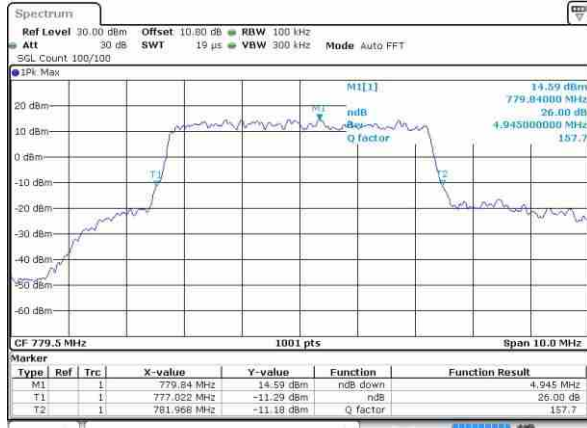


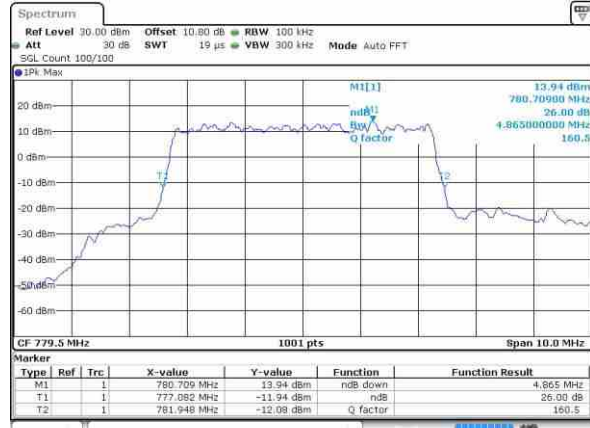


LTE Band 13

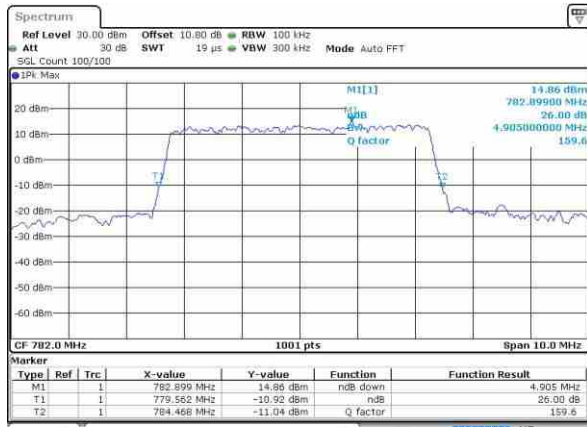
Lowest Channel / 5MHz / QPSK



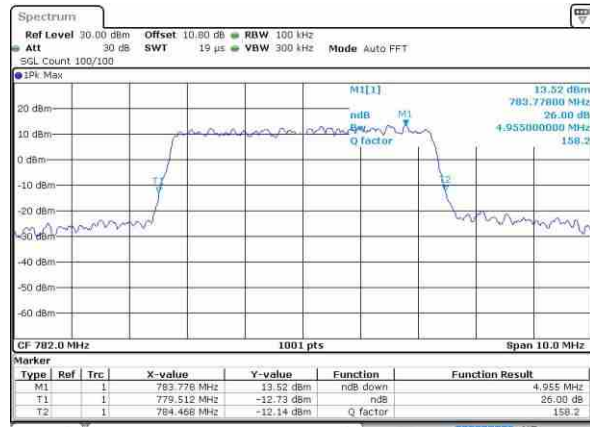
Lowest Channel / 5MHz / 16QAM



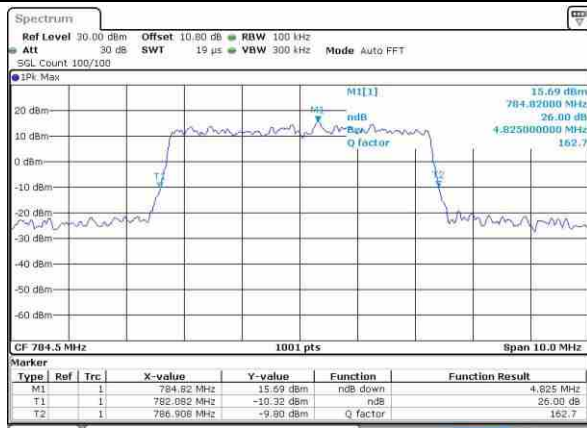
Middle Channel / 5MHz / QPSK



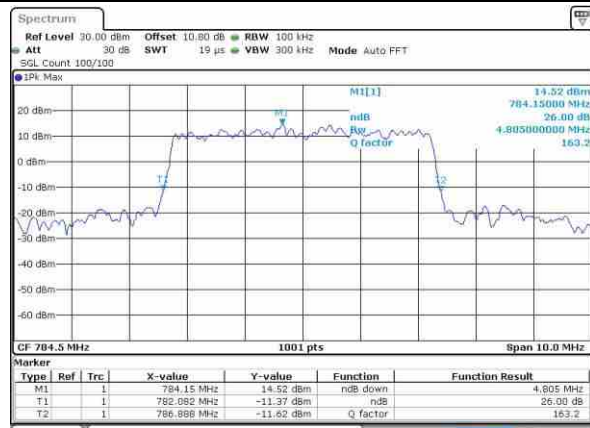
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



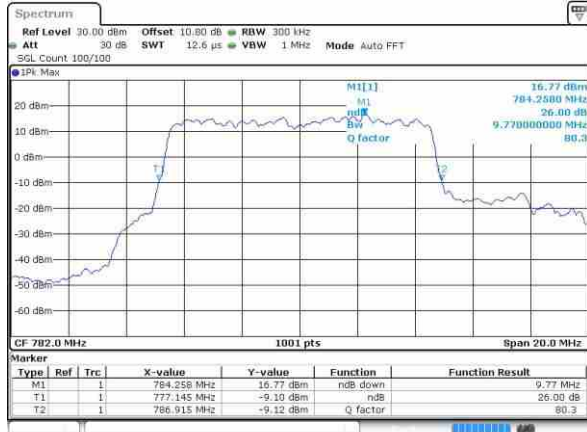
Highest Channel / 5MHz / 16QAM





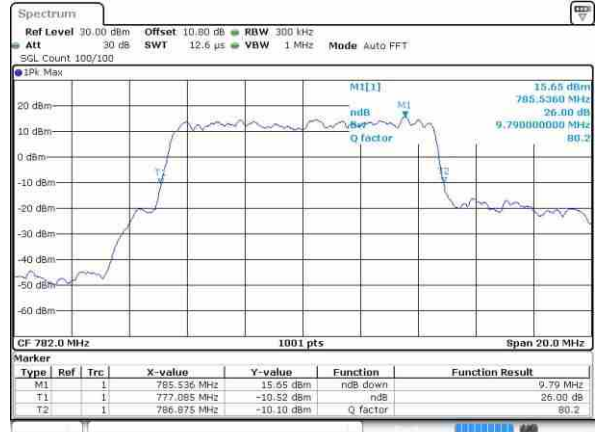
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 25 FEB 2019 00:19:39

Middle Channel / 10MHz / 16QAM

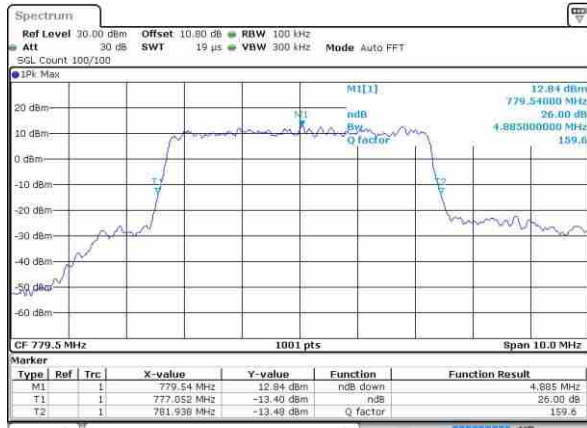


Date: 25 FEB 2019 00:19:28

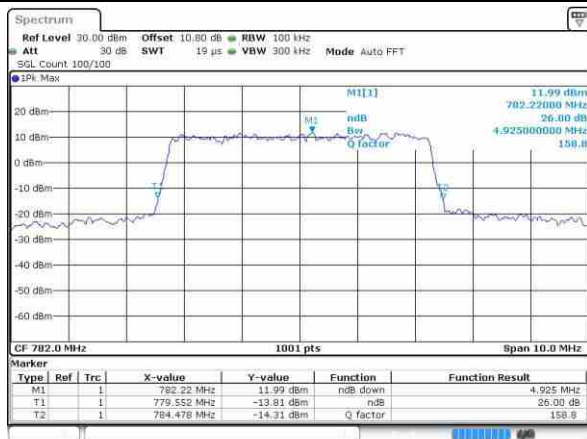


LTE Band 13

Lowest Channel / 5MHz / 64QAM



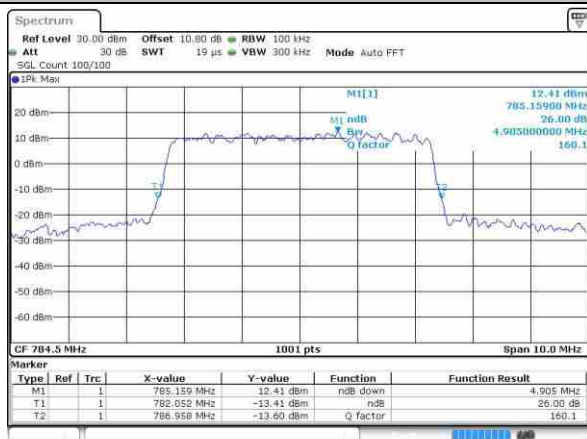
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



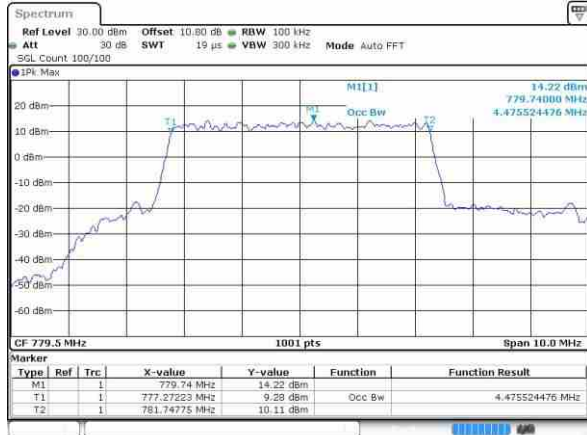
**Occupied Bandwidth**

Mode	LTE Band 13 : 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	-	-	-	-	4.48	4.47	-	-	-	-	-	-
Middle CH	-	-	-	-	4.5	4.51	9.03	9.05	-	-	-	-
Highest CH	-	-	-	-	4.48	4.49	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	-	8.97	-	-	-	-	-
Highest CH	-	-	-	-	4.50	-	-	-	-	-	-	-



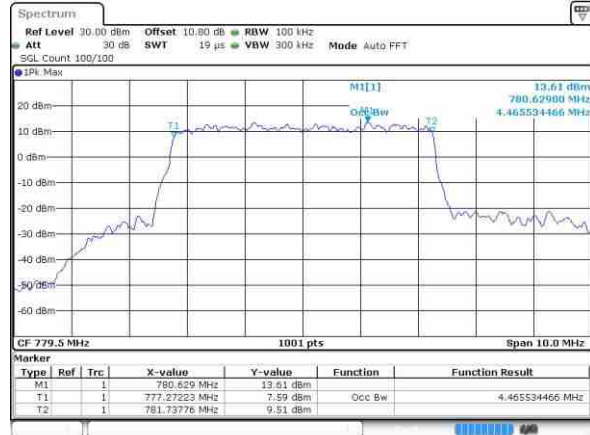
LTE Band 13

Lowest Channel / 5MHz / QPSK



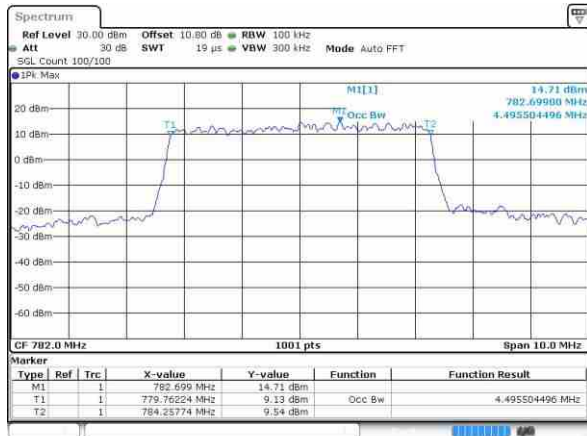
Date: 24 FEB 2019 23:28:22

Lowest Channel / 5MHz / 16QAM



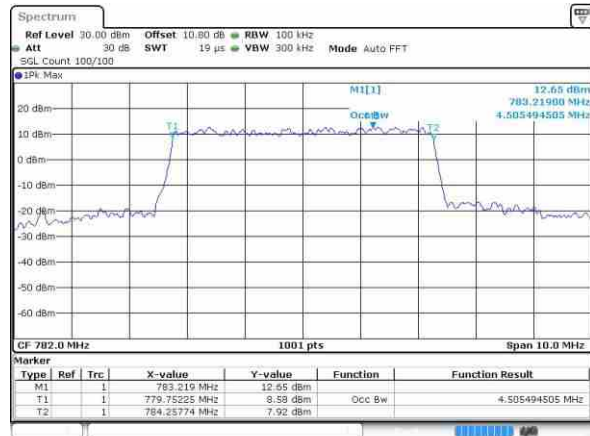
Date: 24 FEB 2019 23:28:33

Middle Channel / 5MHz / QPSK



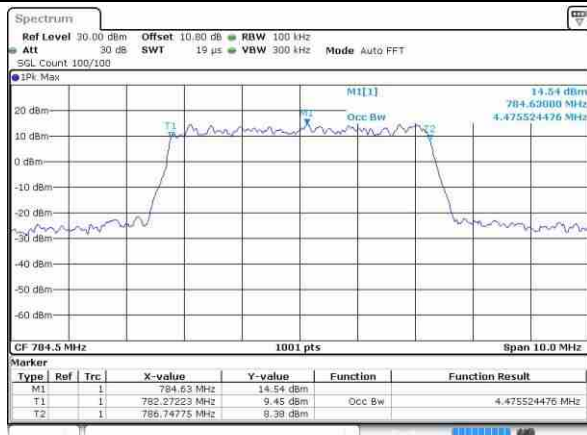
Date: 24 FEB 2019 23:58:27

Middle Channel / 5MHz / 16QAM



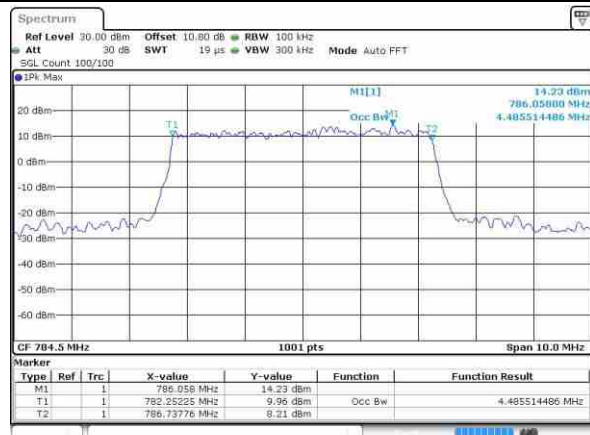
Date: 25 FEB 2019 02:03:39

Highest Channel / 5MHz / QPSK



Date: 24 FEB 2019 23:59:39

Highest Channel / 5MHz / 16QAM

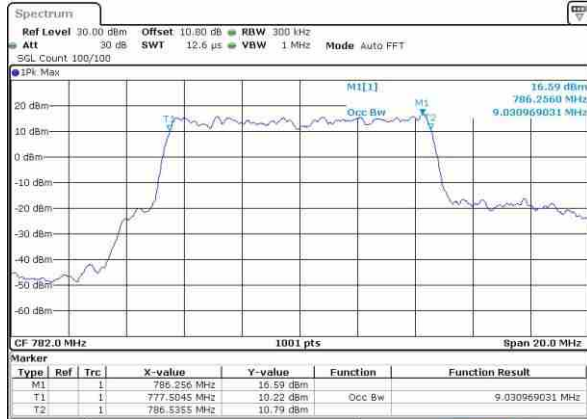


Date: 24 FEB 2019 23:59:50



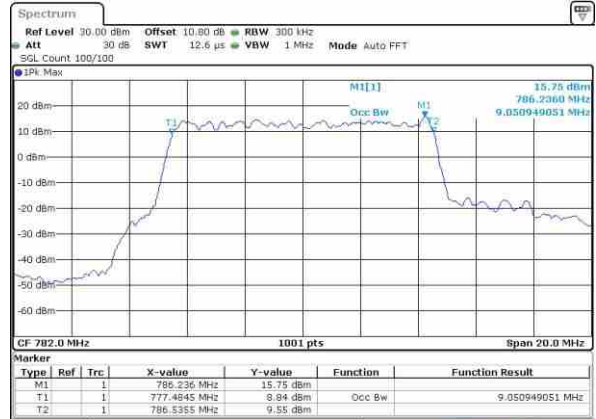
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 25 FEB 2019 00:19:05

Middle Channel / 10MHz / 16QAM

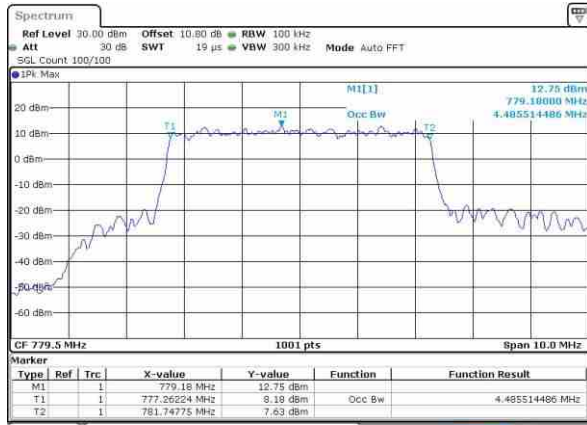


Date: 25 FEB 2019 00:19:17

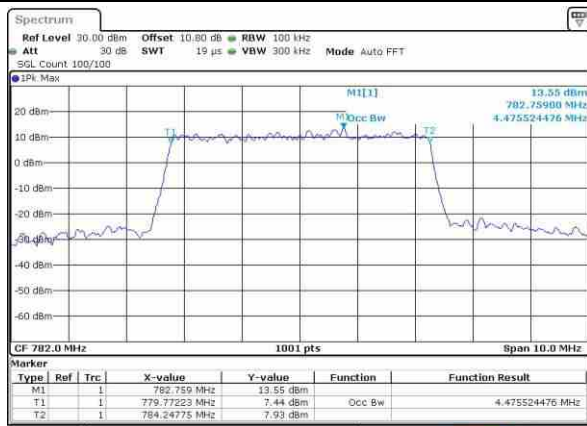


LTE Band 13

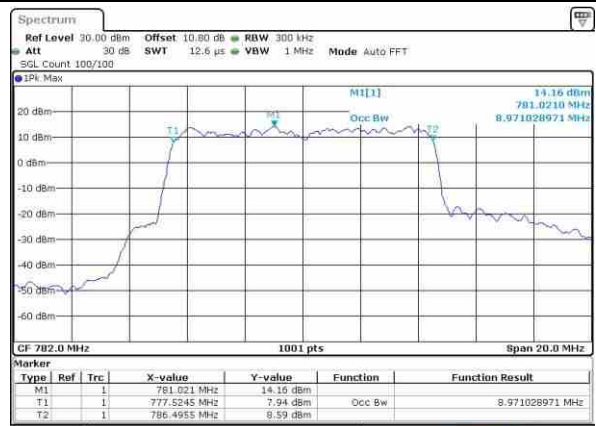
Lowest Channel / 5MHz / 64QAM



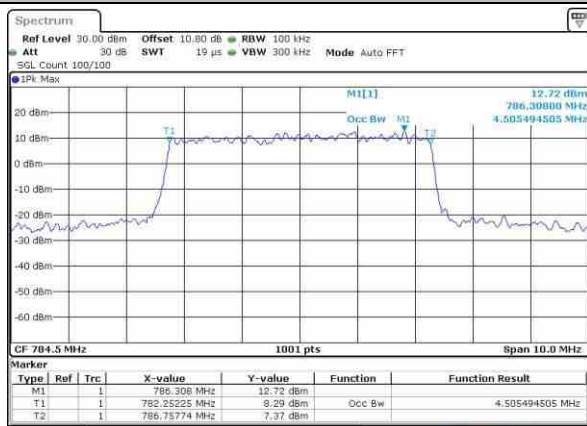
Middle Channel / 5MHz / 64QAM

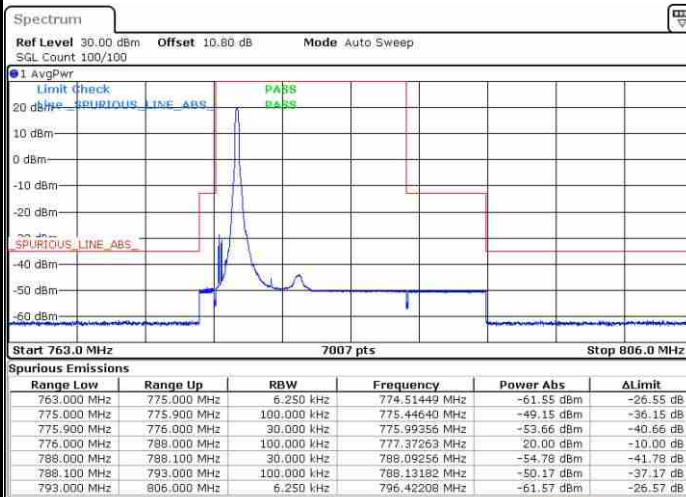
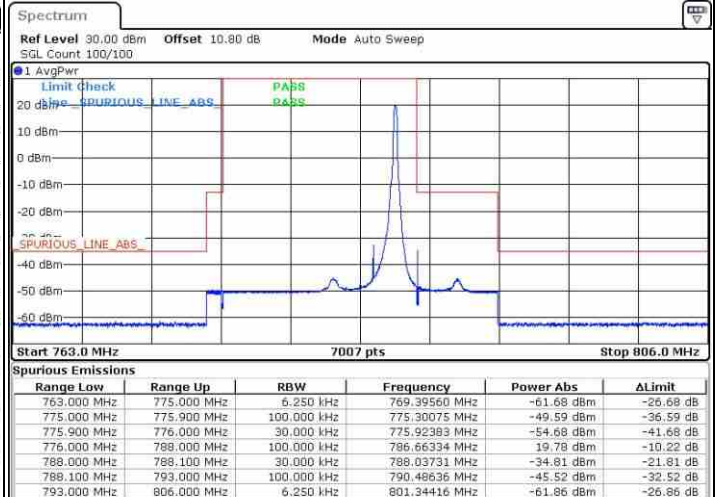
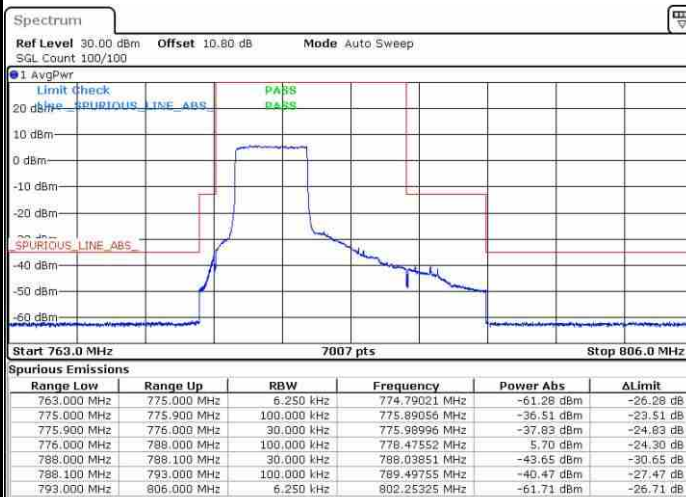
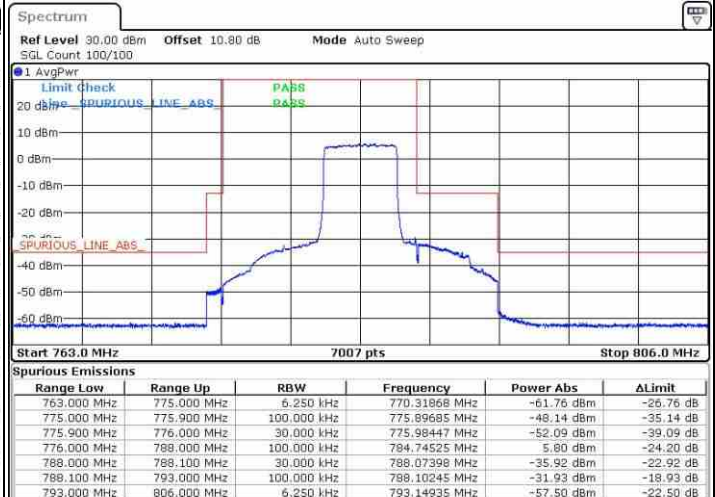


Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

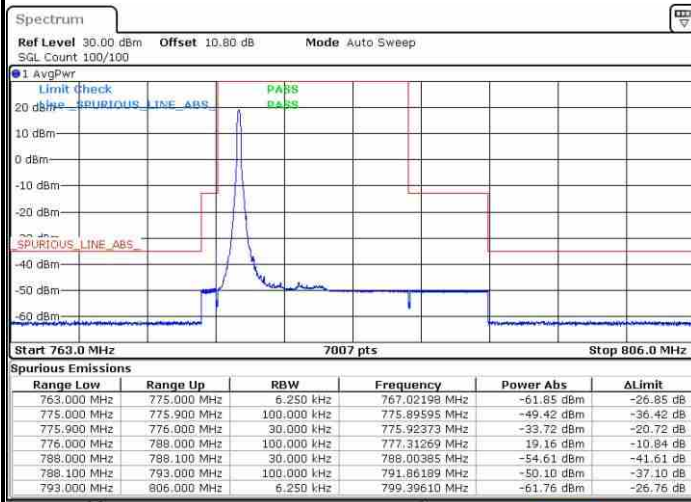


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

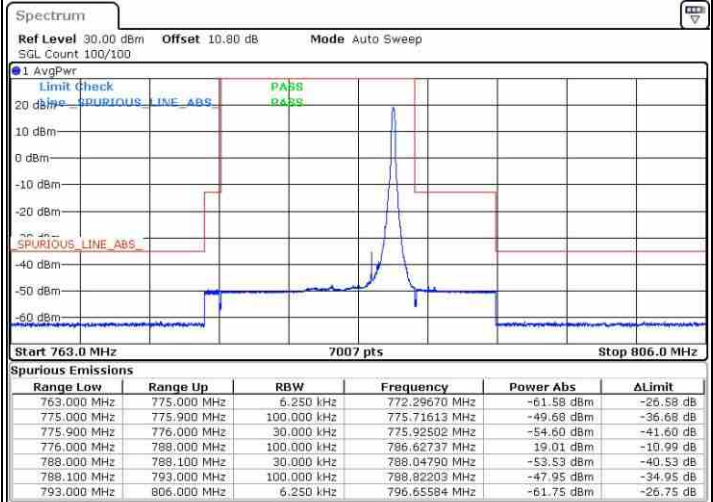


LTE Band 13 / 5MHz / 16QAM

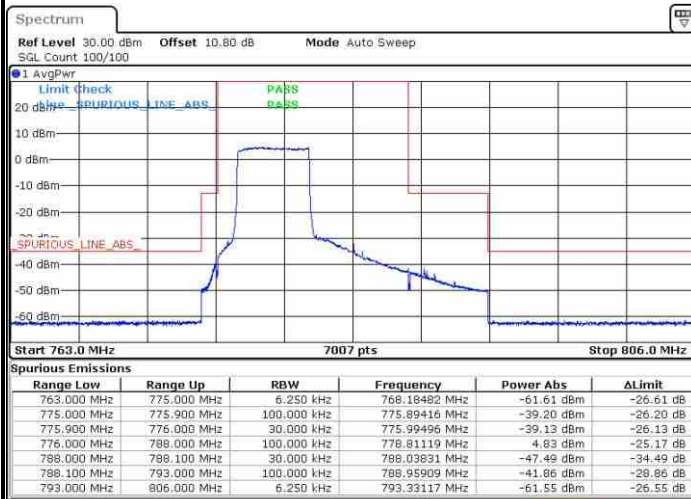
Lowest Band Edge / 1 RB



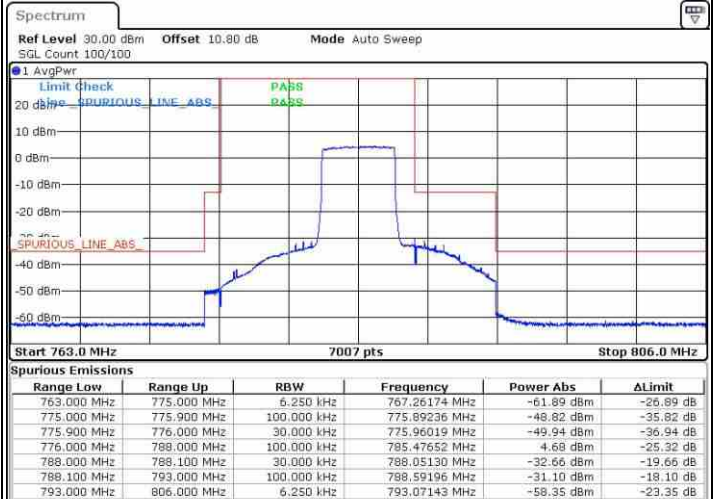
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



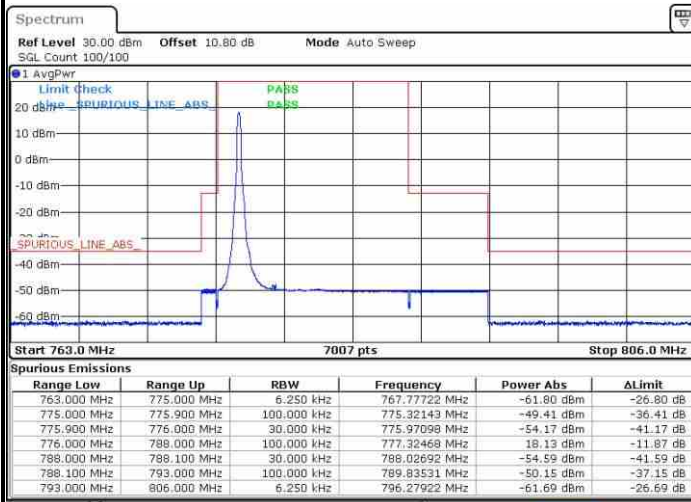
Highest Band Edge / Full RB





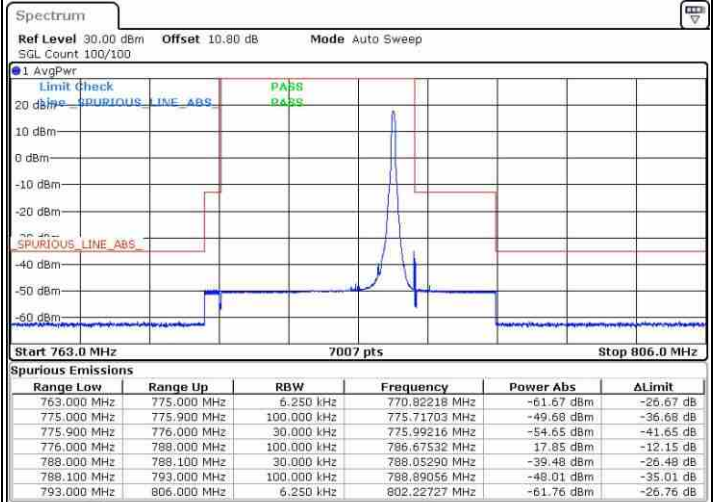
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



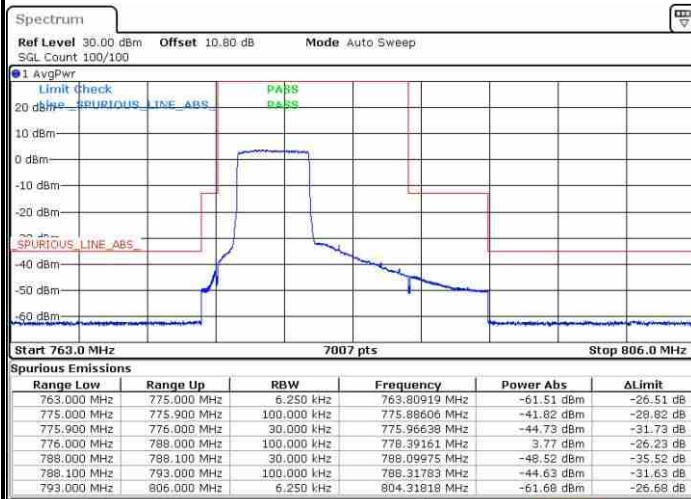
Date: 25.FEB.2019 00:12:17

Highest Band Edge / 1 RB



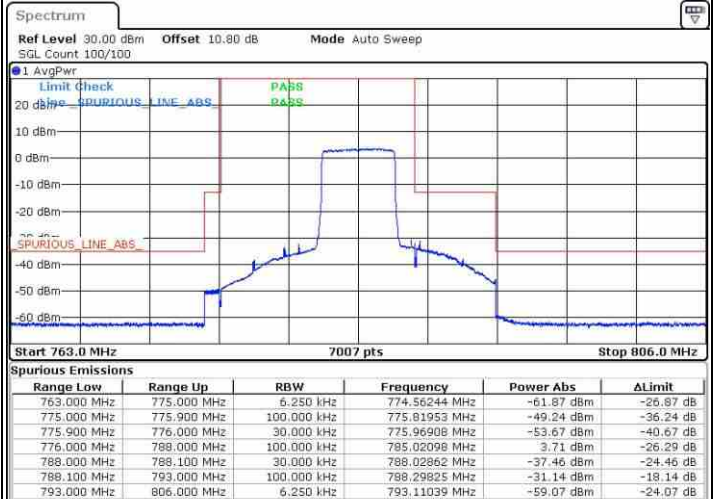
Date: 25.FEB.2019 00:18:03

Lowest Band Edge / Full RB



Date: 25.FEB.2019 00:10:37

Highest Band Edge / Full RB

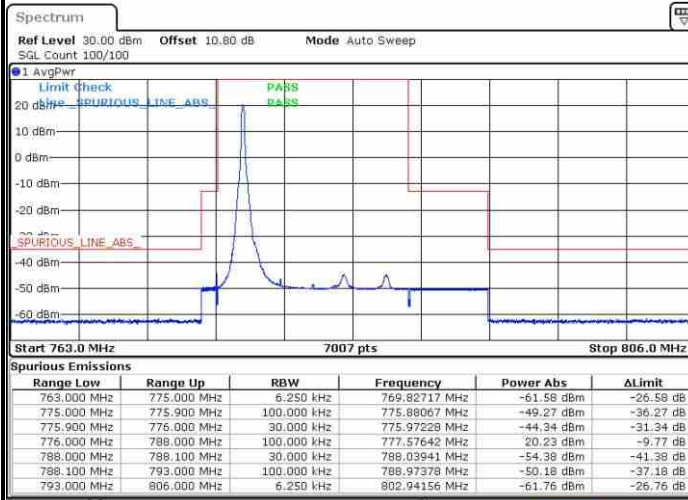


Date: 25.FEB.2019 00:16:23



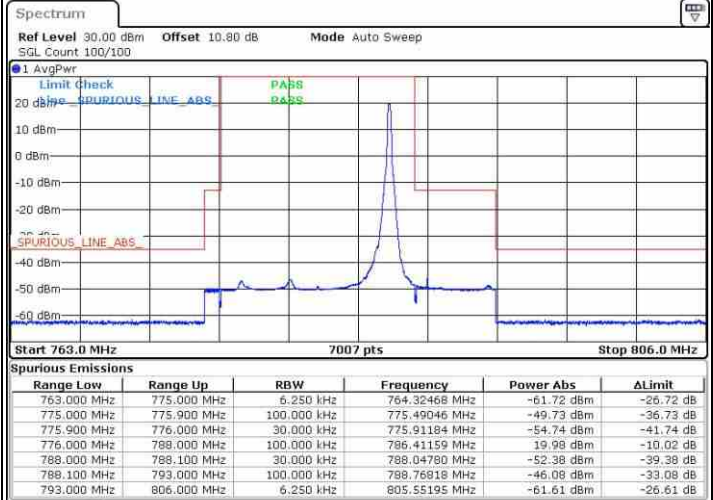
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



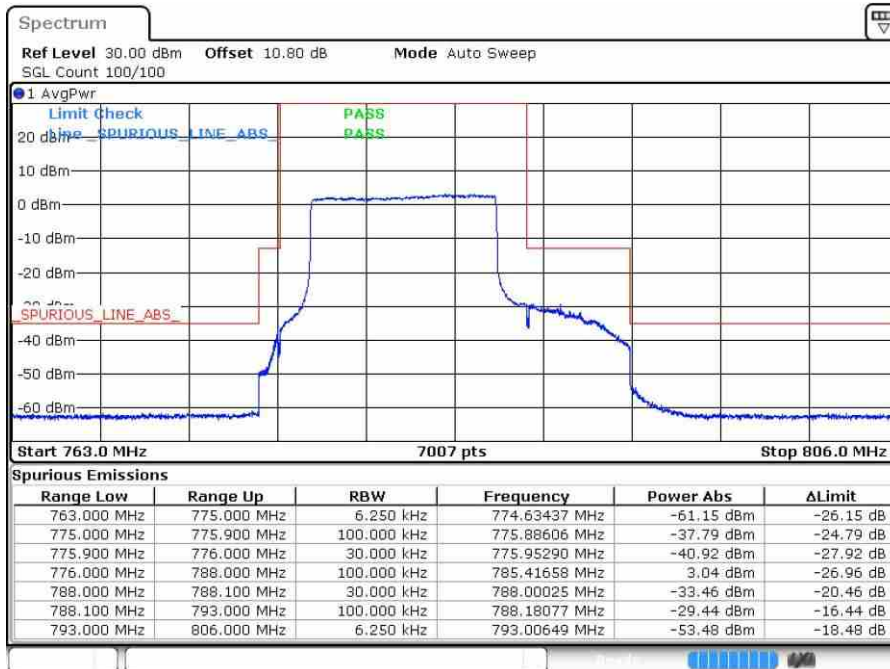
Date: 25.FEB.2019 00:26:20

Highest Band Edge / 1 RB



Date: 25.FEB.2019 00:28:01

Band Edge / Full RB

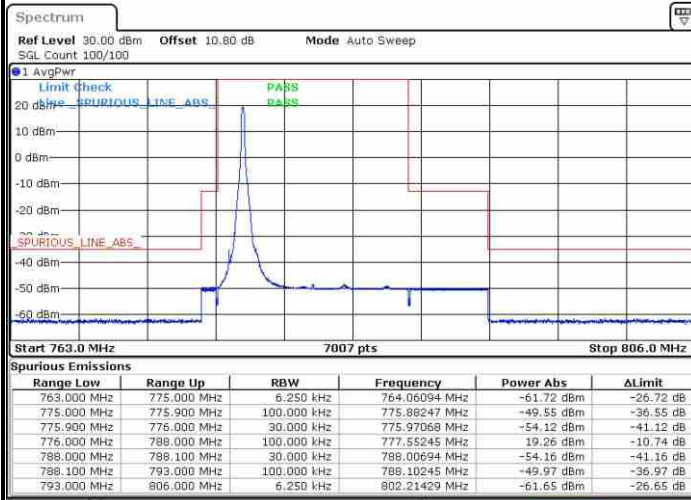


Date: 25.FEB.2019 00:21:19



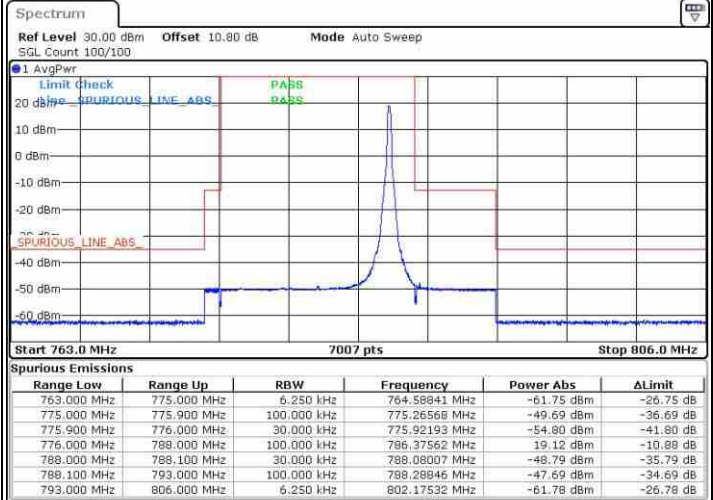
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



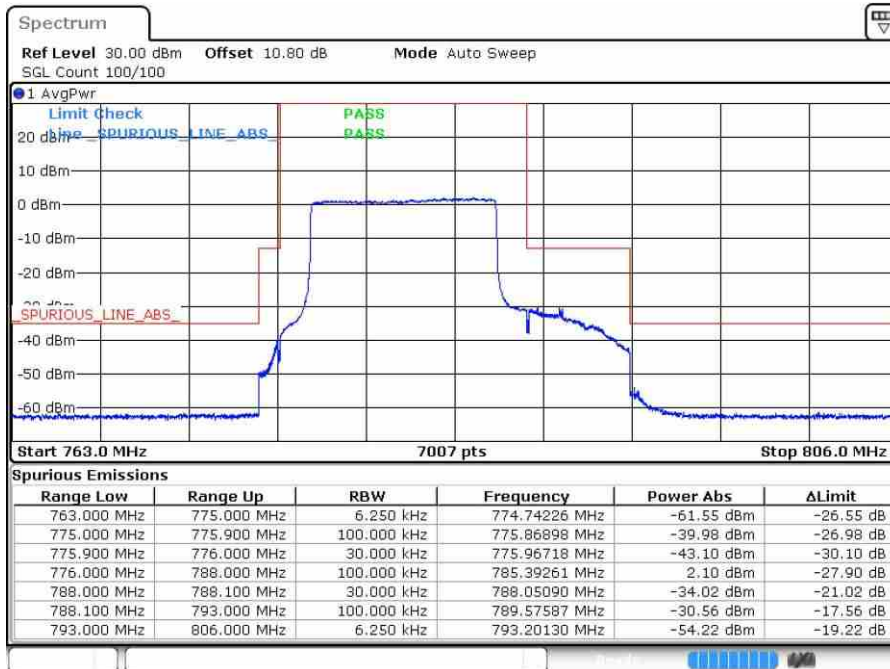
Date: 25.FEB.2019 00:24:40

Highest Band Edge / 1 RB



Date: 25.FEB.2019 00:29:41

Band Edge / Full RB

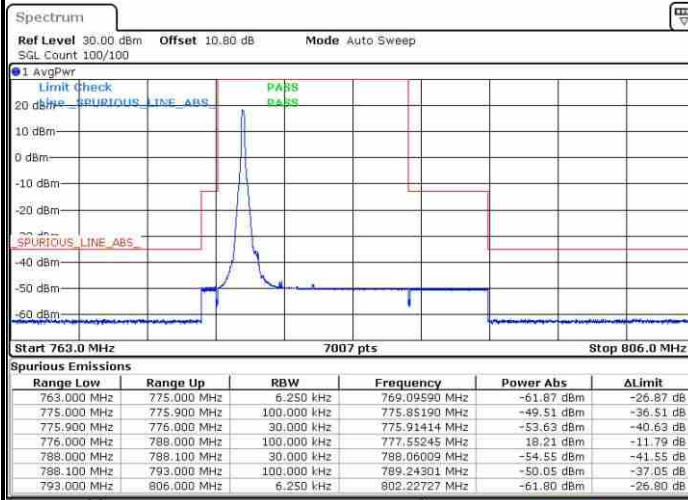


Date: 25.FEB.2019 00:23:00



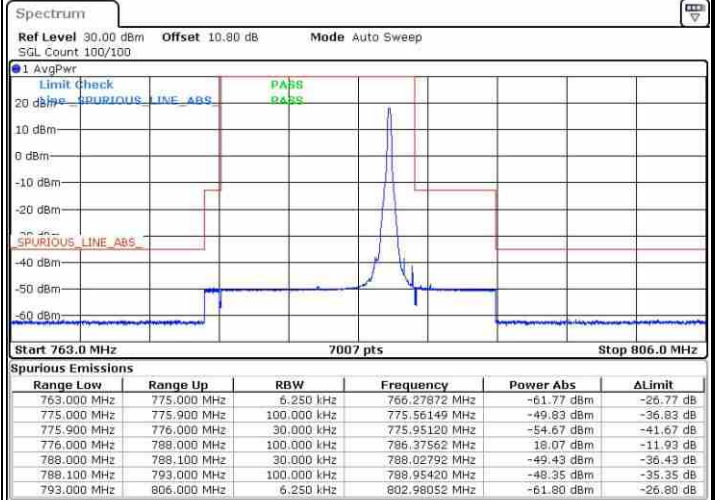
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



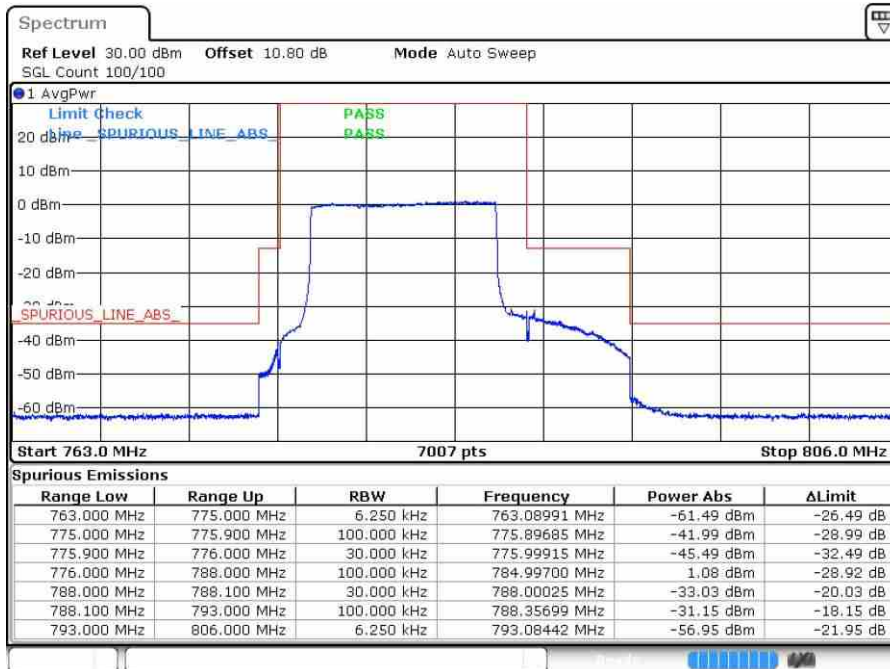
Date: 25.FEB.2019 00:35:05

Highest Band Edge / 1 RB

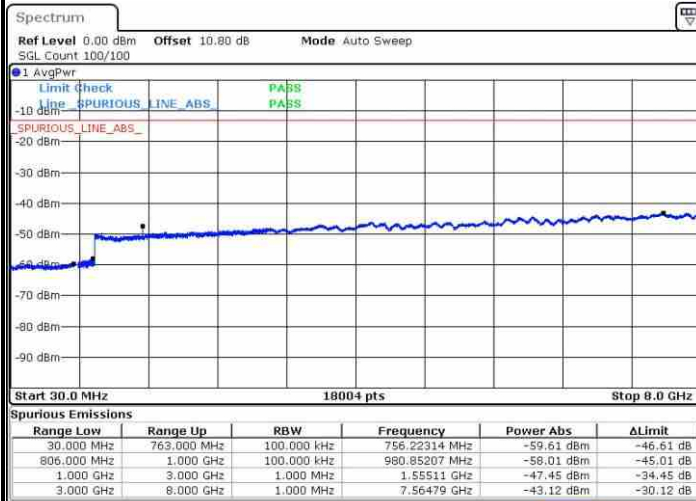


Date: 25.FEB.2019 00:36:45

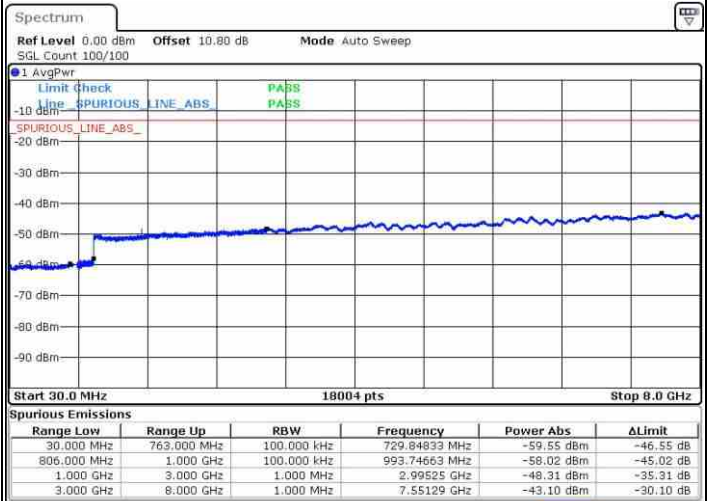
Band Edge / Full RB



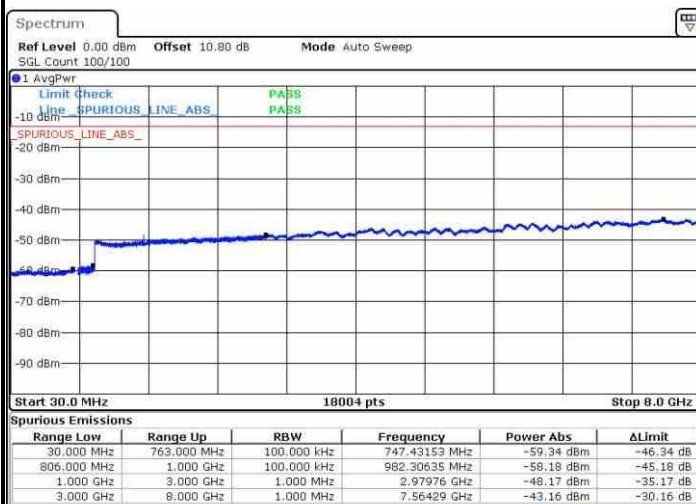
Date: 25.FEB.2019 00:33:24

**Conducted Spurious Emission****LTE Band 13 / 5MHz****Lowest Channel / QPSK**

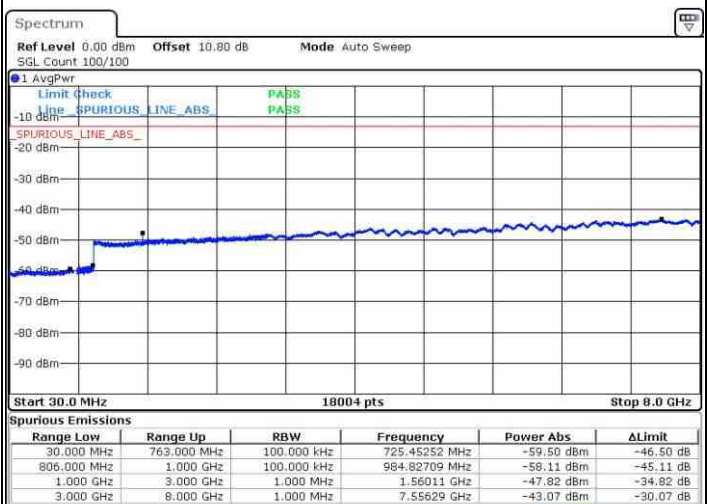
Date: 24 FEB 2019 23:36:28

Lowest Channel / 16QAM

Date: 24 FEB 2019 23:37:18

Middle Channel / QPSK

Date: 24 FEB 2019 23:38:57

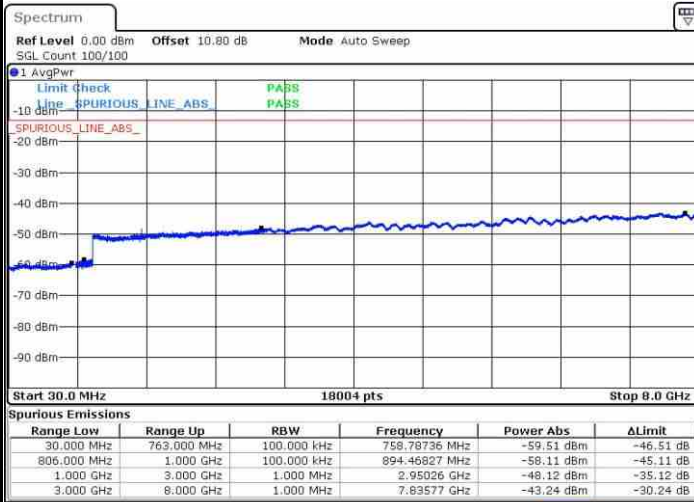
Middle Channel / 16QAM

Date: 24 FEB 2019 23:38:08



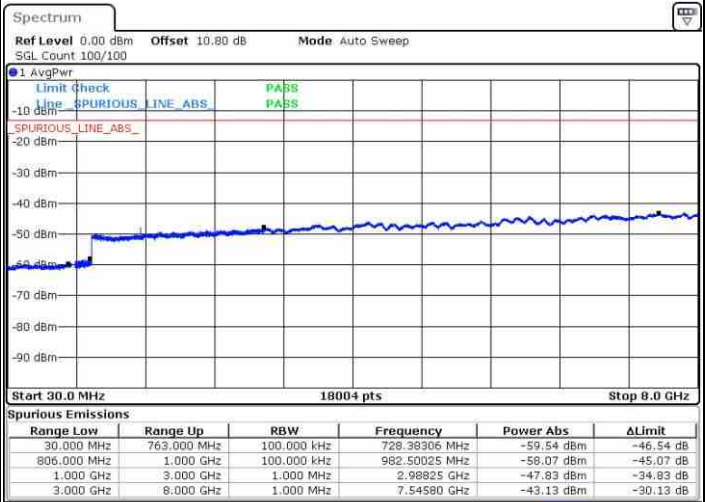
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 25 FEB 2019 00:07:44

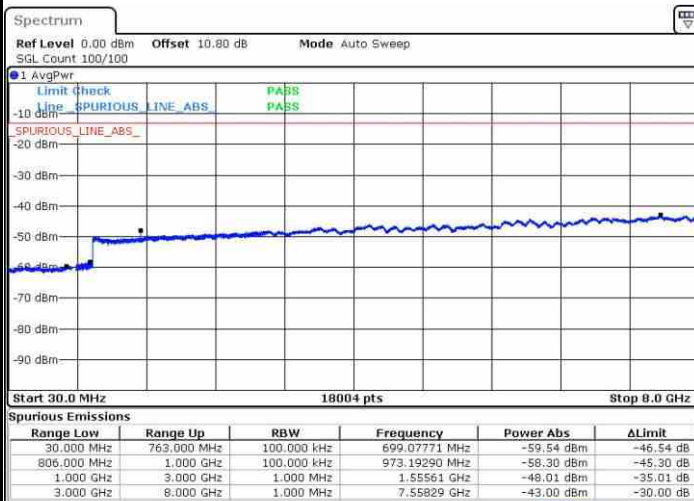
Highest Channel / 16QAM



Date: 25 FEB 2019 00:08:34

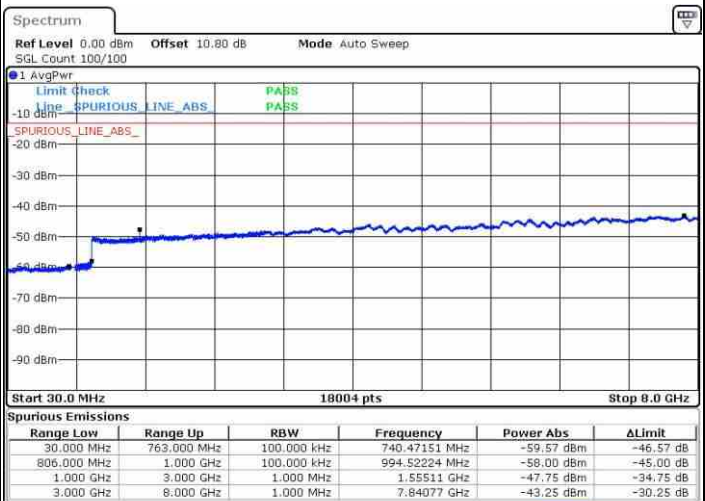
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 25 FEB 2019 00:31:22

Middle Channel / 16QAM

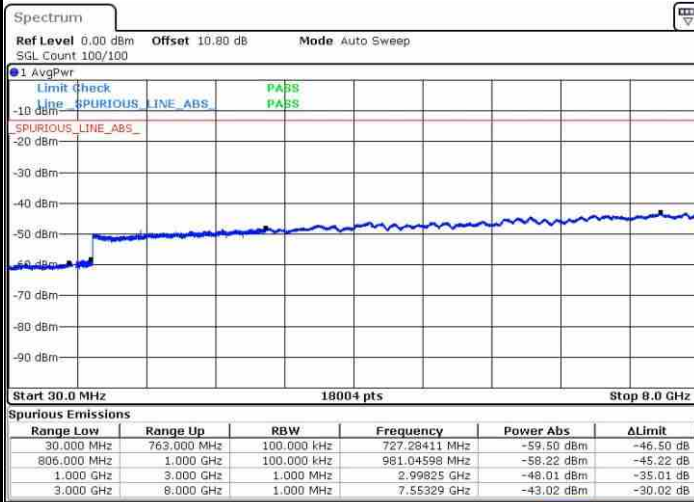


Date: 25 FEB 2019 00:30:32



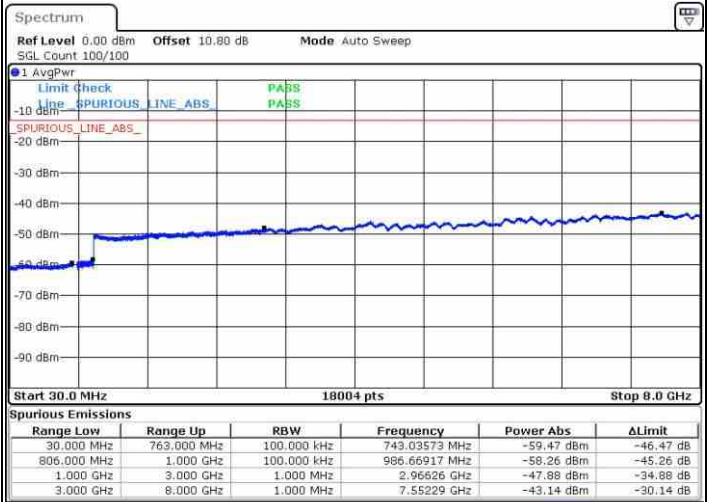
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



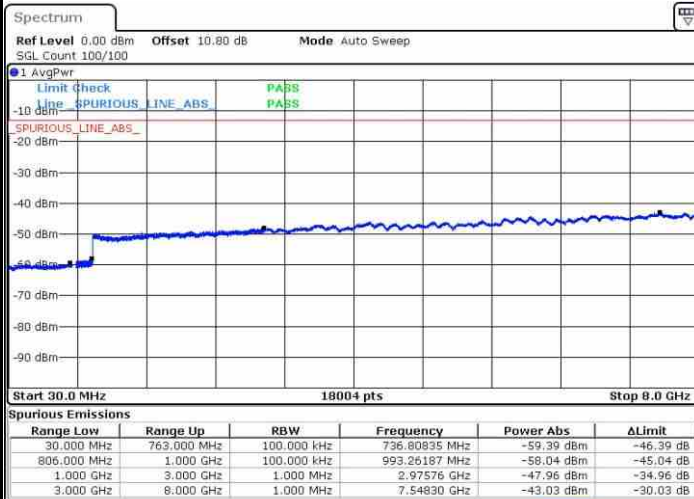
Date: 25 FEB 2019 00:13:08

Middle Channel / 64QAM



Date: 25 FEB 2019 00:13:58

Highest Channel / 64QAM

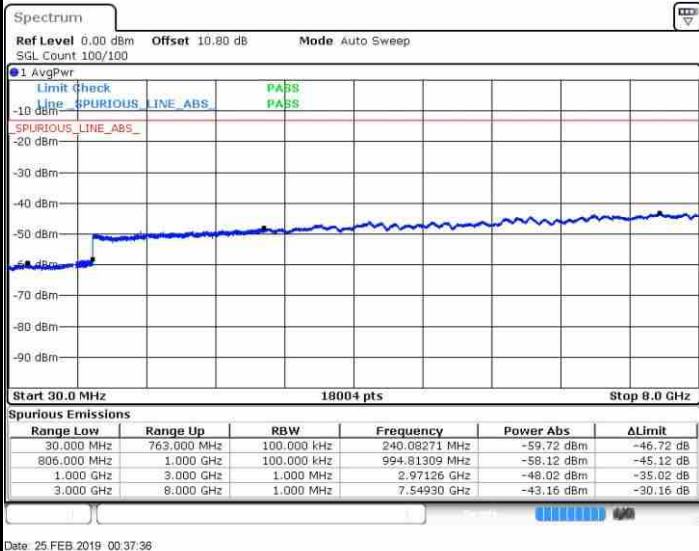


Date: 25 FEB 2019 00:18:54



LTE Band 13 / 10MHz

Middle Channel / 64QAM



Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0086	
-10	Normal Voltage	0.0072	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0079	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.36	4.49	4.12	5.59	PASS
Middle CH	3.36	4.46	4.06	5.59	
Highest CH	3.36	4.75	3.86	5.68	
Mode	LTE Band 25 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.07	6.17	-	-	PASS
Middle CH	5.65	6.23	-	-	
Highest CH	5.16	6.38	-	-	



LTE Band 25 / 20MHz / QPSK

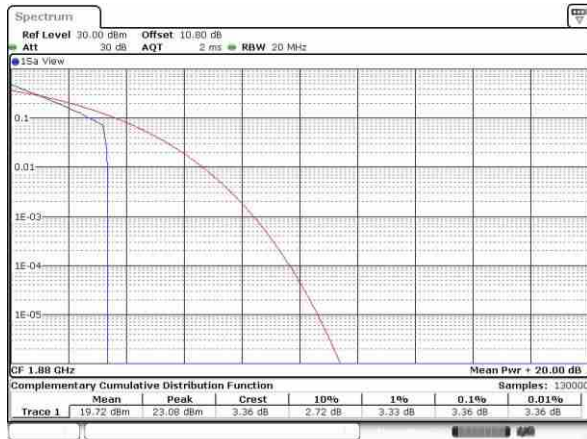
Lowest Channel / 1RB



Lowest Channel / Full RB



Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB





LTE Band 25 / 20MHz / 16QAM

Lowest Channel / 1RB



Lowest Channel / Full RB



Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



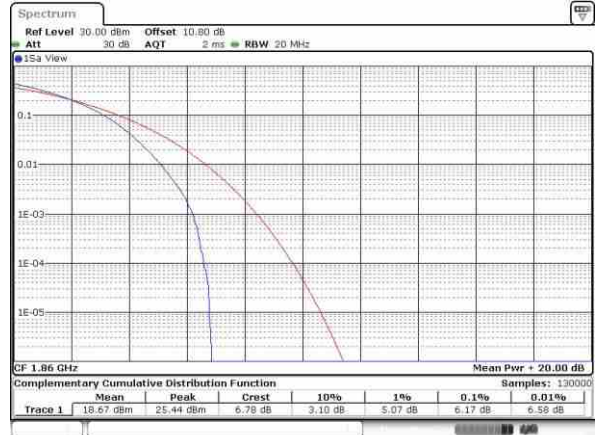


LTE Band 25 / 20MHz / 64QAM

Lowest Channel / 1RB



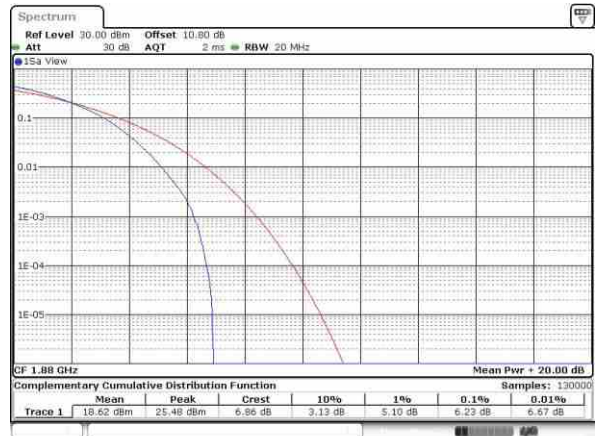
Lowest Channel / Full RB



Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



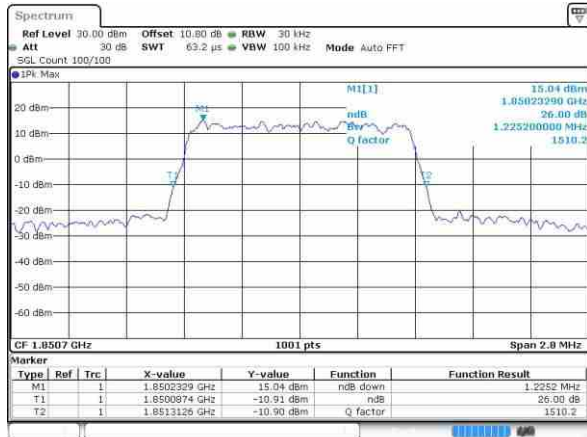
**26dB Bandwidth**

Mode	LTE Band 25 : 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	1.23	1.24	3.02	2.98	4.92	4.90	9.79	9.75	14.63	14.30	20.18	20.14
Middle CH	1.24	1.23	2.97	2.98	4.89	4.92	9.83	9.87	14.66	14.39	20.10	20.06
Highest CH	1.22	1.22	3.04	3.00	4.91	4.91	9.85	9.77	14.21	14.39	20.22	20.22
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.22	-	3.02	-	4.84	-	9.71	-	14.45	-	20.22	-
Middle CH	1.22	-	3.02	-	4.86	-	9.79	-	14.51	-	20.26	-
Highest CH	1.22	-	2.94	-	4.88	-	9.73	-	14.42	-	20.06	-



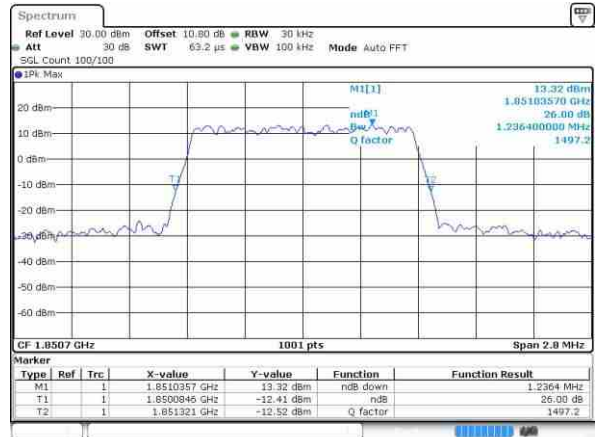
LTE Band 25

Lowest Channel / 1.4MHz / QPSK



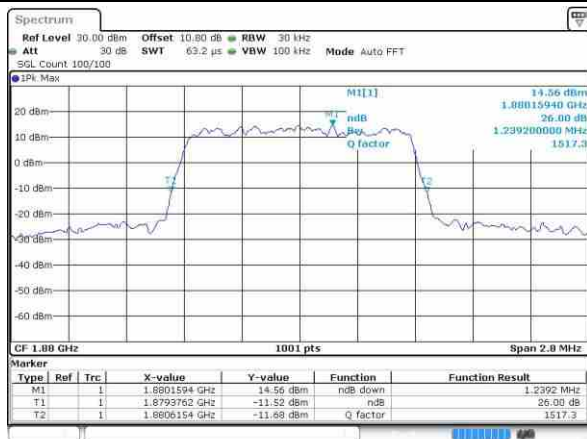
Date: 24 FEB 2019 21:50:54

Lowest Channel / 1.4MHz / 16QAM



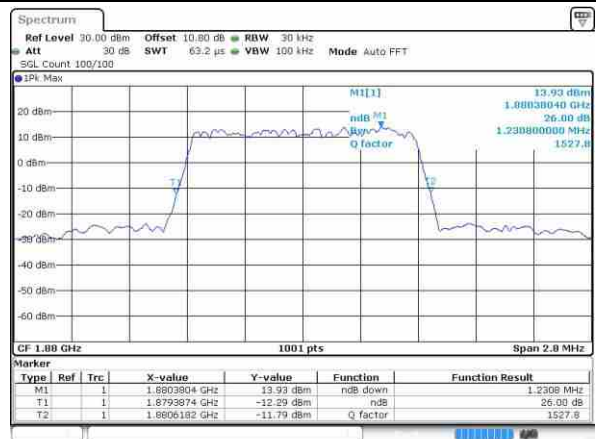
Date: 24 FEB 2019 21:51:08

Middle Channel / 1.4MHz / QPSK



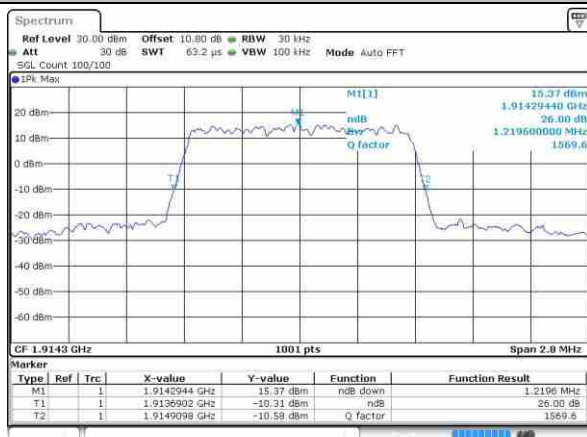
Date: 24 FEB 2019 21:57:34

Middle Channel / 1.4MHz / 16QAM



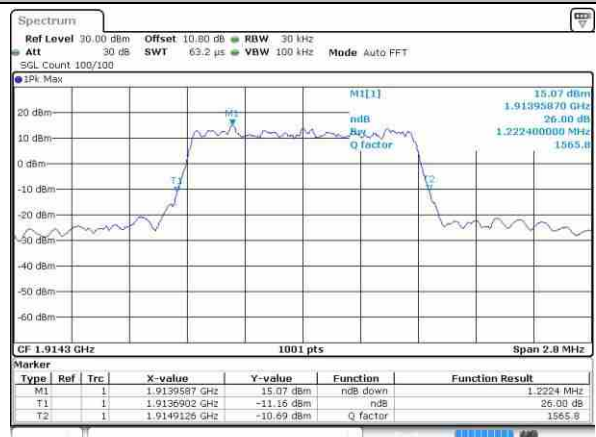
Date: 24 FEB 2019 21:57:45

Highest Channel / 1.4MHz / QPSK



Date: 24 FEB 2019 22:00:12

Highest Channel / 1.4MHz / 16QAM

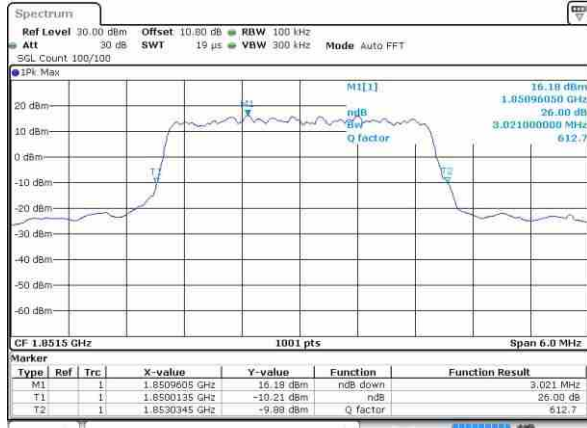


Date: 24 FEB 2019 22:00:00



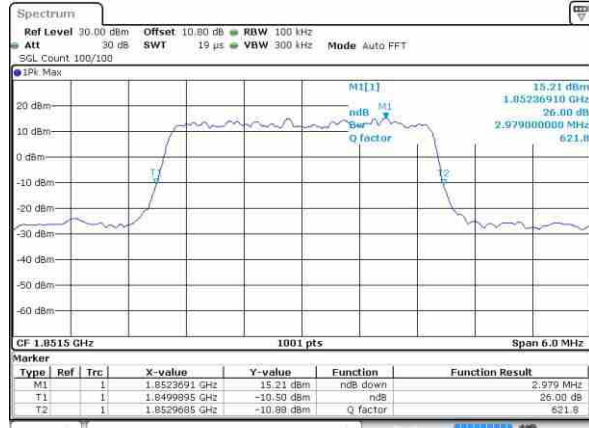
LTE Band 25

Lowest Channel / 3MHz / QPSK



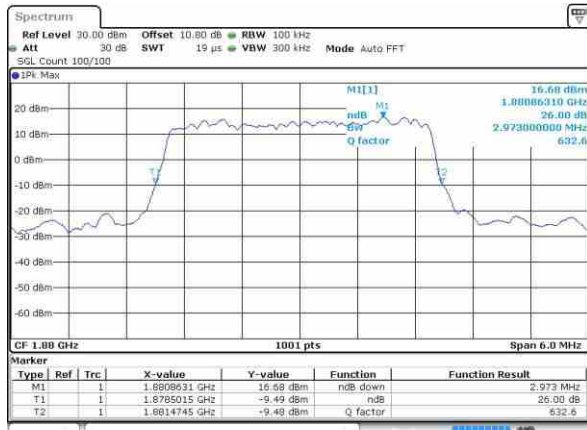
Date: 24 FEB 2019 20:23:24

Lowest Channel / 3MHz / 16QAM



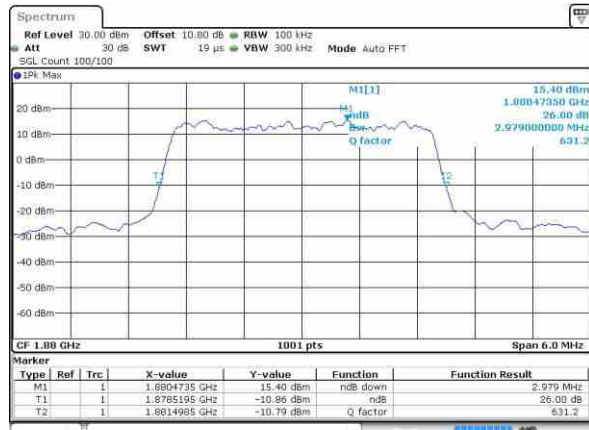
Date: 24 FEB 2019 20:23:36

Middle Channel / 3MHz / QPSK



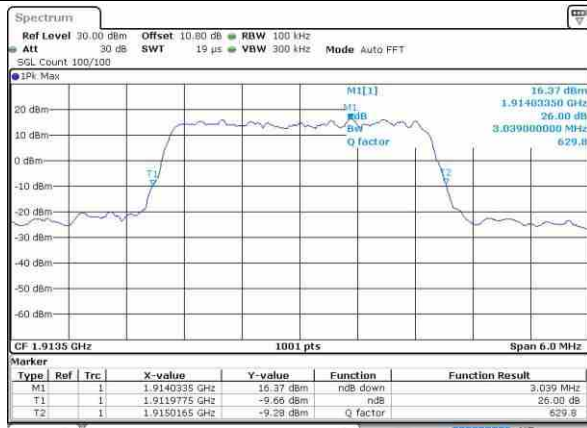
Date: 24 FEB 2019 20:29:32

Middle Channel / 3MHz / 16QAM



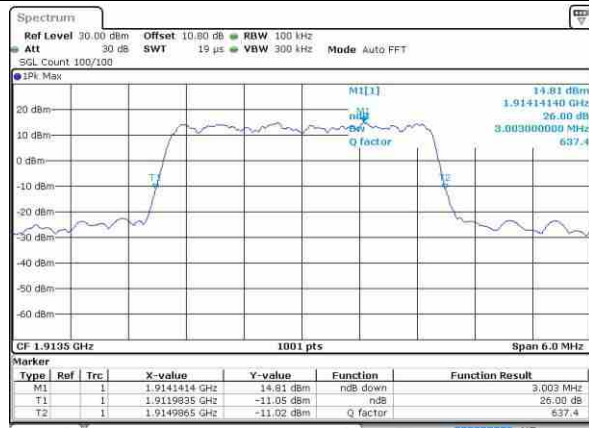
Date: 24 FEB 2019 20:29:43

Highest Channel / 3MHz / QPSK



Date: 24 FEB 2019 20:36:19

Highest Channel / 3MHz / 16QAM

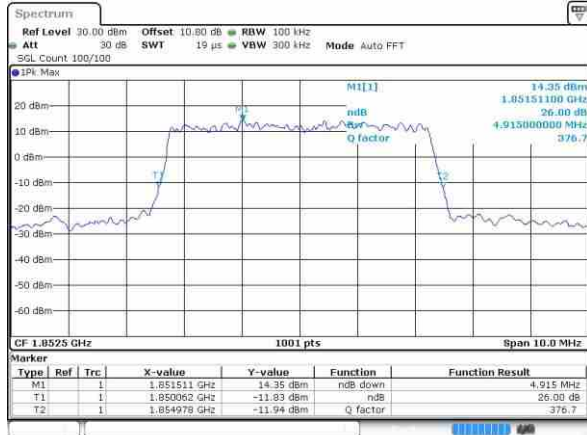


Date: 24 FEB 2019 20:36:07

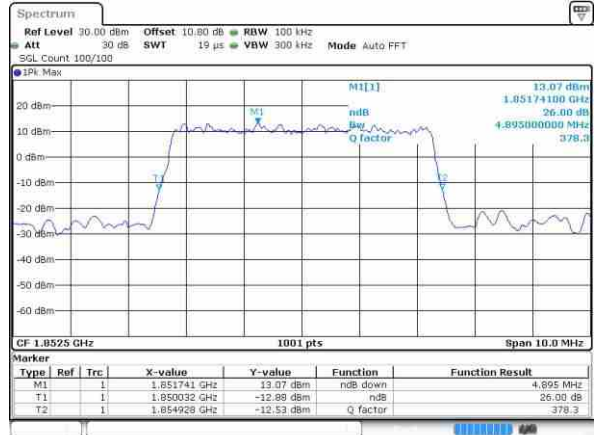


LTE Band 25

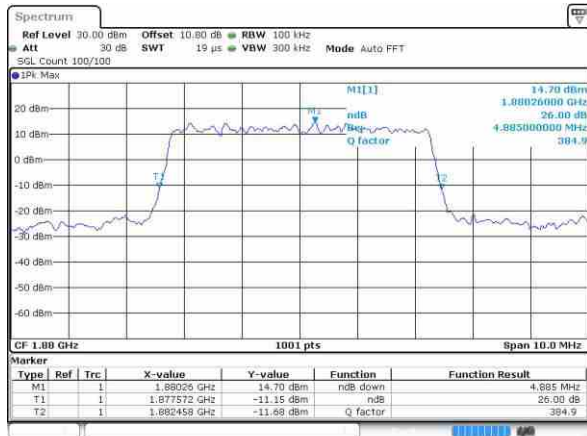
Lowest Channel / 5MHz / QPSK



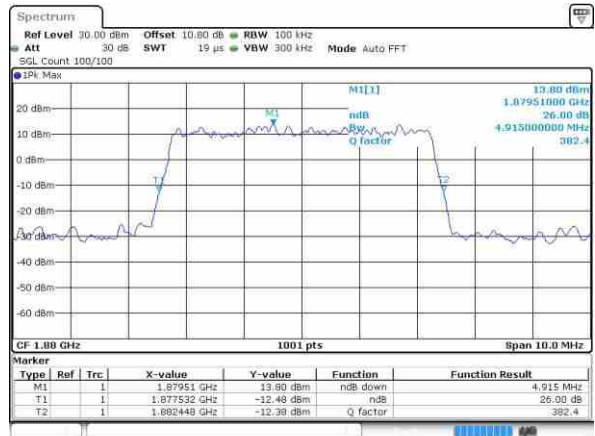
Lowest Channel / 5MHz / 16QAM



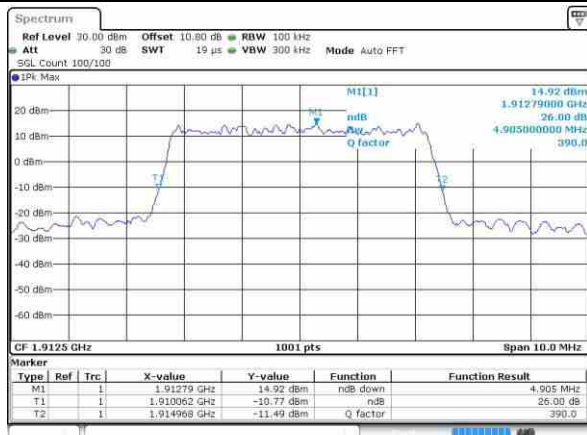
Middle Channel / 5MHz / QPSK



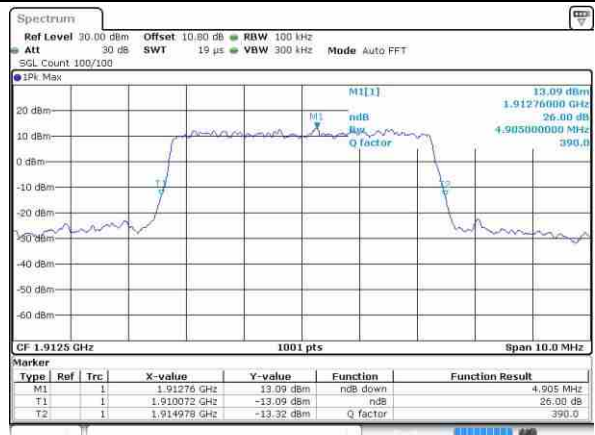
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



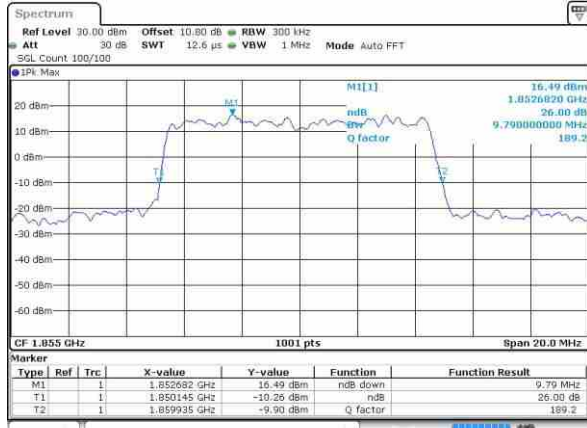
Highest Channel / 5MHz / 16QAM



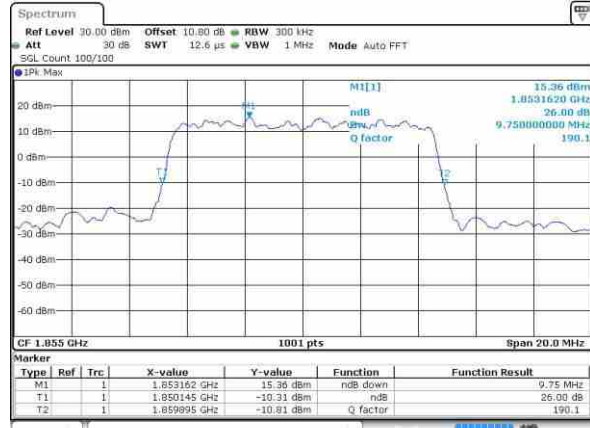


LTE Band 25

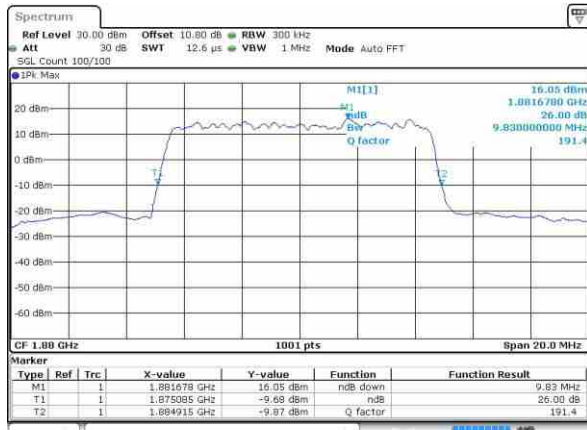
Lowest Channel / 10MHz / QPSK



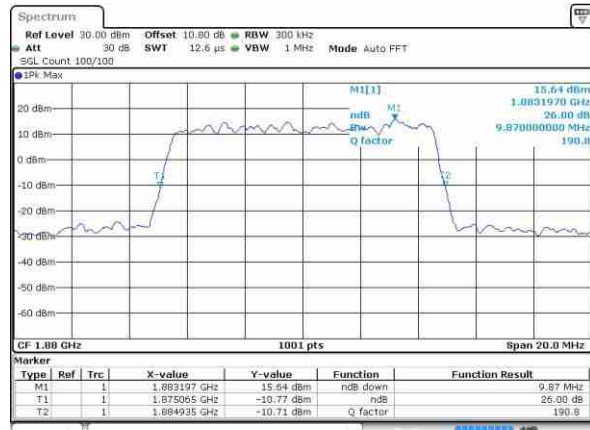
Lowest Channel / 10MHz / 16QAM



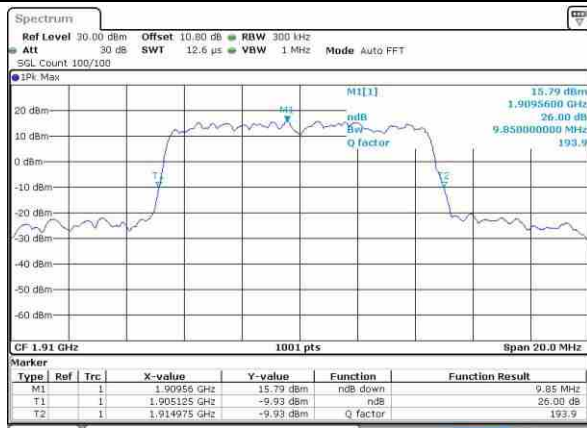
Middle Channel / 10MHz / QPSK



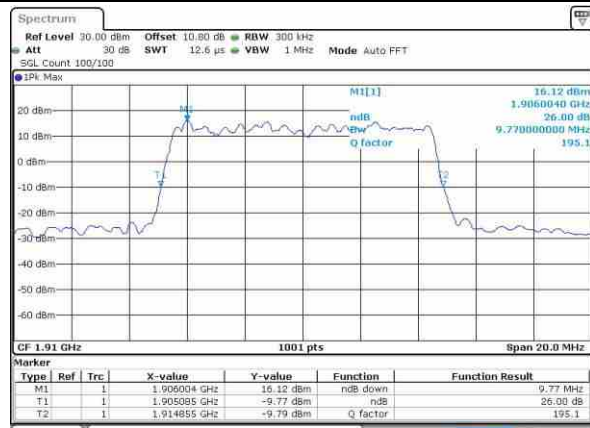
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



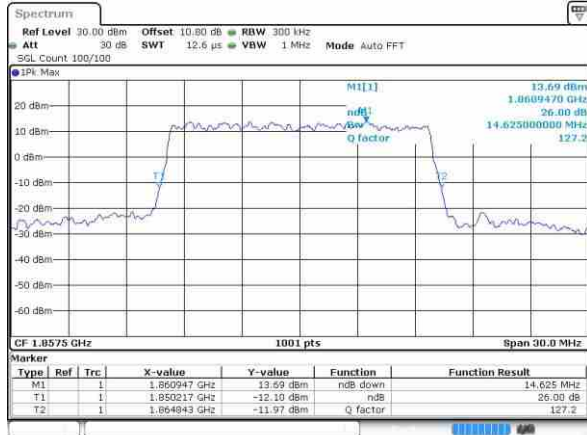
Highest Channel / 10MHz / 16QAM



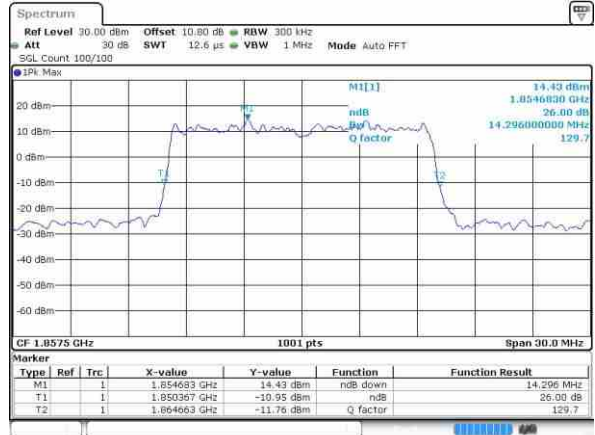


LTE Band 25

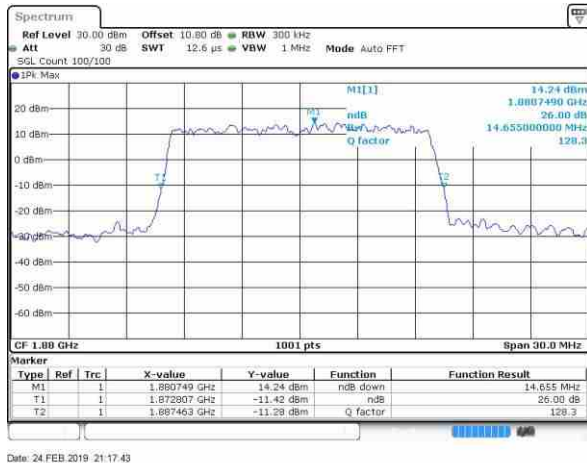
Lowest Channel / 15MHz / QPSK



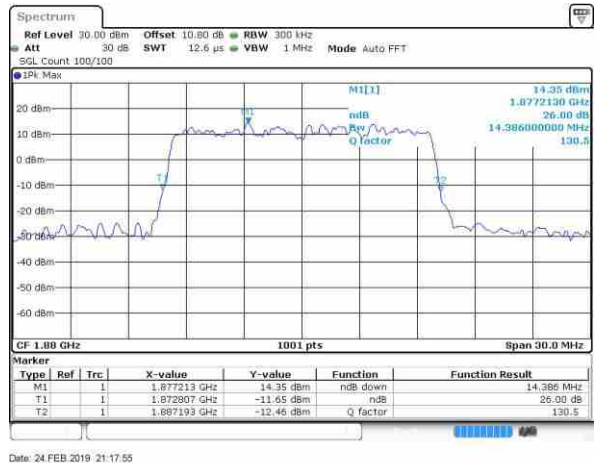
Lowest Channel / 15MHz / 16QAM



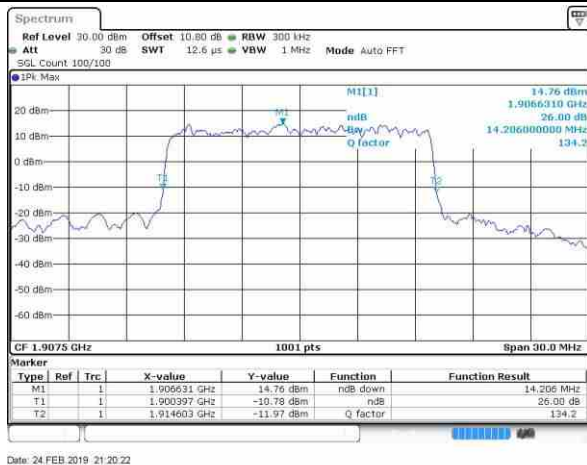
Middle Channel / 15MHz / QPSK



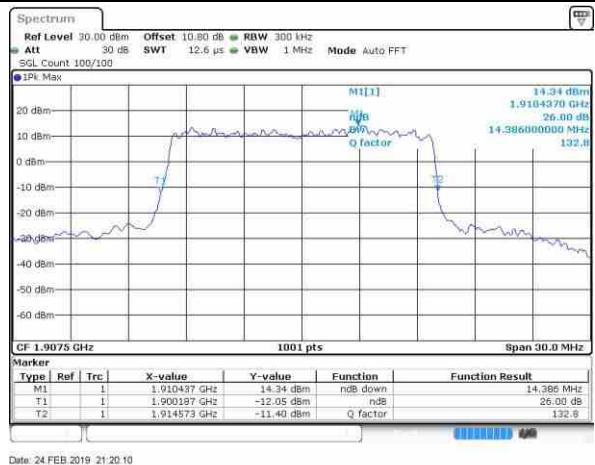
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



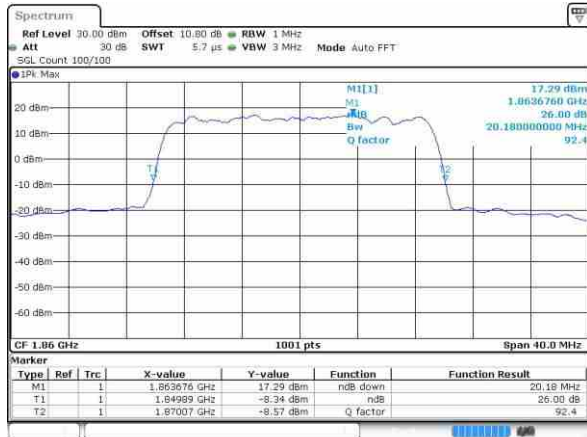
Highest Channel / 15MHz / 16QAM





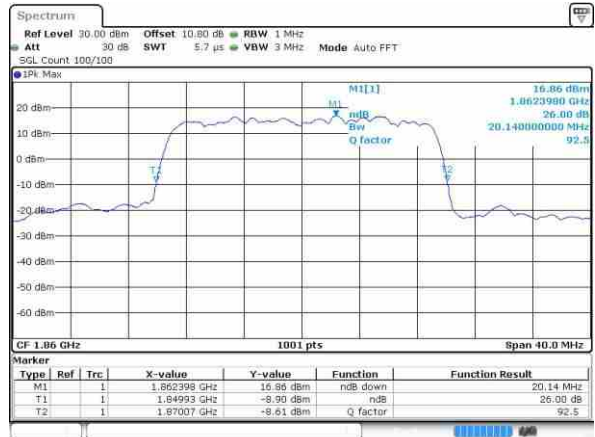
LTE Band 25

Lowest Channel / 20MHz / QPSK



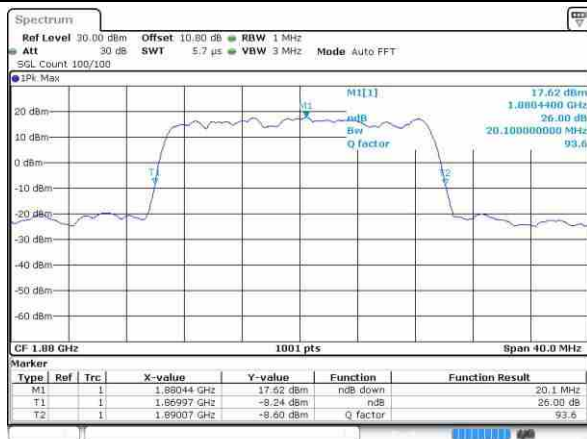
Date: 24 FEB 2019 21:26:18

Lowest Channel / 20MHz / 16QAM



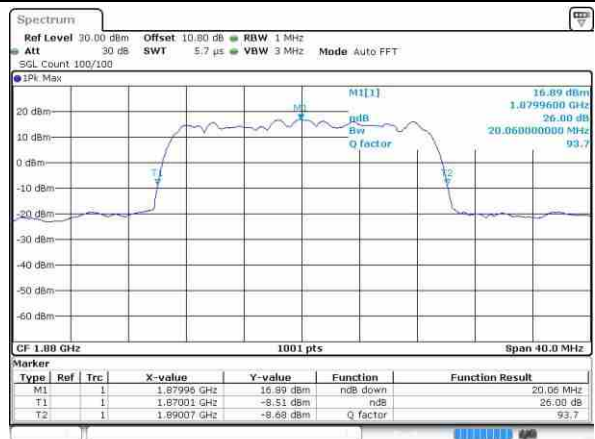
Date: 24 FEB 2019 21:26:29

Middle Channel / 20MHz / QPSK



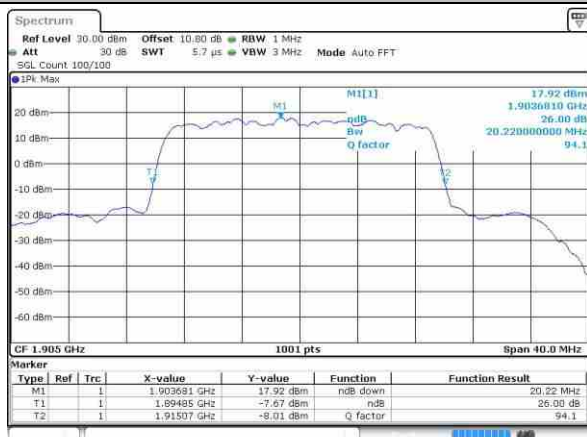
Date: 24 FEB 2019 21:32:25

Middle Channel / 20MHz / 16QAM



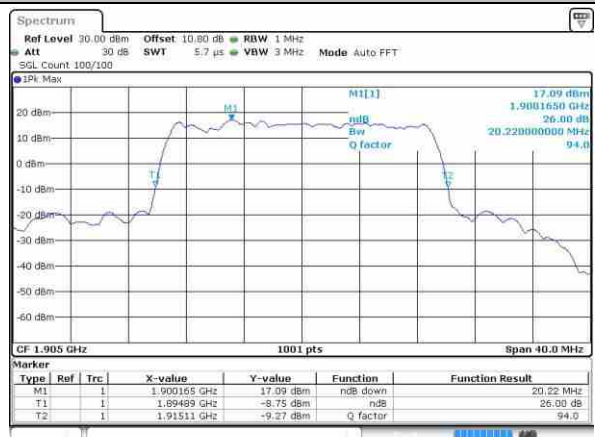
Date: 24 FEB 2019 21:32:36

Highest Channel / 20MHz / QPSK



Date: 24 FEB 2019 21:35:03

Highest Channel / 20MHz / 16QAM

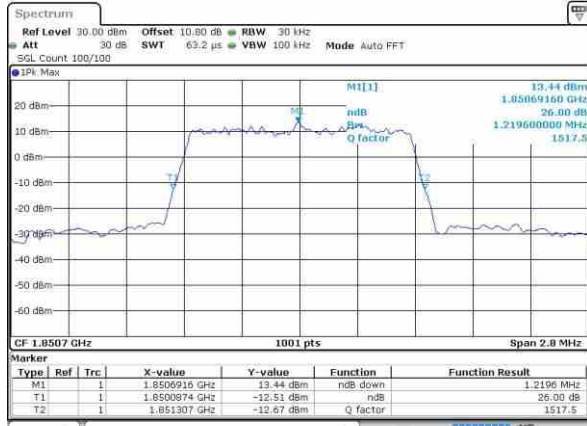


Date: 24 FEB 2019 21:34:52

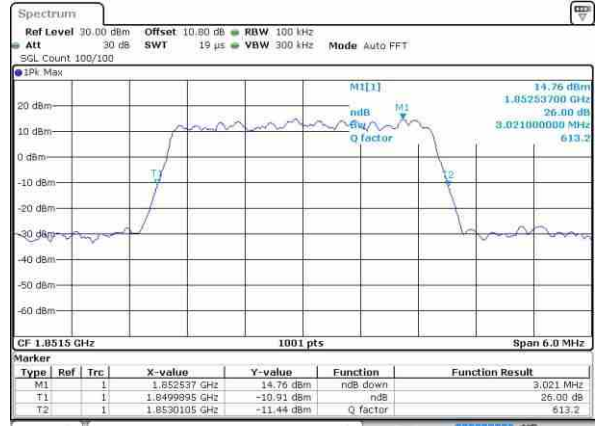


LTE Band 25

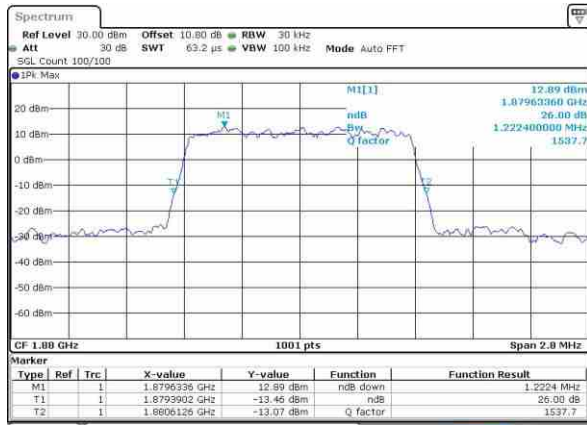
Lowest Channel / 1.4MHz / 64QAM



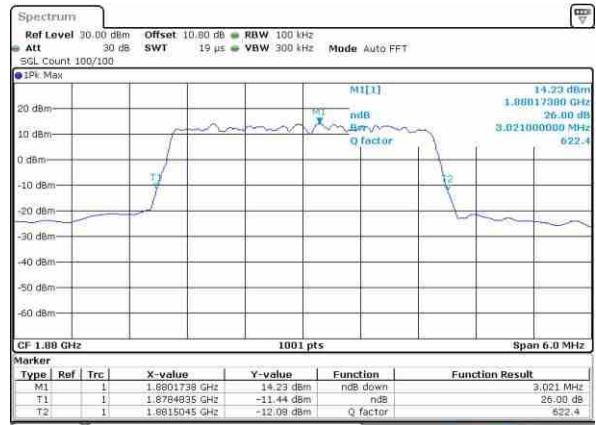
Lowest Channel / 3MHz / 64QAM



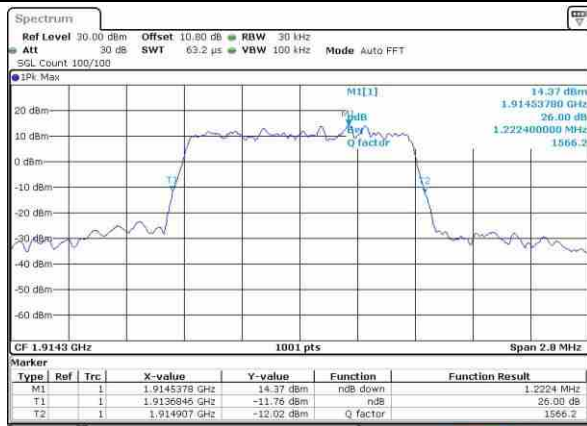
Middle Channel / 1.4MHz / 64QAM



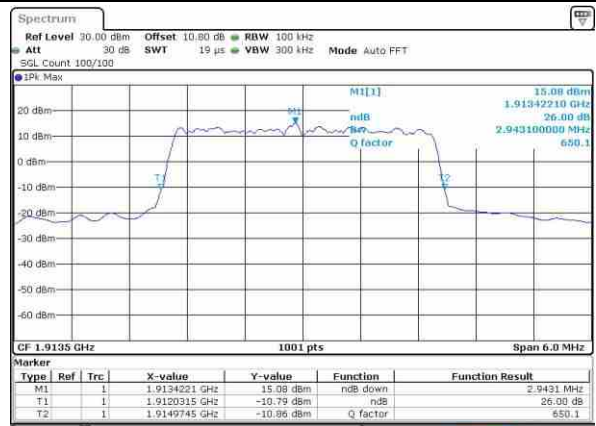
Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



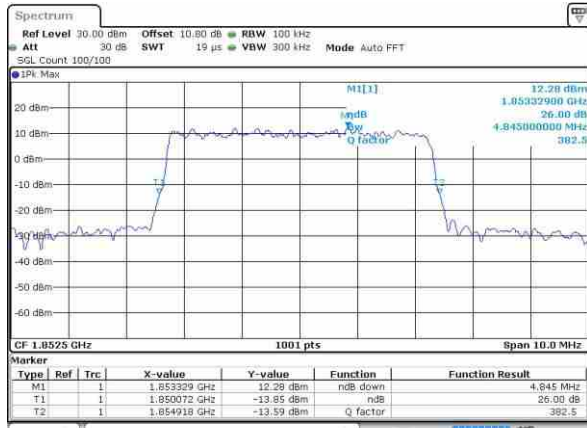
Highest Channel / 3MHz / 64QAM



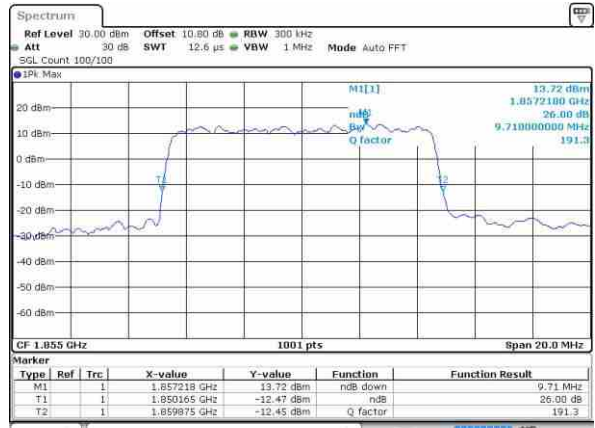


LTE Band 25

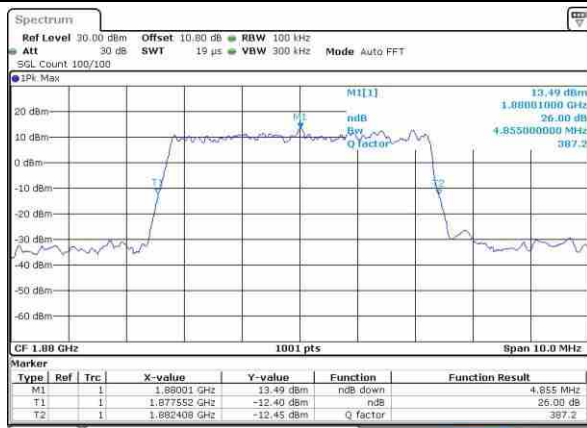
Lowest Channel / 5MHz / 64QAM



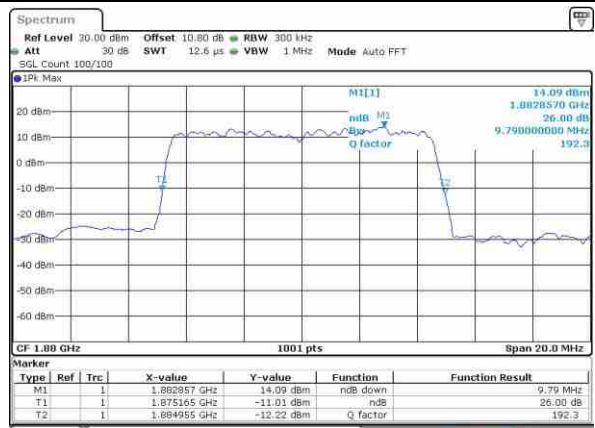
Lowest Channel / 10MHz / 64QAM



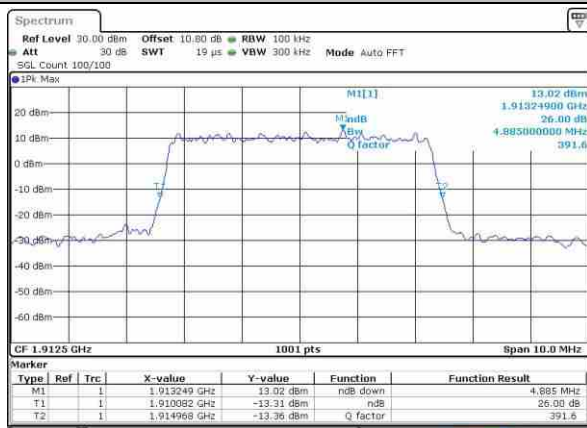
Middle Channel / 5MHz / 64QAM



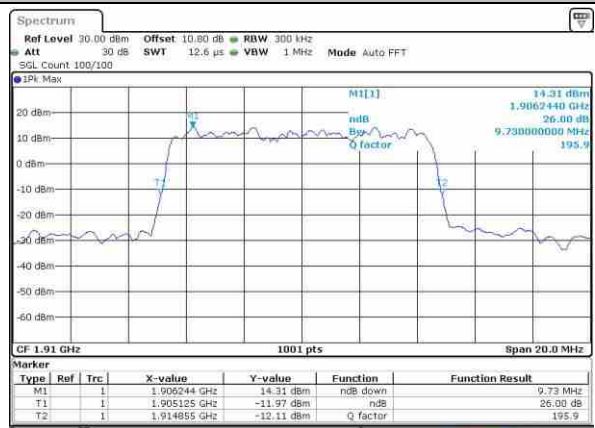
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



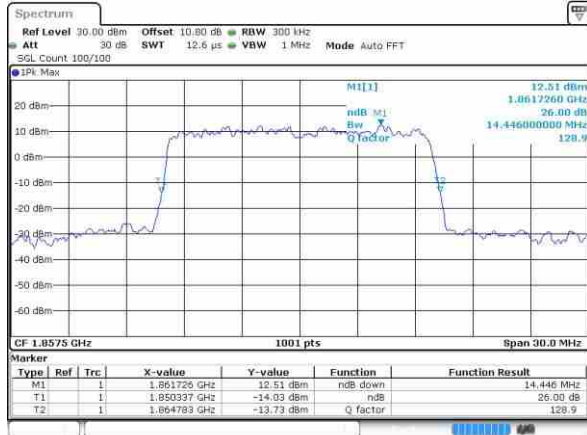
Highest Channel / 10MHz / 64QAM





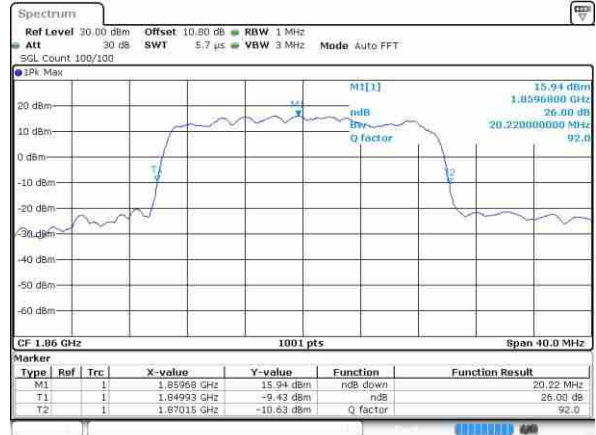
LTE Band 25

Lowest Channel / 15MHz / 64QAM



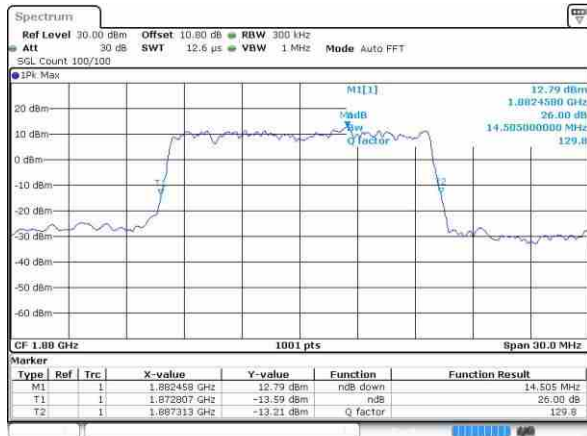
Date: 24 FEB 2019 22:36:47

Lowest Channel / 20MHz / 64QAM



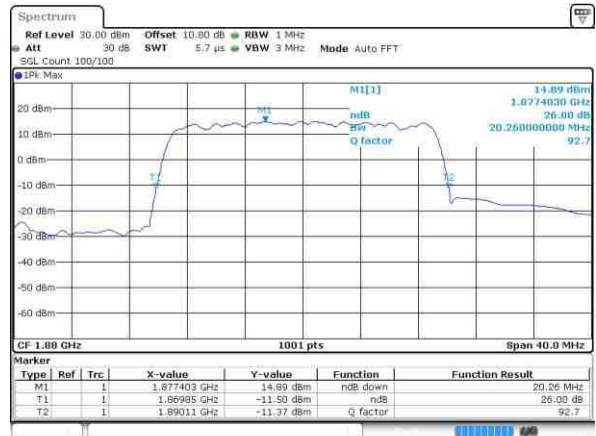
Date: 24 FEB 2019 22:44:08

Middle Channel / 15MHz / 64QAM



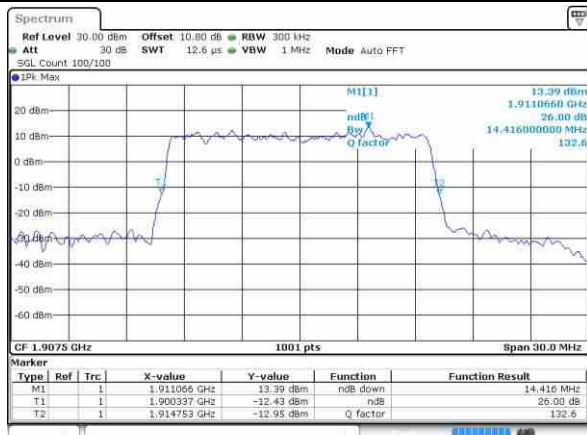
Date: 24 FEB 2019 22:39:50

Middle Channel / 20MHz / 64QAM



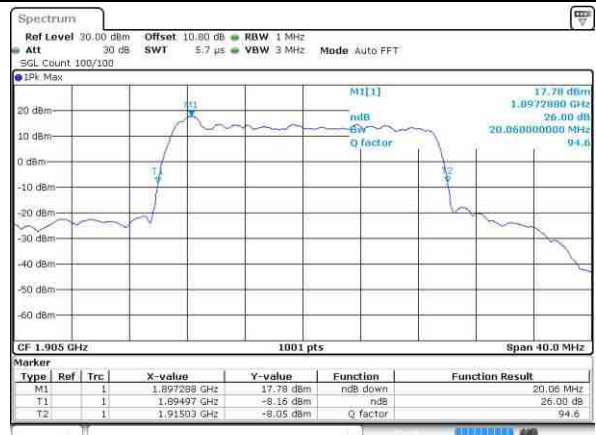
Date: 24 FEB 2019 22:47:11

Highest Channel / 15MHz / 64QAM



Date: 24 FEB 2019 22:41:04

Highest Channel / 20MHz / 64QAM



Date: 24 FEB 2019 22:48:24

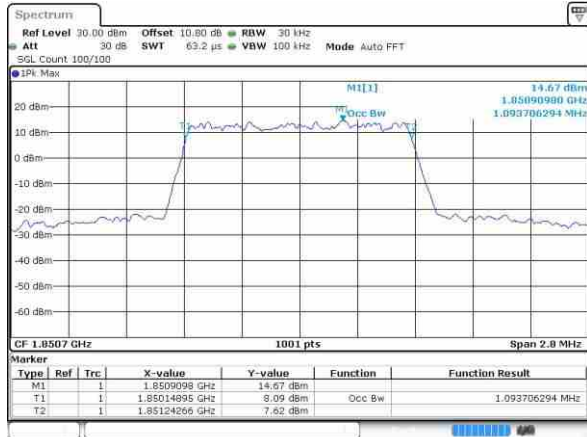
**Occupied Bandwidth**

Mode	LTE Band 25 : 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	2.74	2.71	4.48	4.49	9.05	8.99	13.46	13.52	18.3	18.34
Middle CH	1.09	1.09	2.72	2.72	4.48	4.49	9.01	8.99	13.43	13.43	18.46	18.54
Highest CH	1.09	1.1	2.72	2.71	4.52	4.5	9.07	9.03	13.52	13.4	18.42	18.38
Mode	LTE Band 25 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09	-	2.72	-	4.49	-	9.05	-	13.46	-	18.34	-
Middle CH	1.08	-	2.73	-	4.50	-	9.03	-	13.46	-	18.34	-
Highest CH	1.10	-	2.74	-	4.50	-	9.09	-	13.43	-	18.46	-

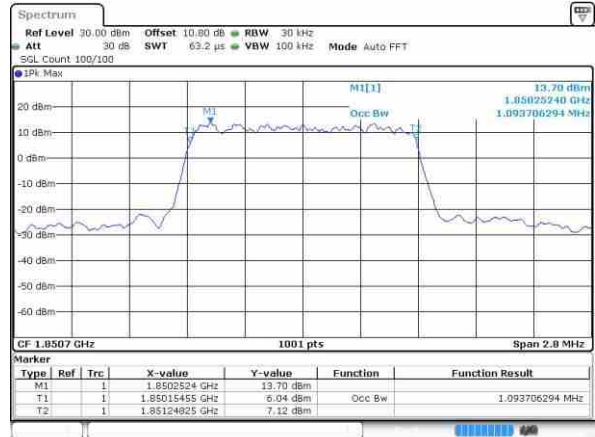


LTE Band 25

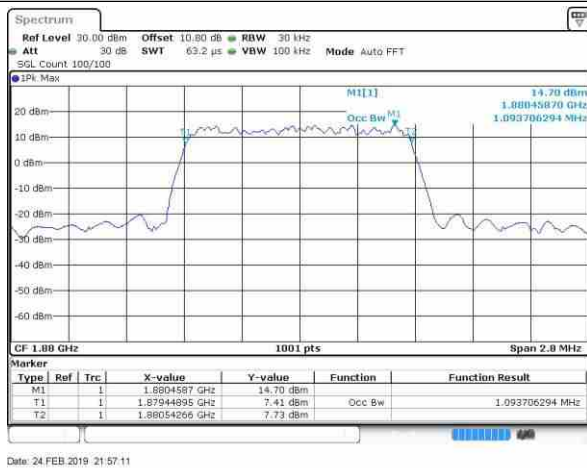
Lowest Channel / 1.4MHz / QPSK



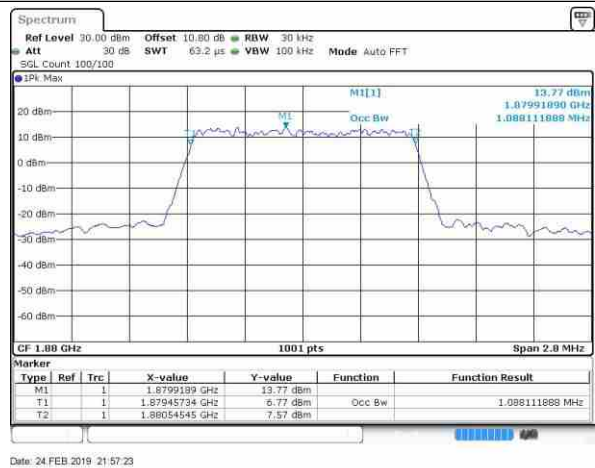
Lowest Channel / 1.4MHz / 16QAM



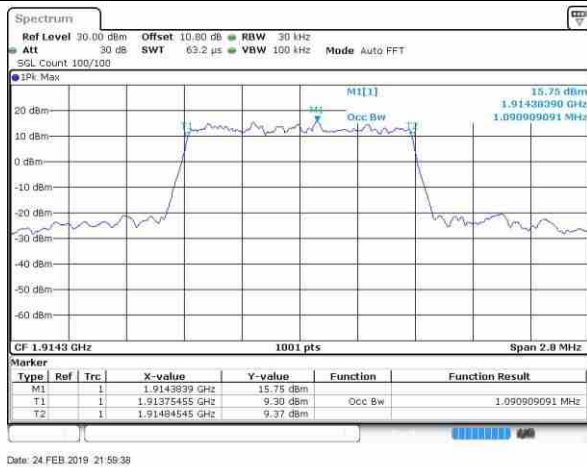
Middle Channel / 1.4MHz / QPSK



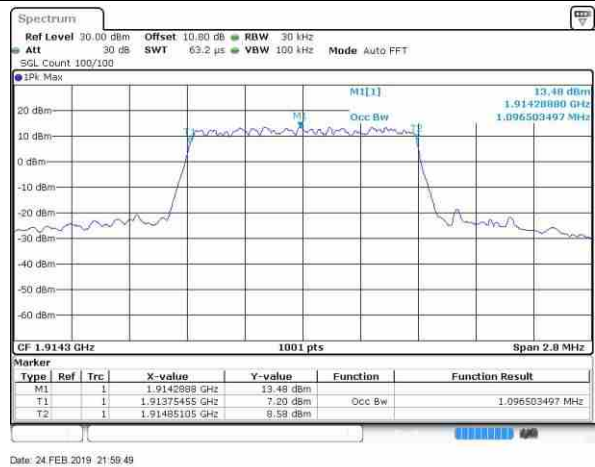
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



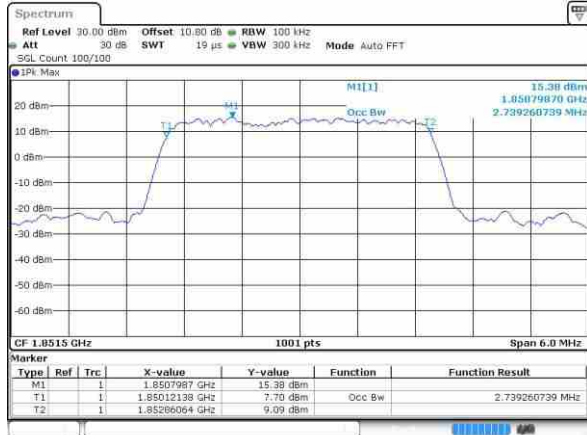
Highest Channel / 1.4MHz / 16QAM





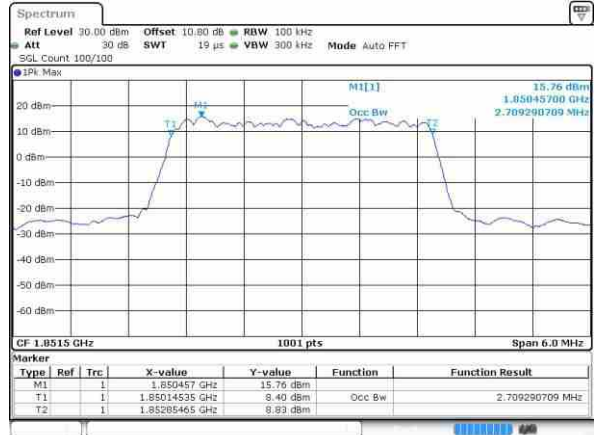
LTE Band 25

Lowest Channel / 3MHz / QPSK



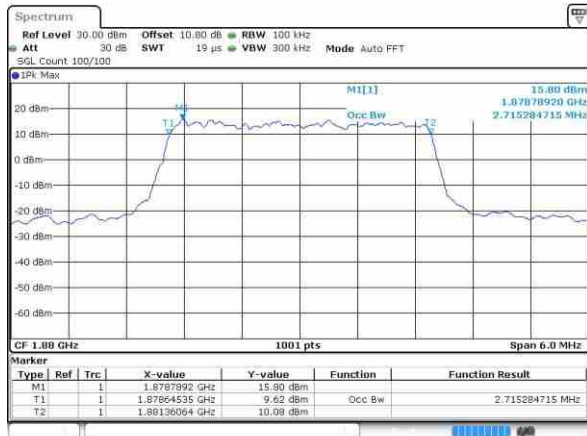
Date: 24 FEB 2019 20:23:01

Lowest Channel / 3MHz / 16QAM



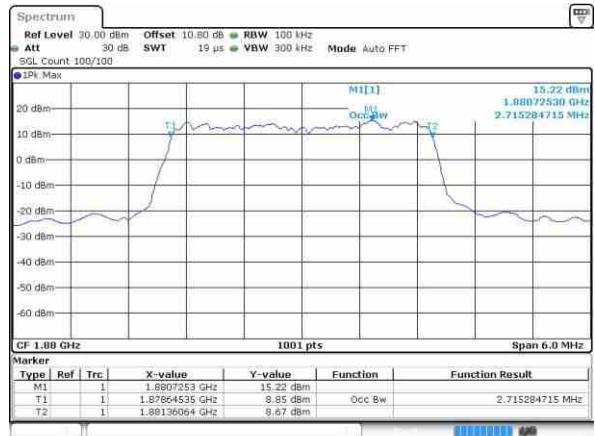
Date: 24 FEB 2019 20:23:13

Middle Channel / 3MHz / QPSK



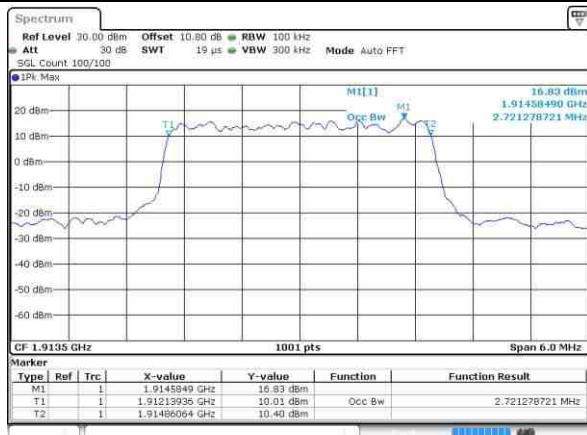
Date: 24 FEB 2019 20:29:08

Middle Channel / 3MHz / 16QAM



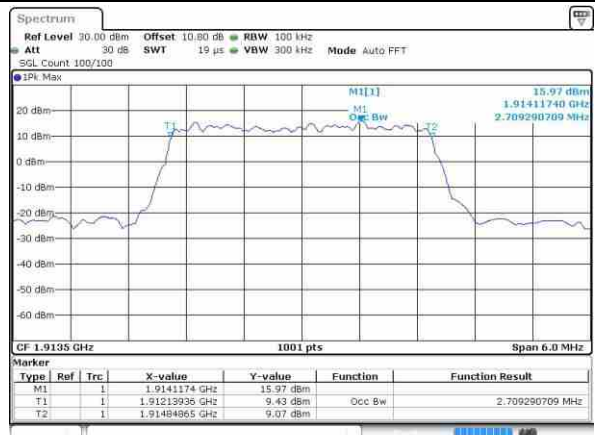
Date: 24 FEB 2019 20:29:20

Highest Channel / 3MHz / QPSK



Date: 24 FEB 2019 20:31:35

Highest Channel / 3MHz / 16QAM

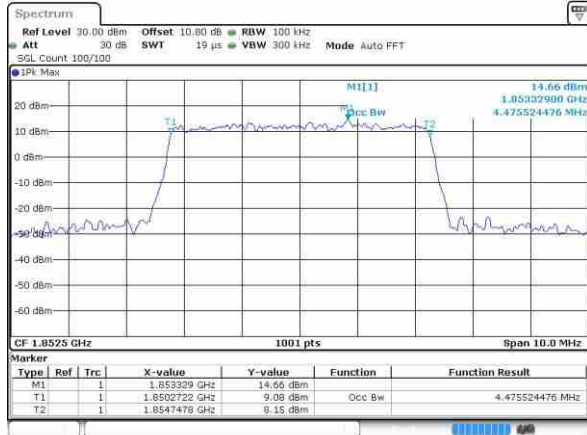


Date: 24 FEB 2019 20:31:47



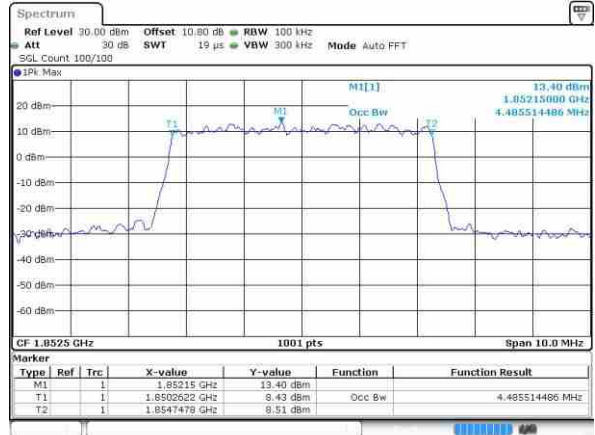
LTE Band 25

Lowest Channel / 5MHz / QPSK



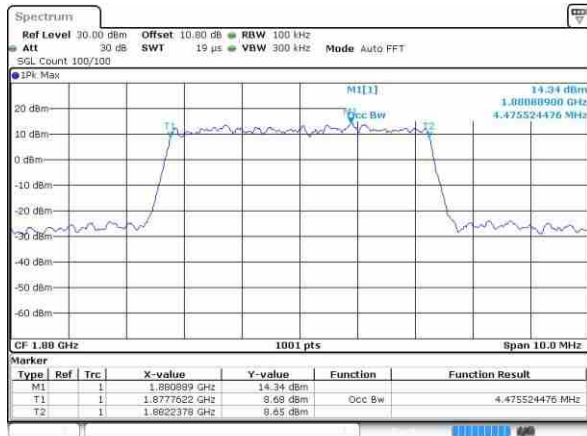
Date: 24 FEB 2019 20:41:52

Lowest Channel / 5MHz / 16QAM



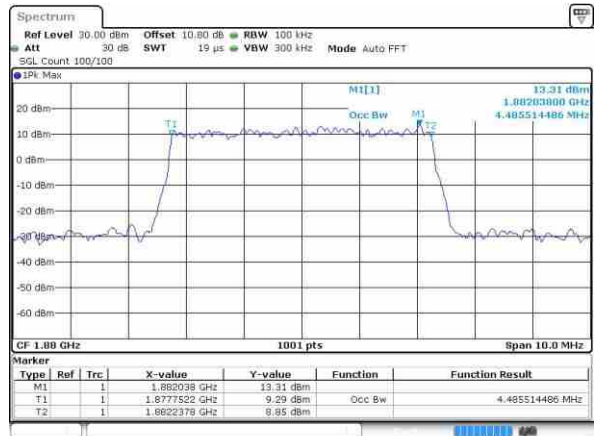
Date: 24 FEB 2019 20:42:03

Middle Channel / 5MHz / QPSK



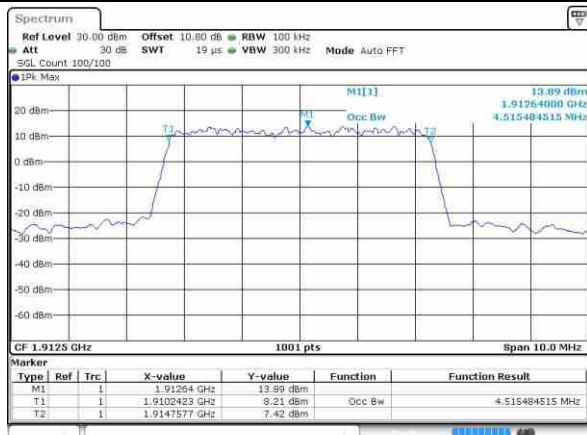
Date: 24 FEB 2019 20:47:59

Middle Channel / 5MHz / 16QAM



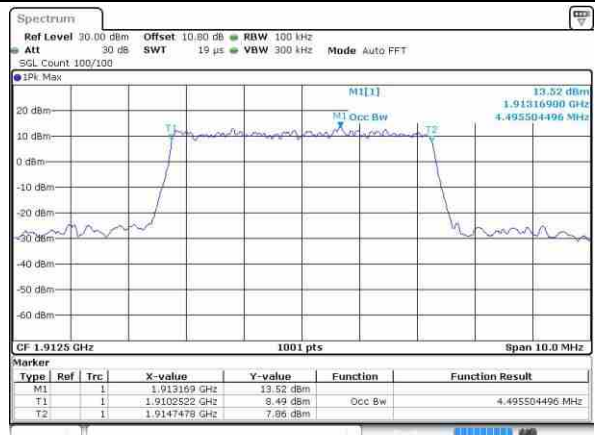
Date: 24 FEB 2019 20:48:10

Highest Channel / 5MHz / QPSK



Date: 24 FEB 2019 20:50:25

Highest Channel / 5MHz / 16QAM

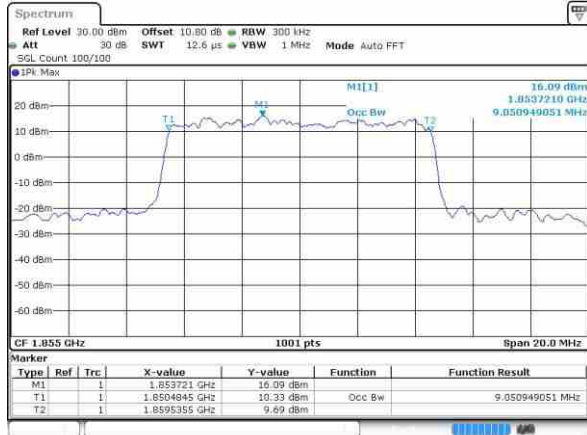


Date: 24 FEB 2019 20:50:37

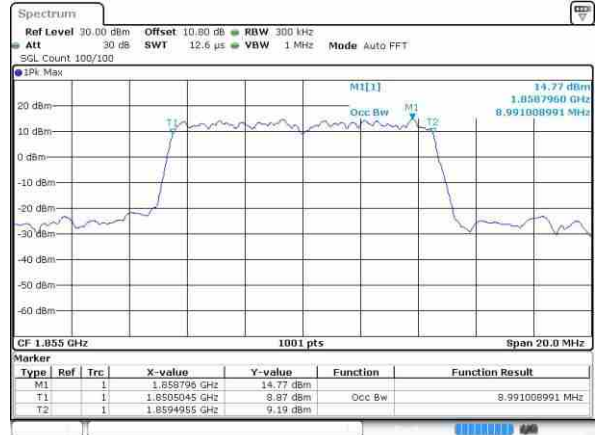


LTE Band 25

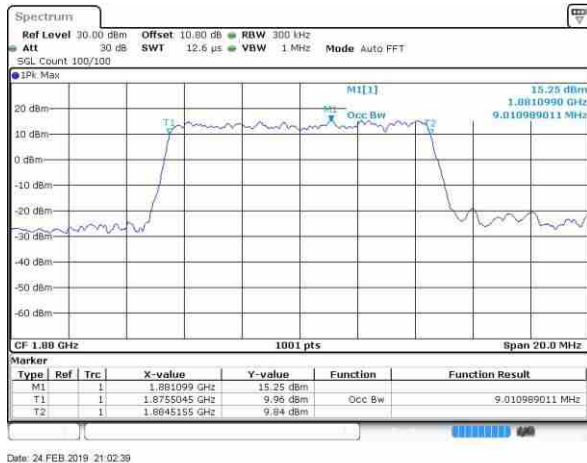
Lowest Channel / 10MHz / QPSK



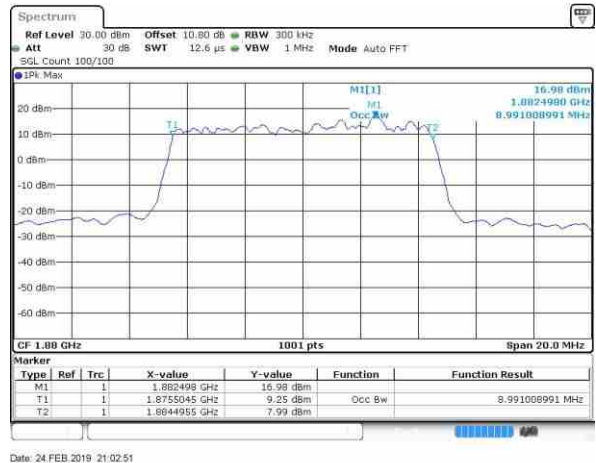
Lowest Channel / 10MHz / 16QAM



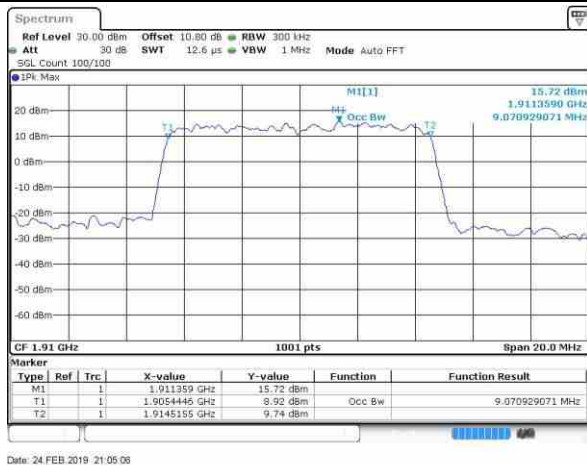
Middle Channel / 10MHz / QPSK



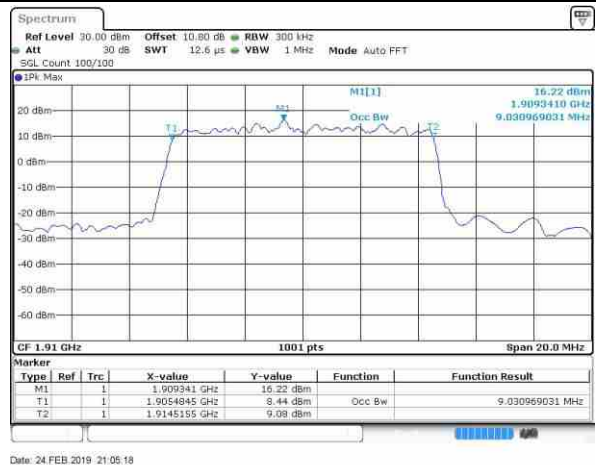
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



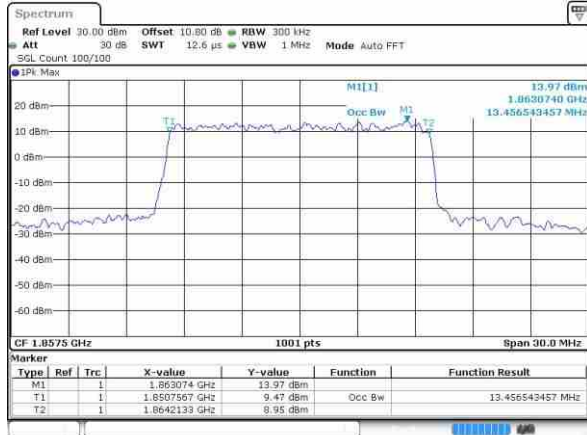
Highest Channel / 10MHz / 16QAM





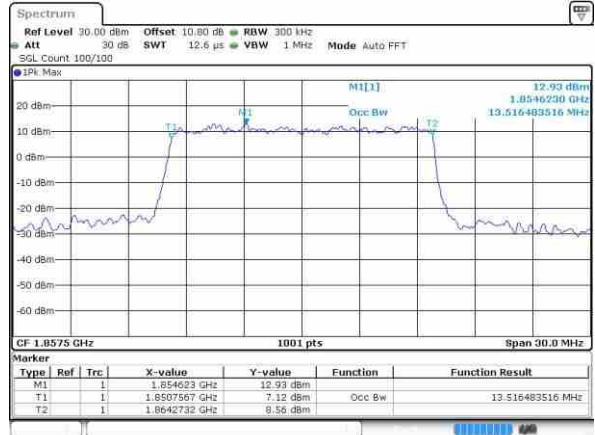
LTE Band 25

Lowest Channel / 15MHz / QPSK



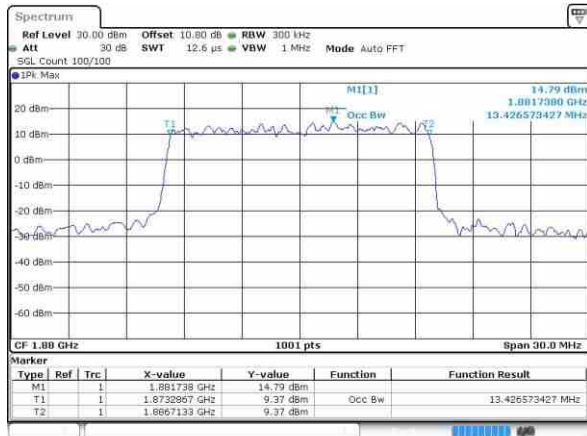
Date: 24 FEB 2019 21:11:13

Lowest Channel / 15MHz / 16QAM



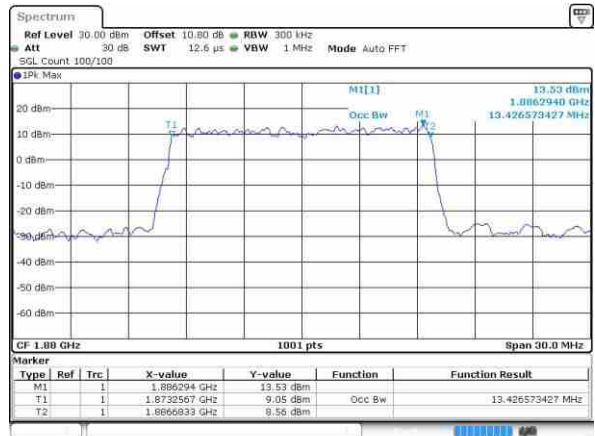
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Middle Channel / 15MHz / QPSK



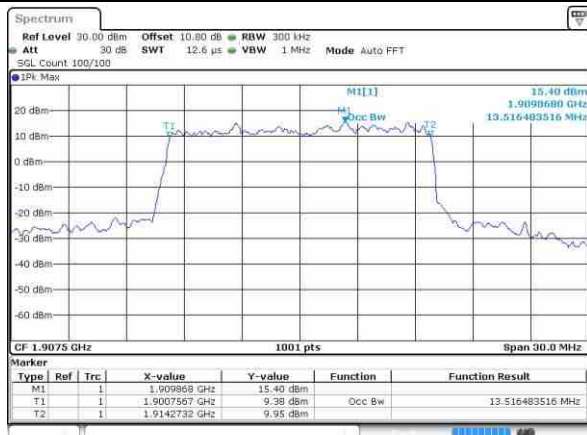
Date: 24 FEB 2019 21:17:20

Middle Channel / 15MHz / 16QAM



Date: 24 FEB 2019 21:17:32

Highest Channel / 15MHz / QPSK



Date: 24 FEB 2019 21:19:47

Highest Channel / 15MHz / 16QAM

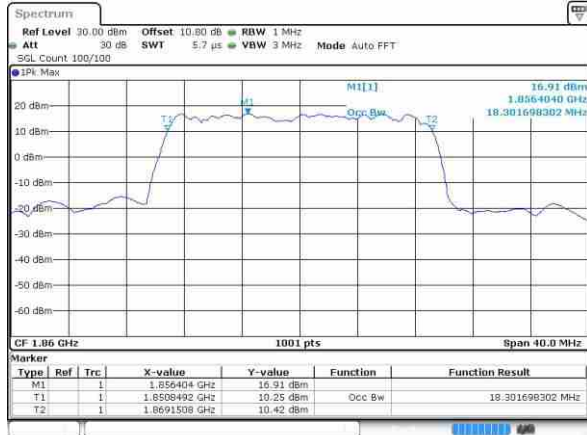


Date: 24 FEB 2019 21:19:59

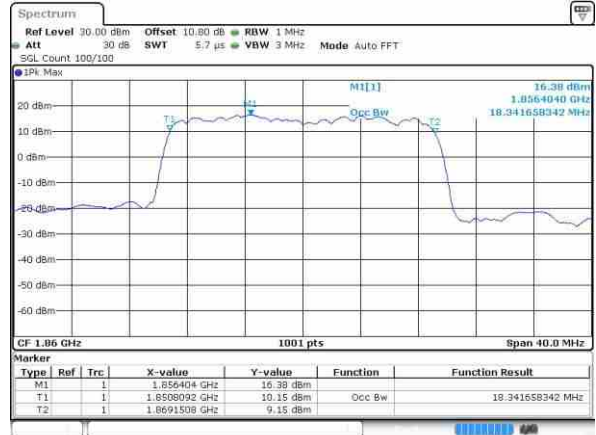


LTE Band 25

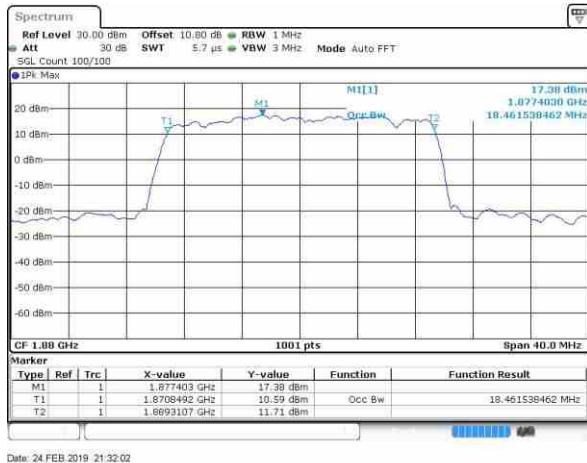
Lowest Channel / 20MHz / QPSK



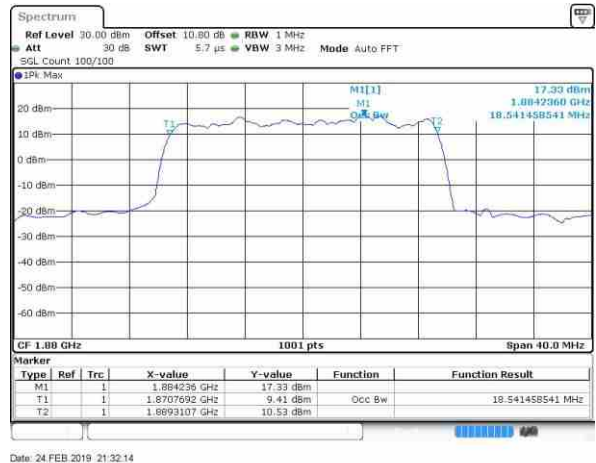
Lowest Channel / 20MHz / 16QAM



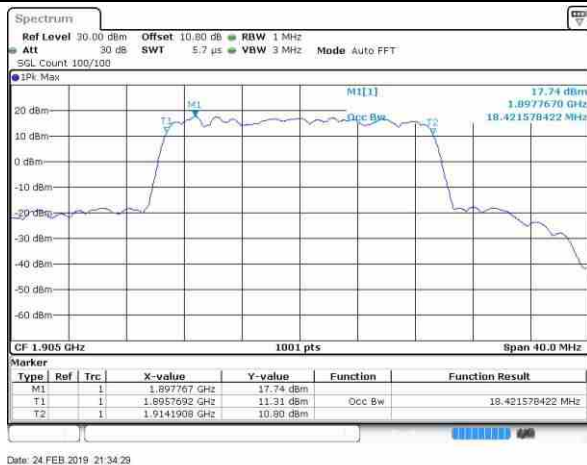
Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM

