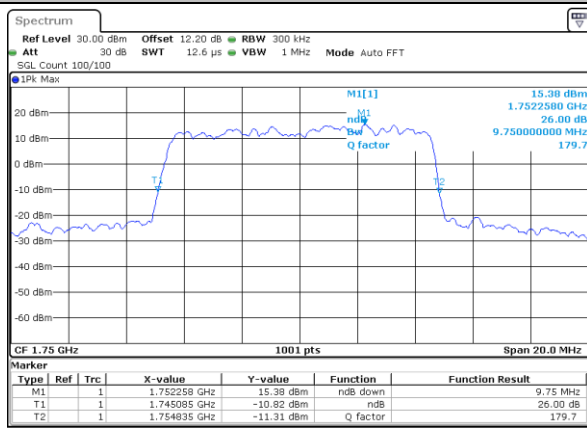
Date: 11 AUG 2020 17:42:09

Middle Channel / 10MHz / 16QAM



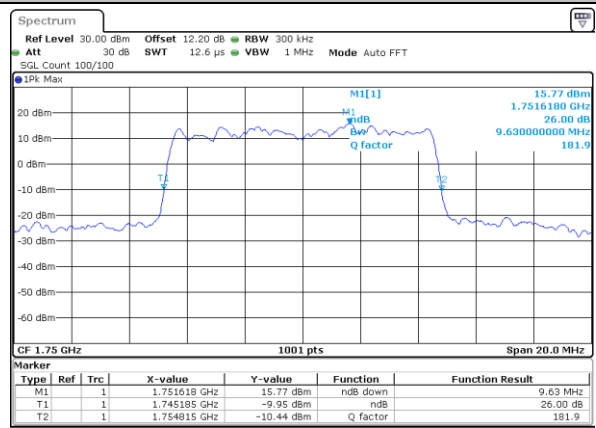
Date: 11 AUG 2020 17:42:21

Highest Channel / 10MHz / QPSK



Date: 11 AUG 2020 17:44:17

Highest Channel / 10MHz / 16QAM

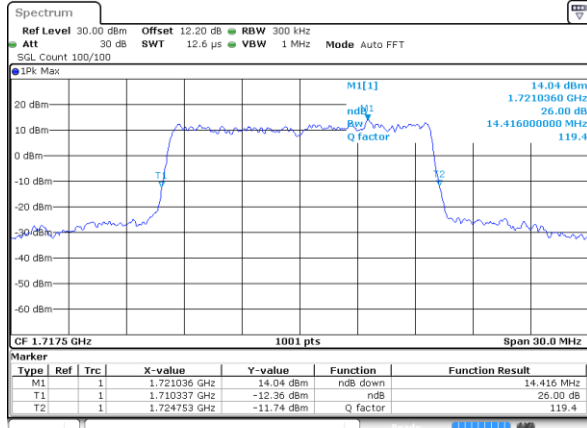


Date: 11 AUG 2020 17:44:29



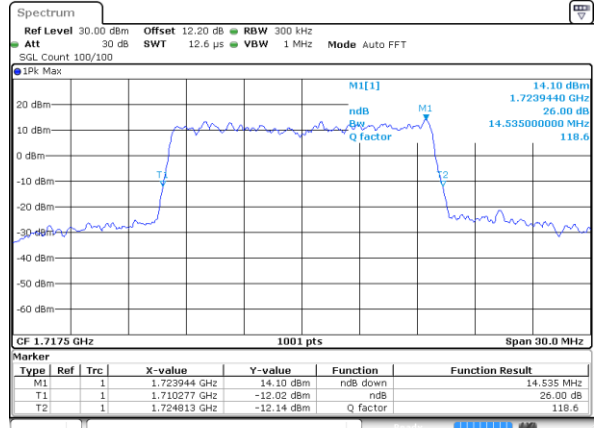
LTE Band 4

Lowest Channel / 15MHz / QPSK



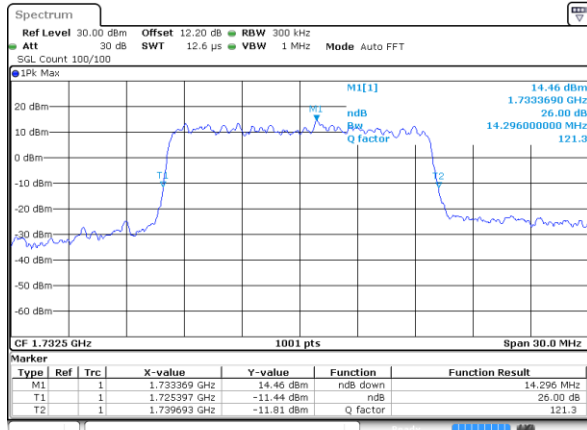
Date: 11 AUG 2020 17:50:30

Lowest Channel / 15MHz / 16QAM



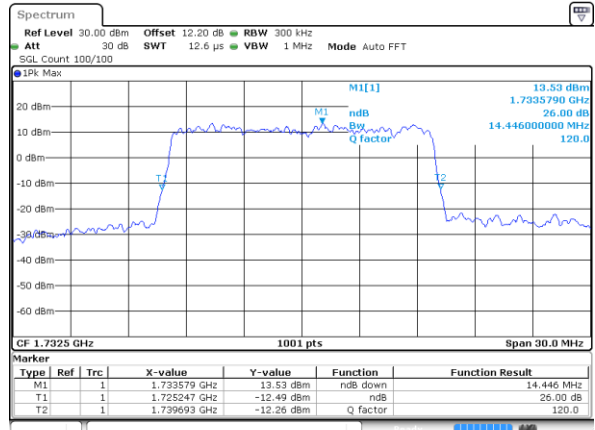
Date: 11 AUG 2020 17:50:42

Middle Channel / 15MHz / QPSK



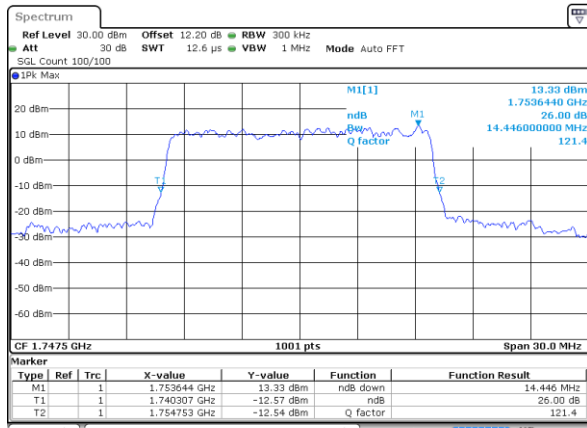
Date: 11 AUG 2020 17:56:42

Middle Channel / 15MHz / 16QAM



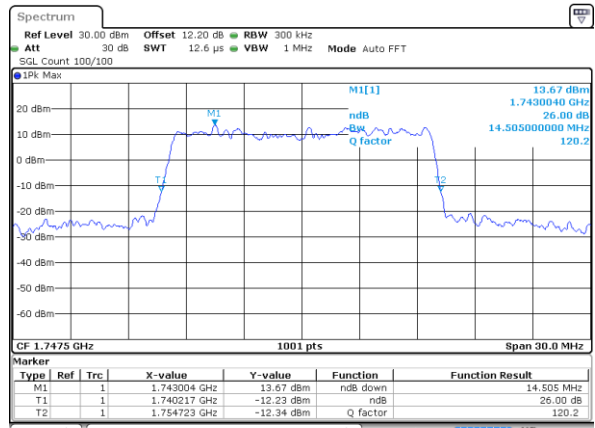
Date: 11 AUG 2020 17:56:54

Highest Channel / 15MHz / QPSK



Date: 11 AUG 2020 17:58:51

Highest Channel / 15MHz / 16QAM

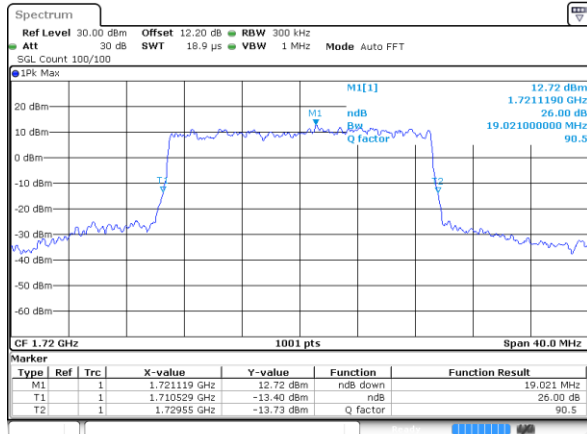


Date: 11 AUG 2020 17:59:03



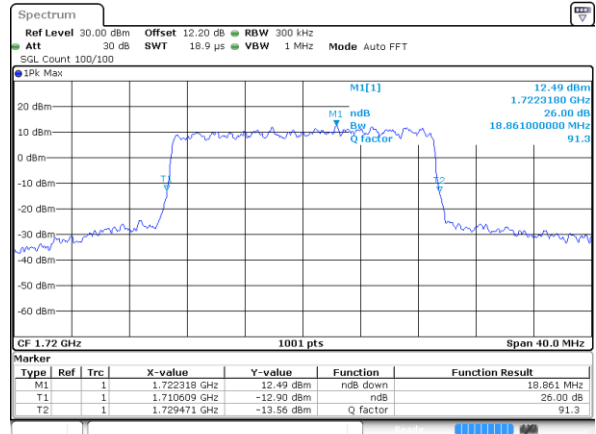
LTE Band 4

Lowest Channel / 20MHz / QPSK



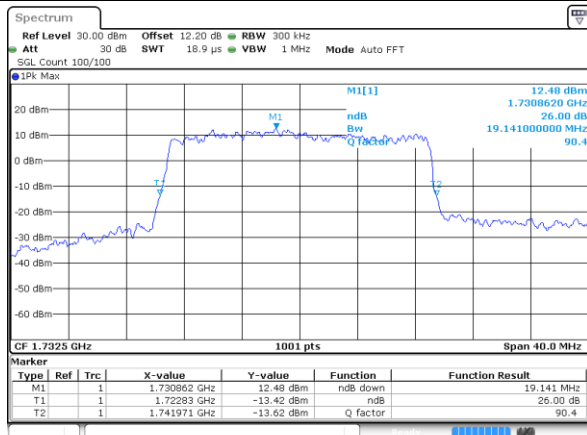
Date: 11 AUG 2020 18:05:05

Lowest Channel / 20MHz / 16QAM



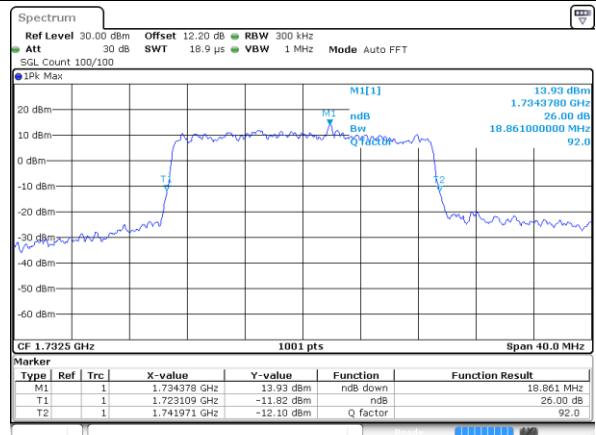
Date: 11 AUG 2020 18:05:17

Middle Channel / 20MHz / QPSK



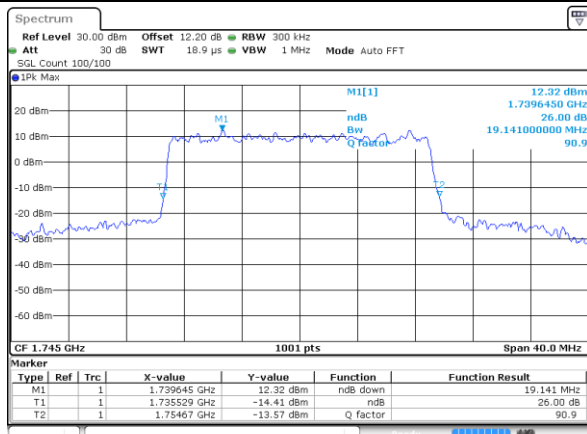
Date: 11 AUG 2020 18:11:16

Middle Channel / 20MHz / 16QAM



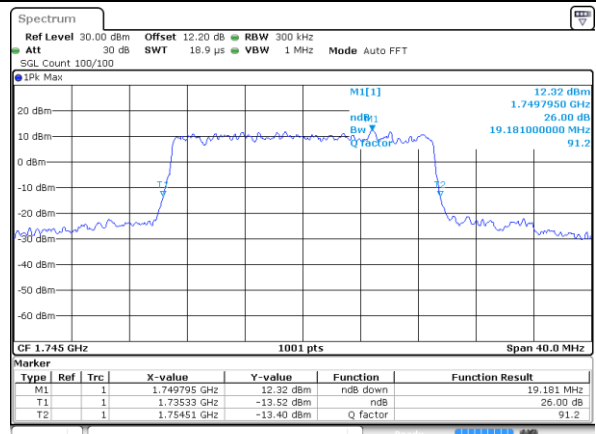
Date: 11 AUG 2020 18:11:28

Highest Channel / 20MHz / QPSK



Date: 11 AUG 2020 18:13:25

Highest Channel / 20MHz / 16QAM

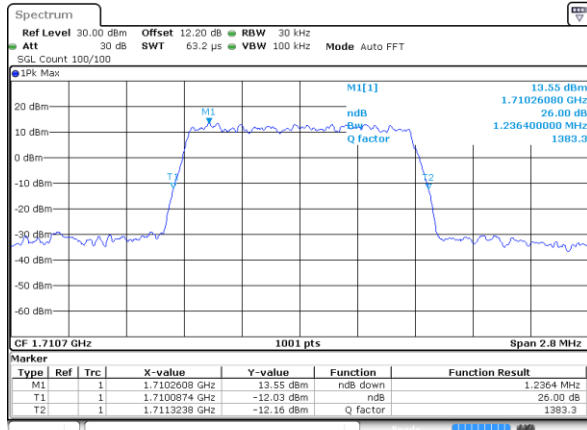


Date: 11 AUG 2020 18:13:37



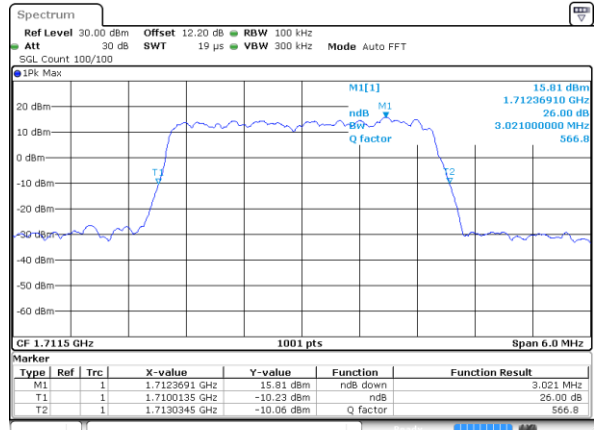
LTE Band 4

Lowest Channel / 1.4MHz / 64QAM



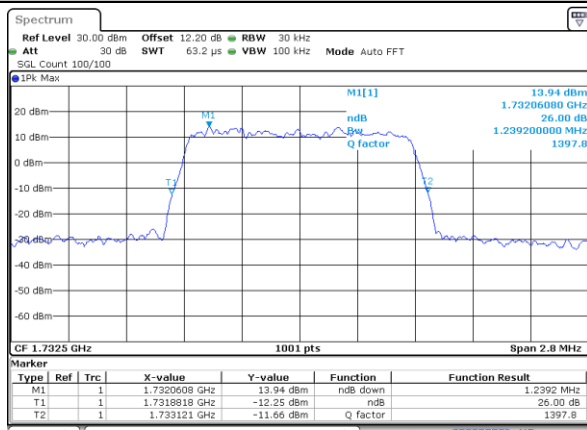
Date: 11 AUG 2020 18:55:48

Lowest Channel / 3MHz / 64QAM



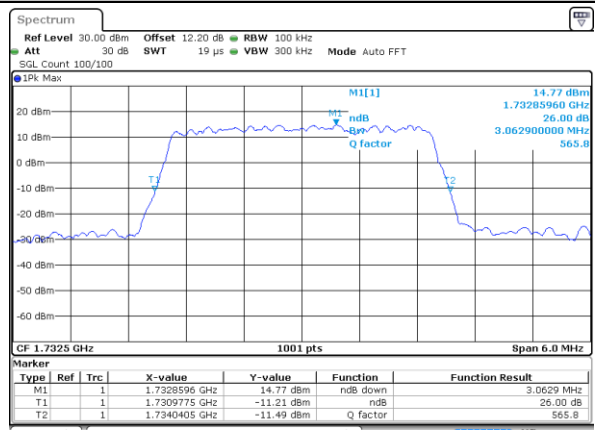
Date: 11 AUG 2020 18:19:26

Middle Channel / 1.4MHz / 64QAM



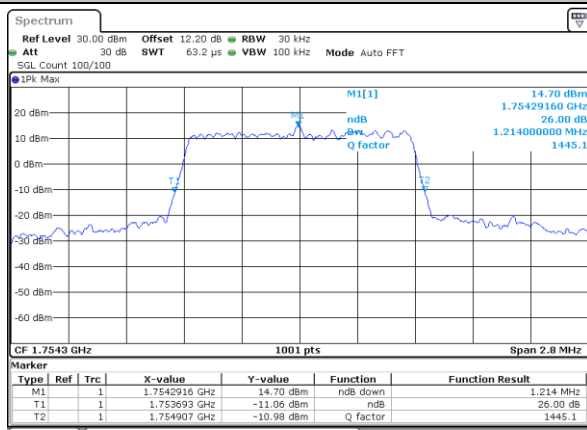
Date: 11 AUG 2020 18:59:00

Middle Channel / 3MHz / 64QAM



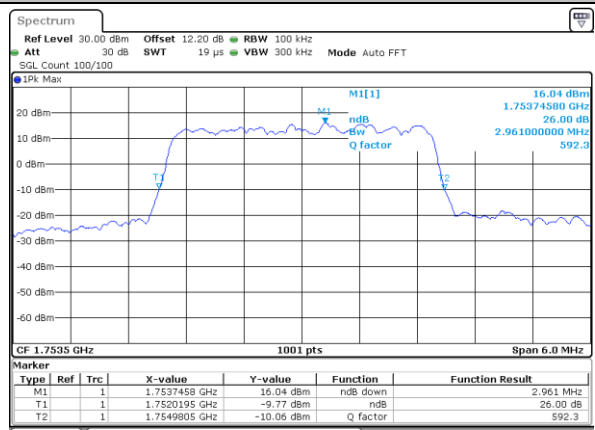
Date: 11 AUG 2020 18:22:32

Highest Channel / 1.4MHz / 64QAM



Date: 11 AUG 2020 19:00:04

Highest Channel / 3MHz / 64QAM

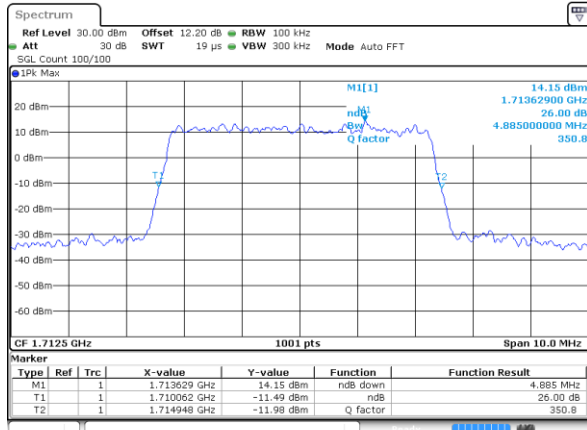


Date: 11 AUG 2020 18:23:36

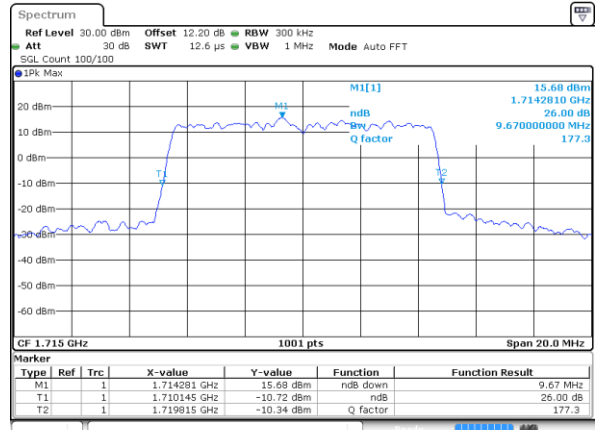


LTE Band 4

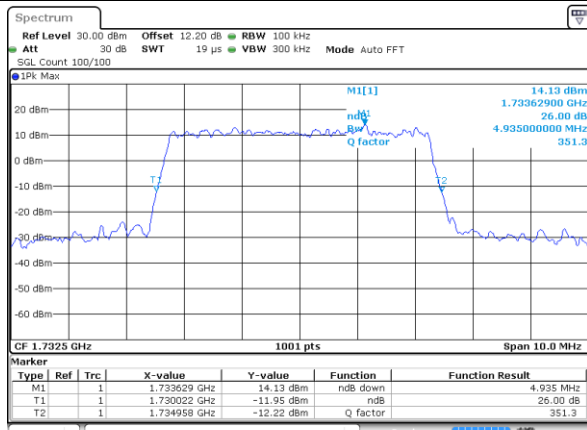
Lowest Channel / 5MHz / 64QAM



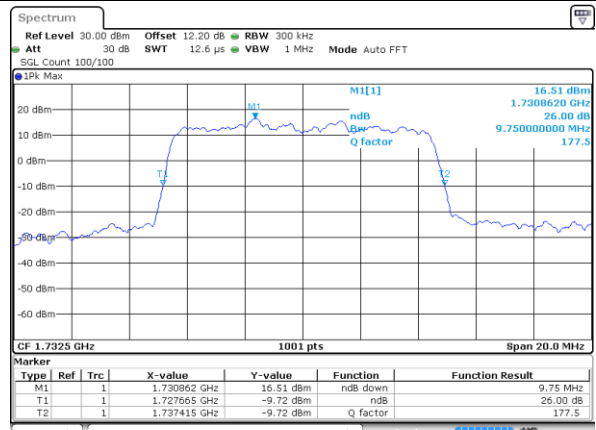
Lowest Channel / 10MHz / 64QAM



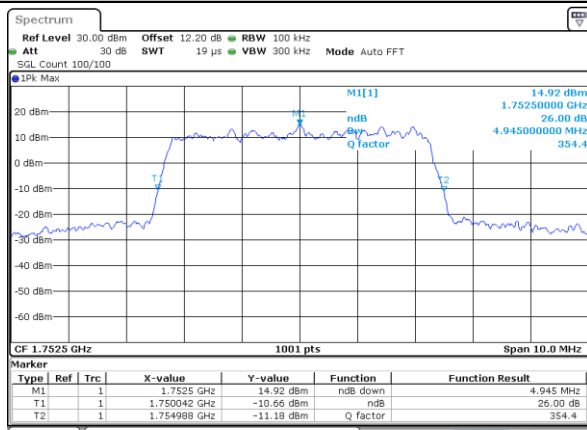
Middle Channel / 5MHz / 64QAM



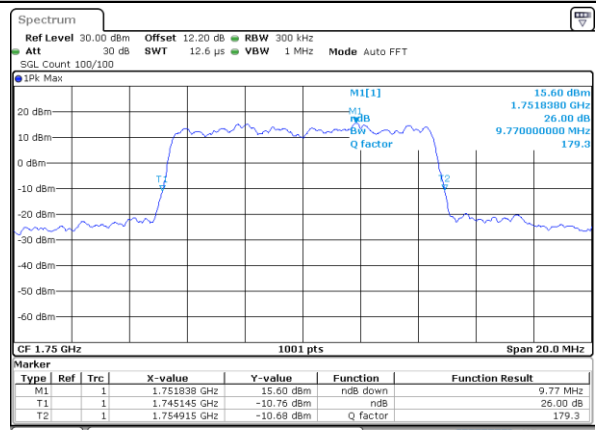
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



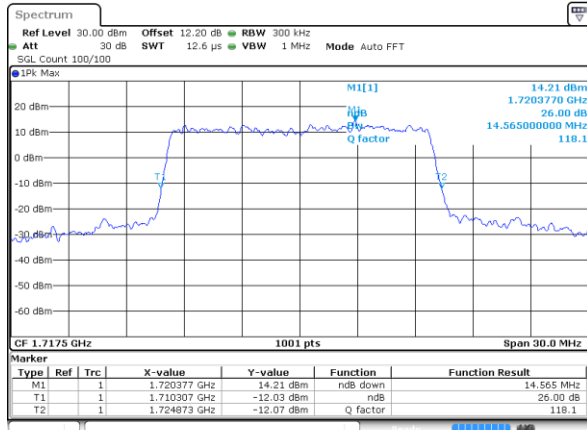
Highest Channel / 10MHz / 64QAM



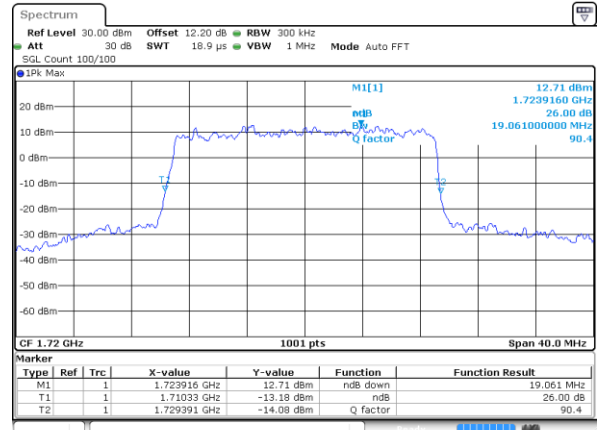


LTE Band 4

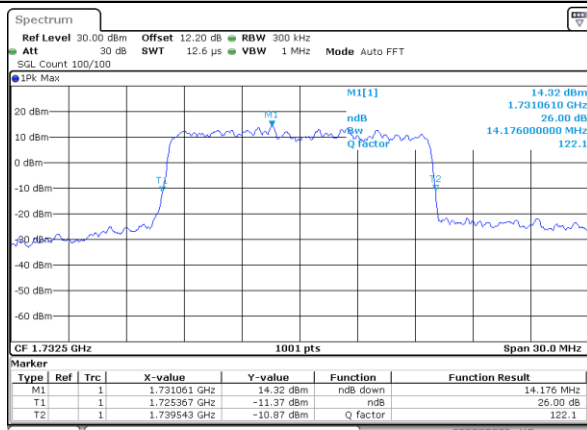
Lowest Channel / 15MHz / 64QAM



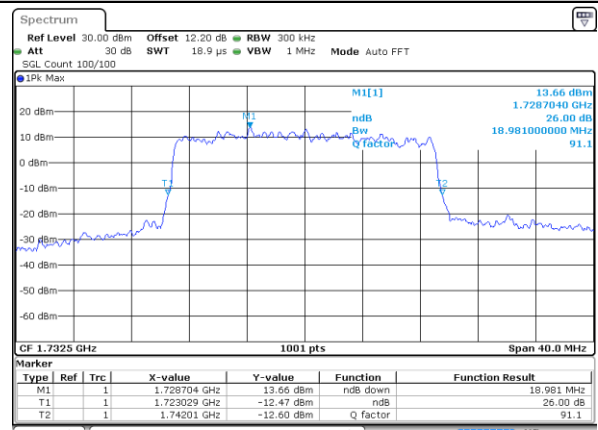
Lowest Channel / 20MHz / 64QAM



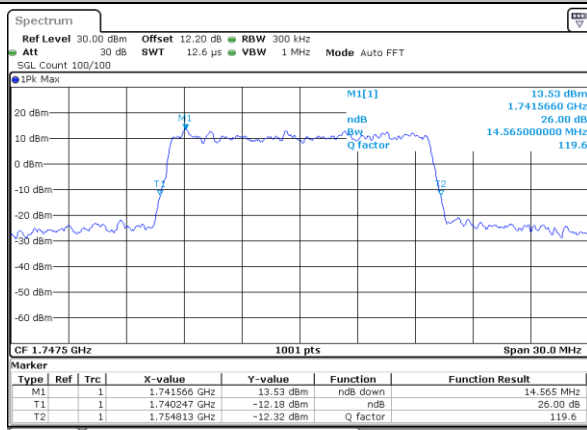
Middle Channel / 15MHz / 64QAM



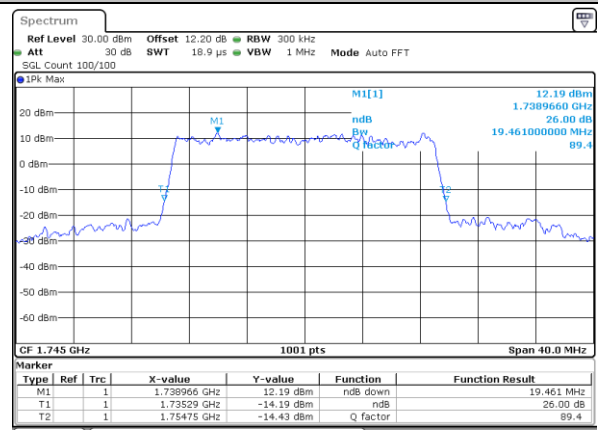
Middle Channel / 20MHz / 64QAM



Highest Channel / 15MHz / 64QAM



Highest Channel / 20MHz / 64QAM



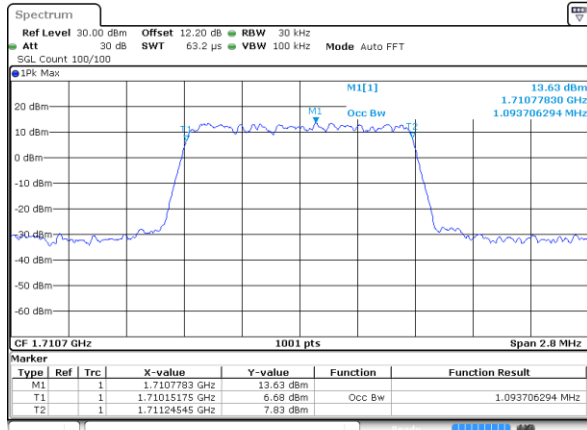
**Occupied Bandwidth**

Mode	LTE Band 4 : 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	1.09	1.09	2.71	2.72	4.49	4.49	9.09	8.95	13.43	13.40	17.82	17.90
Middle CH	1.08	1.09	2.72	2.73	4.50	4.50	8.99	9.03	13.43	13.43	17.78	17.82
Highest CH	1.09	1.09	2.73	2.72	4.47	4.52	9.05	9.01	13.58	13.49	17.90	17.86
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09	-	2.72	-	4.54	-	9.05	-	13.46	-	17.90	-
Middle CH	1.09	-	2.72	-	4.50	-	8.95	-	13.43	-	17.82	-
Highest CH	1.09	-	2.72	-	4.52	-	9.03	-	13.49	-	17.94	-

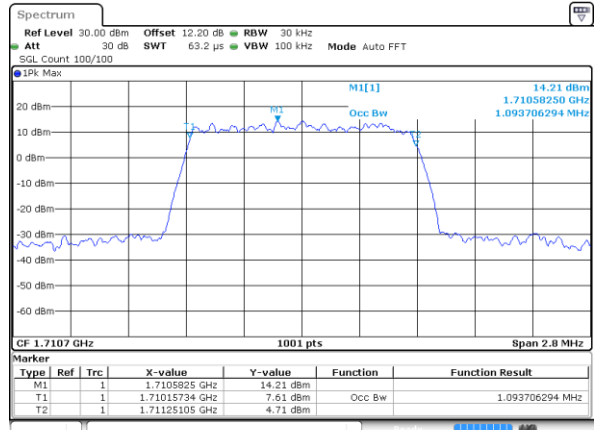


LTE Band 4

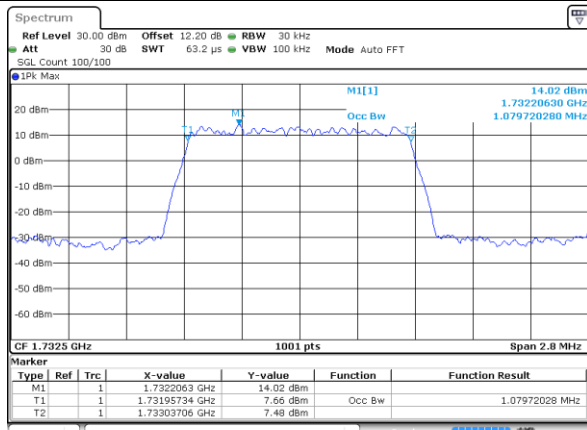
Lowest Channel / 1.4MHz / QPSK



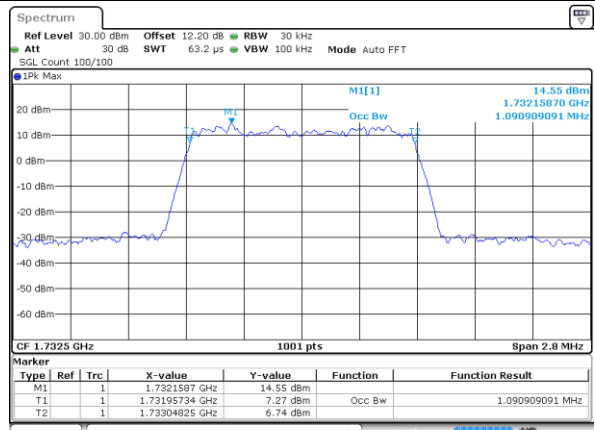
Lowest Channel / 1.4MHz / 16QAM



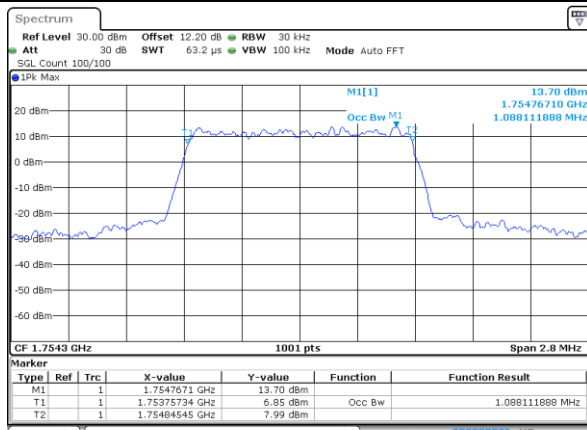
Middle Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



Highest Channel / 1.4MHz / 16QAM

