



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0032	PASS
40	Normal Voltage	0.0030	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note: Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.4V.



LTE Band 12

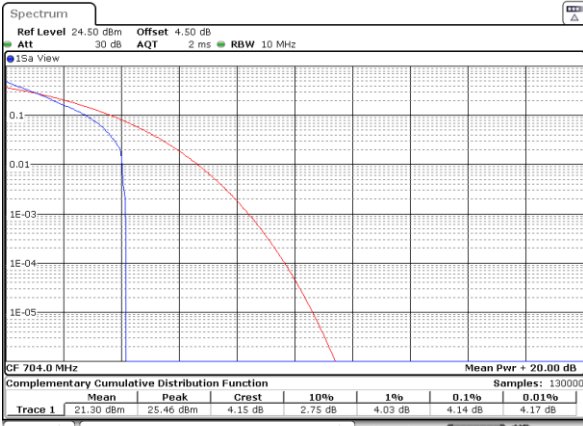
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.14	5.04	4.64	5.97	PASS
Middle CH	4.35	4.99	5.28	5.91	
Highest CH	4.52	4.87	5.16	5.77	
Mode	LTE Band 12 / 10MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	4.99	6.06	-	-	PASS
Middle CH	5.42	5.94	-	-	
Highest CH	5.42	5.77	-	-	



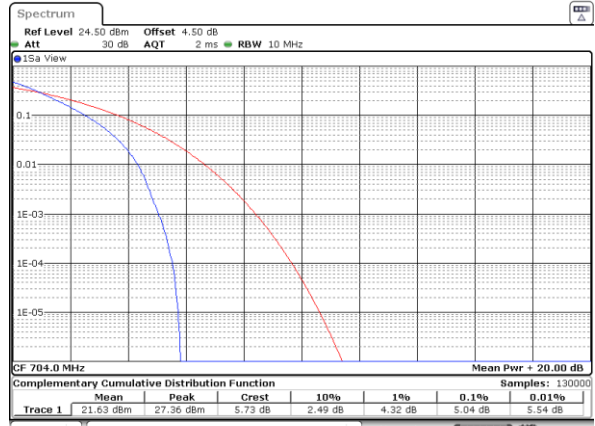
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



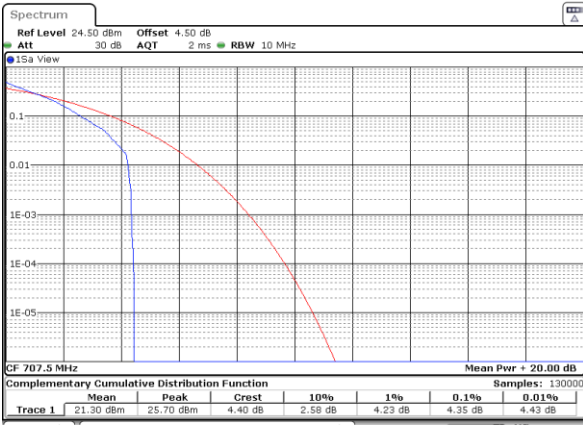
Date: 6 AUG 2020 15:50:09

Lowest Channel / Full RB



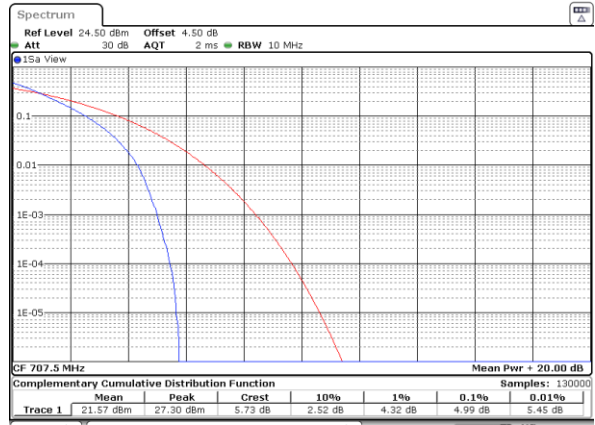
Date: 6 AUG 2020 15:44:27

Middle Channel / 1RB



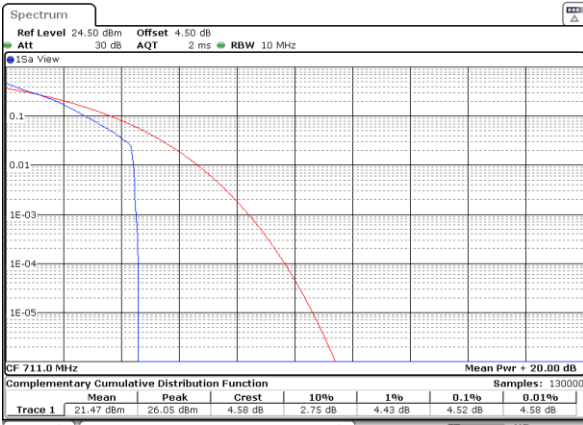
Date: 6 AUG 2020 15:51:15

Middle Channel / Full RB



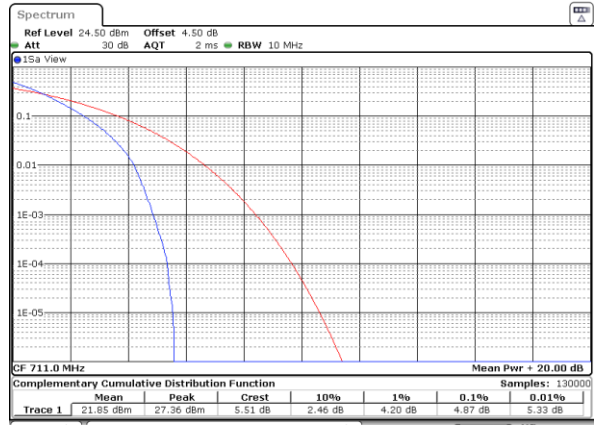
Date: 6 AUG 2020 16:03:27

Highest Channel / 1RB



Date: 25 AUG 2020 10:46:22

Highest Channel / Full RB

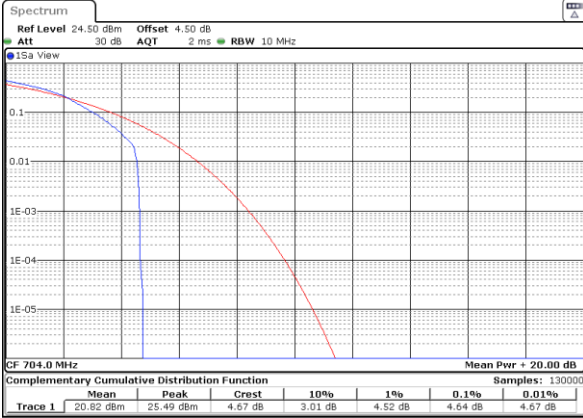


Date: 6 AUG 2020 16:06:05



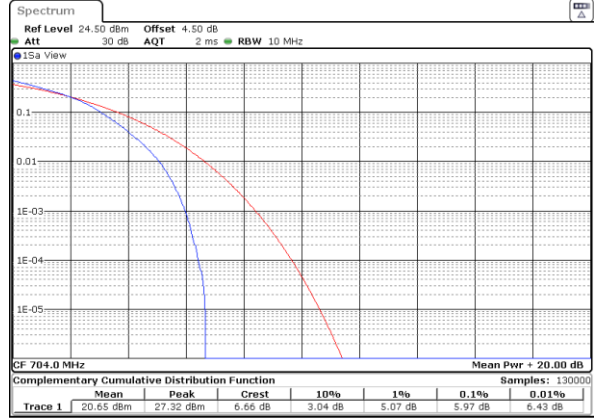
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 6 AUG 2020 15:46:58

Lowest Channel / Full RB



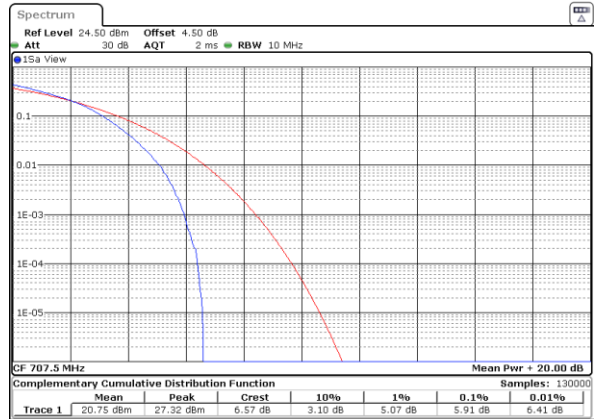
Date: 6 AUG 2020 15:44:41

Middle Channel / 1RB



Date: 6 AUG 2020 16:01:56

Middle Channel / Full RB



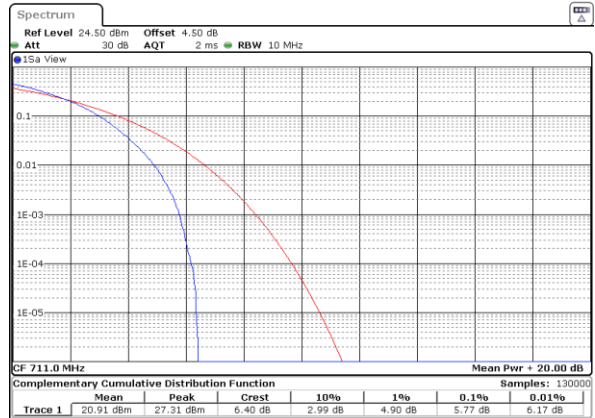
Date: 6 AUG 2020 16:02:53

Highest Channel / 1RB



Date: 25 AUG 2020 10:46:09

Highest Channel / Full RB

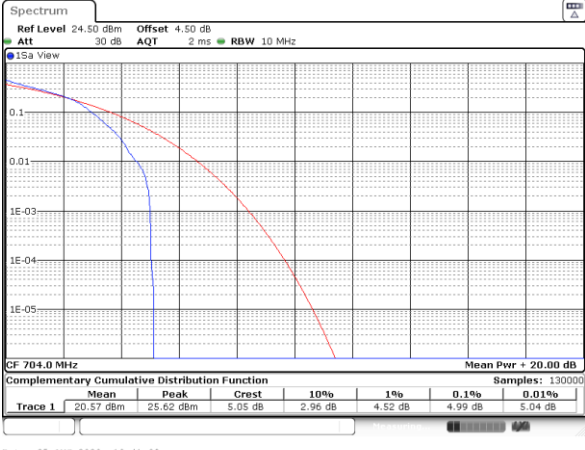


Date: 6 AUG 2020 16:07:14



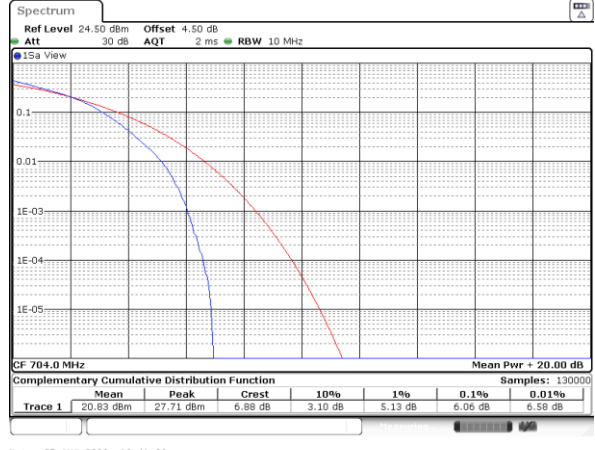
LTE Band 12 / 10MHz / 64QAM

Lowest Channel / 1RB



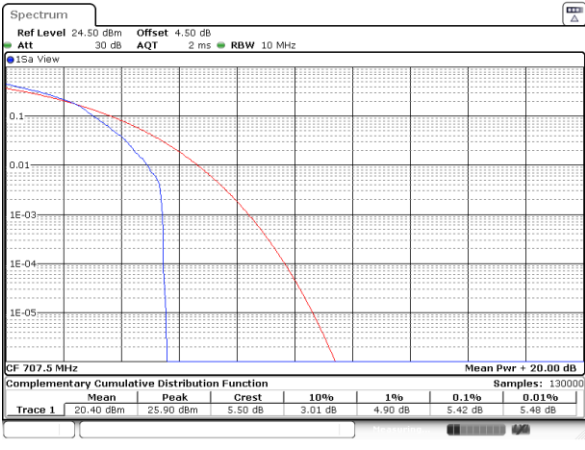
Date: 25_AUG.2020 10:41:03

Lowest Channel / Full RB



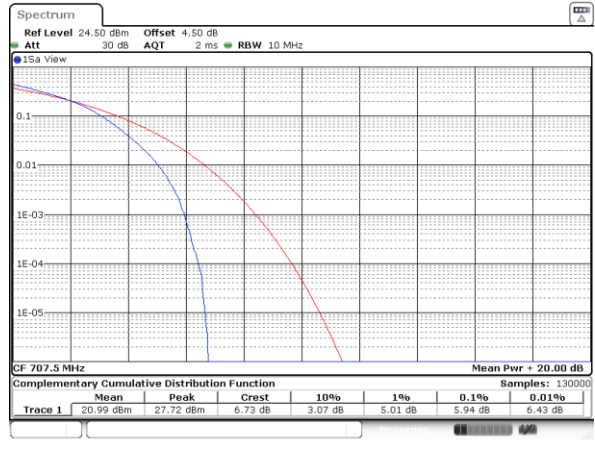
Date: 25_AUG.2020 10:41:120

Middle Channel / 1RB



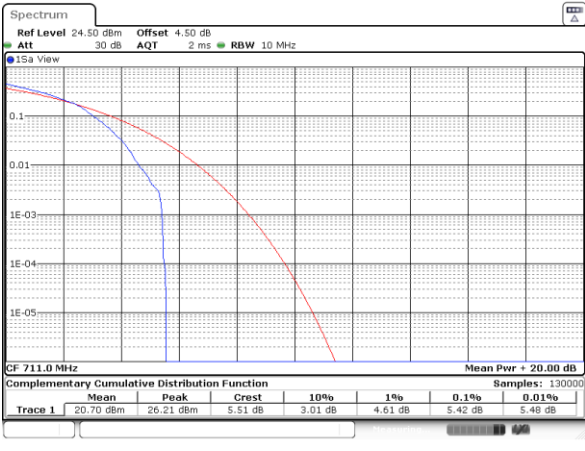
Date: 25_AUG.2020 10:40:39

Middle Channel / Full RB



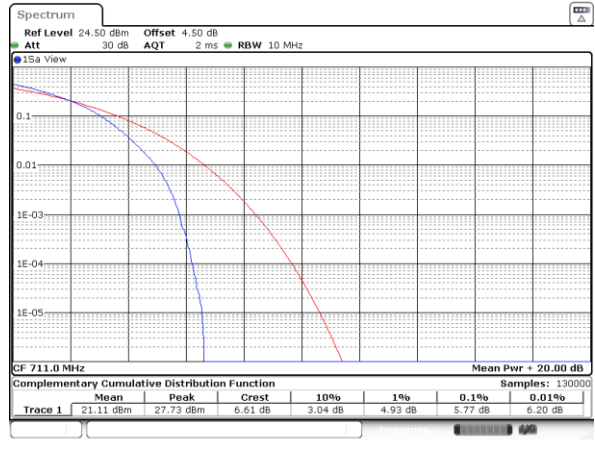
Date: 25_AUG.2020 10:40:124

Highest Channel / 1RB



Date: 25_AUG.2020 10:39:40

Highest Channel / Full RB



Date: 25_AUG.2020 10:39:57



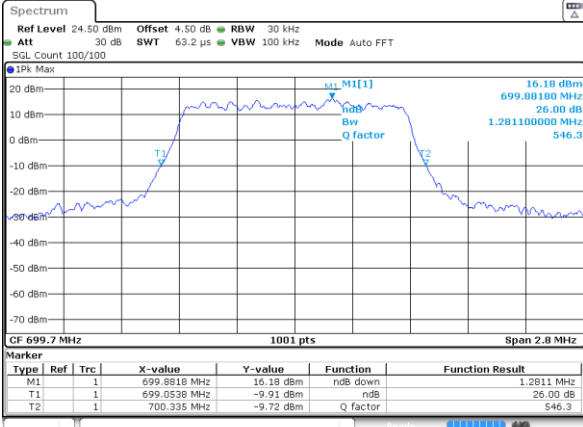
26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.28	1.26	3.02	2.98	4.95	4.90	9.97	9.61
Middle CH	1.28	1.29	3.00	2.97	4.99	4.93	9.81	9.83
Highest CH	1.25	1.24	2.98	3.03	4.90	4.96	9.73	9.77
Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.25	-	3.05	-	4.88	-	9.89	-
Middle CH	1.28	-	2.99	-	4.99	-	9.87	-
Highest CH	1.29	-	3.04	-	4.91	-	9.79	-



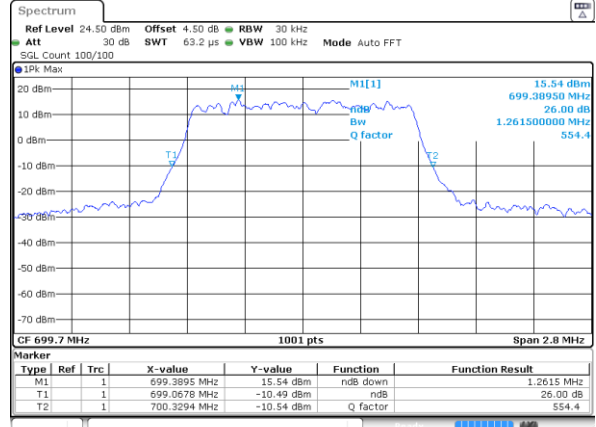
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



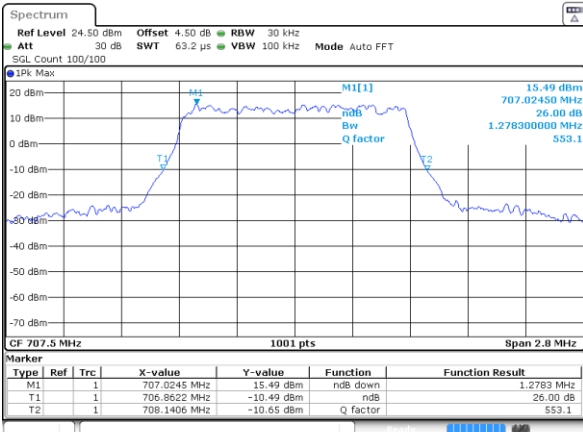
Date: 6 AUG 2020 14:49:00

Lowest Channel / 1.4MHz / 16QAM



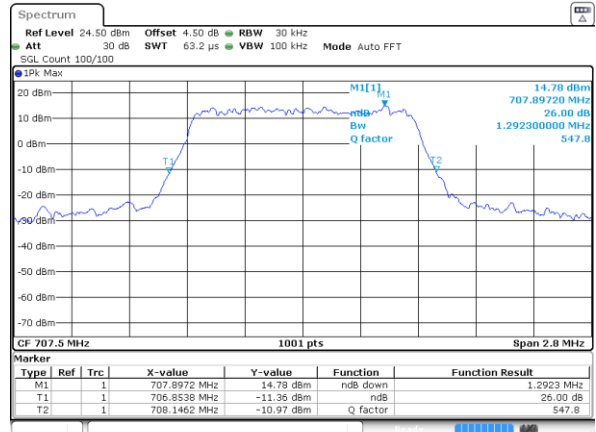
Date: 6 AUG 2020 14:52:19

Middle Channel / 1.4MHz / QPSK



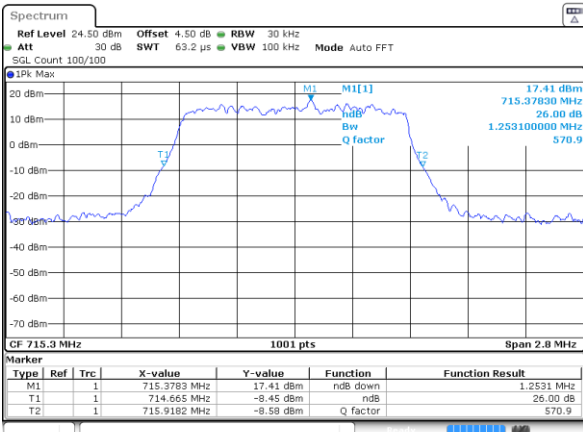
Date: 6 AUG 2020 15:03:37

Middle Channel / 1.4MHz / 16QAM



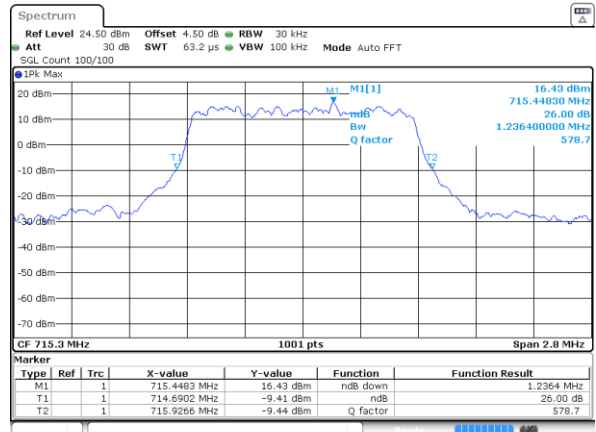
Date: 6 AUG 2020 15:03:12

Highest Channel / 1.4MHz / QPSK



Date: 6 AUG 2020 15:04:42

Highest Channel / 1.4MHz / 16QAM

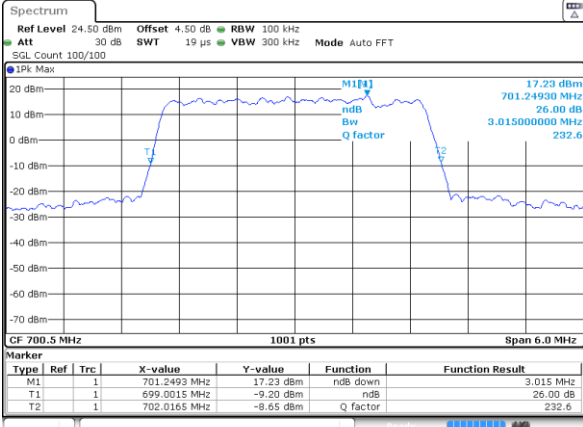


Date: 6 AUG 2020 15:06:23



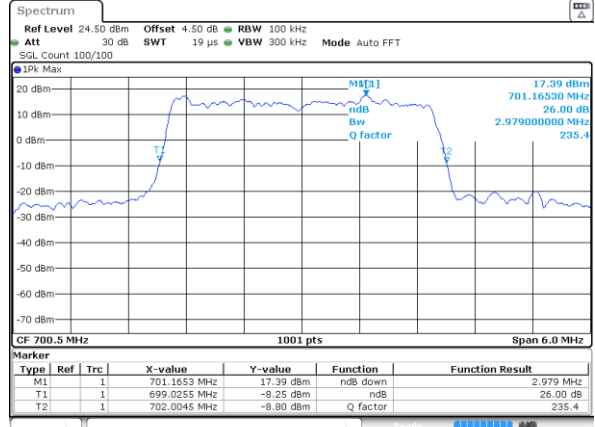
LTE Band 12

Lowest Channel / 3MHz / QPSK



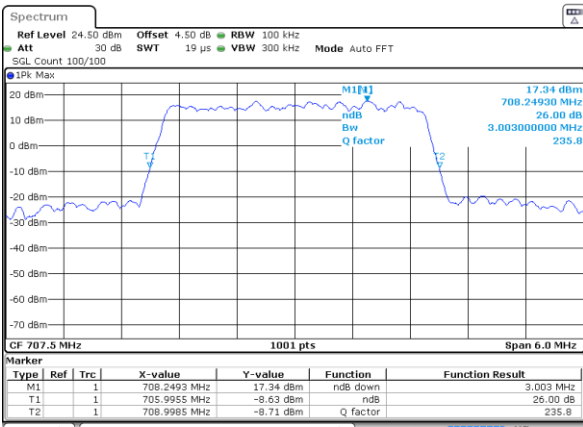
Date: 6 AUG 2020 15:12:30

Lowest Channel / 3MHz / 16QAM



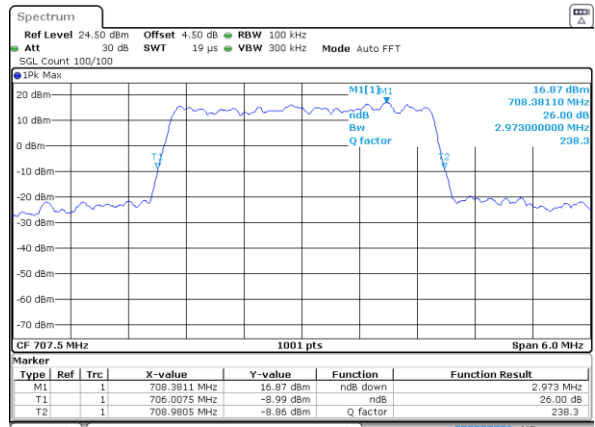
Date: 6 AUG 2020 15:11:33

Middle Channel / 3MHz / QPSK



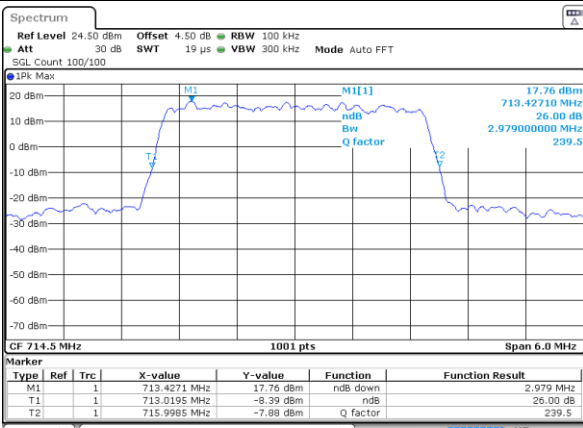
Date: 6 AUG 2020 15:19:23

Middle Channel / 3MHz / 16QAM



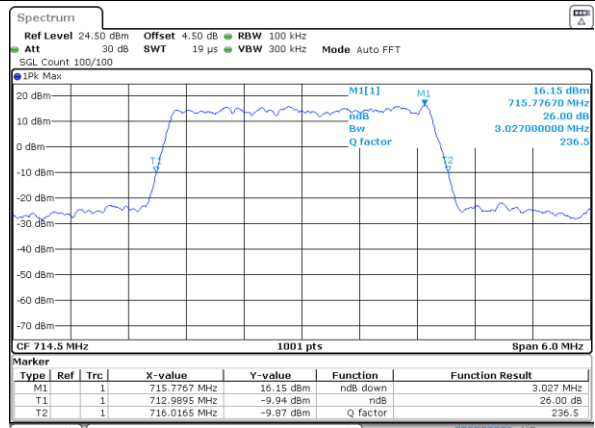
Date: 6 AUG 2020 15:19:46

Highest Channel / 3MHz / QPSK



Date: 6 AUG 2020 15:23:40

Highest Channel / 3MHz / 16QAM

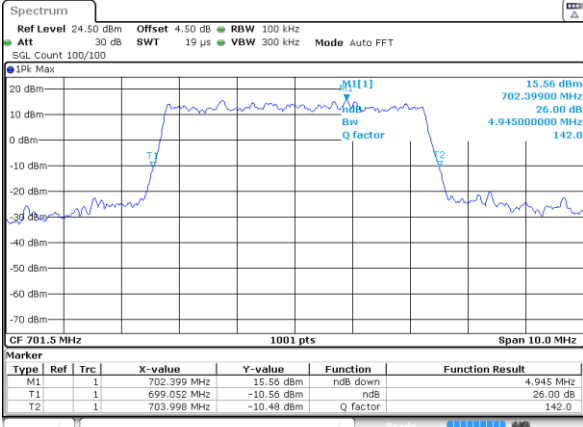


Date: 6 AUG 2020 15:22:43



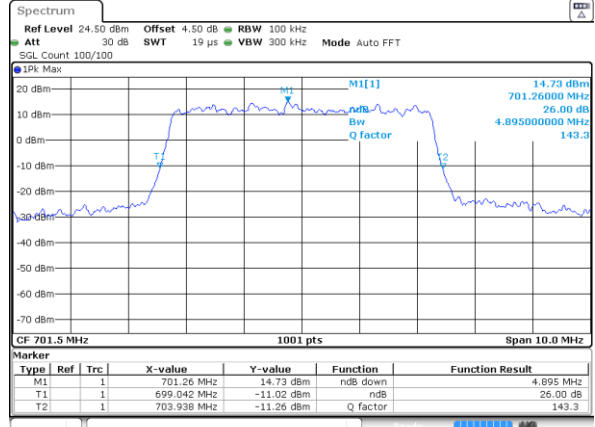
LTE Band 12

Lowest Channel / 5MHz / QPSK



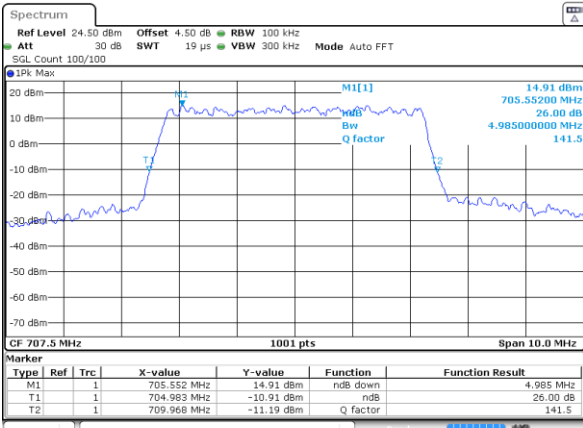
Date: 6 AUG 2020 15:28:09

Lowest Channel / 5MHz / 16QAM



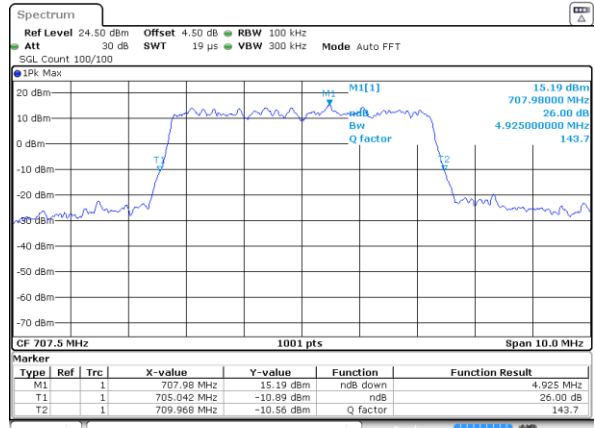
Date: 6 AUG 2020 15:29:05

Middle Channel / 5MHz / QPSK



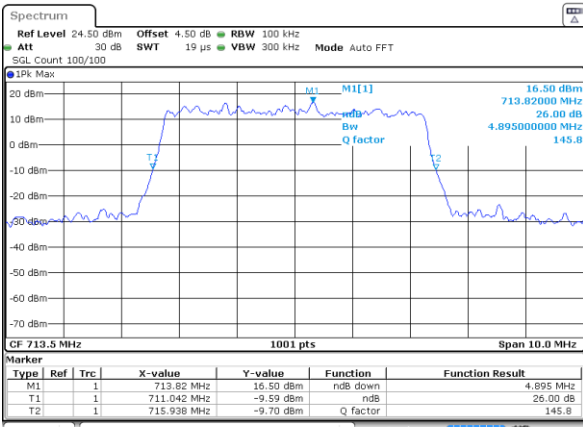
Date: 6 AUG 2020 15:35:33

Middle Channel / 5MHz / 16QAM



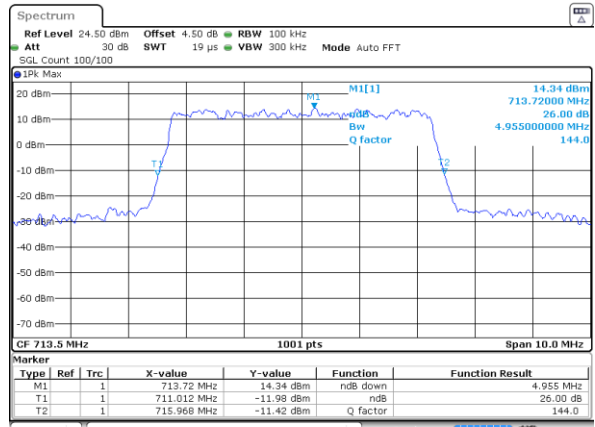
Date: 6 AUG 2020 15:34:42

Highest Channel / 5MHz / QPSK



Date: 6 AUG 2020 15:37:10

Highest Channel / 5MHz / 16QAM

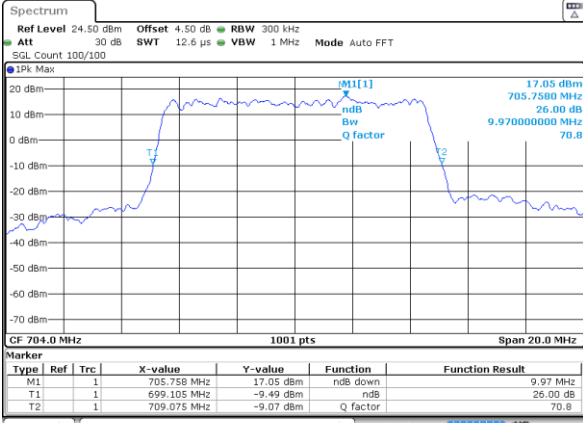


Date: 6 AUG 2020 15:38:11



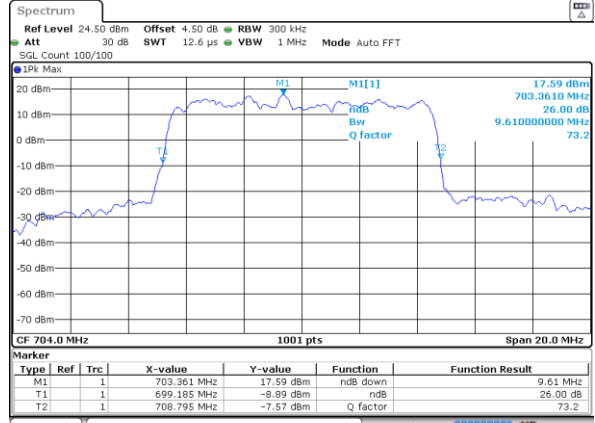
LTE Band 12

Lowest Channel / 10MHz / QPSK



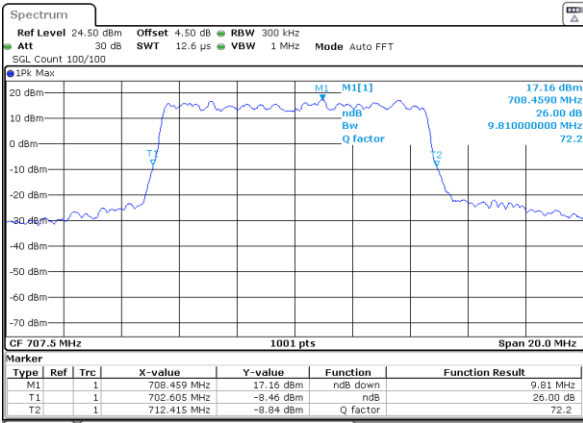
Date: 6 AUG 2020 15:43:34

Lowest Channel / 10MHz / 16QAM



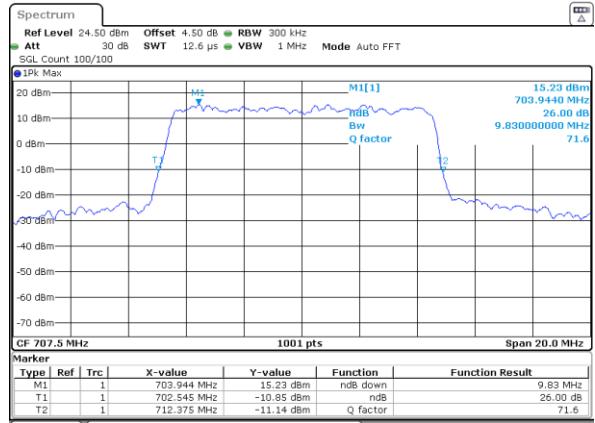
Date: 6 AUG 2020 15:42:29

Middle Channel / 10MHz / QPSK



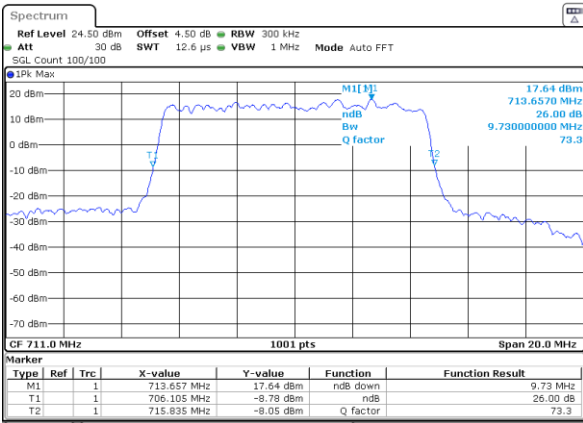
Date: 6 AUG 2020 16:03:18

Middle Channel / 10MHz / 16QAM



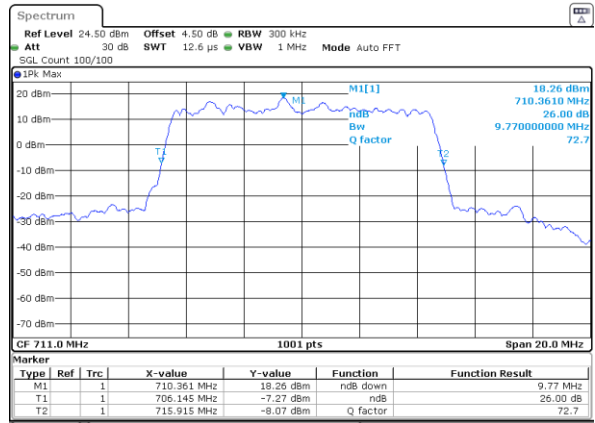
Date: 6 AUG 2020 16:02:44

Highest Channel / 10MHz / QPSK



Date: 6 AUG 2020 16:04:34

Highest Channel / 10MHz / 16QAM

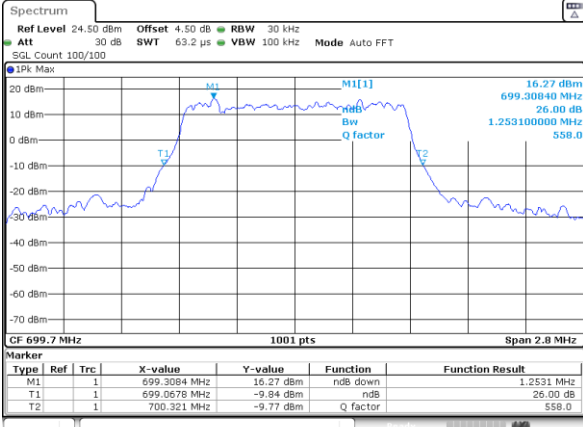


Date: 6 AUG 2020 16:06:27



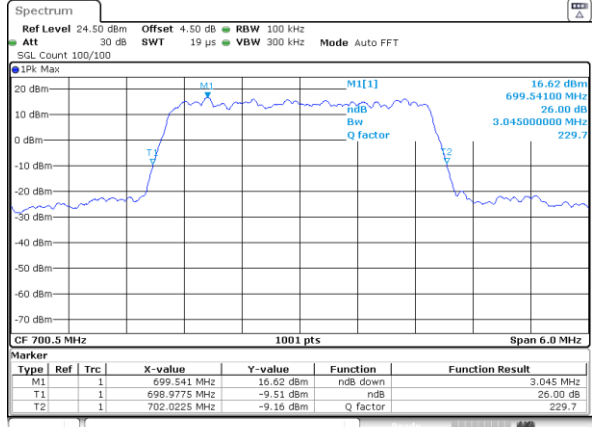
LTE Band 12

Lowest Channel / 1.4MHz / 64QAM



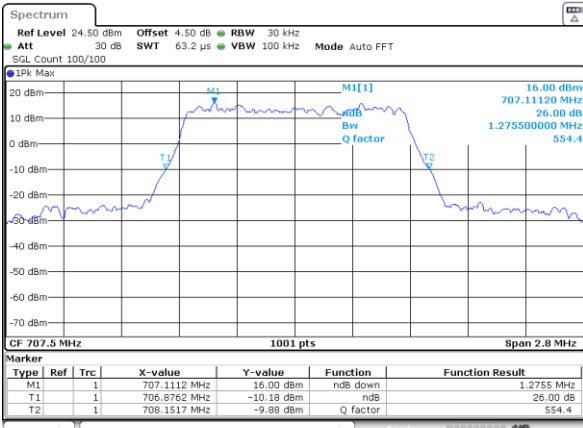
Date: 25_AUG.2020 09:41:58

Lowest Channel / 3MHz / 64QAM



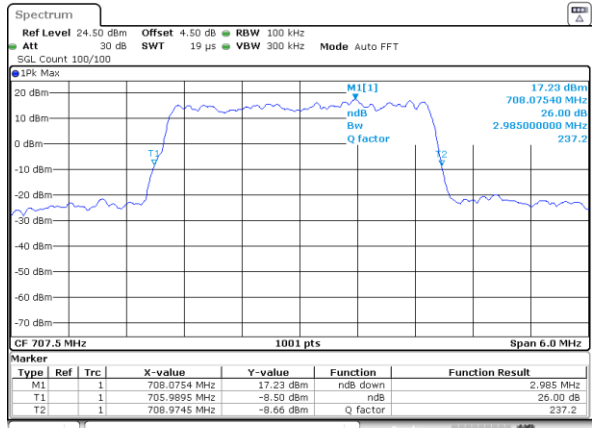
Date: 25_AUG.2020 10:11:120

Middle Channel / 1.4MHz / 64QAM



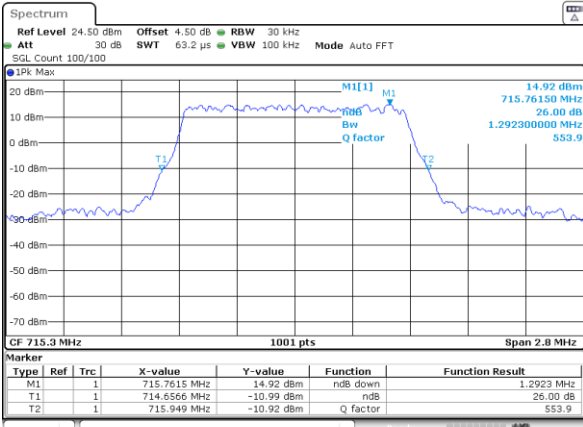
Date: 25_AUG.2020 09:57:20

Middle Channel / 3MHz / 64QAM



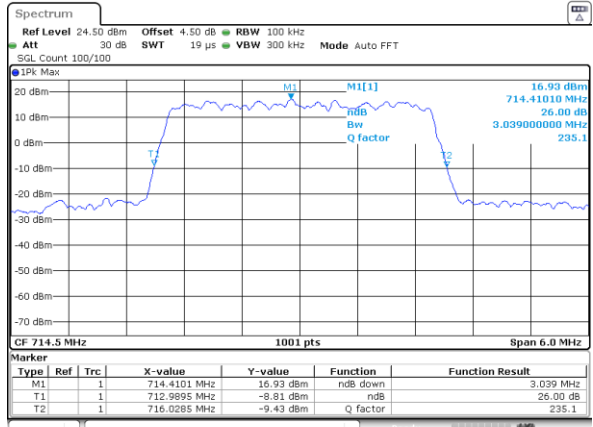
Date: 25_AUG.2020 10:11:444

Highest Channel / 1.4MHz / 64QAM



Date: 25_AUG.2020 09:58:00

Highest Channel / 3MHz / 64QAM

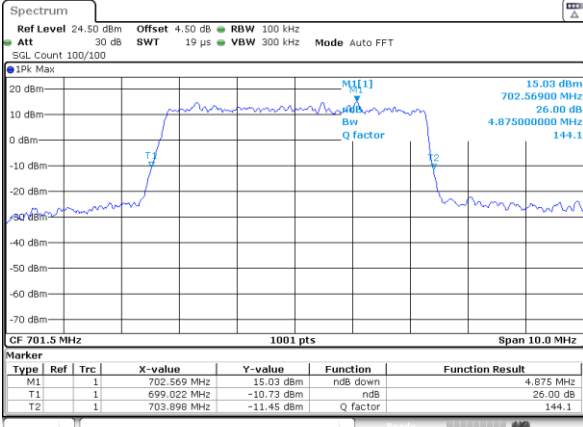


Date: 25_AUG.2020 10:11:330



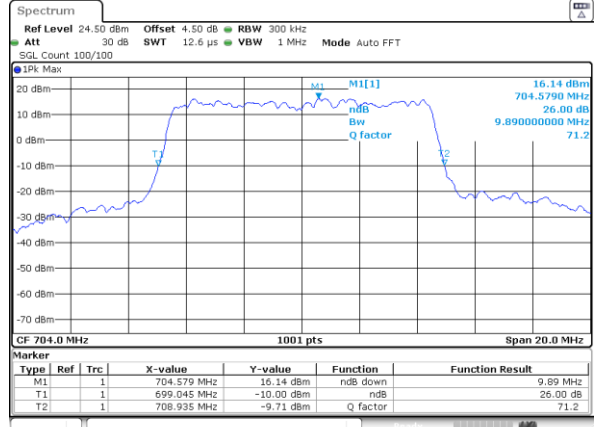
LTE Band 12

Lowest Channel / 5MHz / 64QAM



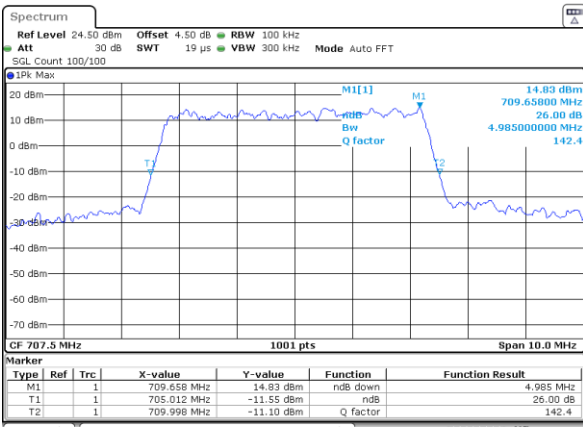
Date: 25_AUG.2020 10:21:26

Lowest Channel / 10MHz / 64QAM



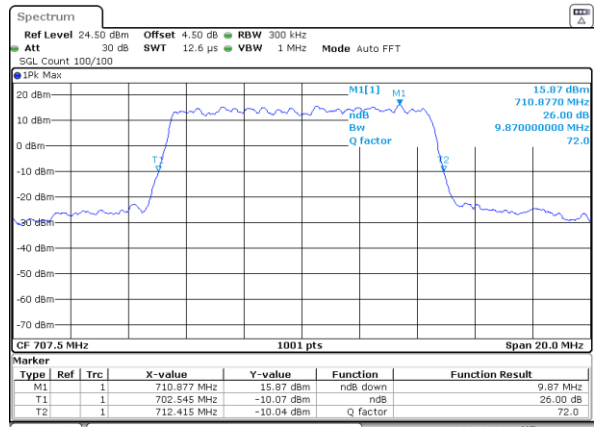
Date: 25_AUG.2020 10:29:34

Middle Channel / 5MHz / 64QAM



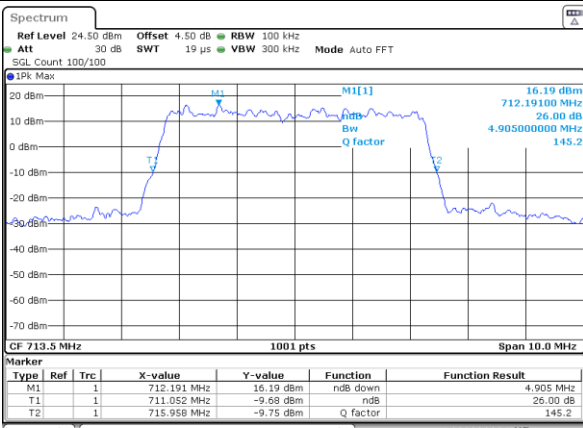
Date: 25_AUG.2020 10:23:05

Middle Channel / 10MHz / 64QAM



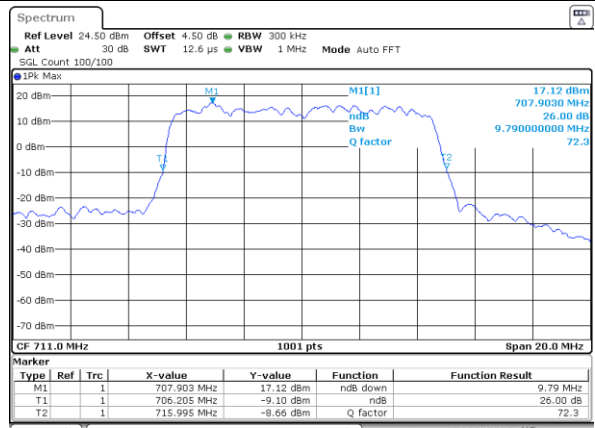
Date: 25_AUG.2020 10:32:08

Highest Channel / 5MHz / 64QAM



Date: 25_AUG.2020 10:24:44

Highest Channel / 10MHz / 64QAM



Date: 25_AUG.2020 10:32:58



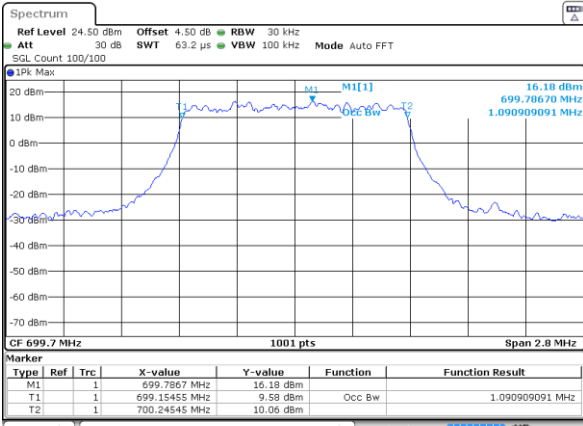
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.10	2.71	2.69	4.50	4.49	9.03	9.01
Middle CH	1.09	1.09	2.72	2.73	4.49	4.50	9.03	9.01
Highest CH	1.10	1.10	2.70	2.70	4.49	4.50	9.05	9.05
Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09	-	2.73	-	4.49	-	9.05	-
Middle CH	1.09	-	2.72	-	4.50	-	9.03	-
Highest CH	1.08	-	2.74	-	4.49	-	8.93	-



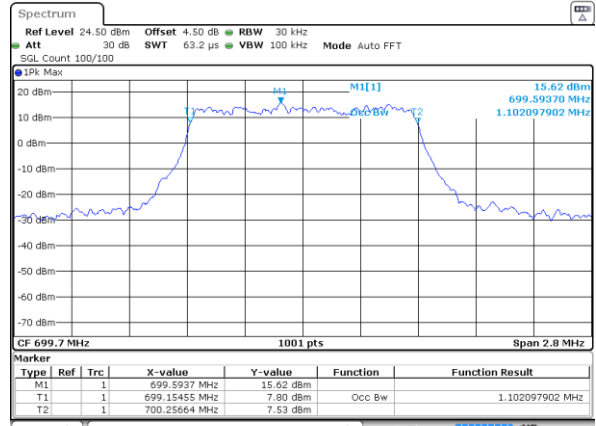
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



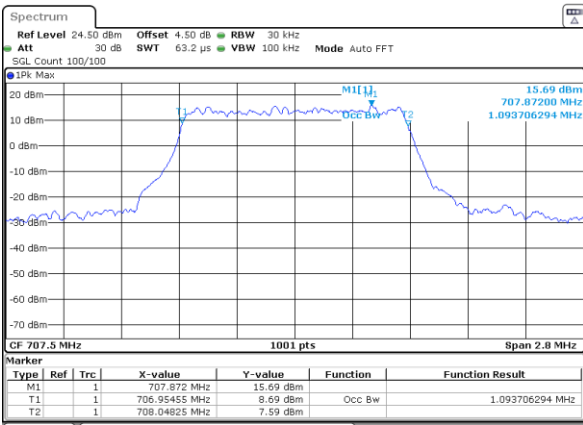
Date: 6 AUG 2020 14:48:46

Lowest Channel / 1.4MHz / 16QAM



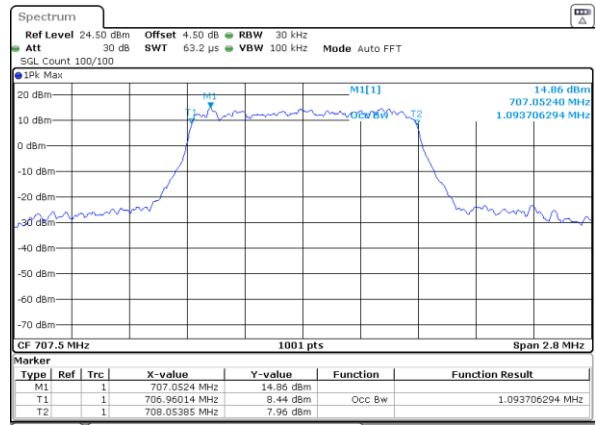
Date: 6 AUG 2020 14:52:13

Middle Channel / 1.4MHz / QPSK



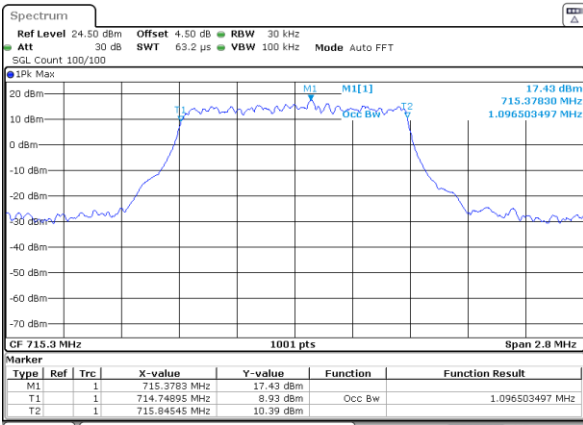
Date: 6 AUG 2020 15:03:30

Middle Channel / 1.4MHz / 16QAM



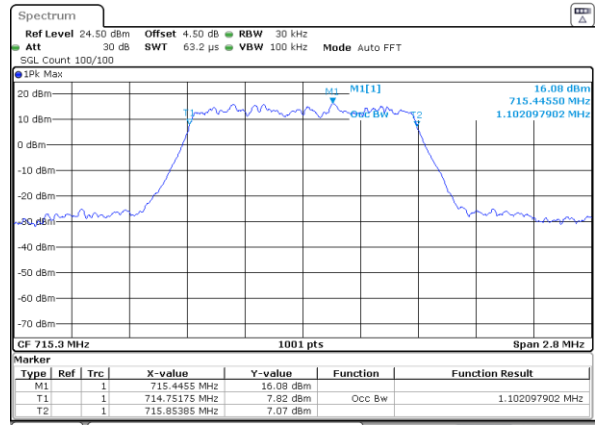
Date: 6 AUG 2020 15:03:04

Highest Channel / 1.4MHz / QPSK



Date: 6 AUG 2020 15:04:10

Highest Channel / 1.4MHz / 16QAM

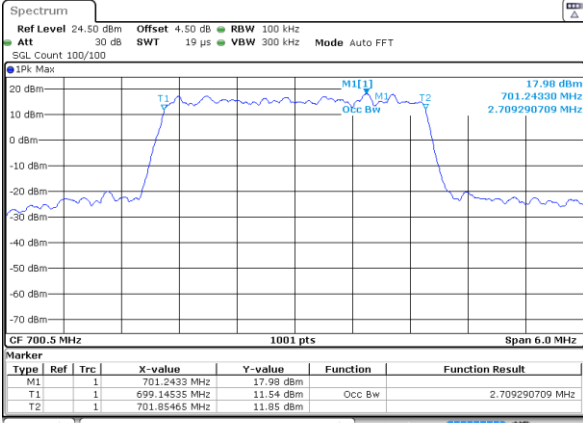


Date: 6 AUG 2020 15:06:16



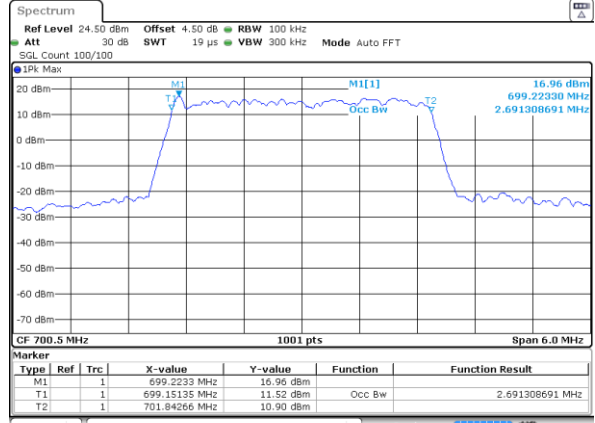
LTE Band 12

Lowest Channel / 3MHz / QPSK



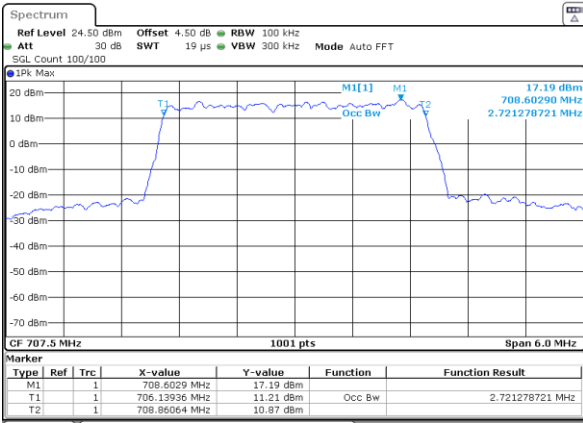
Date: 6 AUG 2020 15:12:23

Lowest Channel / 3MHz / 16QAM



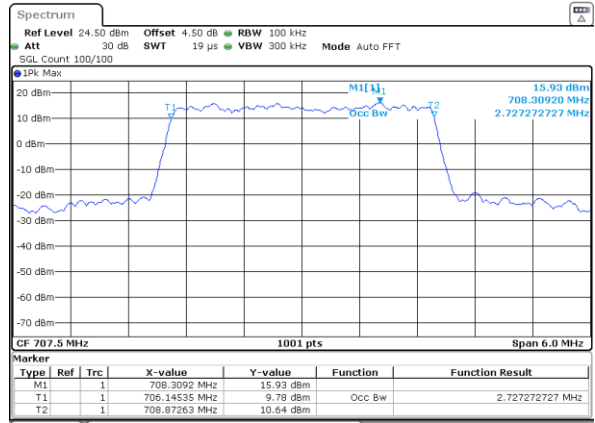
Date: 6 AUG 2020 15:11:26

Middle Channel / 3MHz / QPSK



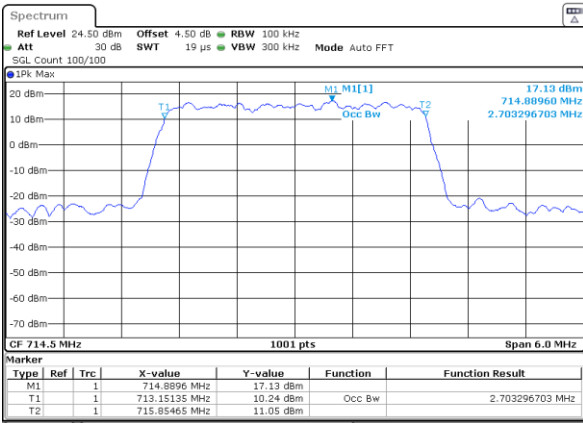
Date: 6 AUG 2020 15:19:15

Middle Channel / 3MHz / 16QAM



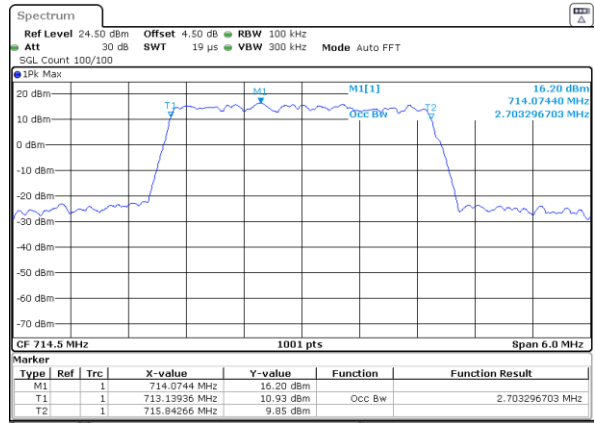
Date: 6 AUG 2020 15:19:37

Highest Channel / 3MHz / QPSK



Date: 6 AUG 2020 15:23:32

Highest Channel / 3MHz / 16QAM

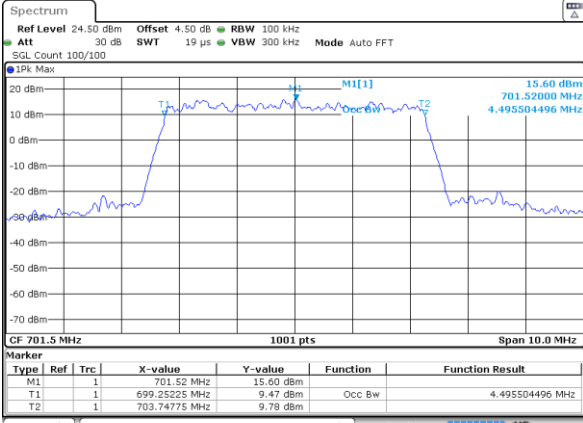


Date: 6 AUG 2020 15:22:36



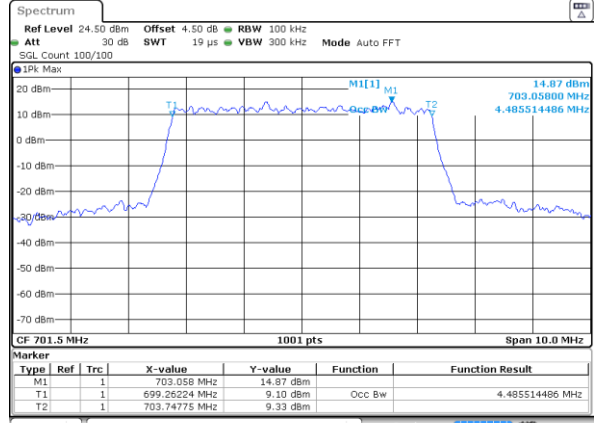
LTE Band 12

Lowest Channel / 5MHz / QPSK



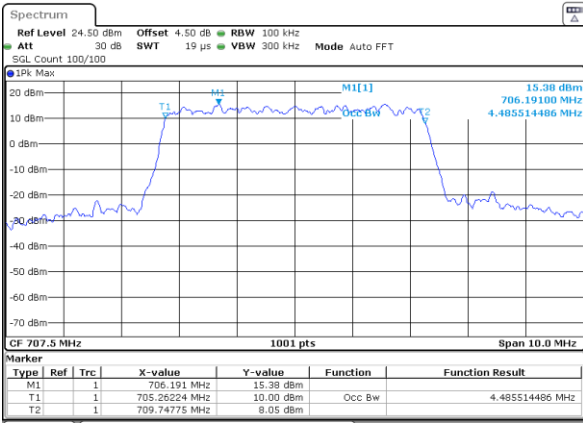
Date: 6 AUG 2020 15:28:02

Lowest Channel / 5MHz / 16QAM



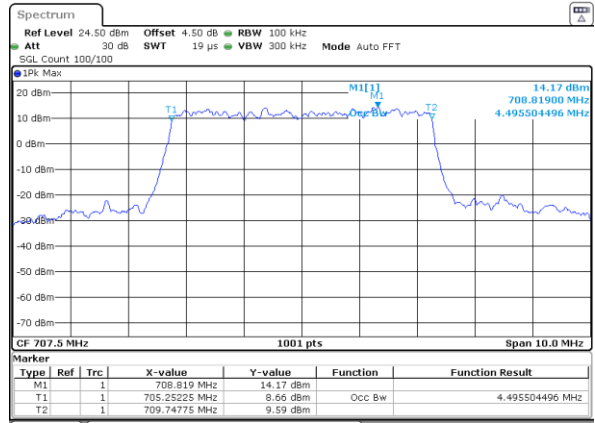
Date: 6 AUG 2020 15:28:59

Middle Channel / 5MHz / QPSK



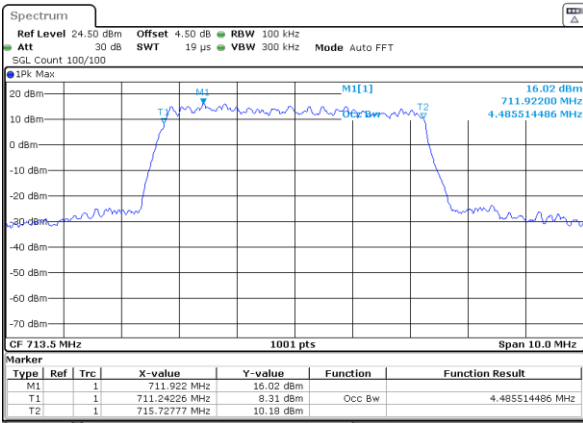
Date: 6 AUG 2020 15:35:27

Middle Channel / 5MHz / 16QAM



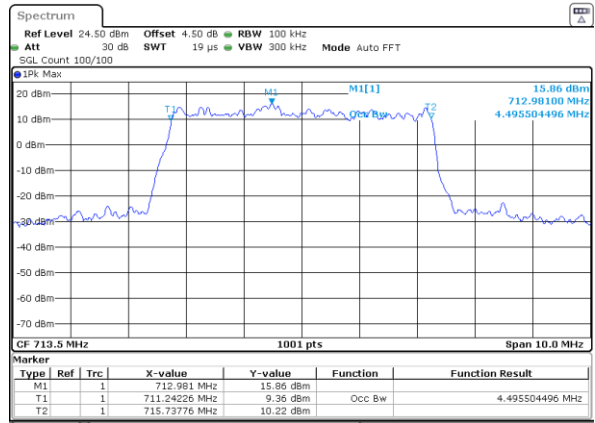
Date: 6 AUG 2020 15:34:35

Highest Channel / 5MHz / QPSK



Date: 6 AUG 2020 15:37:03

Highest Channel / 5MHz / 16QAM

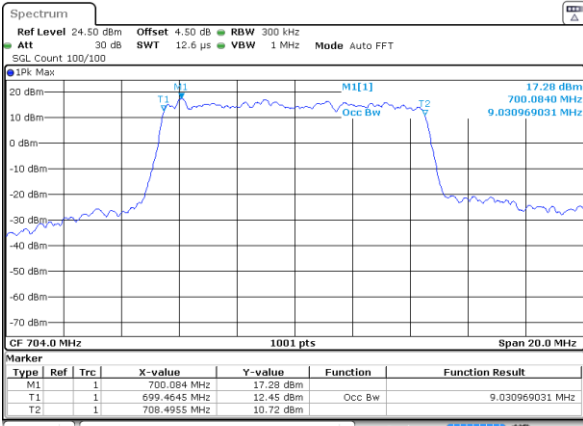


Date: 6 AUG 2020 15:38:04



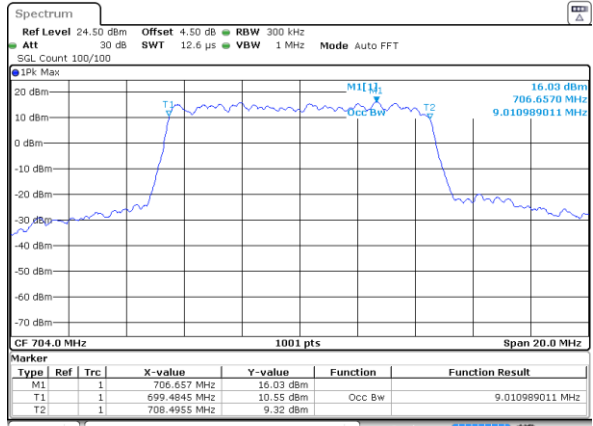
LTE Band 12

Lowest Channel / 10MHz / QPSK



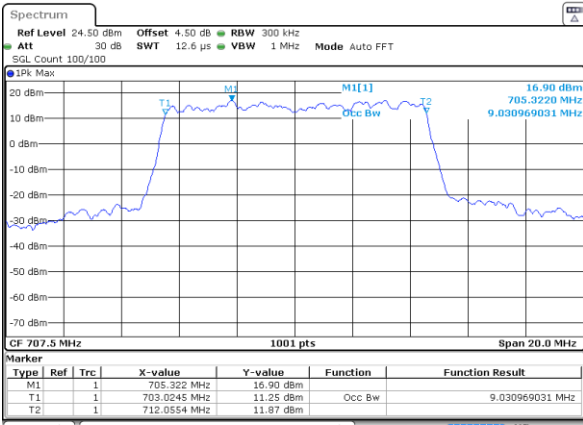
Date: 6 AUG 2020 15:43:26

Lowest Channel / 10MHz / 16QAM



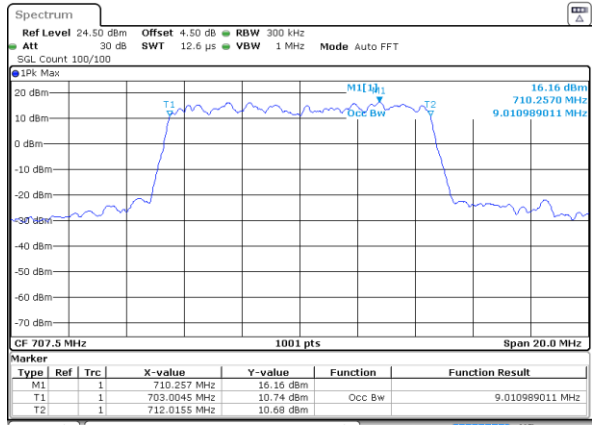
Date: 6 AUG 2020 15:42:21

Middle Channel / 10MHz / QPSK



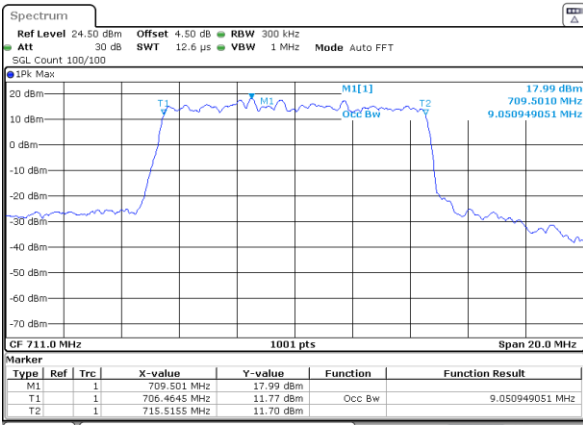
Date: 6 AUG 2020 16:03:10

Middle Channel / 10MHz / 16QAM



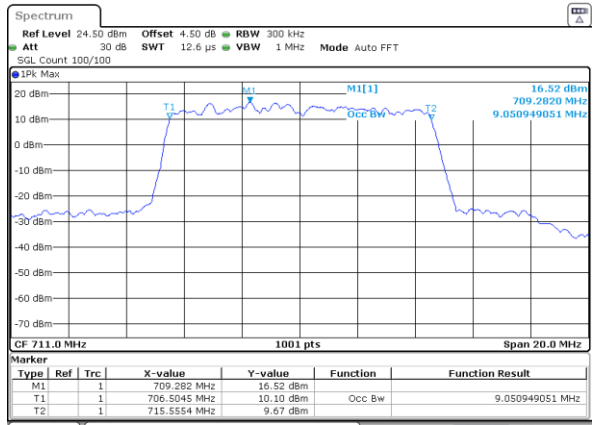
Date: 6 AUG 2020 16:02:37

Highest Channel / 10MHz / QPSK



Date: 6 AUG 2020 16:04:27

Highest Channel / 10MHz / 16QAM

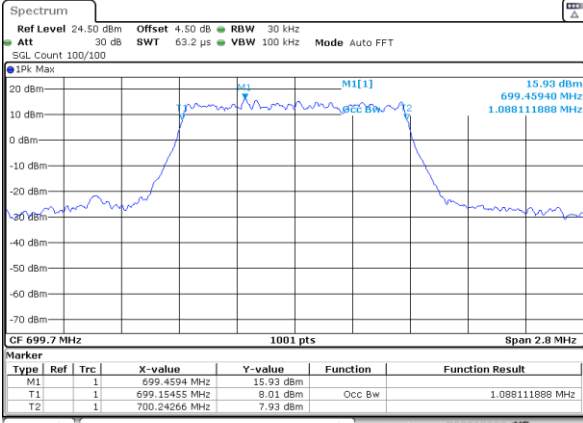


Date: 6 AUG 2020 16:06:18



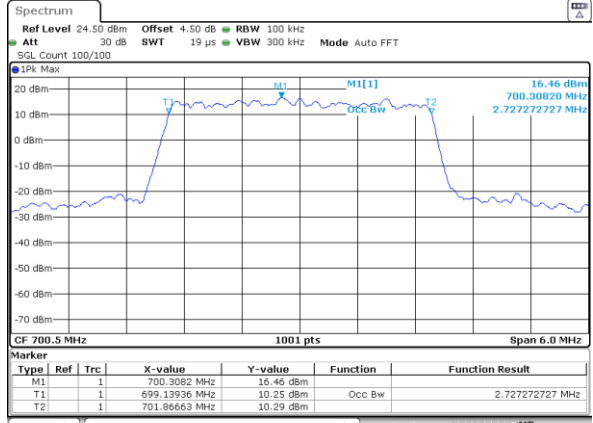
LTE Band 12

Lowest Channel / 1.4MHz / 64QAM



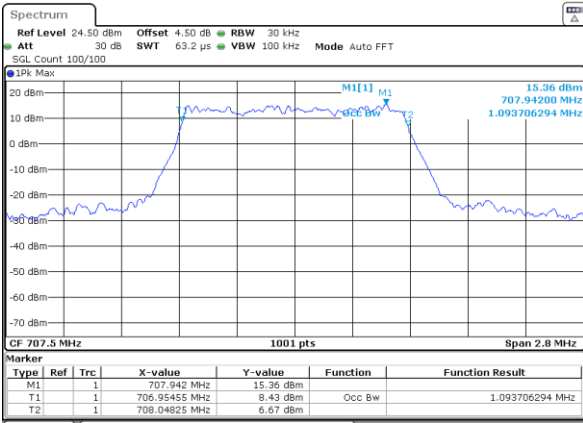
Date: 25_AUG.2020 09:41:52

Lowest Channel / 3MHz / 64QAM



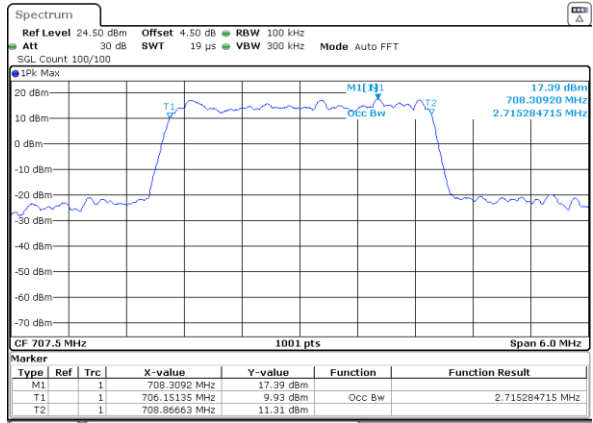
Date: 25_AUG.2020 10:11:14

Middle Channel / 1.4MHz / 64QAM



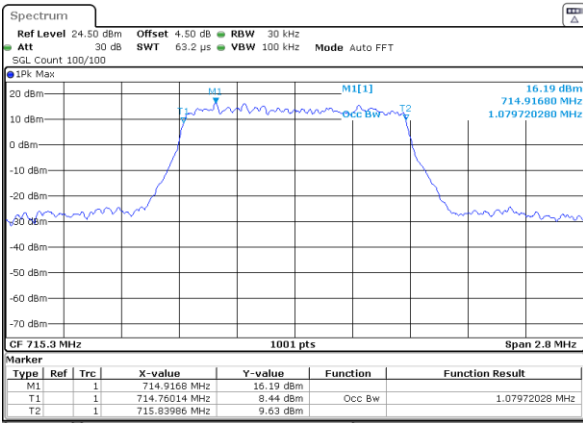
Date: 25_AUG.2020 09:57:13

Middle Channel / 3MHz / 64QAM



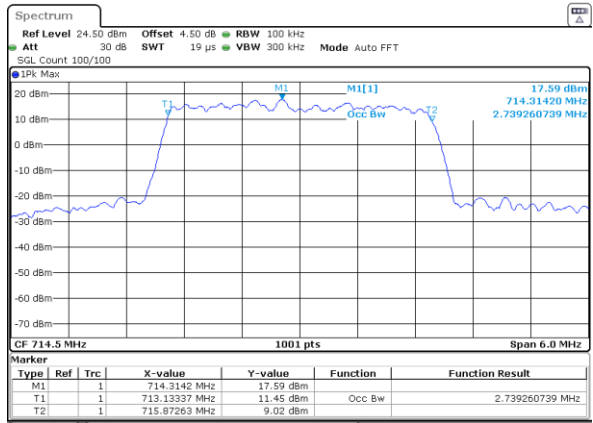
Date: 25_AUG.2020 10:14:36

Highest Channel / 1.4MHz / 64QAM



Date: 25_AUG.2020 09:57:53

Highest Channel / 3MHz / 64QAM

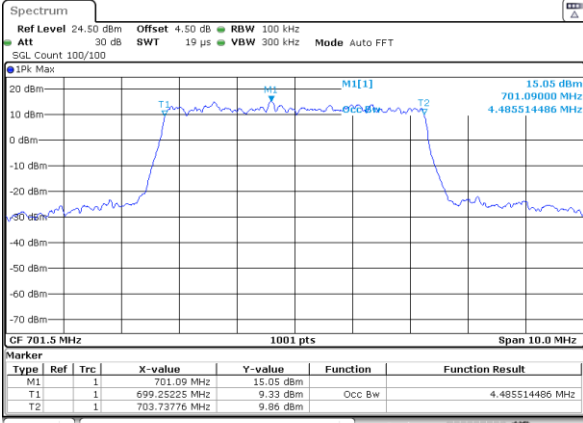


Date: 25_AUG.2020 10:15:24



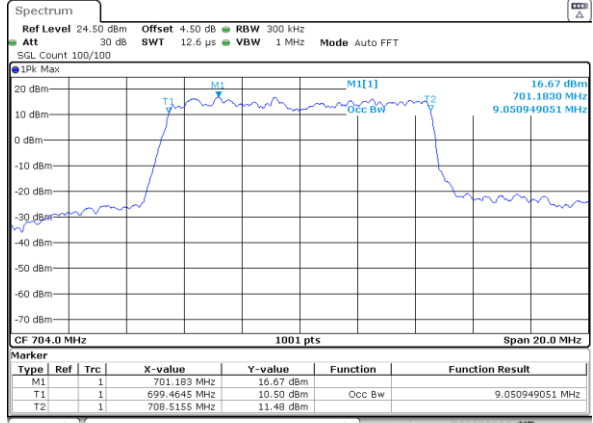
LTE Band 12

Lowest Channel / 5MHz / 64QAM



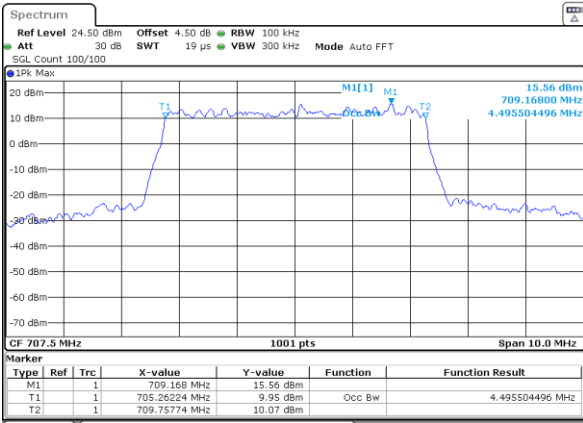
Date: 25_AUG.2020 10:21:14

Lowest Channel / 10MHz / 64QAM



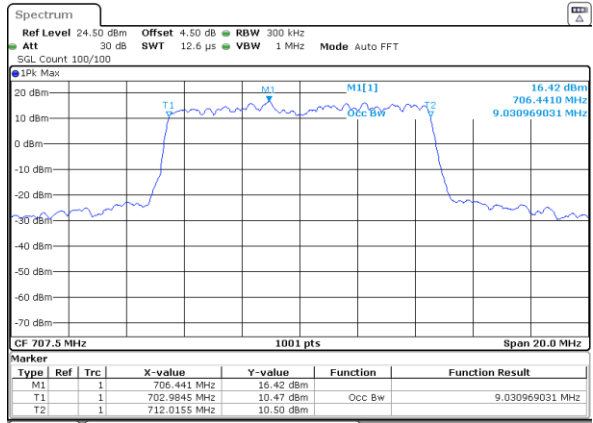
Date: 25_AUG.2020 10:29:25

Middle Channel / 5MHz / 64QAM



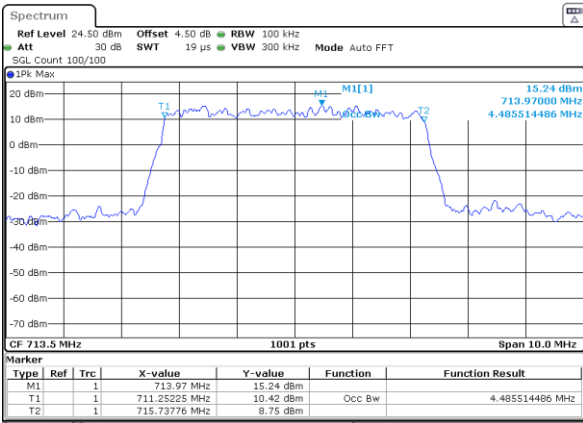
Date: 25_AUG.2020 10:23:25

Middle Channel / 10MHz / 64QAM



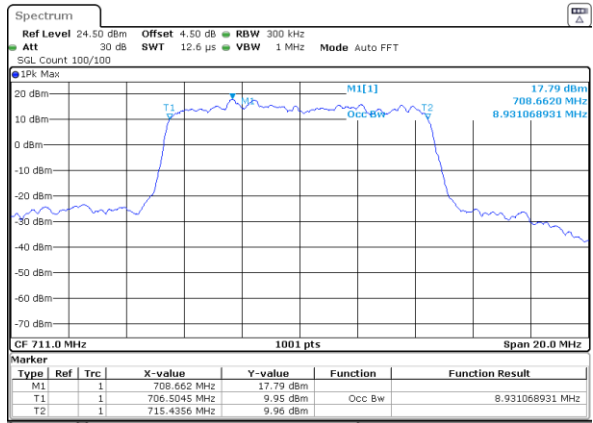
Date: 25_AUG.2020 10:32:01

Highest Channel / 5MHz / 64QAM



Date: 25_AUG.2020 10:24:36

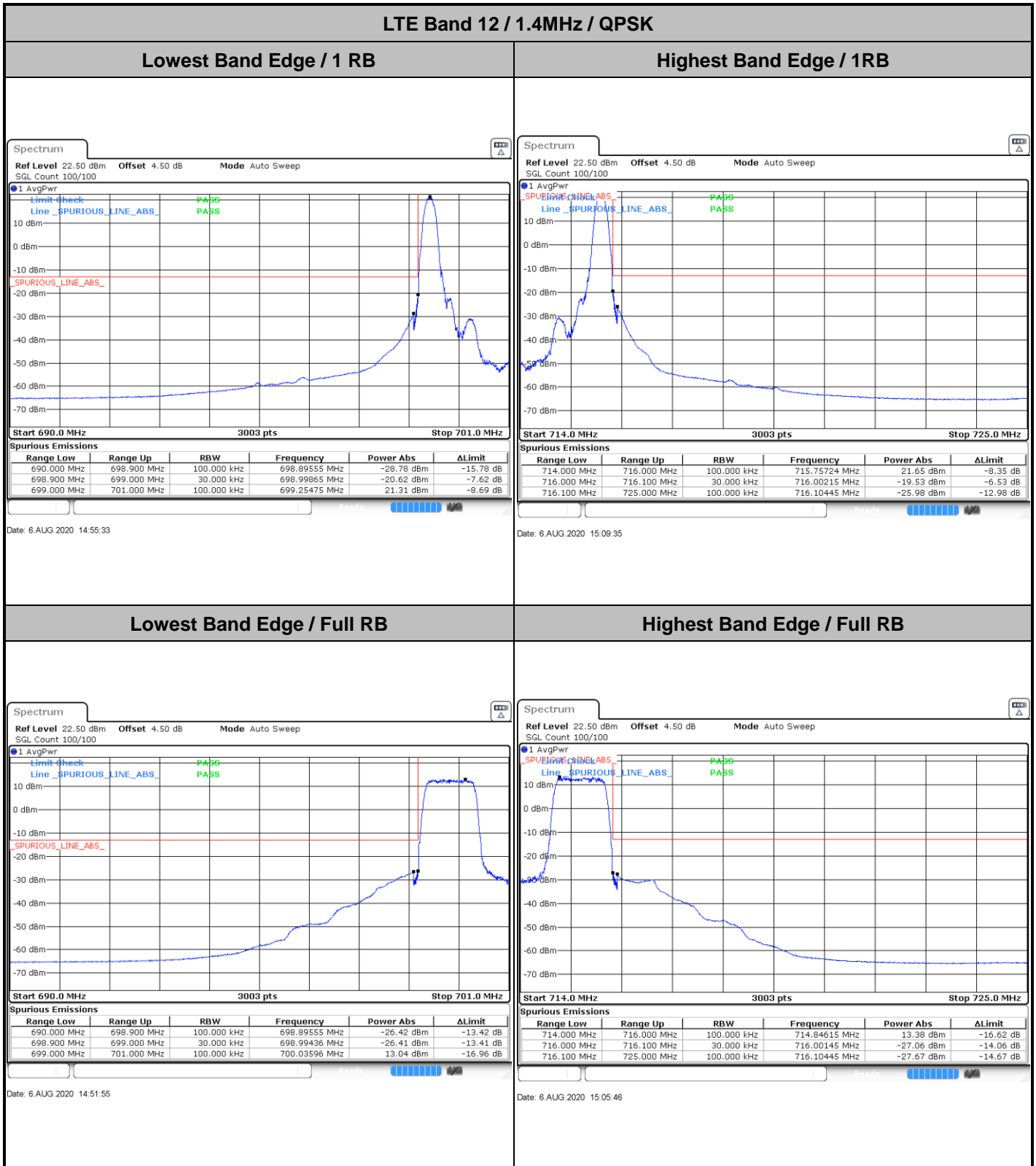
Highest Channel / 10MHz / 64QAM



Date: 25_AUG.2020 10:32:52



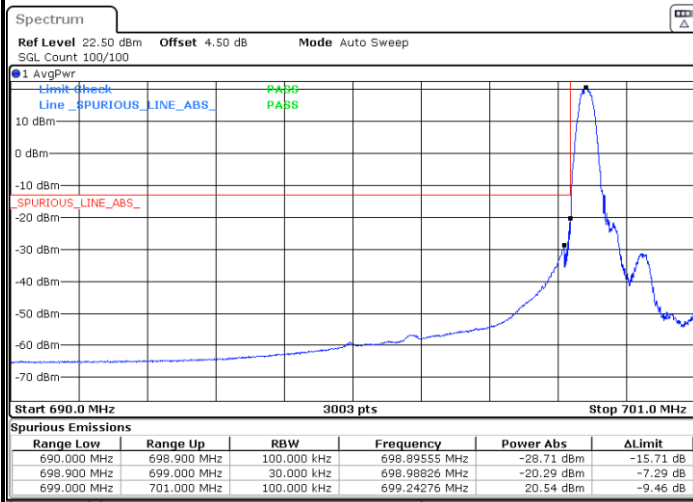
Conducted Band Edge





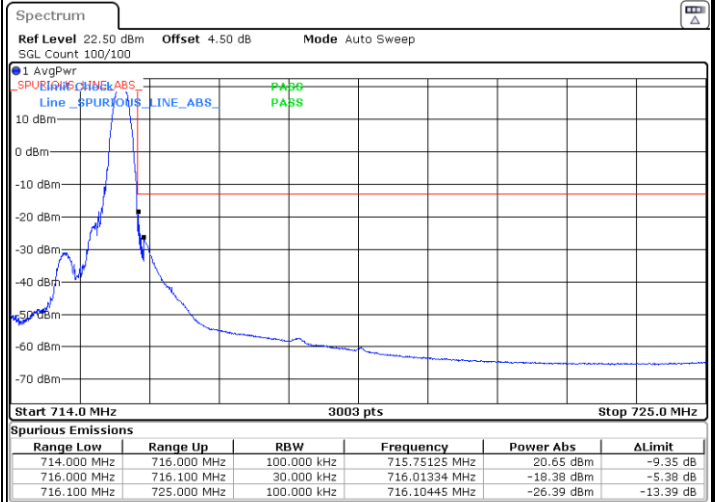
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



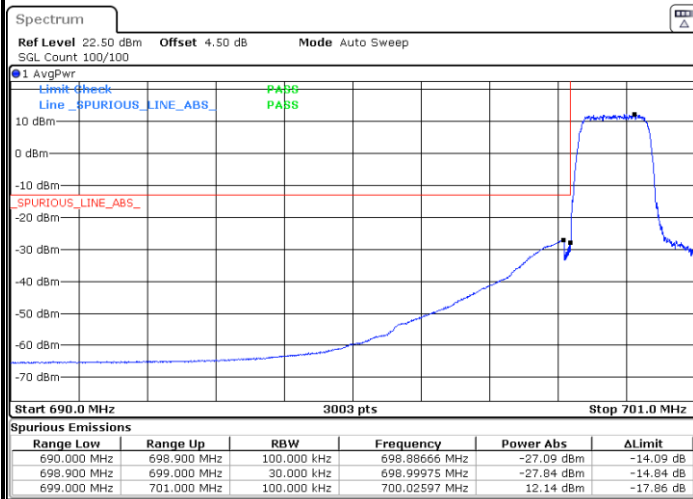
Date: 6 AUG.2020 14:54:31

Highest Band Edge / 1 RB



Date: 6 AUG.2020 15:10:25

Lowest Band Edge / Full RB



Date: 6 AUG.2020 14:53:21

Highest Band Edge / Full RB

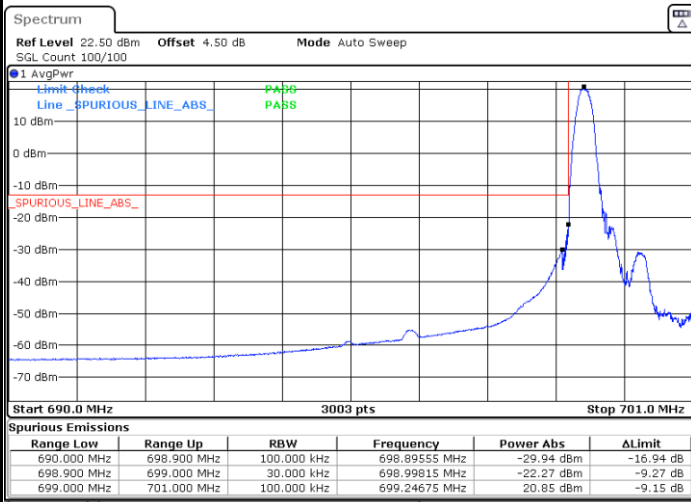


Date: 6 AUG.2020 15:06:59



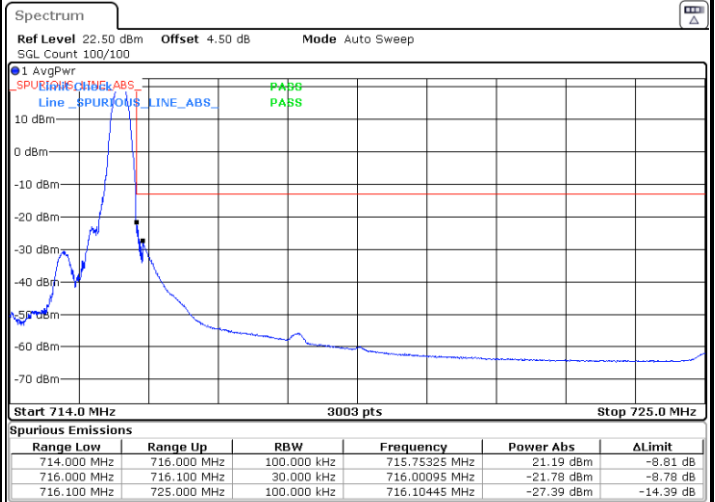
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



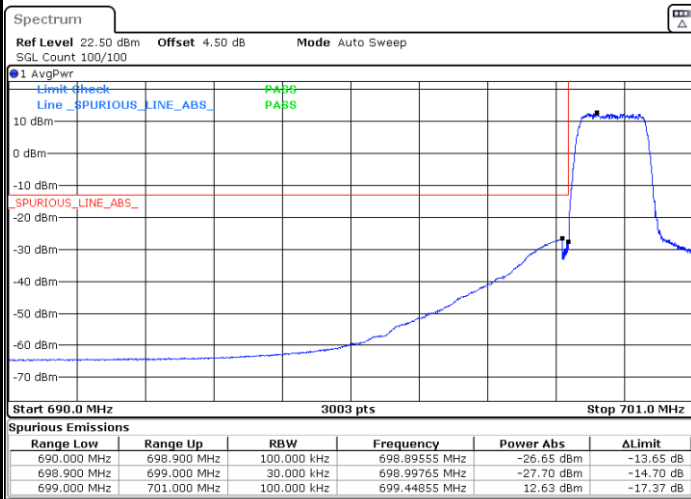
Date: 25.AUG.2020 09:45:53

Highest Band Edge / 1 RB



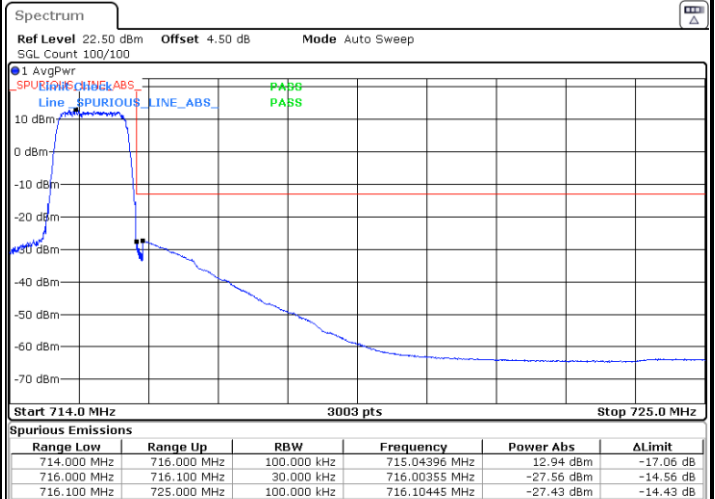
Date: 25.AUG.2020 09:59:49

Lowest Band Edge / Full RB



Date: 25.AUG.2020 09:43:35

Highest Band Edge / Full RB

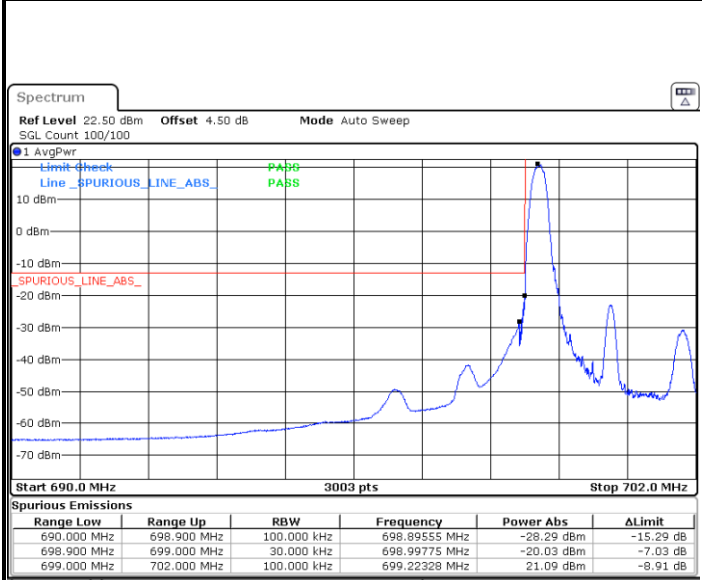


Date: 25.AUG.2020 09:58:40



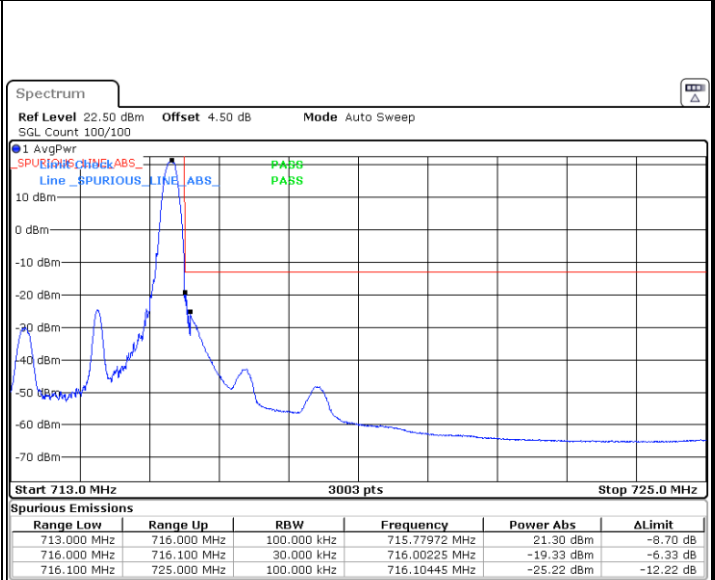
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



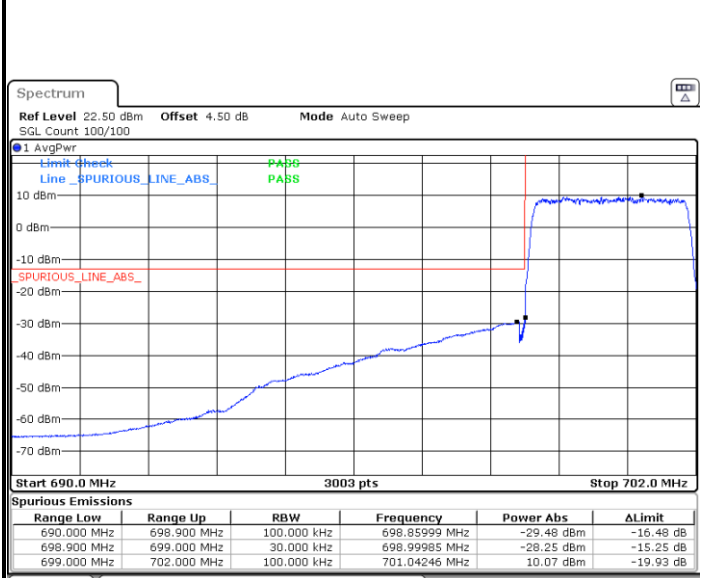
Date: 6 AUG. 2020 15:14:17

Highest Band Edge / 1 RB



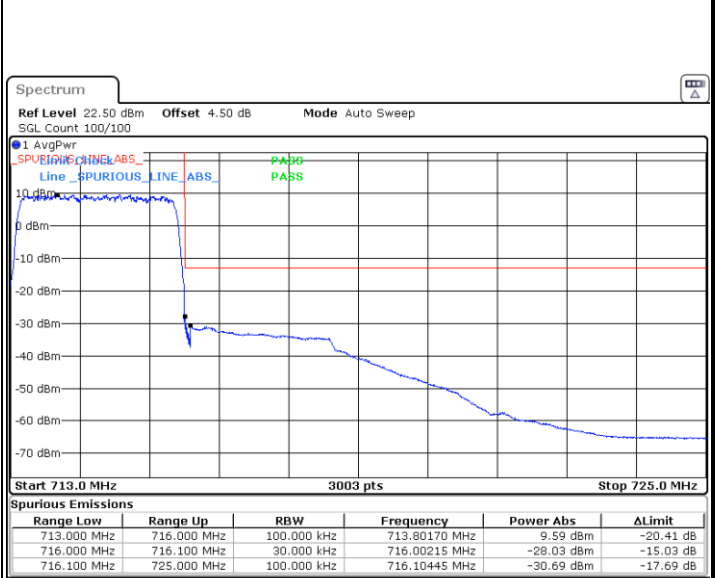
Date: 6 AUG. 2020 15:26:43

Lowest Band Edge / Full RB



Date: 6 AUG. 2020 15:13:17

Highest Band Edge / Full RB

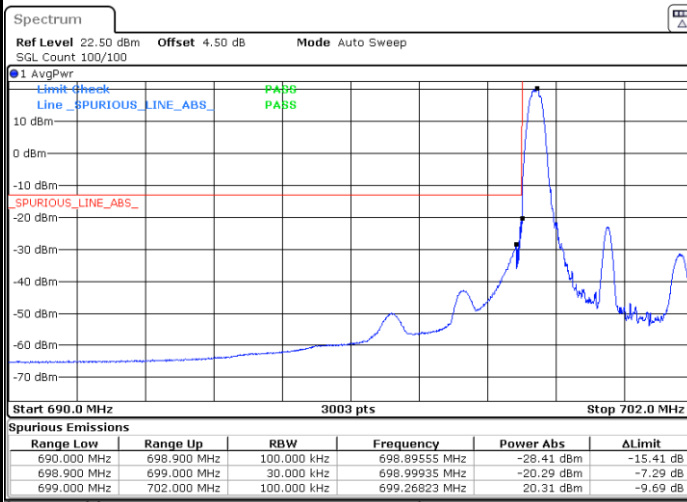


Date: 6 AUG. 2020 15:24:19



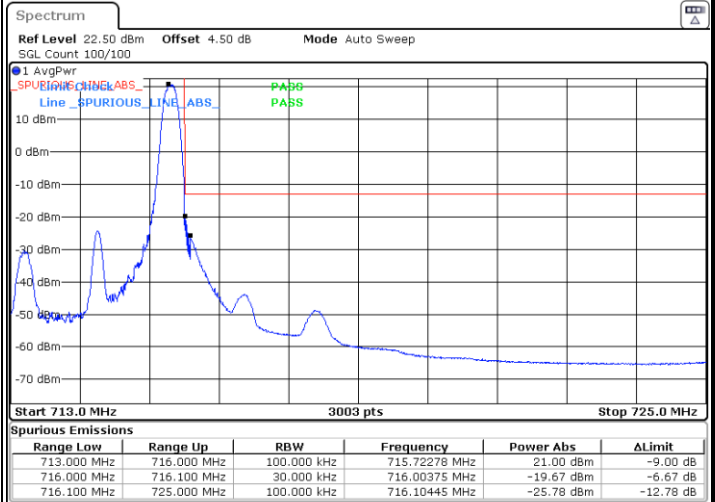
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



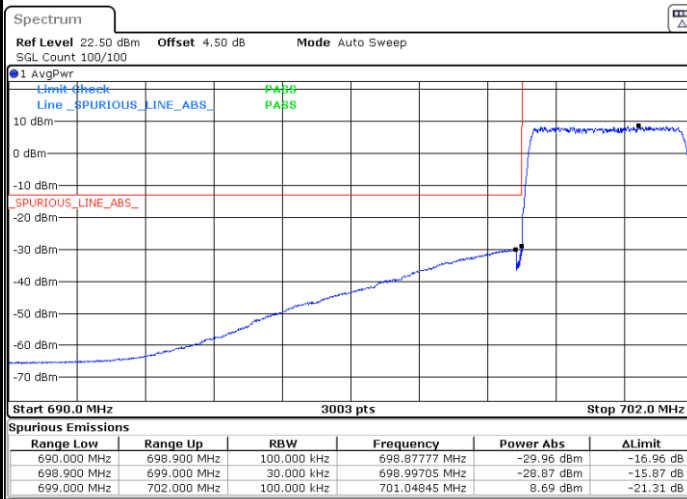
Date: 6 AUG.2020 15:15:27

Highest Band Edge / 1 RB



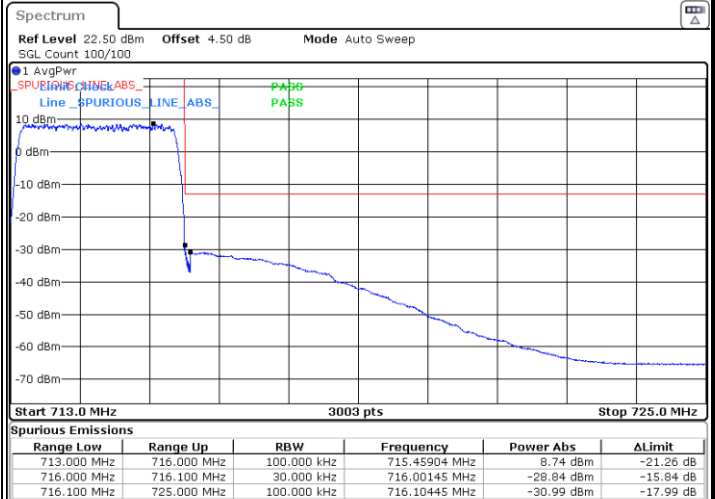
Date: 6 AUG.2020 15:26:03

Lowest Band Edge / Full RB



Date: 6 AUG.2020 15:12:04

Highest Band Edge / Full RB

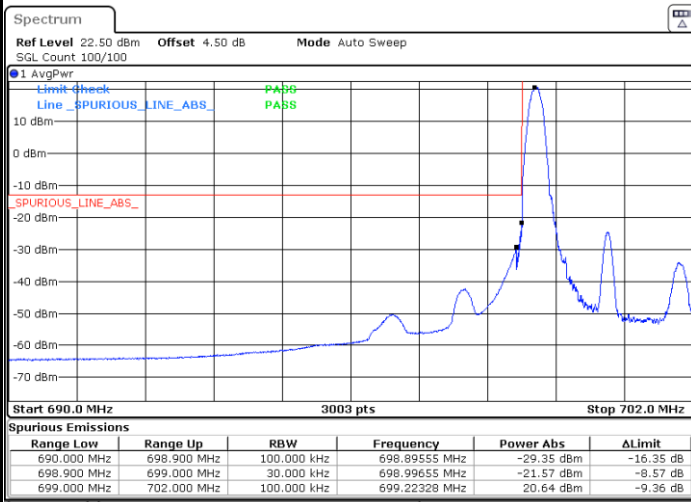


Date: 6 AUG.2020 15:23:15



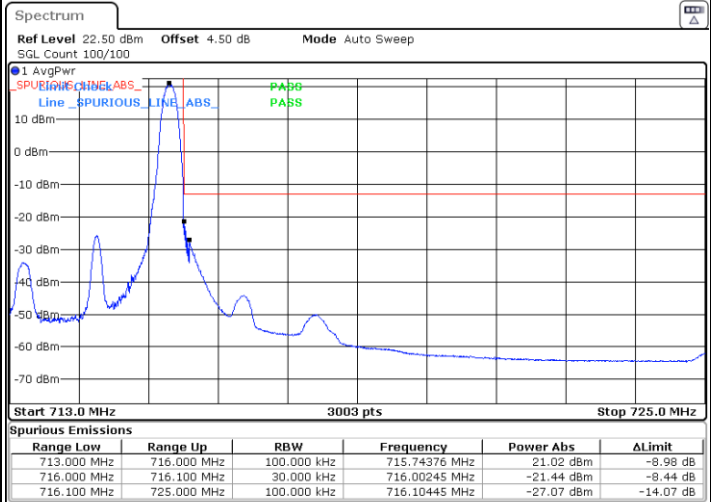
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



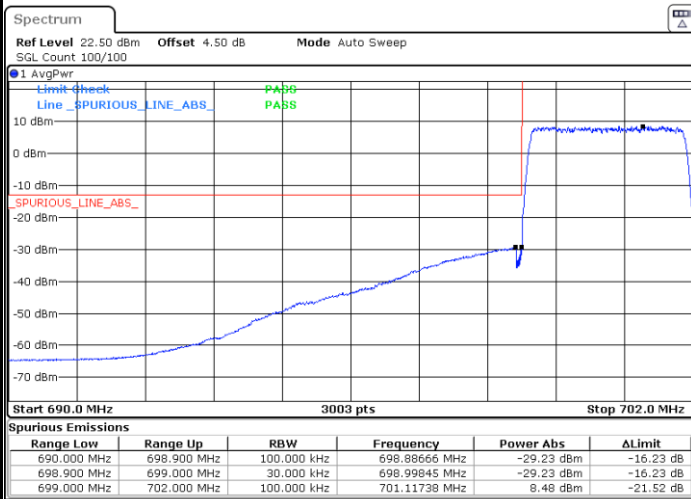
Date: 25.AUG.2020 10:13:11

Highest Band Edge / 1 RB



Date: 25.AUG.2020 10:17:06

Lowest Band Edge / Full RB



Date: 25.AUG.2020 10:12:14

Highest Band Edge / Full RB

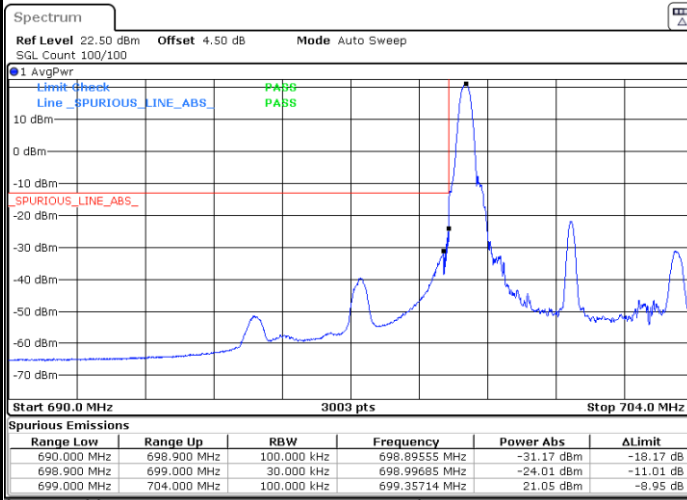


Date: 25.AUG.2020 10:16:06



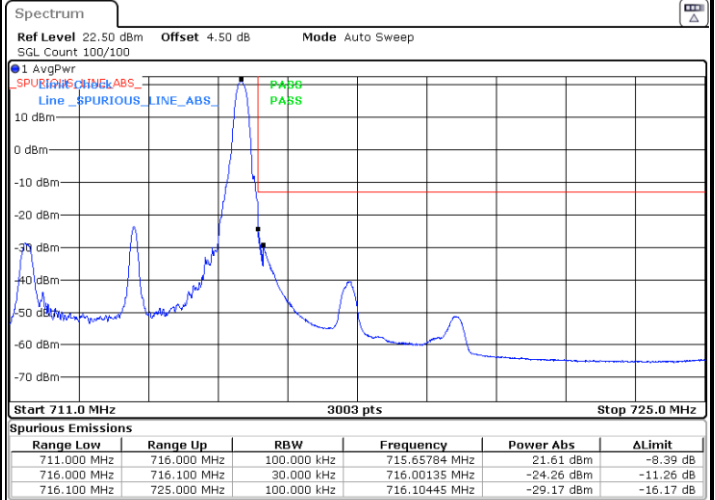
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



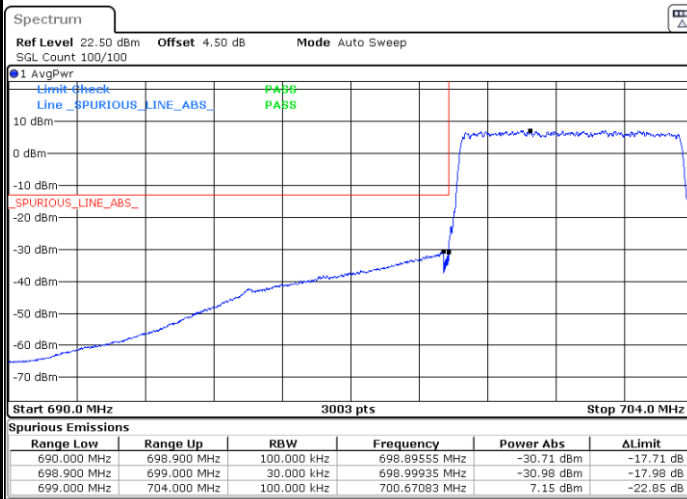
Date: 6 AUG.2020 15:32:06

Highest Band Edge / 1 RB



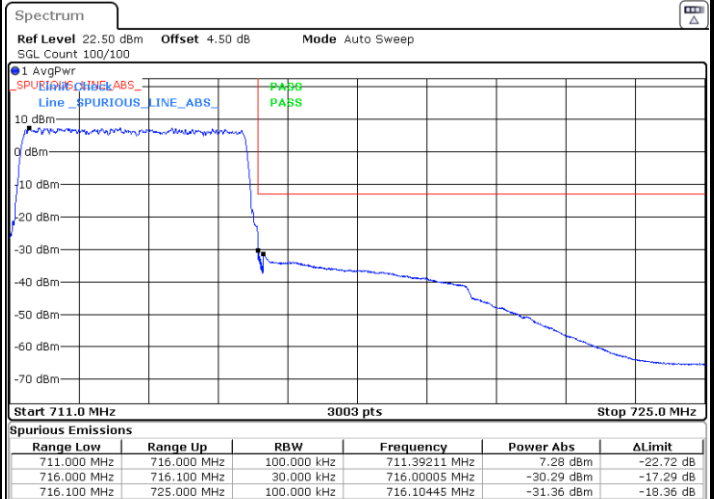
Date: 6 AUG.2020 15:40:41

Lowest Band Edge / Full RB



Date: 6 AUG.2020 15:28:42

Highest Band Edge / Full RB

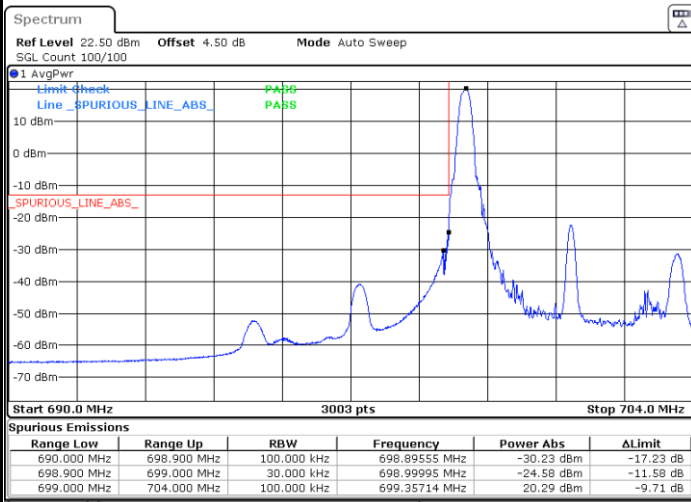


Date: 6 AUG.2020 15:37:43



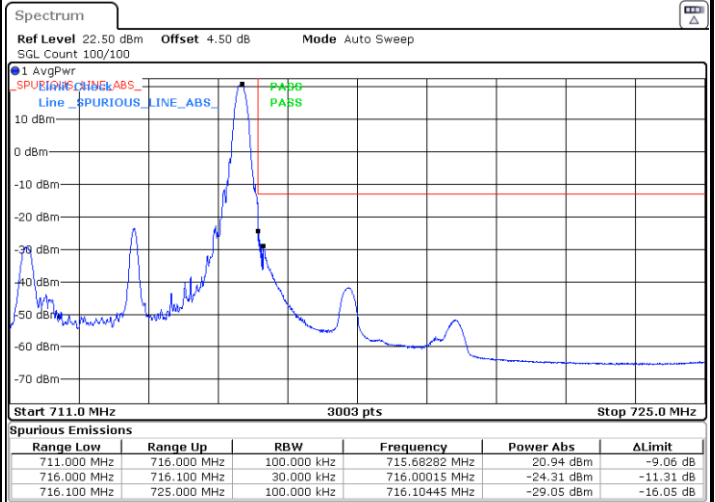
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



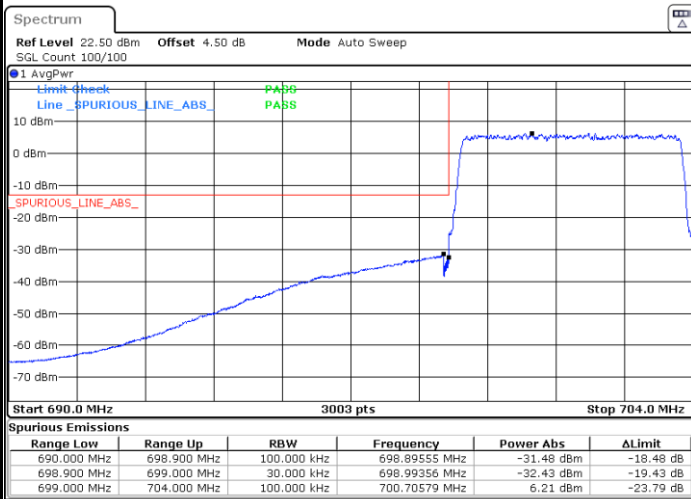
Date: 6 AUG.2020 15:30:28

Highest Band Edge / 1 RB



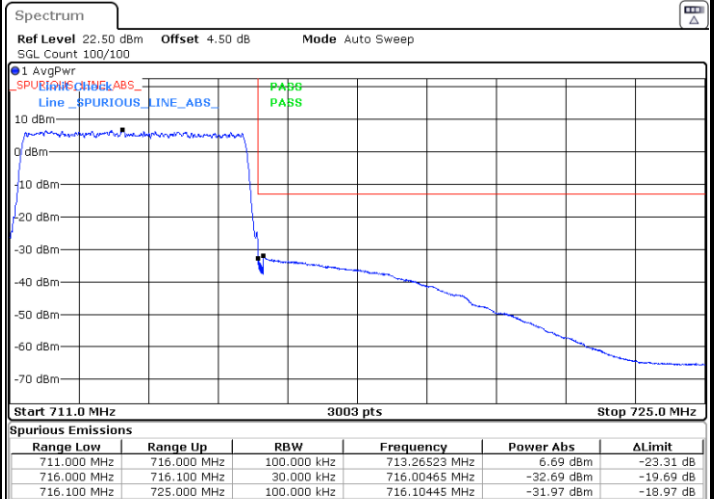
Date: 6 AUG.2020 15:41:21

Lowest Band Edge / Full RB



Date: 6 AUG.2020 15:29:34

Highest Band Edge / Full RB

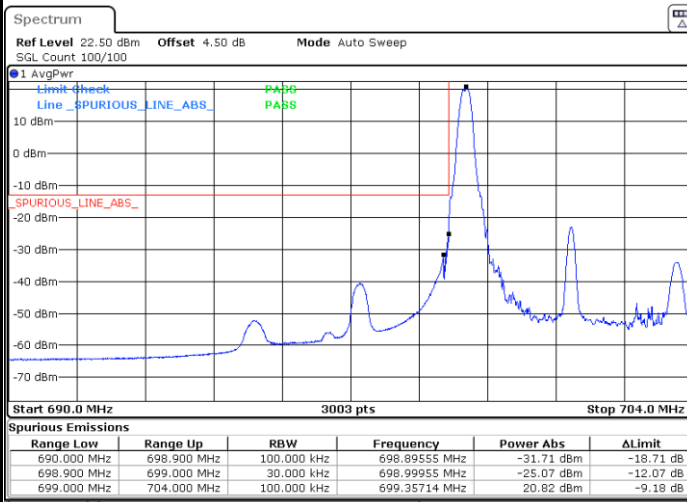


Date: 6 AUG.2020 15:38:44



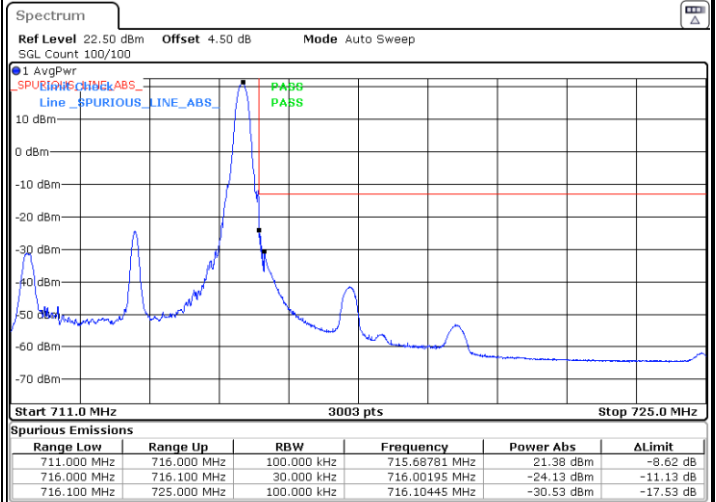
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



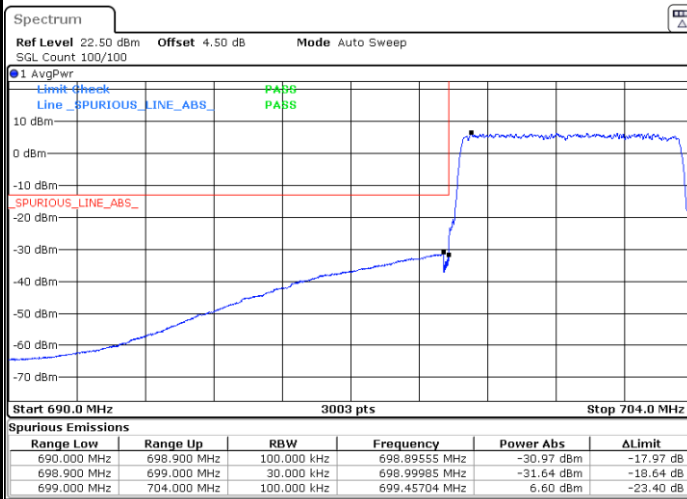
Date: 25.AUG.2020 10:22:52

Highest Band Edge / 1 RB



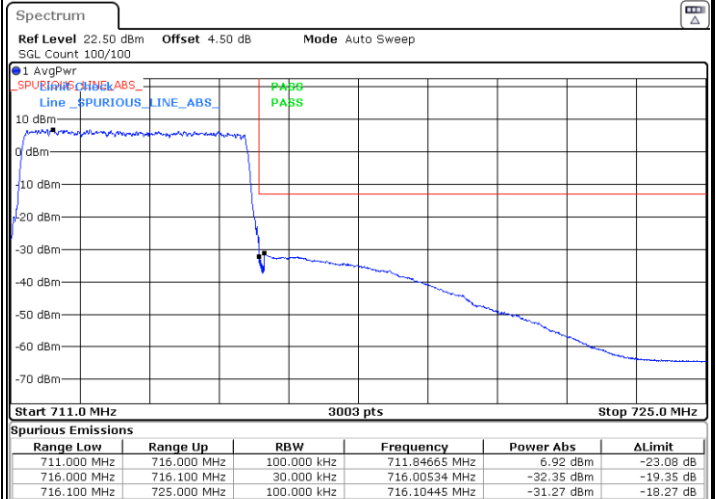
Date: 25.AUG.2020 10:25:51

Lowest Band Edge / Full RB



Date: 25.AUG.2020 10:22:09

Highest Band Edge / Full RB



Date: 25.AUG.2020 10:25:14