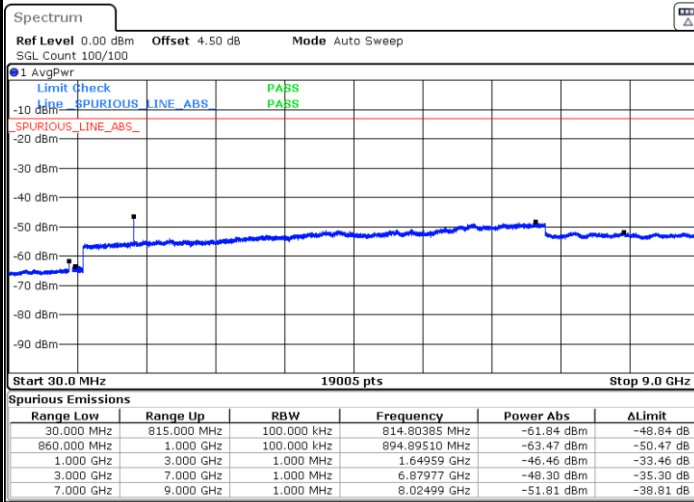




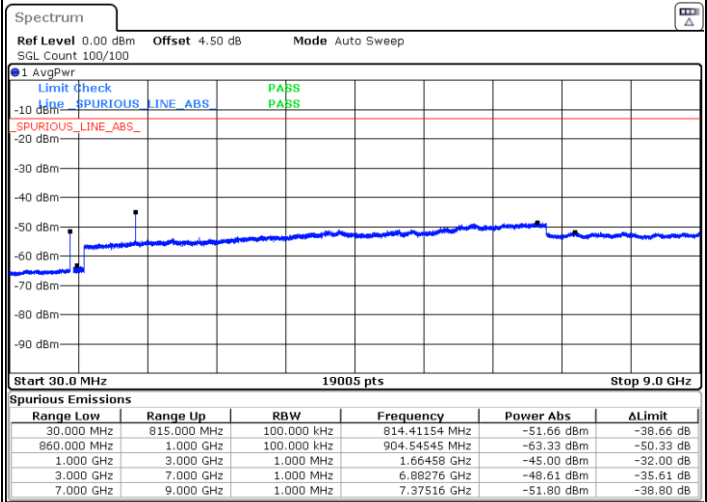
LTE Band 5 / 10MHz

Lowest Channel / 64QAM



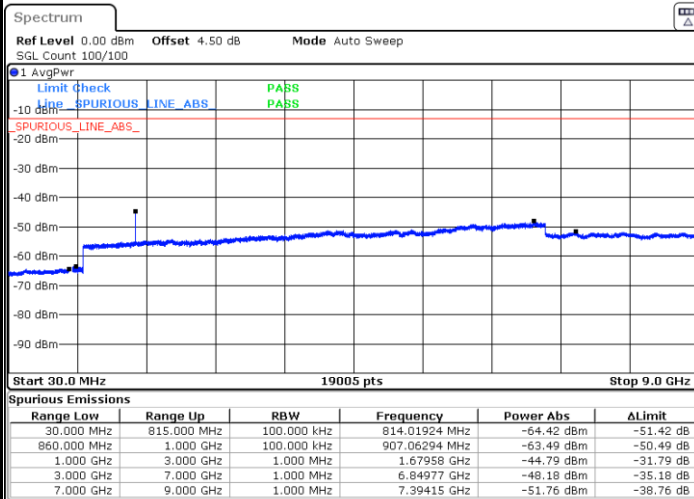
Date: 20 MAR 2020 20:59:47

Middle Channel / 64QAM



Date: 20 MAR 2020 21:00:42

Highest Channel / 64QAM



Date: 20 MAR 2020 21:05:31

**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	0.0011	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0030	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0046	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0071	
-20	Normal Voltage	0.0063	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0041	
20	Normal Voltage	0.0030	
20	Battery End Point	0.0022	

Note:

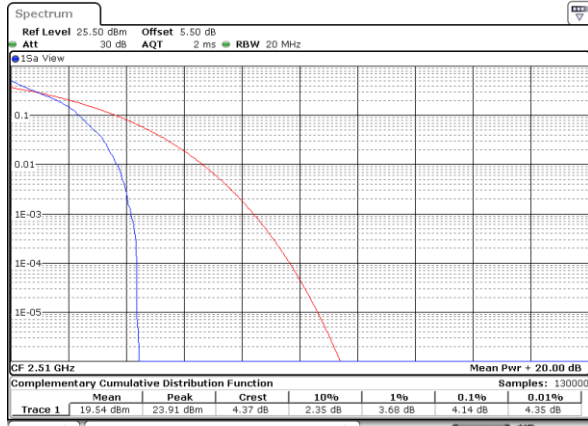
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V



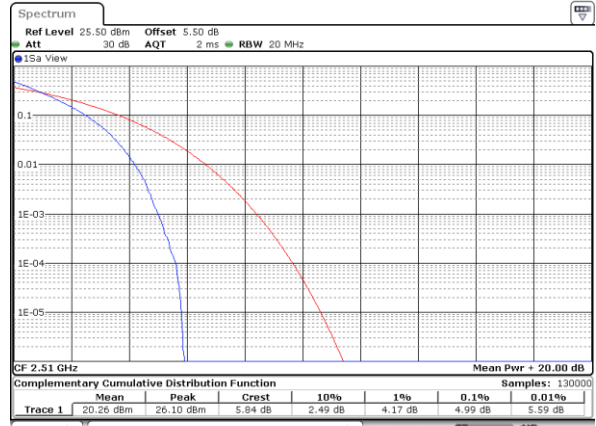
LTE Band 7

Peak-to-Average Ratio

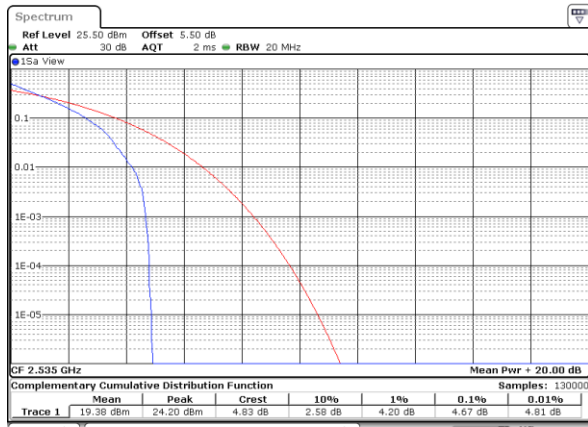
Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.14	4.99	5.33	6.00	PASS
Middle CH	4.67	4.96	5.48	5.91	
Highest CH	4.43	4.96	5.39	5.88	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.25	5.88	-	-	PASS
Middle CH	5.51	5.88	-	-	
Highest CH	5.39	5.88	-	-	

LTE Band 7 / 20MHz / QPSK
Lowest Channel / 1RB


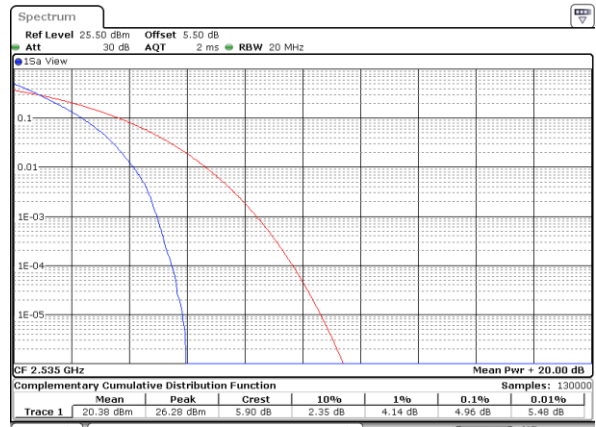
Date: 21 MAR 2020 19:38:58

Lowest Channel / Full RB


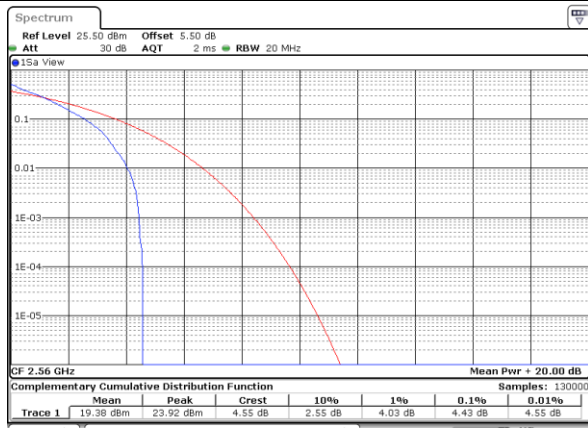
Date: 21 MAR 2020 19:39:07

Middle Channel / 1RB


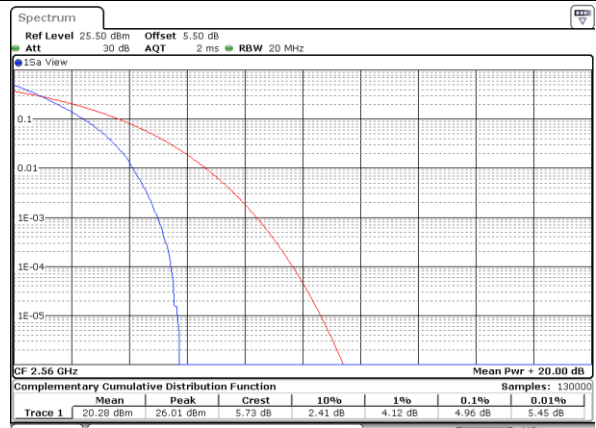
Date: 21 MAR 2020 19:39:44

Middle Channel / Full RB


Date: 21 MAR 2020 19:39:35

Highest Channel / 1RB


Date: 21 MAR 2020 19:40:15

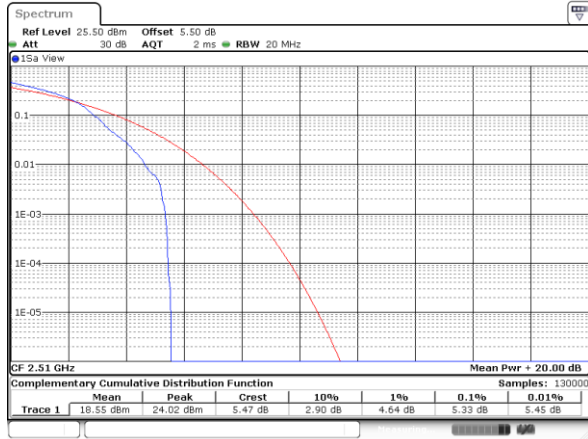
Highest Channel / Full RB


Date: 21 MAR 2020 19:40:24

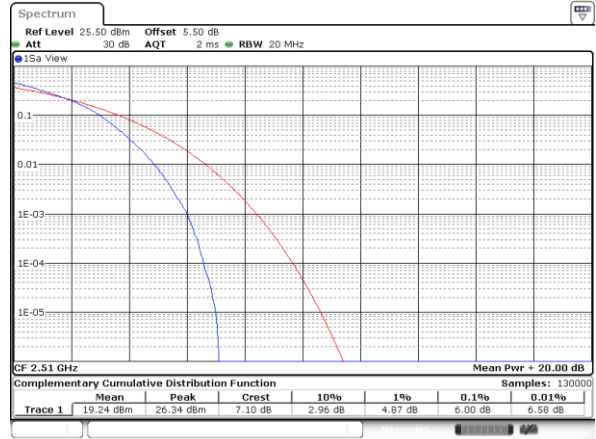


LTE Band 7 / 20MHz / 16QAM

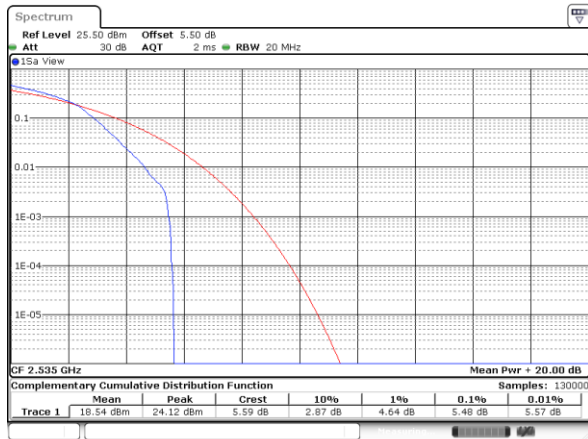
Lowest Channel / 1RB



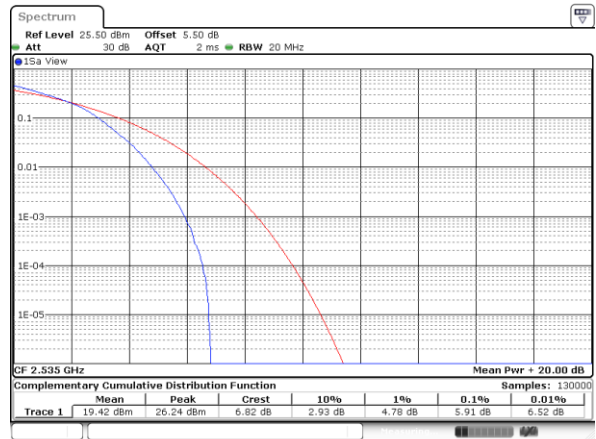
Lowest Channel / Full RB



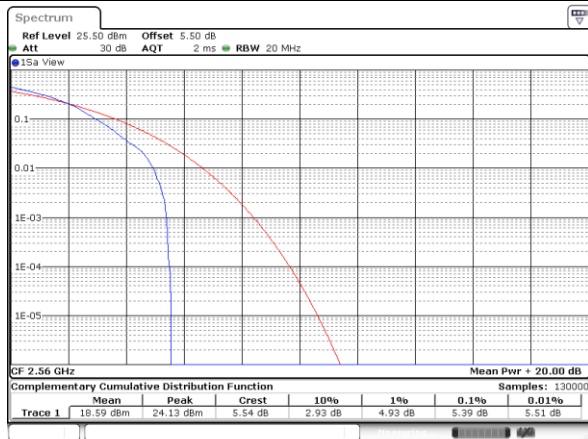
Middle Channel / 1RB



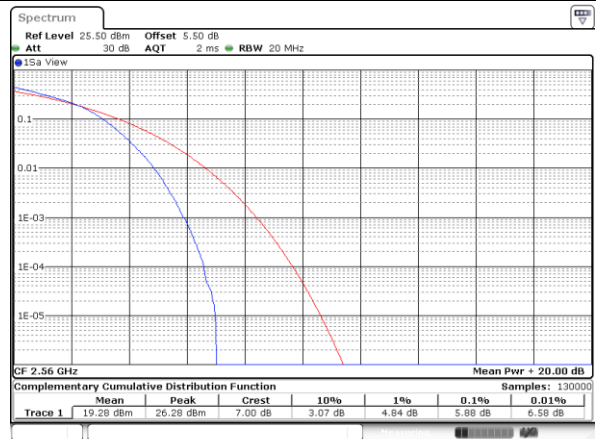
Middle Channel / Full RB



Highest Channel / 1RB



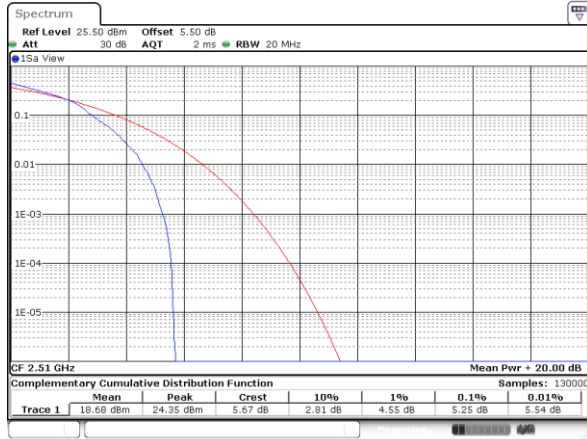
Highest Channel / Full RB



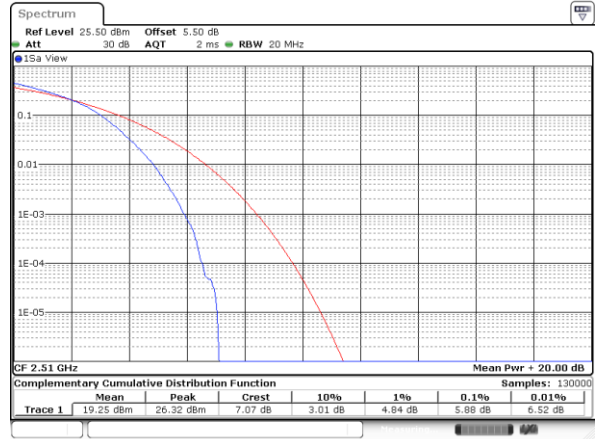


LTE Band 7 / 20MHz / 64QAM

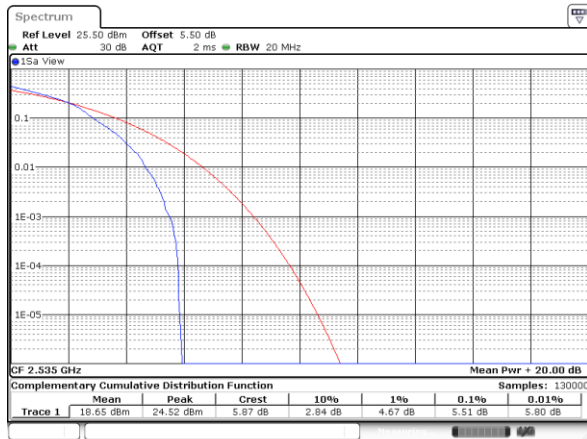
Lowest Channel / 1RB



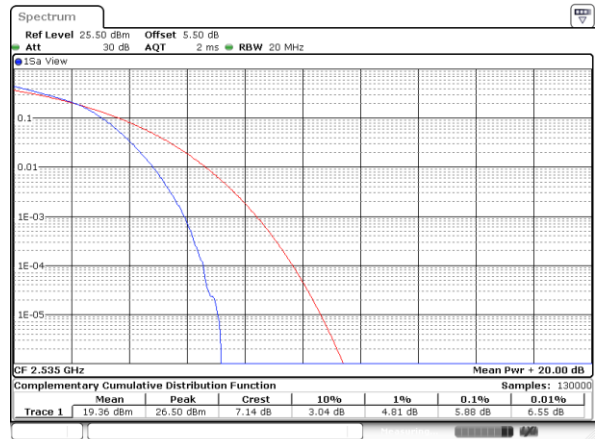
Lowest Channel / Full RB



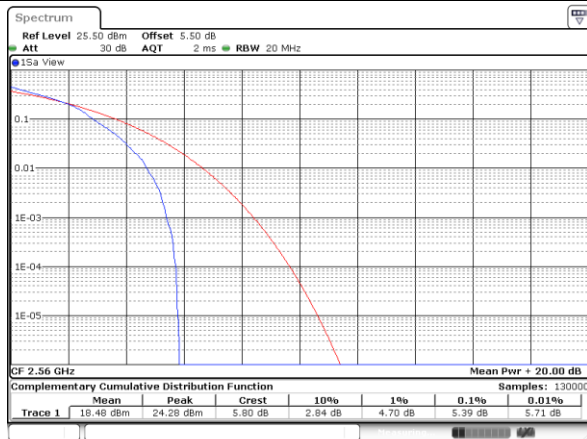
Middle Channel / 1RB



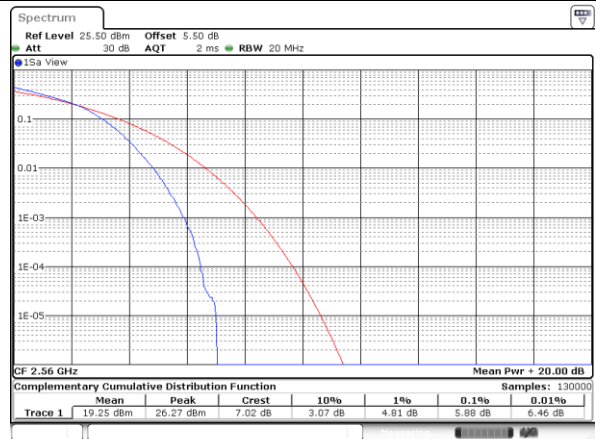
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



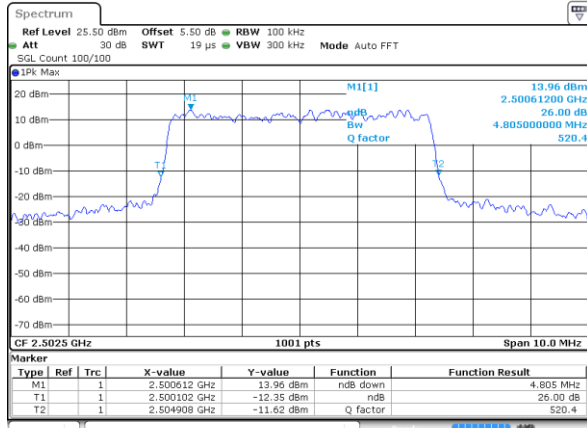
**26dB Bandwidth**

Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.81	4.85	9.79	9.69	14.33	14.51	20.14	20.14
Middle CH	-	-	-	-	4.88	4.78	9.81	9.73	14.27	14.21	20.18	20.30
Highest CH	-	-	-	-	4.92	4.76	9.65	9.69	14.54	14.30	20.22	20.18
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.87	-	9.69	-	14.30	-	20.10	-
Middle CH	-	-	-	-	4.85	-	9.73	-	14.39	-	20.14	-
Highest CH	-	-	-	-	4.85	-	9.65	-	14.48	-	20.10	-

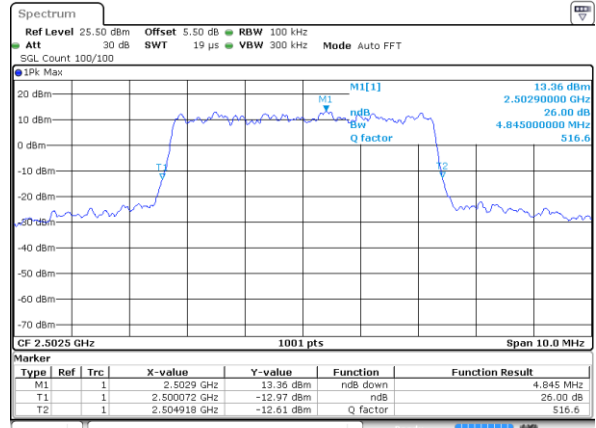


LTE Band 7

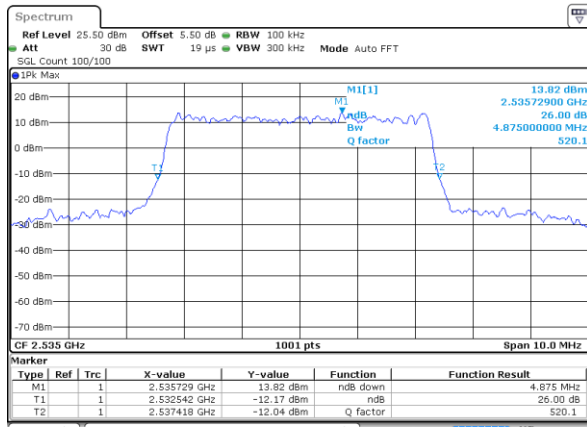
Lowest Channel / 5MHz / QPSK



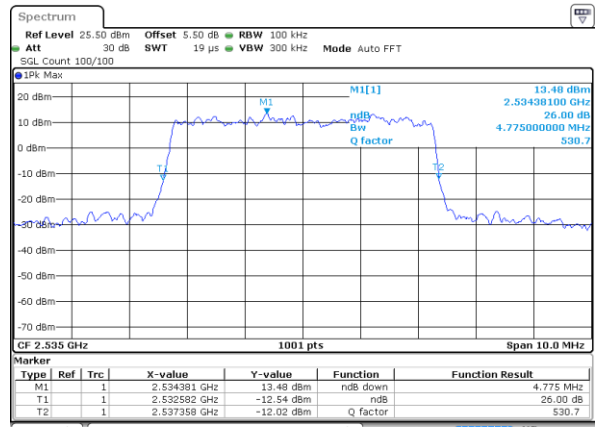
Lowest Channel / 5MHz / 16QAM



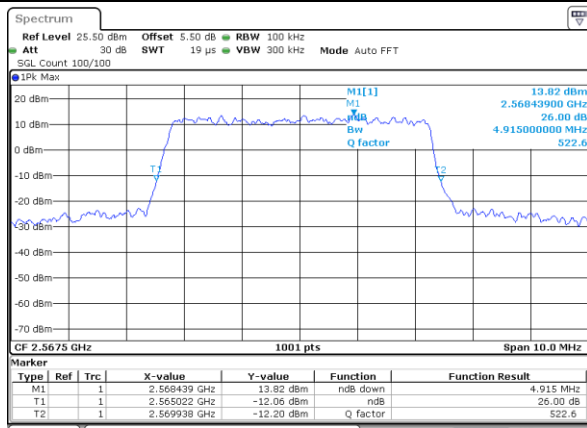
Middle Channel / 5MHz / QPSK



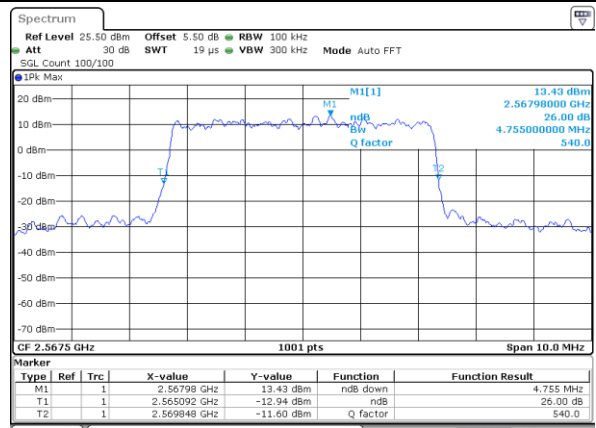
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



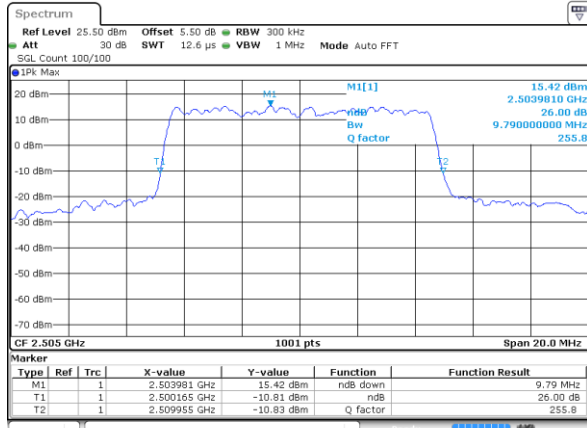
Highest Channel / 5MHz / 16QAM





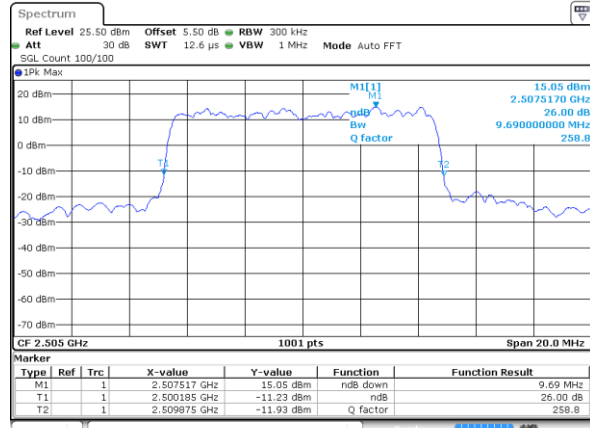
LTE Band 7

Lowest Channel / 10MHz / QPSK



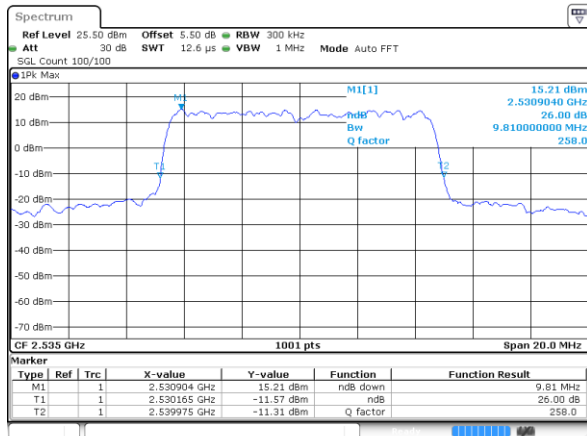
Date: 21 MAR 2020 17:51:26

Lowest Channel / 10MHz / 16QAM



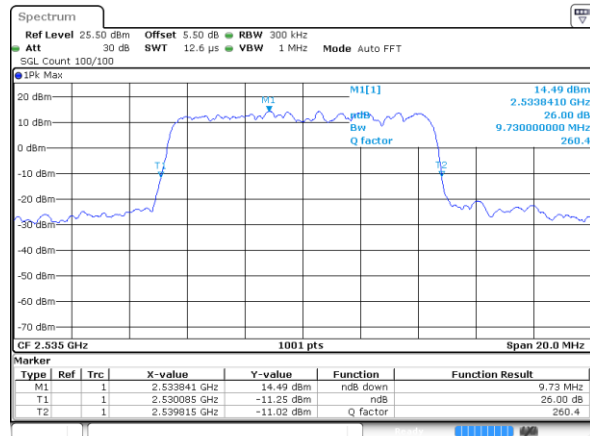
Date: 21 MAR 2020 17:51:46

Middle Channel / 10MHz / QPSK



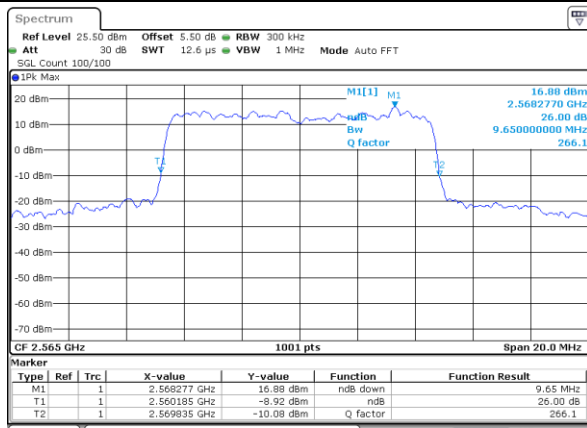
Date: 21 MAR 2020 17:52:26

Middle Channel / 10MHz / 16QAM



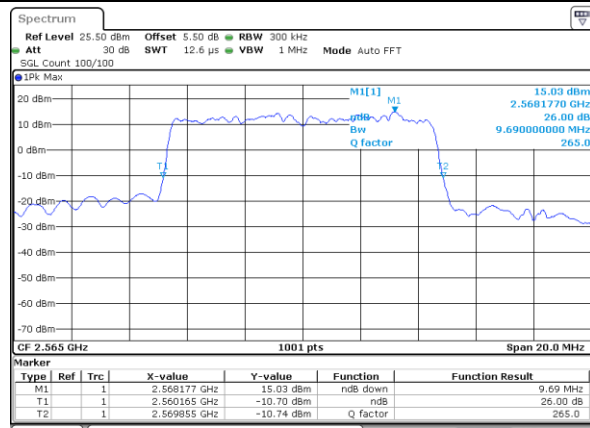
Date: 21 MAR 2020 17:52:06

Highest Channel / 10MHz / QPSK



Date: 21 MAR 2020 17:52:46

Highest Channel / 10MHz / 16QAM

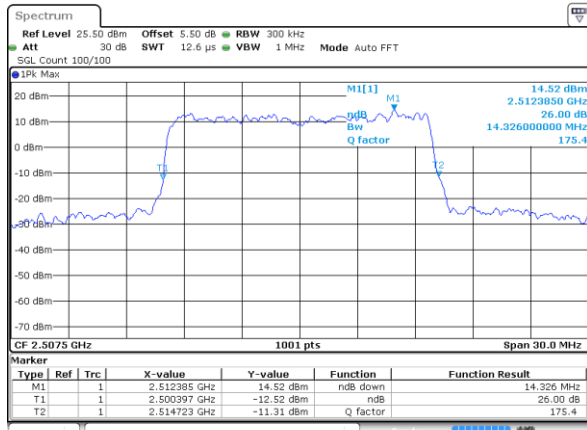


Date: 21 MAR 2020 17:53:06



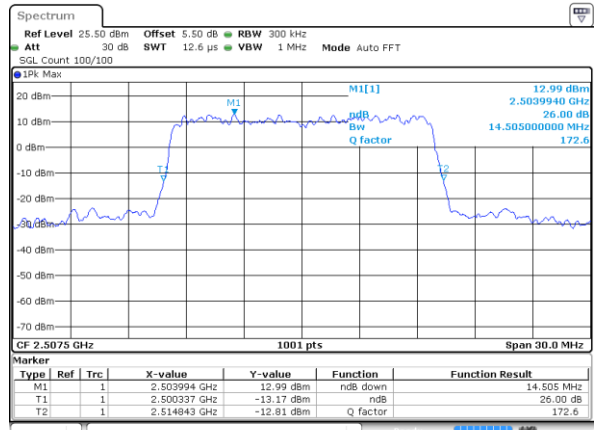
LTE Band 7

Lowest Channel / 15MHz / QPSK



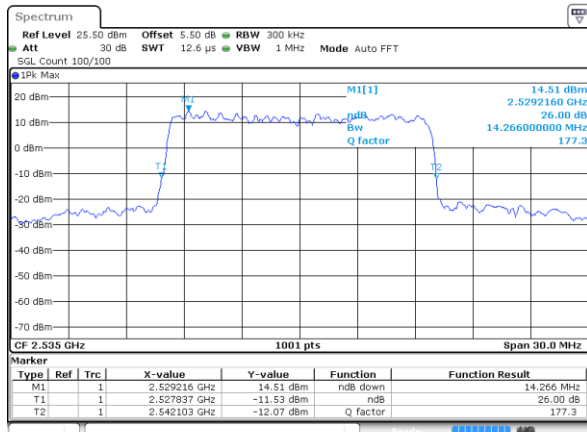
Date: 21 MAR 2020 18:08:14

Lowest Channel / 15MHz / 16QAM



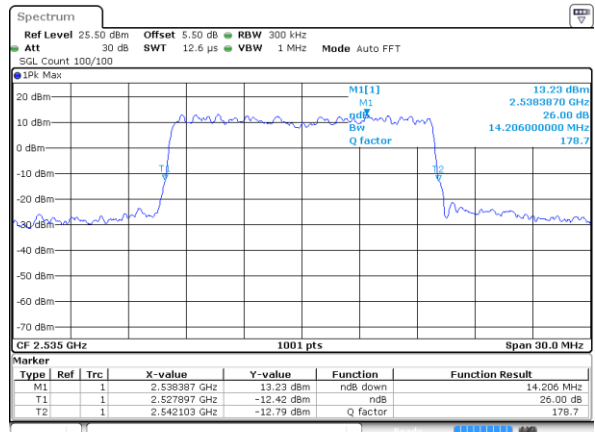
Date: 21 MAR 2020 18:07:54

Middle Channel / 15MHz / QPSK



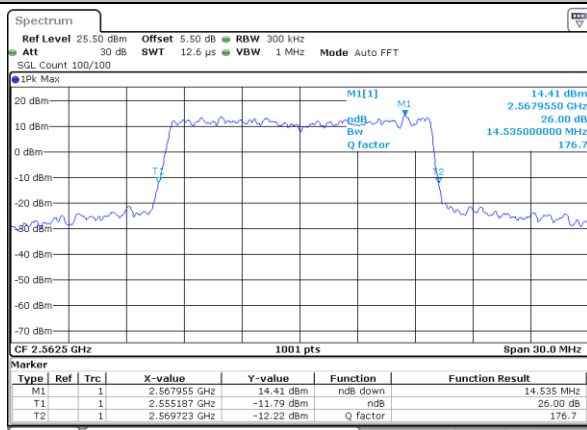
Date: 21 MAR 2020 18:08:34

Middle Channel / 15MHz / 16QAM



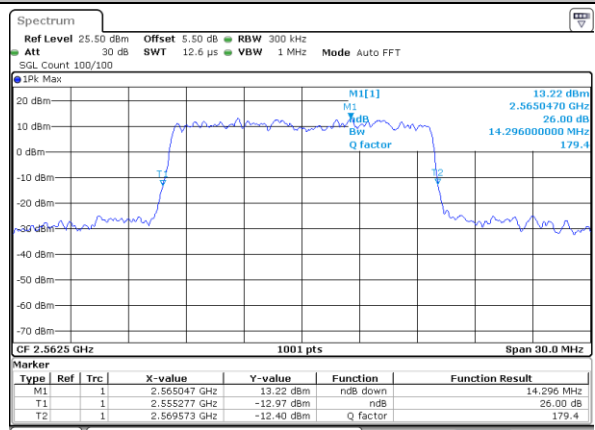
Date: 21 MAR 2020 18:08:54

Highest Channel / 15MHz / QPSK



Date: 21 MAR 2020 18:09:34

Highest Channel / 15MHz / 16QAM

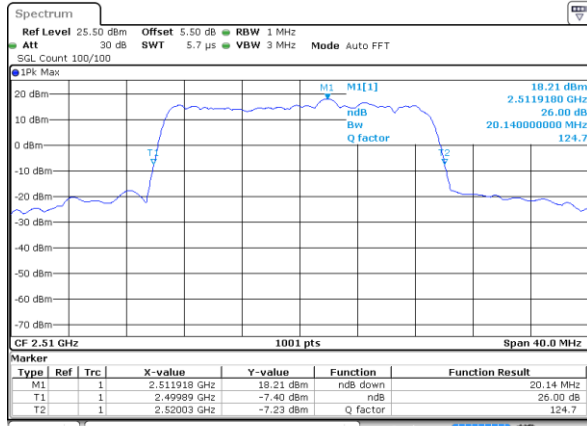


Date: 21 MAR 2020 18:09:14

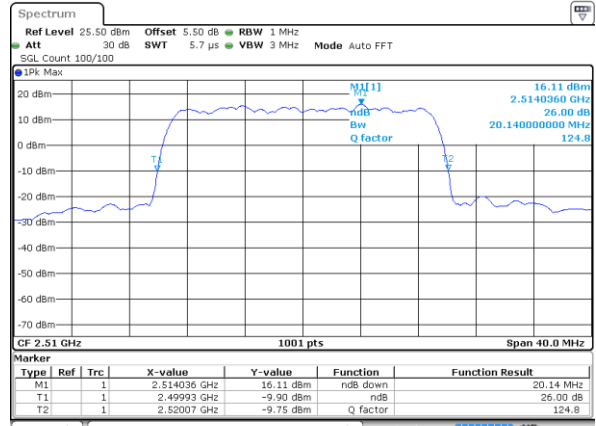


LTE Band 7

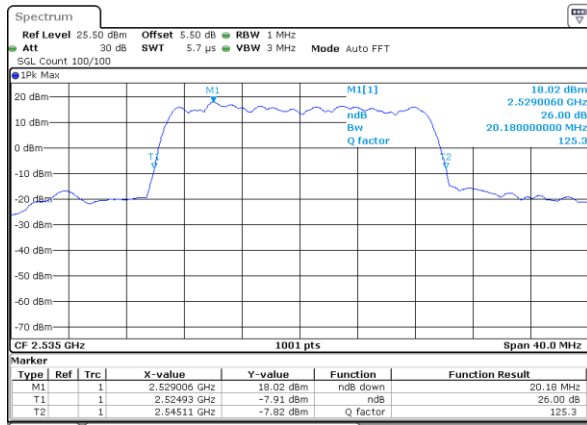
Lowest Channel / 20MHz / QPSK



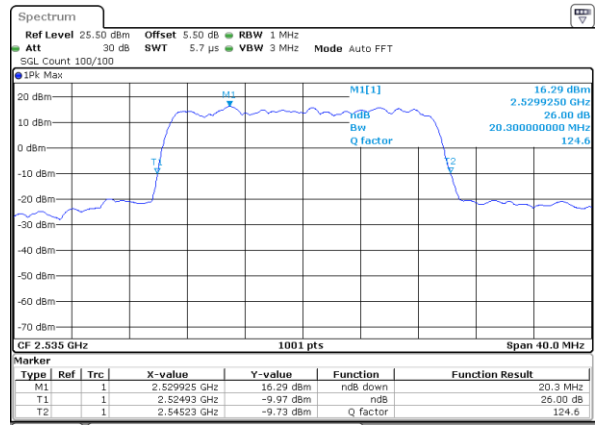
Lowest Channel / 20MHz / 16QAM



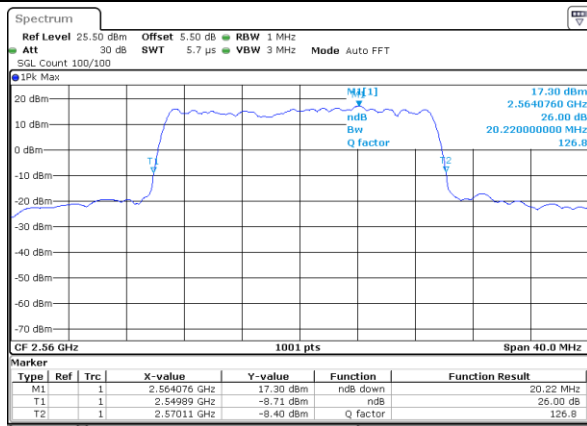
Middle Channel / 20MHz / QPSK



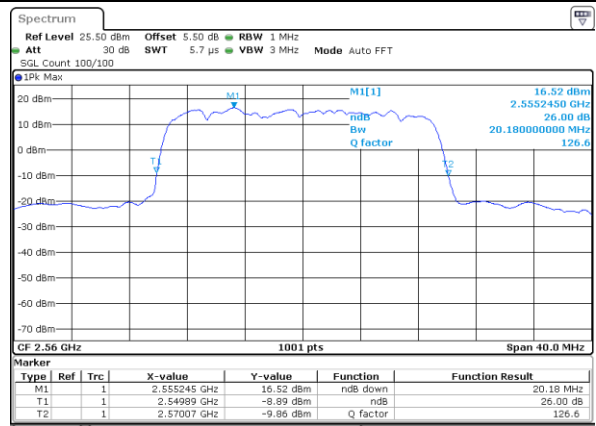
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



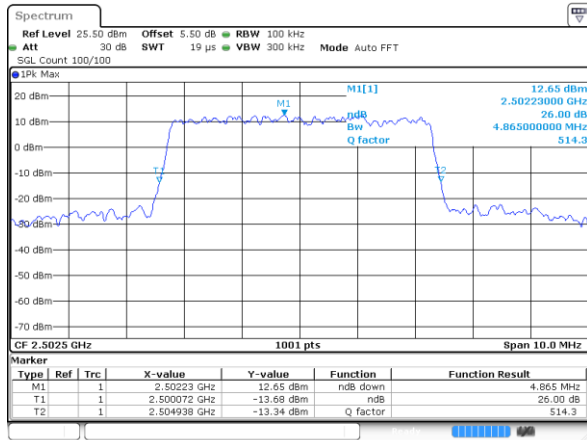
Highest Channel / 20MHz / 16QAM





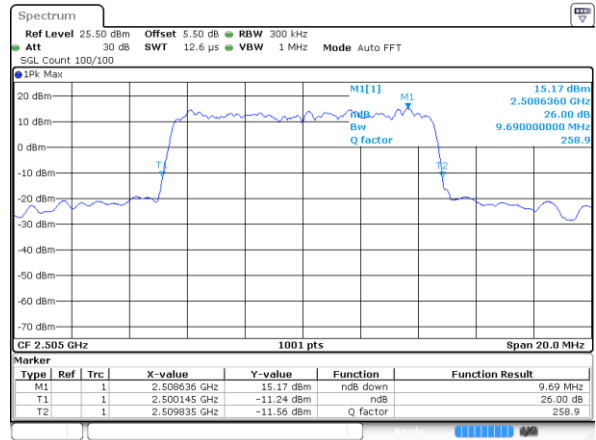
LTE Band 7

Lowest Channel / 5MHz / 64QAM



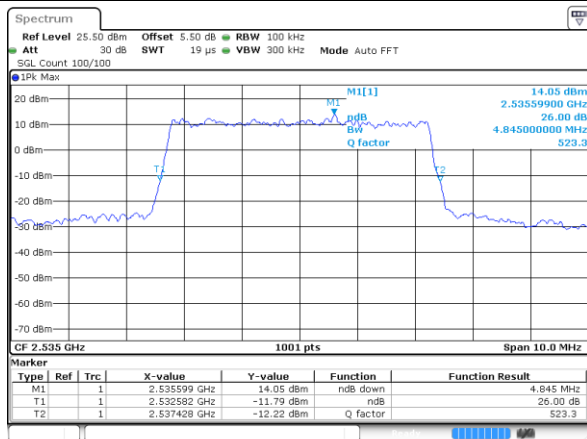
Date: 21 MAR 2020 18:49:43

Lowest Channel / 10MHz / 64QAM



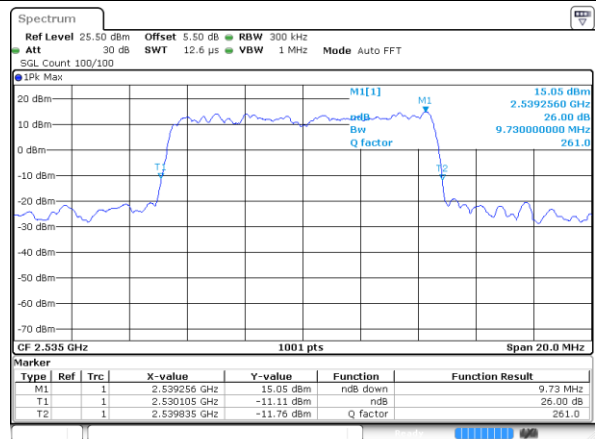
Date: 21 MAR 2020 18:57:58

Middle Channel / 5MHz / 64QAM



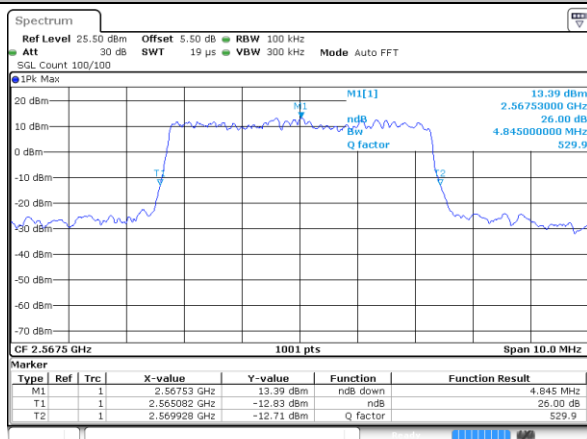
Date: 21 MAR 2020 18:49:53

Middle Channel / 10MHz / 64QAM



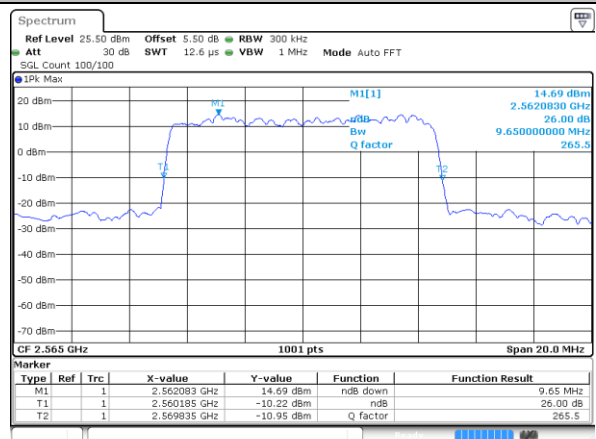
Date: 21 MAR 2020 18:58:08

Highest Channel / 5MHz / 64QAM



Date: 21 MAR 2020 18:50:03

Highest Channel / 10MHz / 64QAM

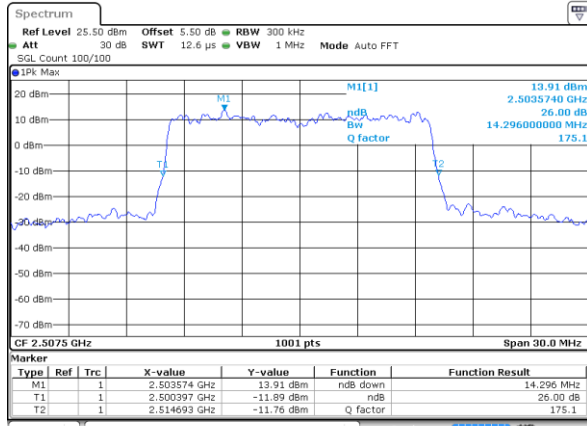


Date: 21 MAR 2020 18:58:18



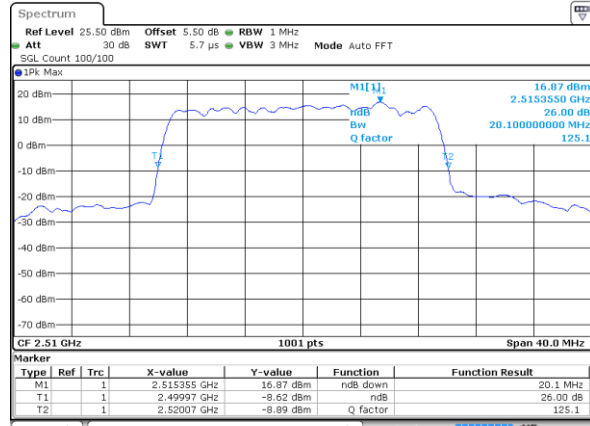
LTE Band 7

Lowest Channel / 15MHz / 64QAM



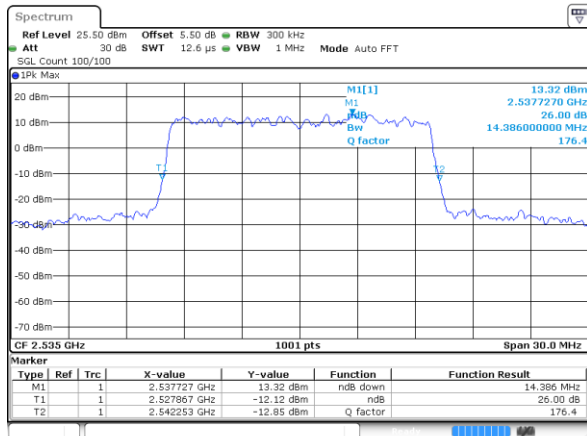
Date: 21 MAR 2020 19:06:11

Lowest Channel / 20MHz / 64QAM



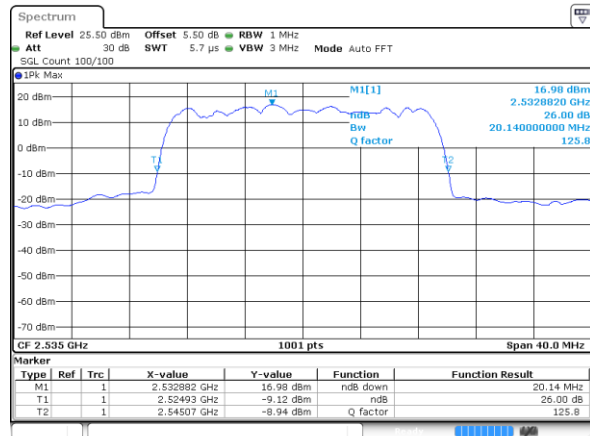
Date: 21 MAR 2020 19:14:26

Middle Channel / 15MHz / 64QAM



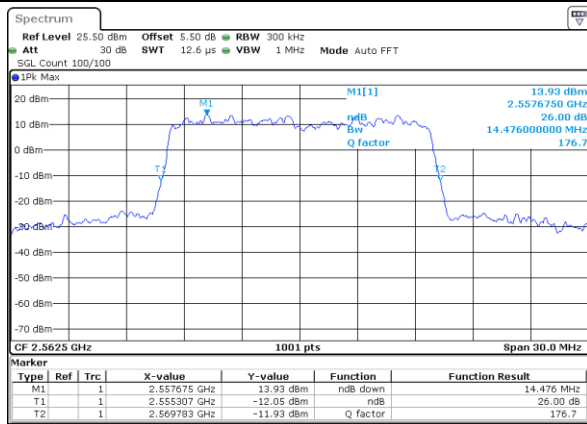
Date: 21 MAR 2020 19:06:21

Middle Channel / 20MHz / 64QAM



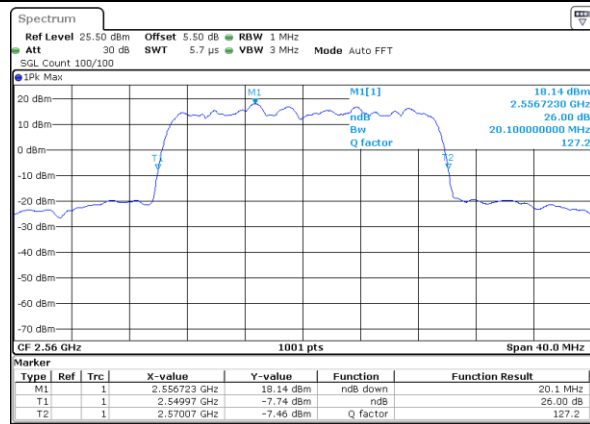
Date: 21 MAR 2020 19:14:36

Highest Channel / 15MHz / 64QAM



Date: 21 MAR 2020 19:06:32

Highest Channel / 20MHz / 64QAM



Date: 21 MAR 2020 19:14:46

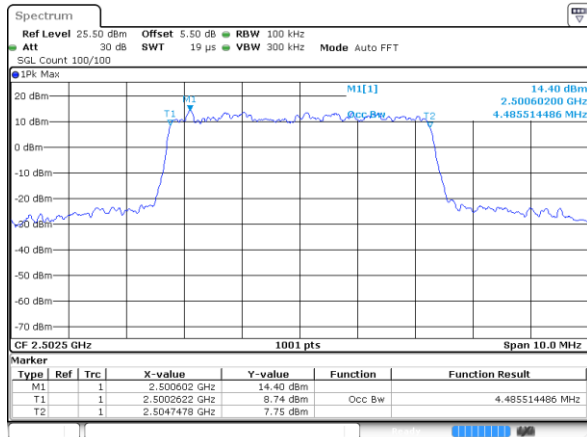
**Occupied Bandwidth**

Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.47	9.03	9.03	13.49	13.49	18.18	18.38
Middle CH	-	-	-	-	4.50	4.48	9.03	8.99	13.46	13.49	18.42	18.42
Highest CH	-	-	-	-	4.48	4.49	9.01	9.07	13.49	13.46	18.26	18.30
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	9.01	-	13.46	-	18.30	-
Middle CH	-	-	-	-	4.49	-	9.03	-	13.49	-	18.30	-
Highest CH	-	-	-	-	4.48	-	8.99	-	13.46	-	18.38	-



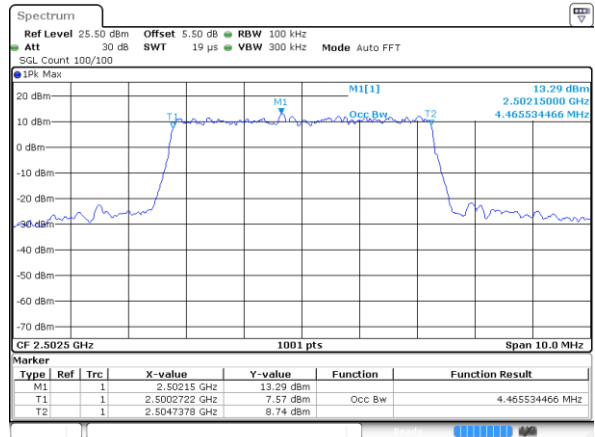
LTE Band 7

Lowest Channel / 5MHz / QPSK



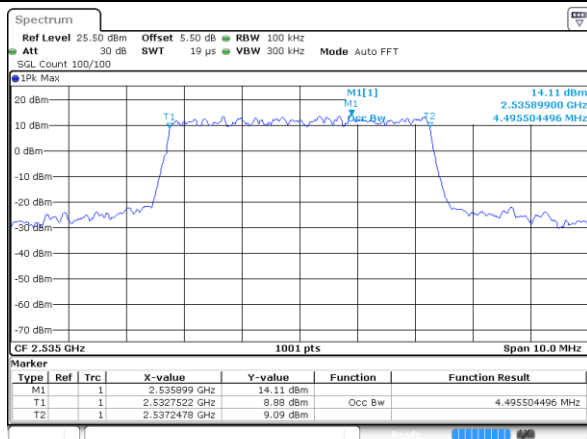
Date: 21 MAR 2020 17:34:47

Lowest Channel / 5MHz / 16QAM



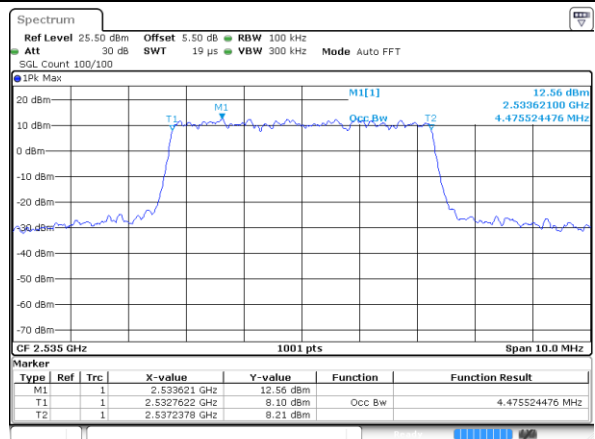
Date: 21 MAR 2020 17:35:07

Middle Channel / 5MHz / QPSK



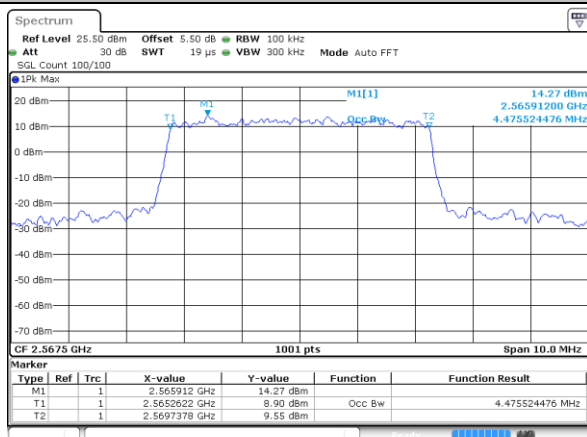
Date: 21 MAR 2020 17:35:46

Middle Channel / 5MHz / 16QAM



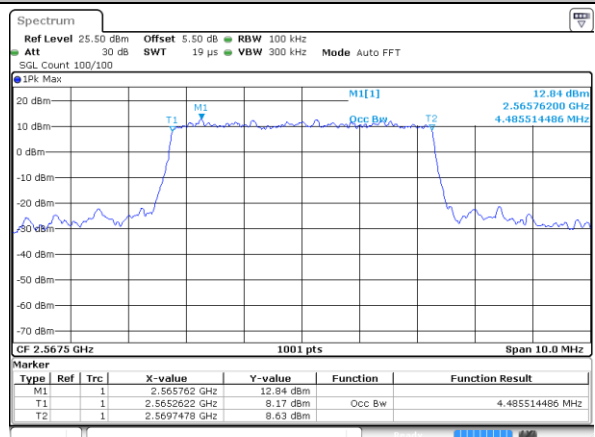
Date: 21 MAR 2020 17:35:26

Highest Channel / 5MHz / QPSK



Date: 21 MAR 2020 17:36:06

Highest Channel / 5MHz / 16QAM

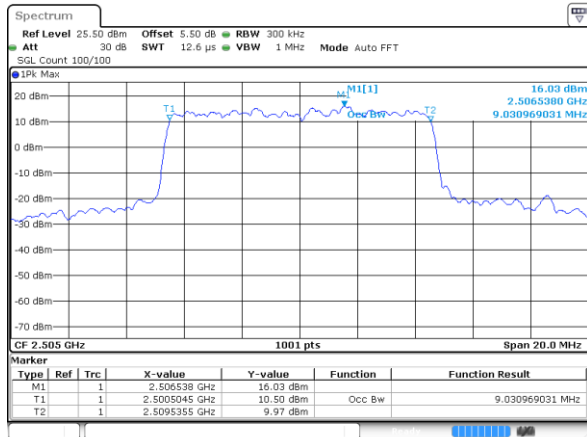


Date: 21 MAR 2020 17:36:26



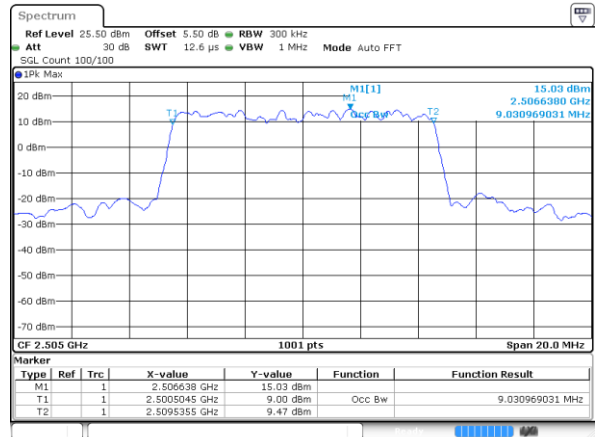
LTE Band 7

Lowest Channel / 10MHz / QPSK



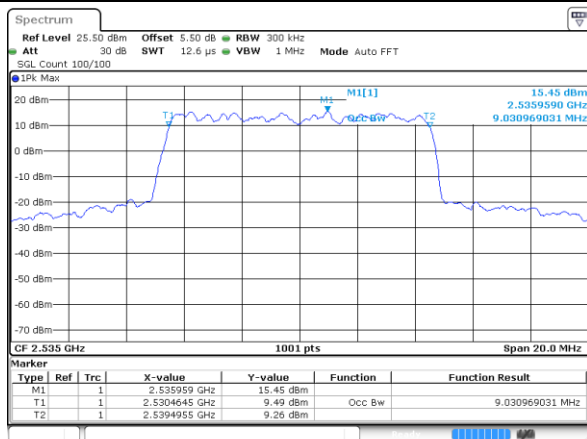
Date: 21 MAR 2020 17:51:16

Lowest Channel / 10MHz / 16QAM



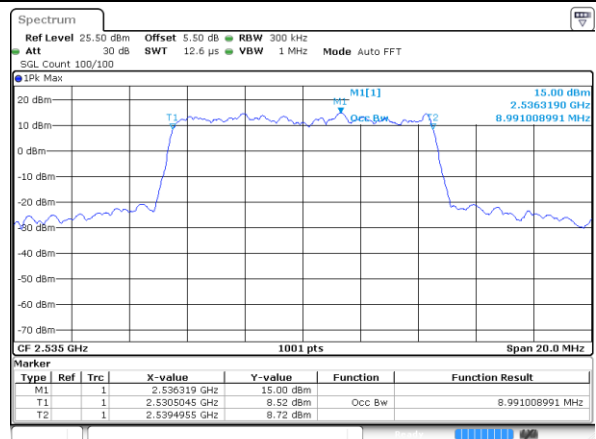
Date: 21 MAR 2020 17:51:36

Middle Channel / 10MHz / QPSK



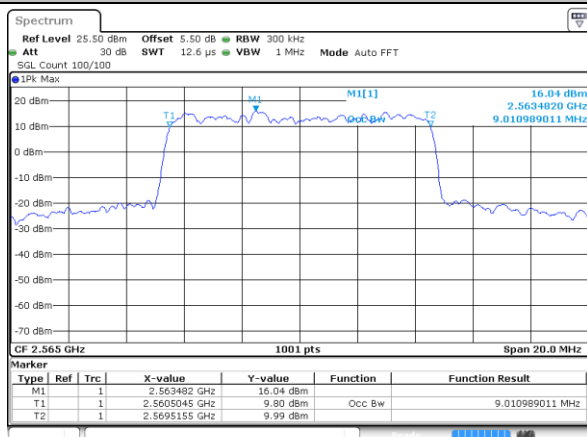
Date: 21 MAR 2020 17:52:16

Middle Channel / 10MHz / 16QAM



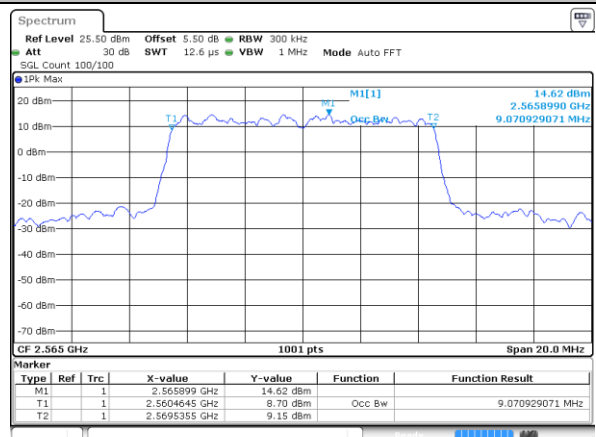
Date: 21 MAR 2020 17:51:56

Highest Channel / 10MHz / QPSK



Date: 21 MAR 2020 17:52:36

Highest Channel / 10MHz / 16QAM

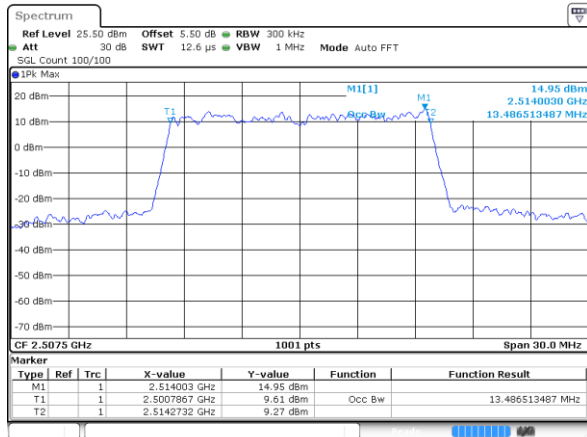


Date: 21 MAR 2020 17:52:56

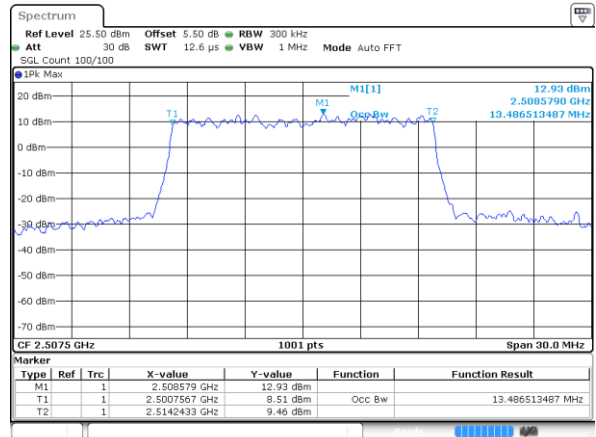


LTE Band 7

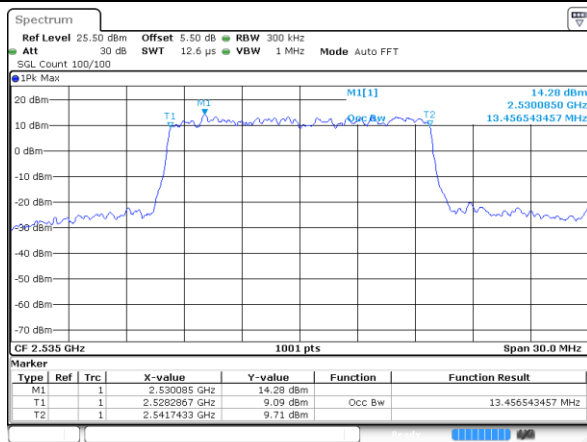
Lowest Channel / 15MHz / QPSK



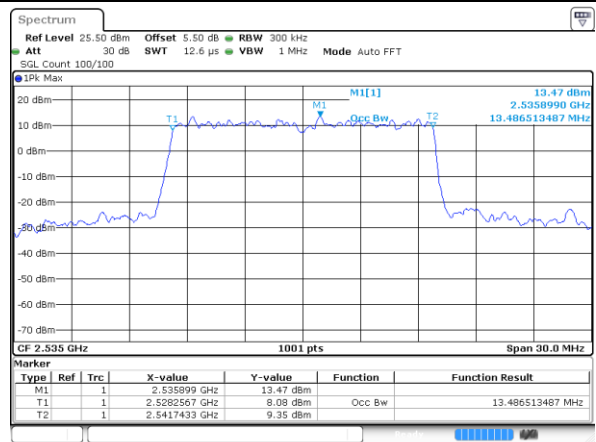
Lowest Channel / 15MHz / 16QAM



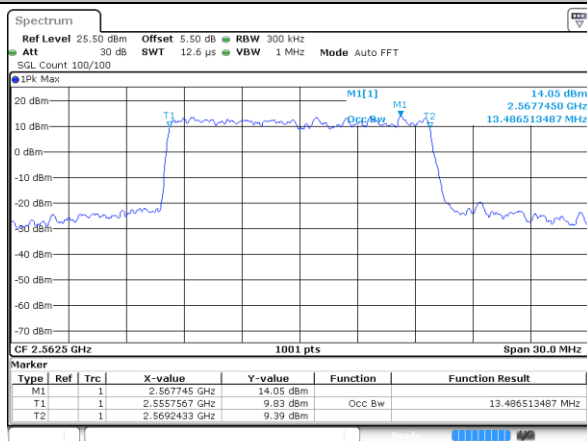
Middle Channel / 15MHz / QPSK



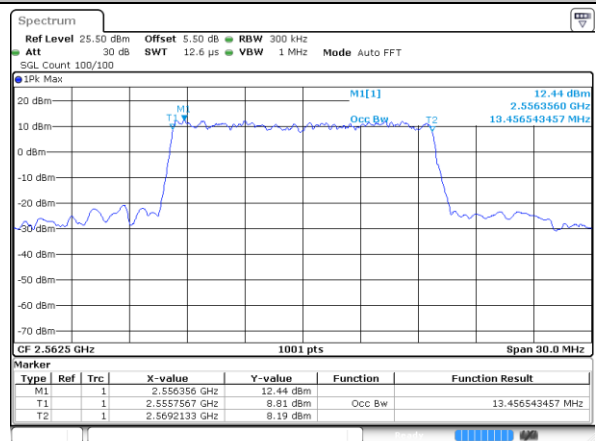
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



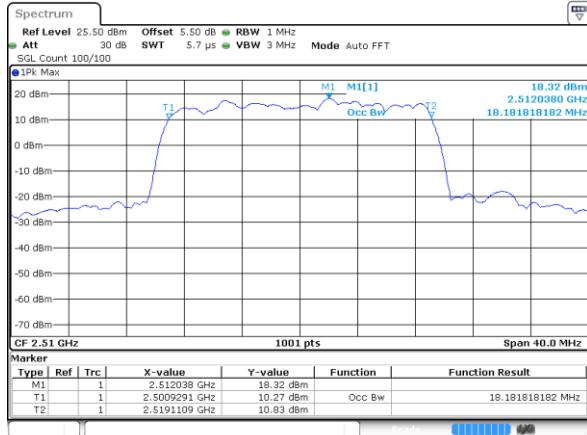
Highest Channel / 15MHz / 16QAM





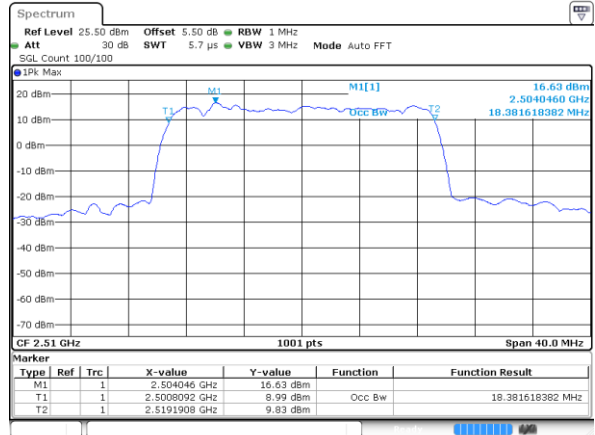
LTE Band 7

Lowest Channel / 20MHz / QPSK



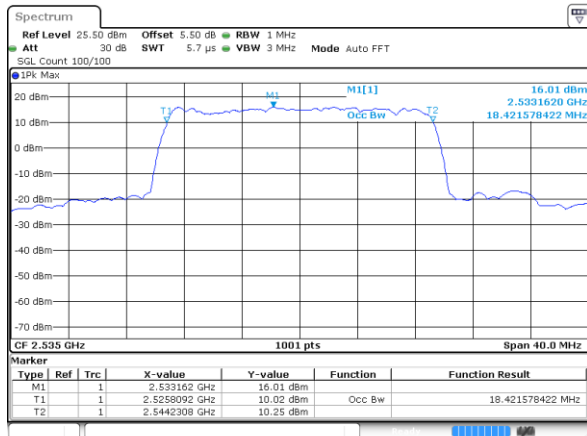
Date: 21 MAR 2020 18:33:04

Lowest Channel / 20MHz / 16QAM



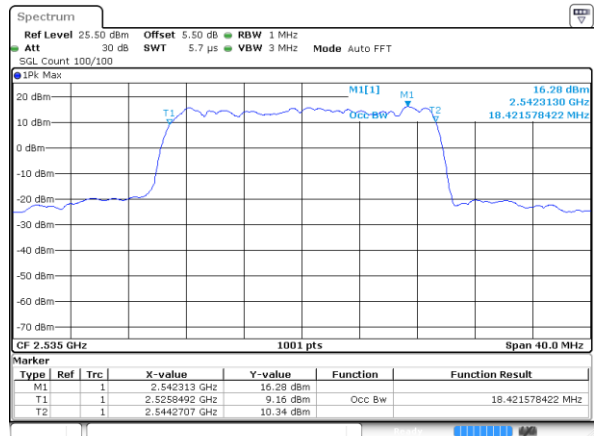
Date: 21 MAR 2020 18:32:44

Middle Channel / 20MHz / QPSK



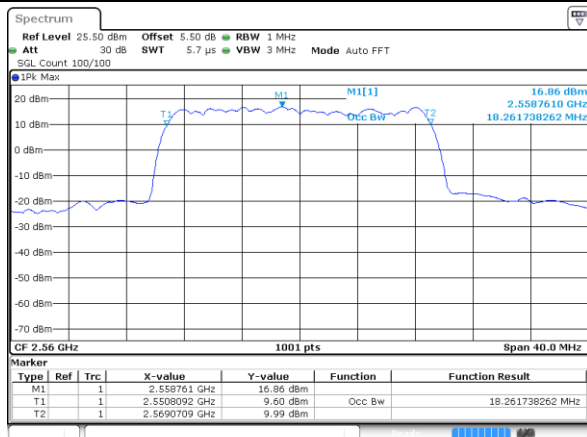
Date: 21 MAR 2020 18:33:24

Middle Channel / 20MHz / 16QAM



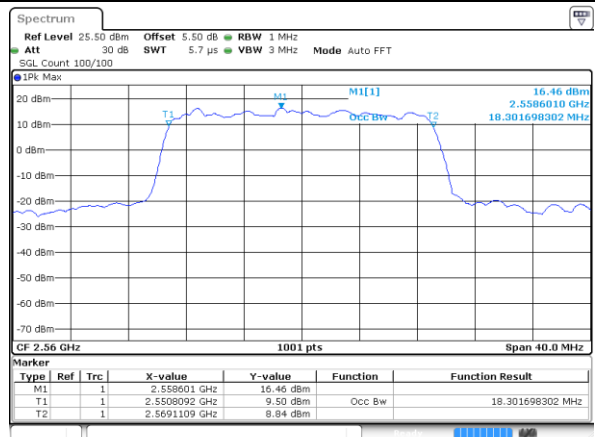
Date: 21 MAR 2020 18:33:44

Highest Channel / 20MHz / QPSK



Date: 21 MAR 2020 18:34:24

Highest Channel / 20MHz / 16QAM

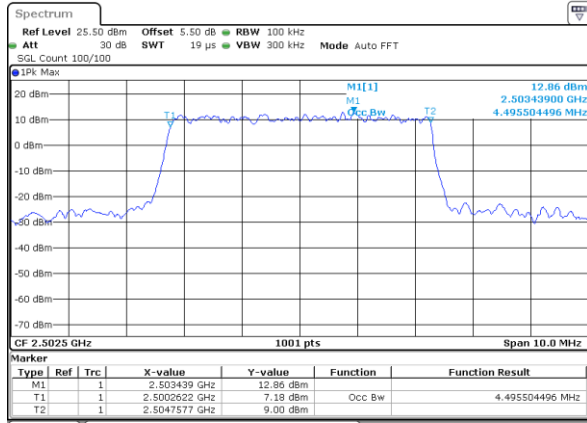


Date: 21 MAR 2020 18:34:04



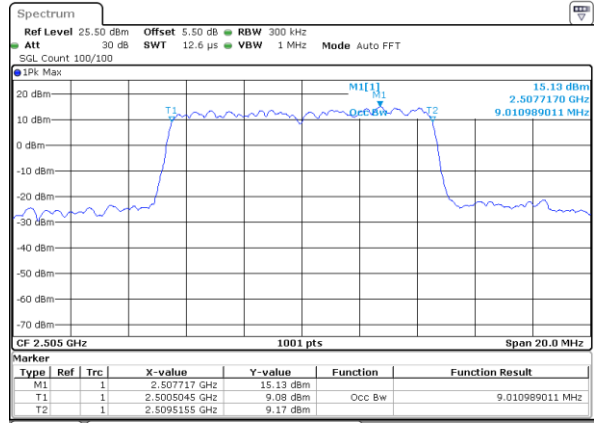
LTE Band 7

Lowest Channel / 5MHz / 64QAM



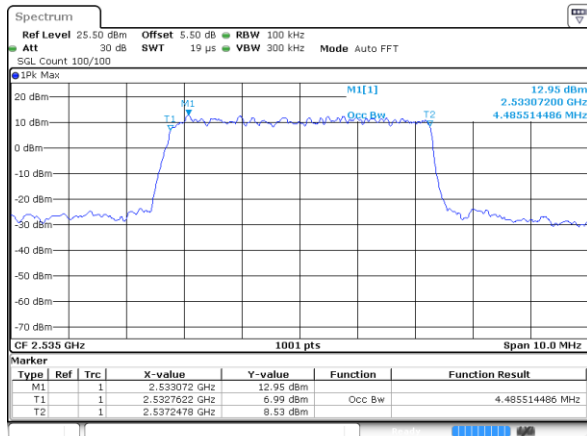
Date: 21 MAR 2020 18:49:13

Lowest Channel / 10MHz / 64QAM



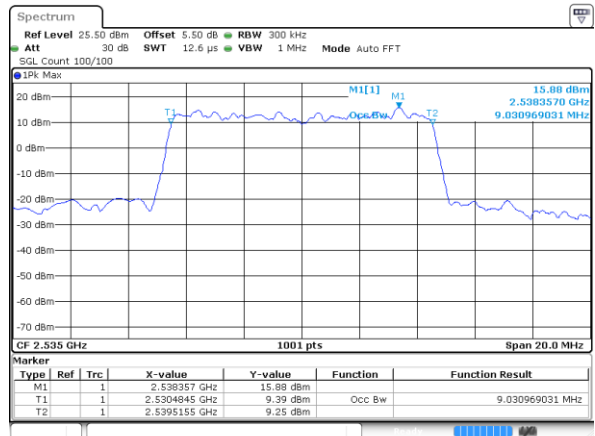
Date: 21 MAR 2020 18:57:28

Middle Channel / 5MHz / 64QAM



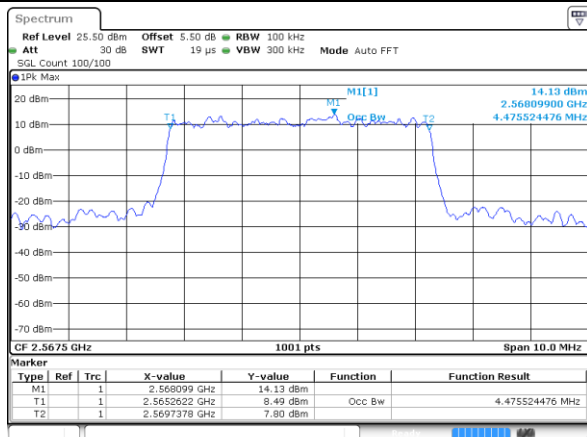
Date: 21 MAR 2020 18:49:23

Middle Channel / 10MHz / 64QAM



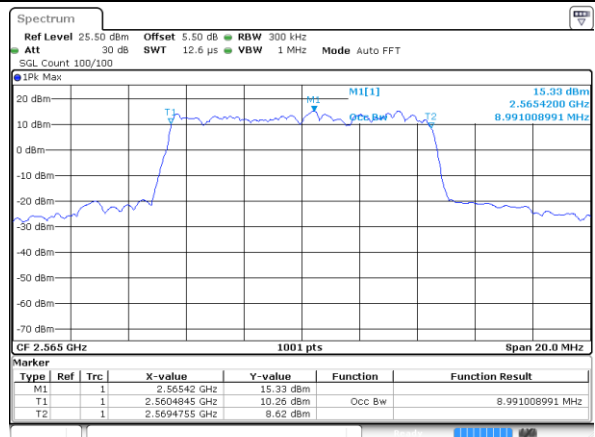
Date: 21 MAR 2020 18:57:38

Highest Channel / 5MHz / 64QAM



Date: 21 MAR 2020 18:49:33

Highest Channel / 10MHz / 64QAM

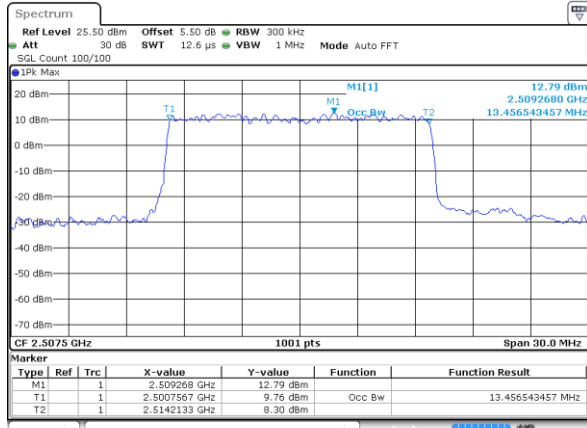


Date: 21 MAR 2020 18:57:48



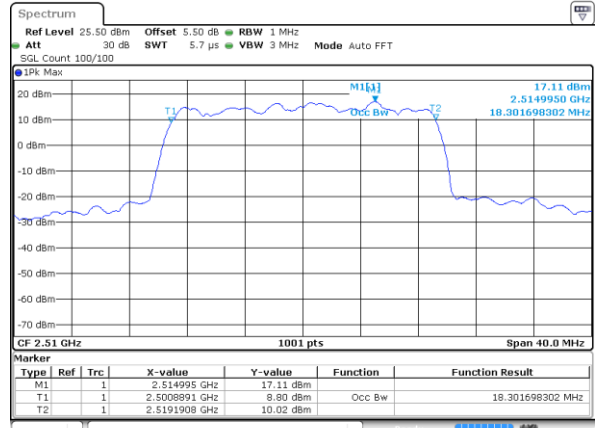
LTE Band 7

Lowest Channel / 15MHz / 64QAM



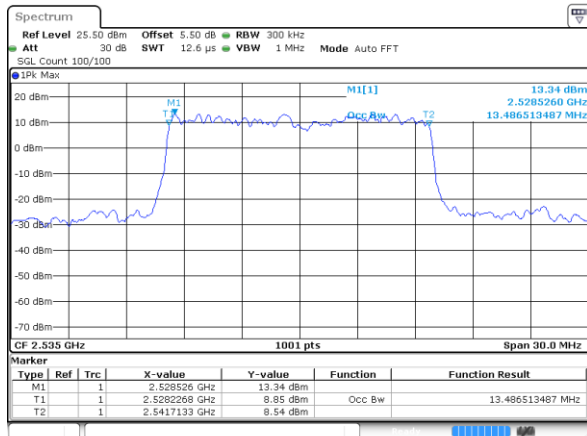
Date: 21 MAR 2020 19:05:42

Lowest Channel / 20MHz / 64QAM



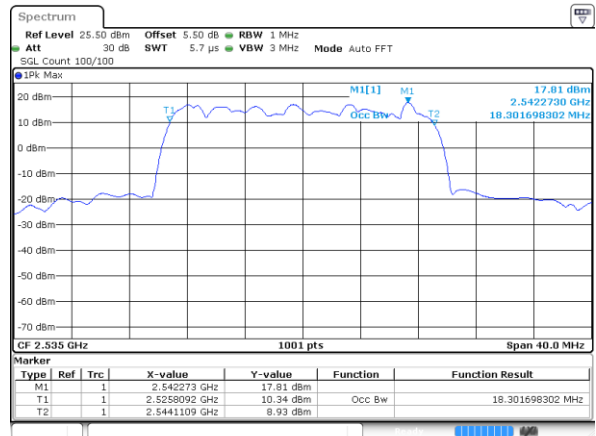
Date: 21 MAR 2020 19:13:56

Middle Channel / 15MHz / 64QAM



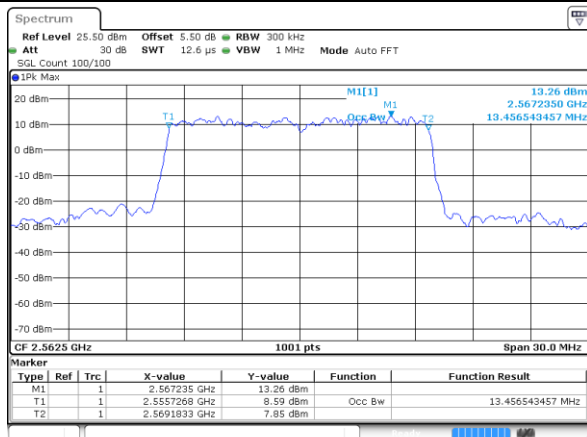
Date: 21 MAR 2020 19:05:52

Middle Channel / 20MHz / 64QAM



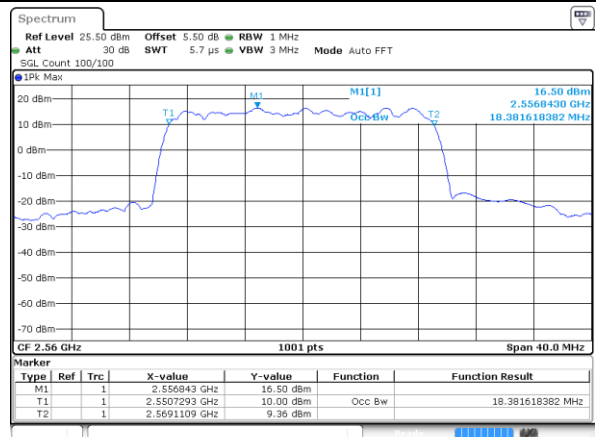
Date: 21 MAR 2020 19:14:06

Highest Channel / 15MHz / 64QAM



Date: 21 MAR 2020 19:06:01

Highest Channel / 20MHz / 64QAM



Date: 21 MAR 2020 19:14:16

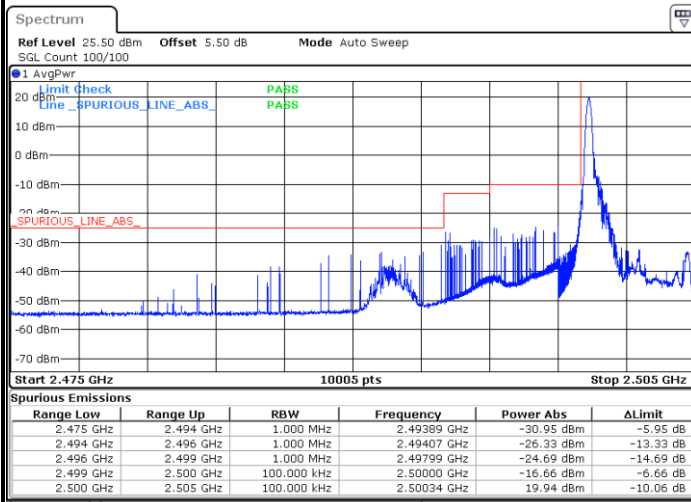


Conducted Band Edge

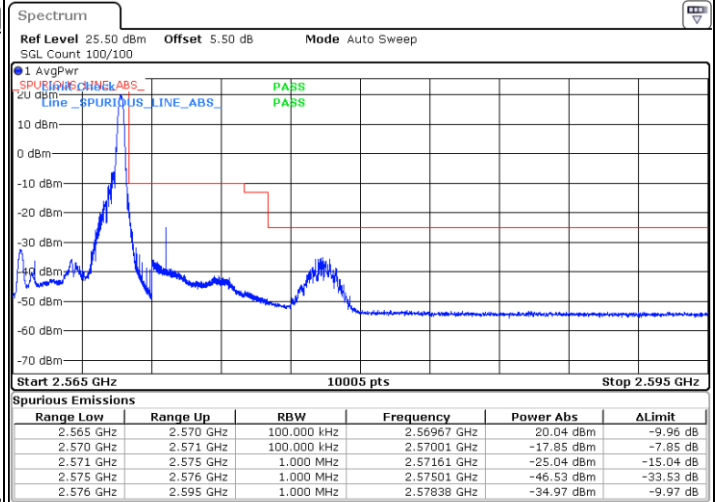


LTE Band 7 / 5MHz / QPSK

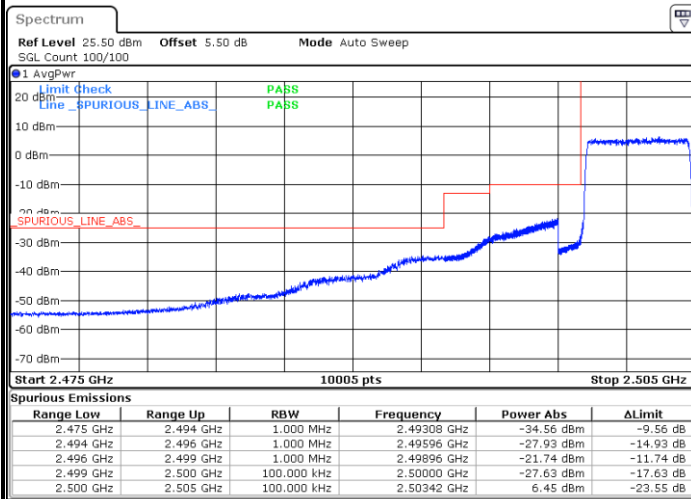
Lowest Band Edge / 1 RB



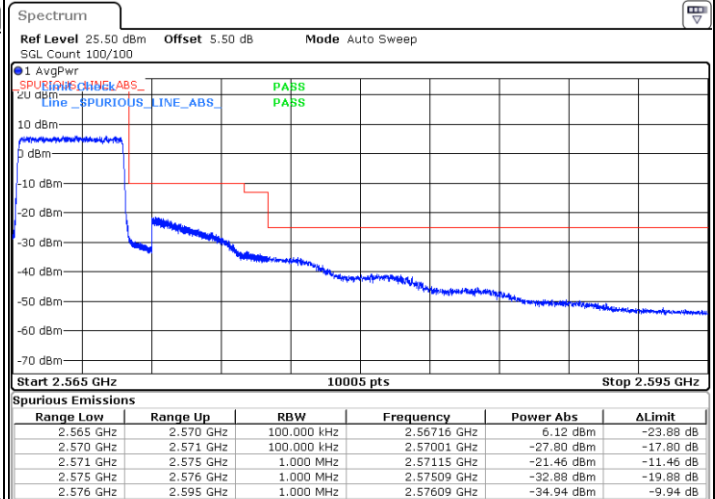
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



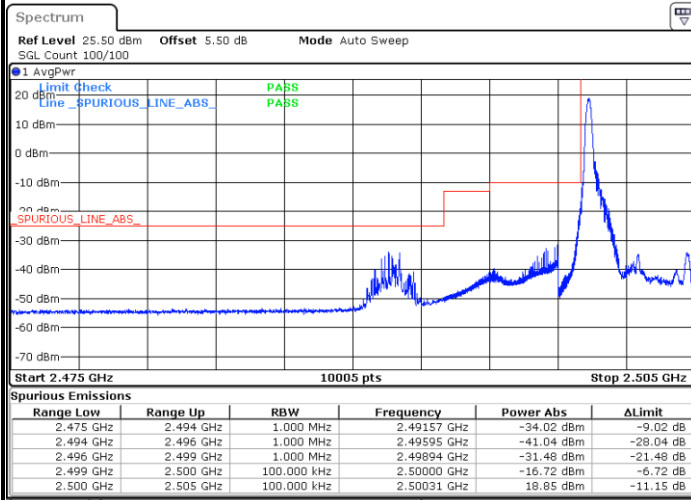
Highest Band Edge / Full RB



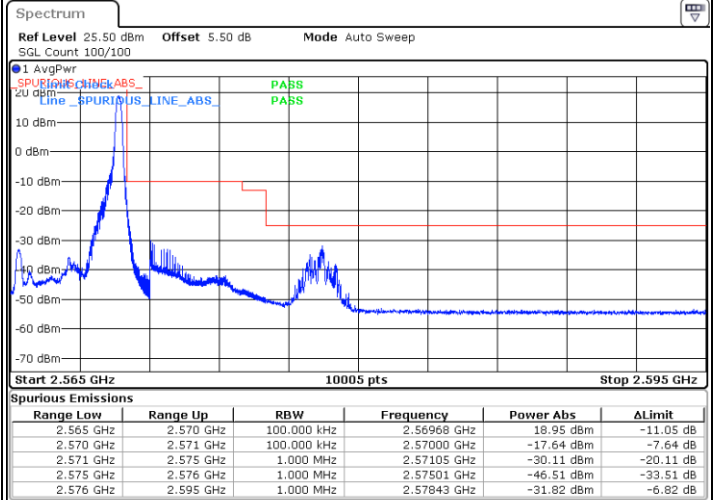


LTE Band 7 / 5MHz / 16QAM

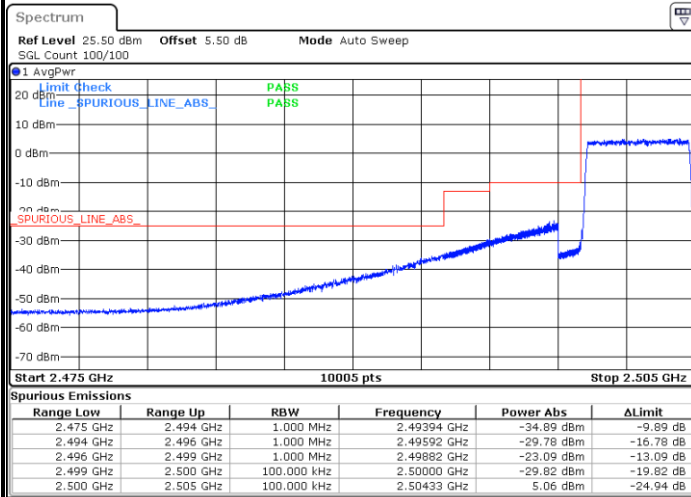
Lowest Band Edge / 1 RB



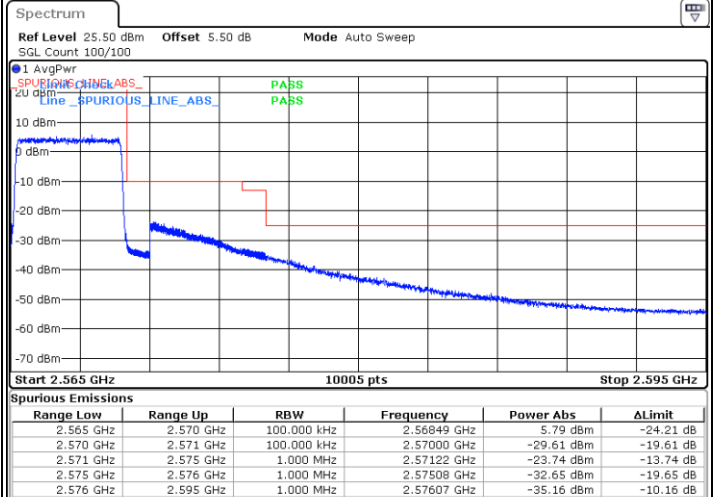
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



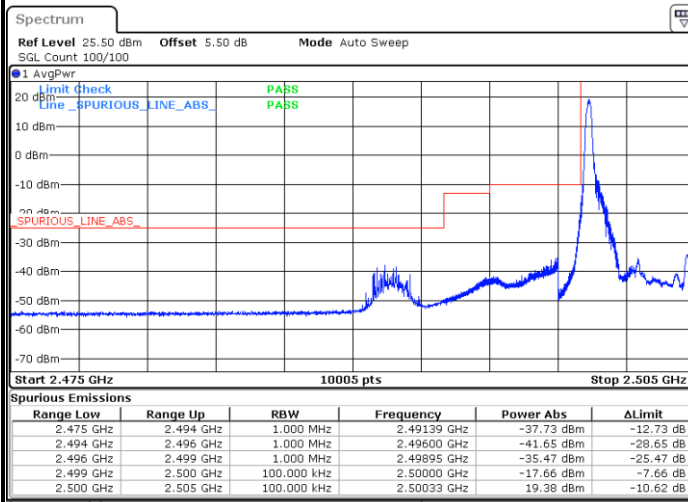
Highest Band Edge / Full RB



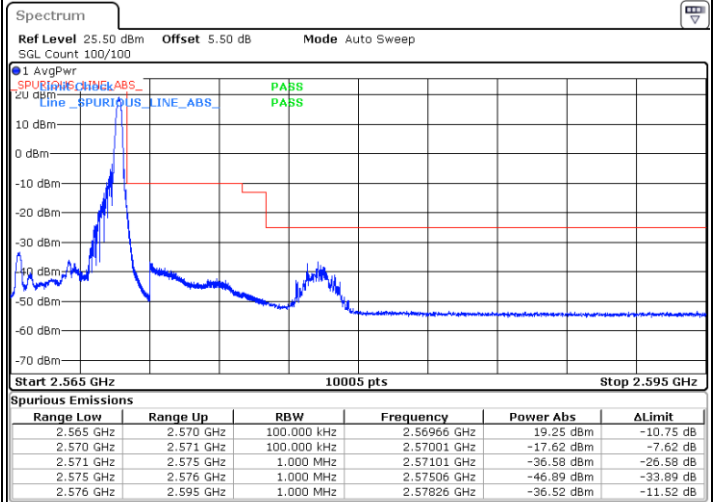


LTE Band 7 / 5MHz / 64QAM

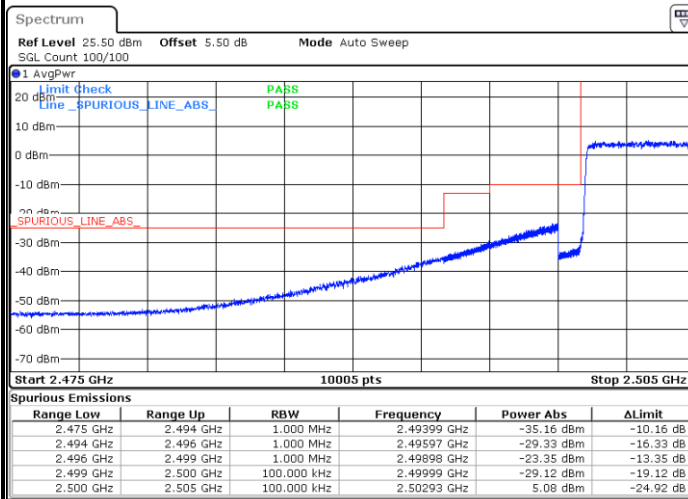
Lowest Band Edge / 1RB



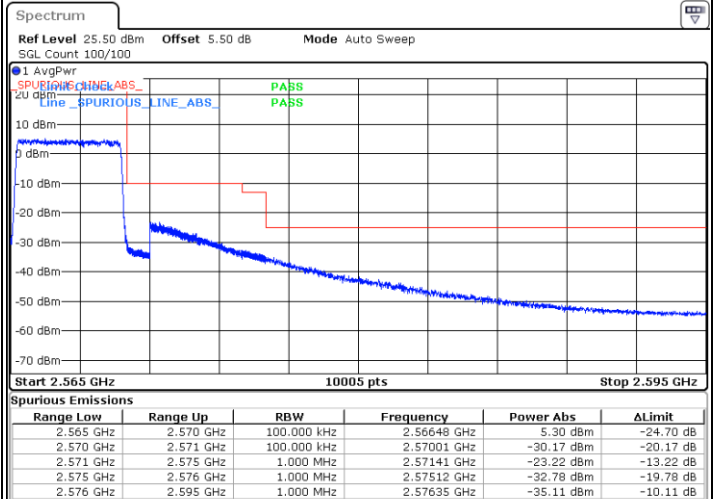
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



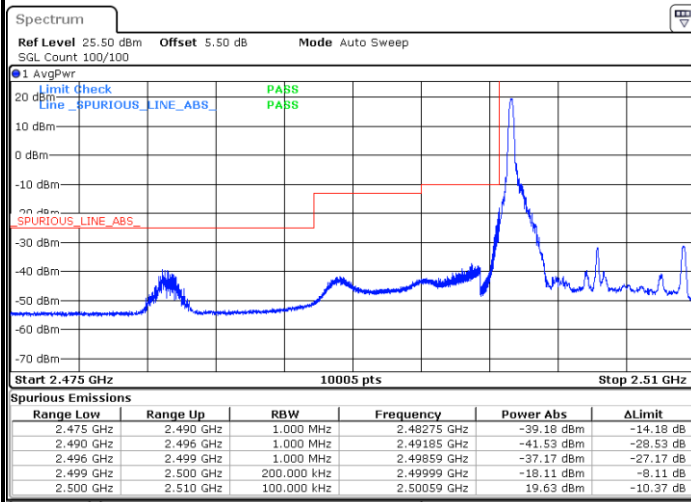
Highest Band Edge / Full RB



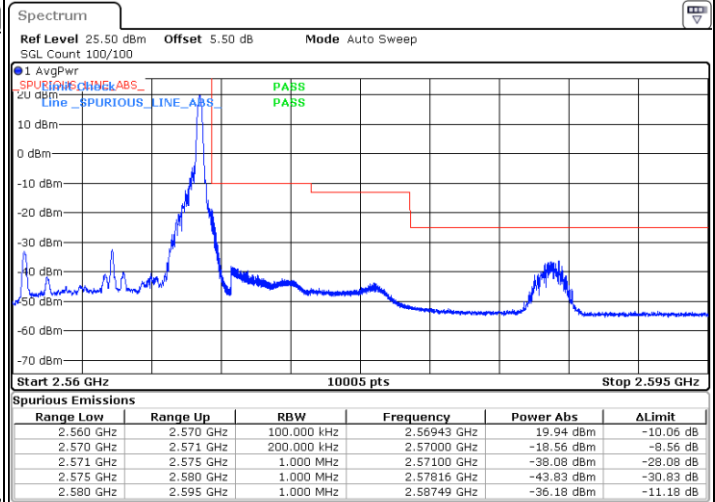


LTE Band 7 / 10MHz / QPSK

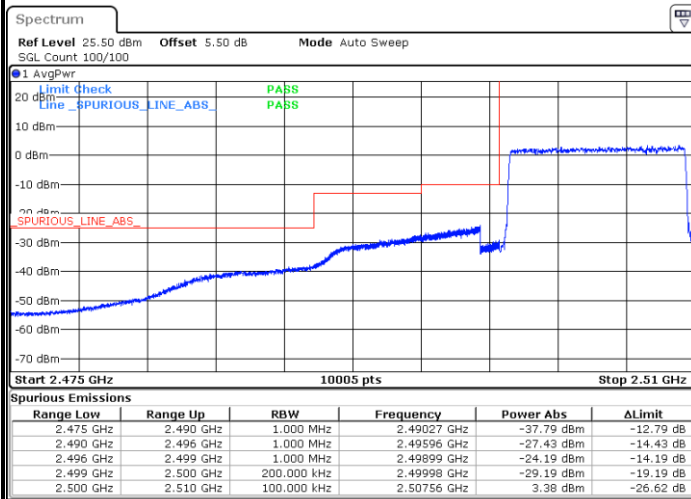
Lowest Band Edge / 1 RB



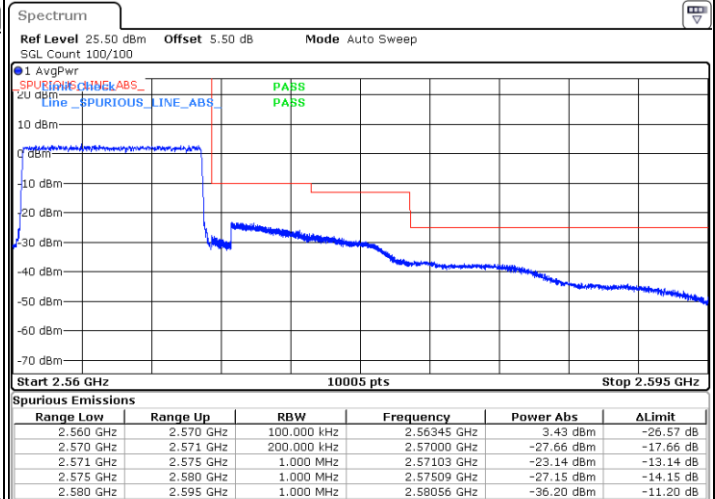
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



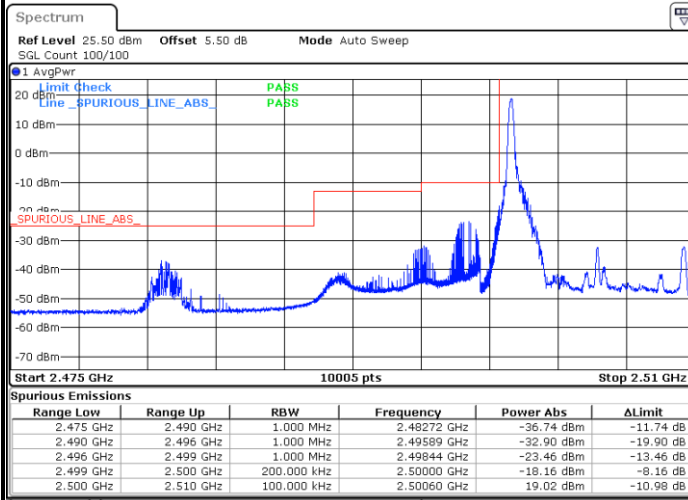
Highest Band Edge / Full RB



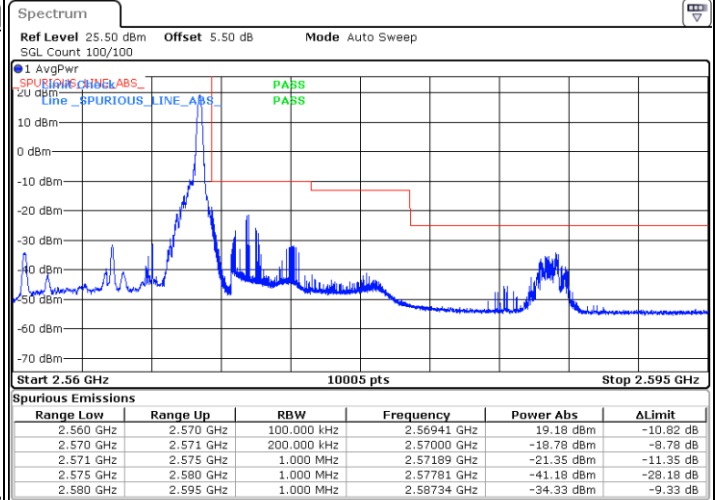


LTE Band 7 / 10MHz / 16QAM

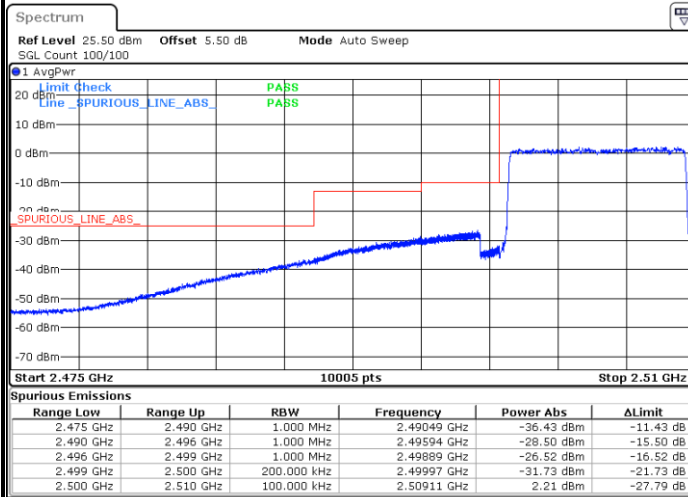
Lowest Band Edge / 1 RB



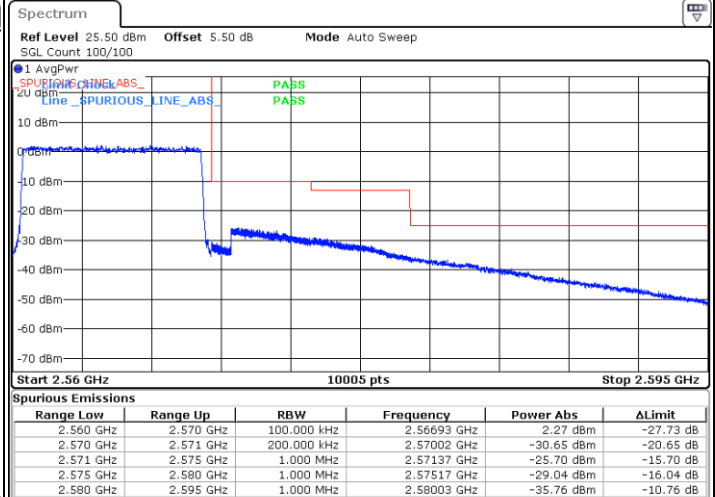
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



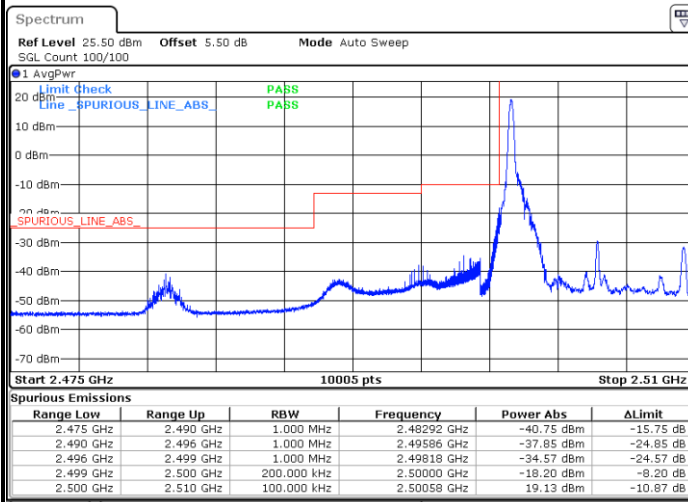
Highest Band Edge / Full RB



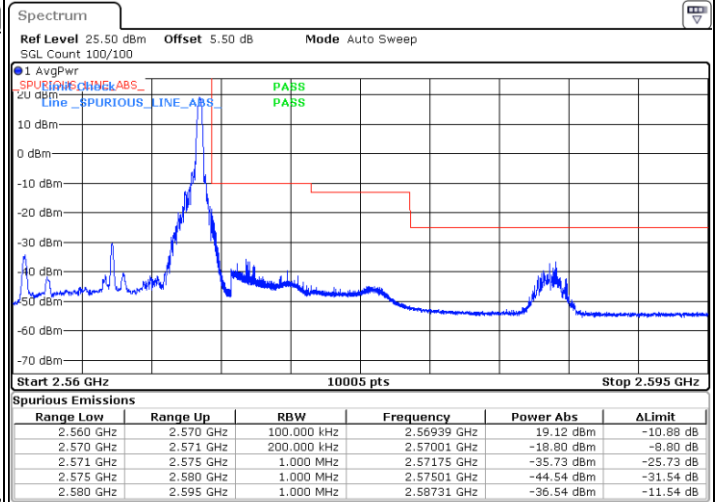


LTE Band 7 / 10MHz / 64QAM

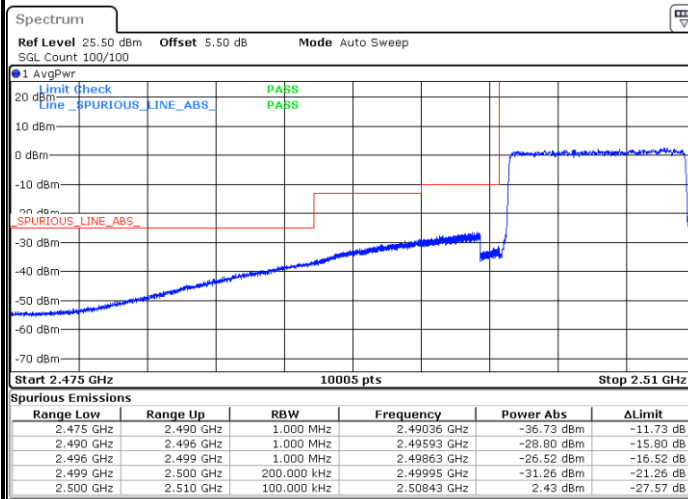
Lowest Band Edge / 1 RB



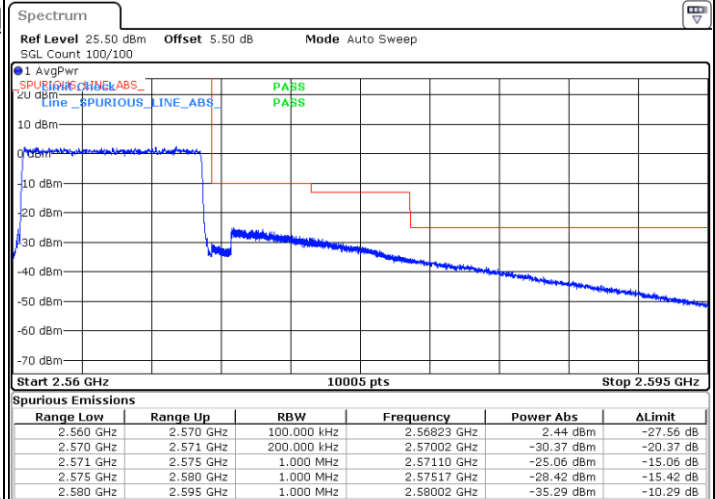
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



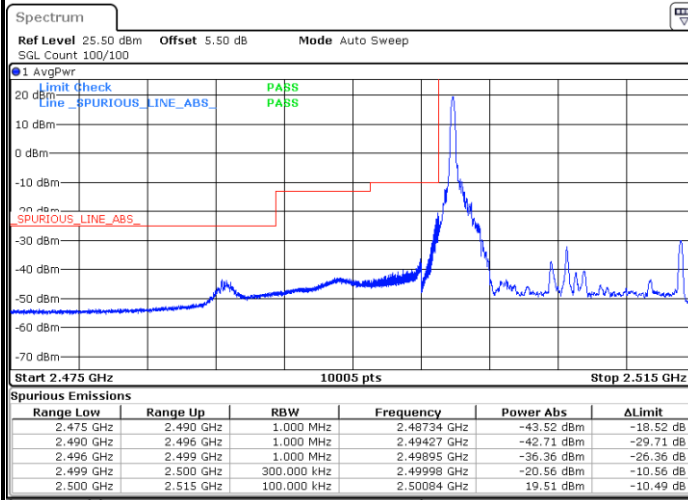
Highest Band Edge / Full RB



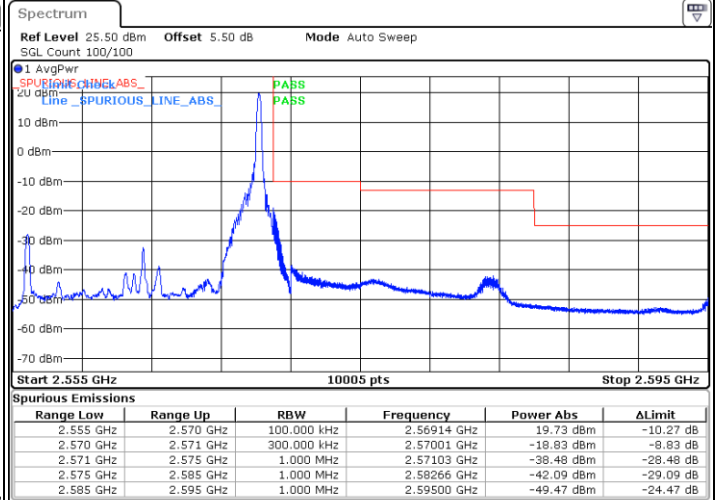


LTE Band 7 / 15MHz / QPSK

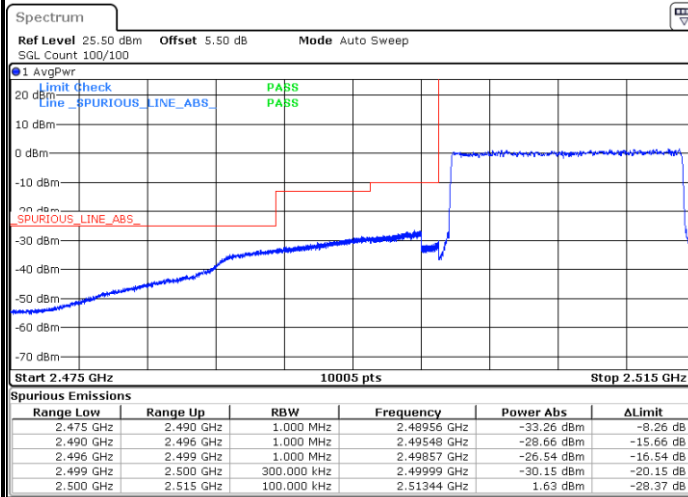
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

