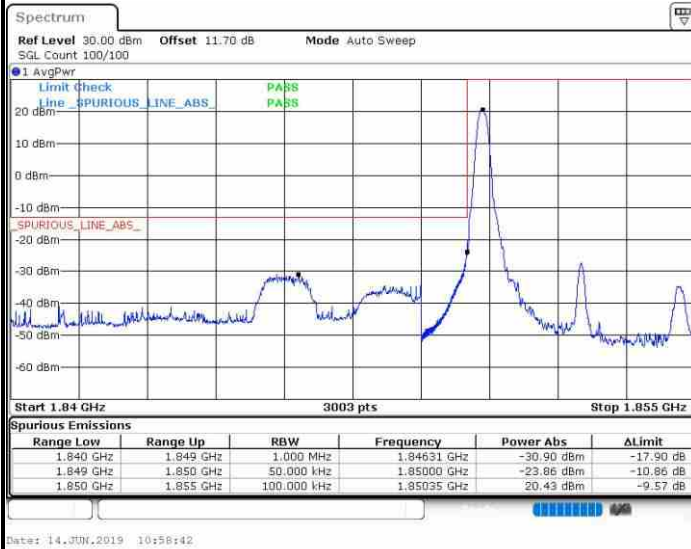


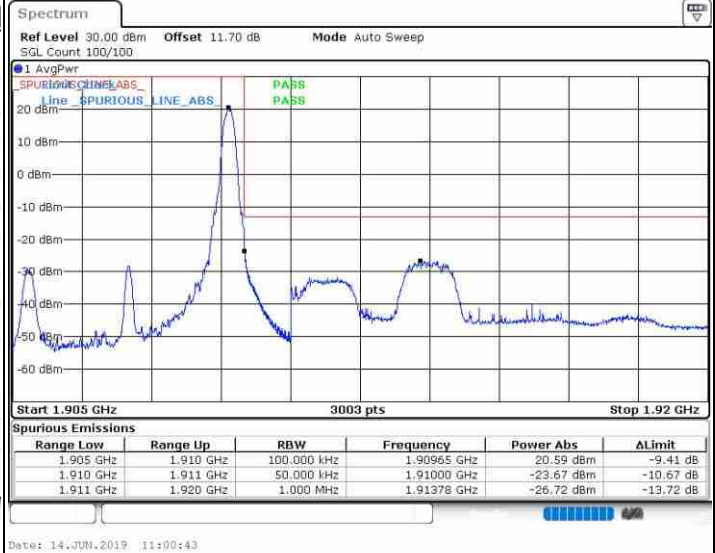


LTE Band 2 / 5MHz / 64QAM

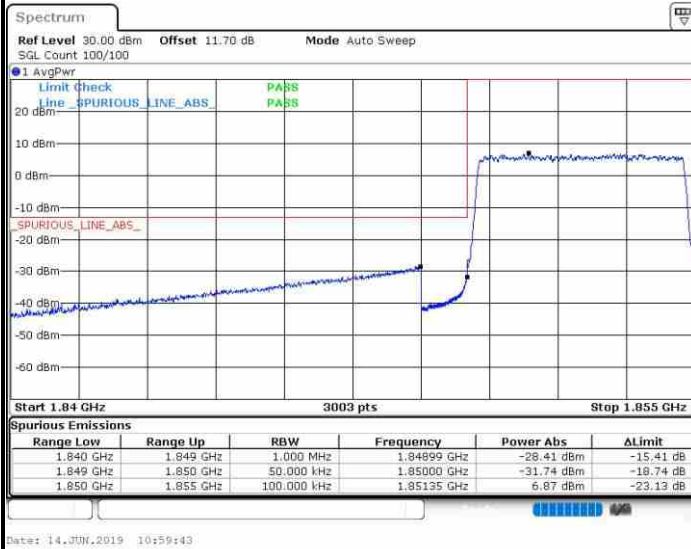
Lowest Band Edge / 1RB



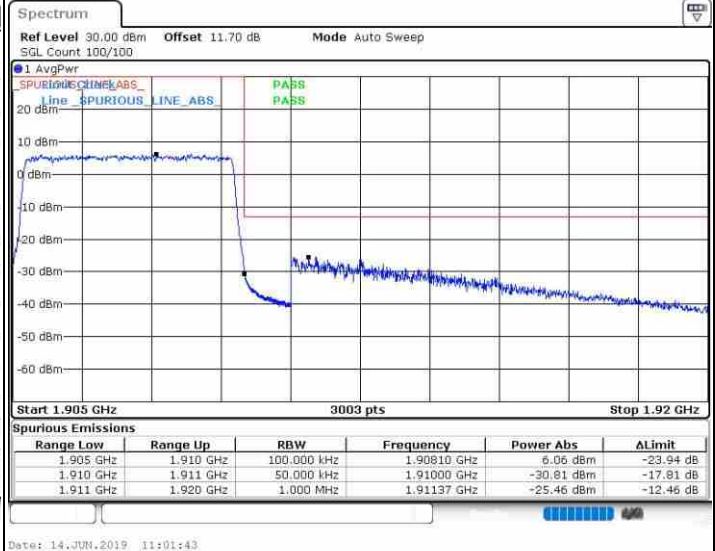
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



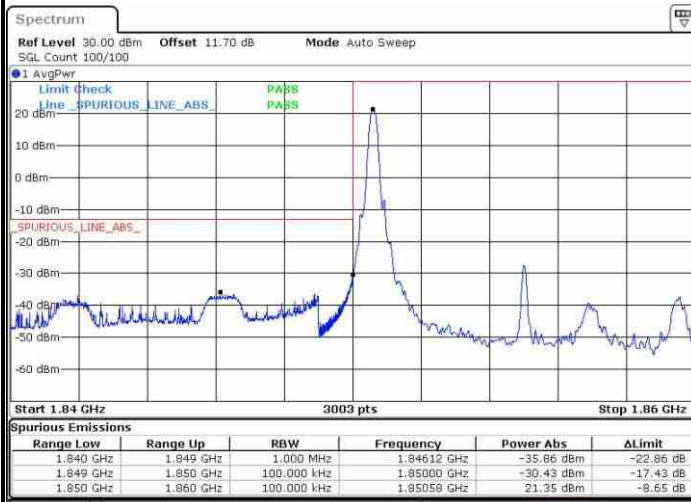
Highest Band Edge / Full RB



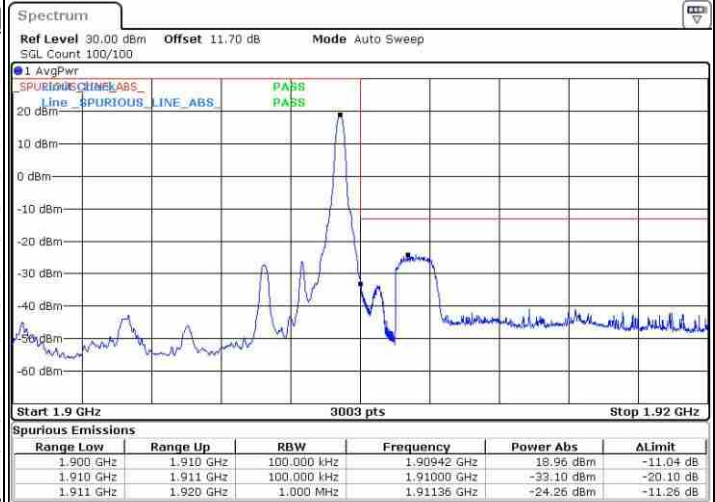


LTE Band 2 / 10MHz / QPSK

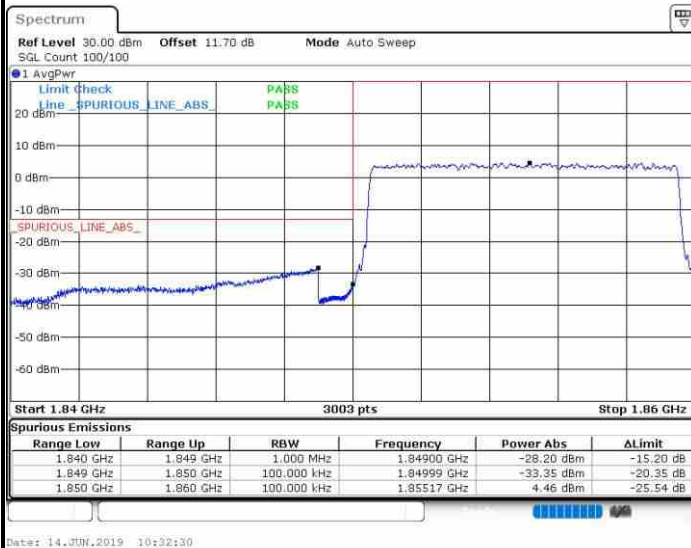
Lowest Band Edge / 1 RB



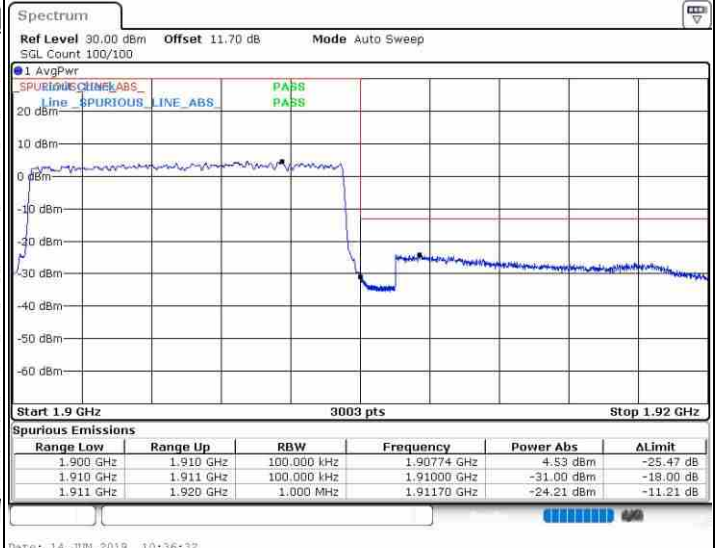
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



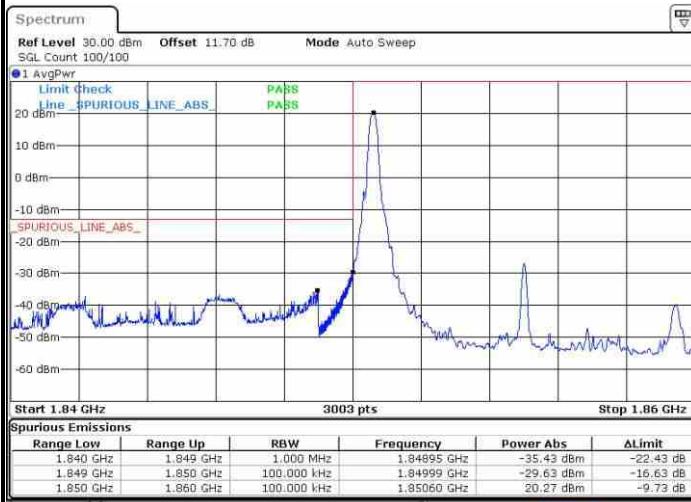
Highest Band Edge / Full RB



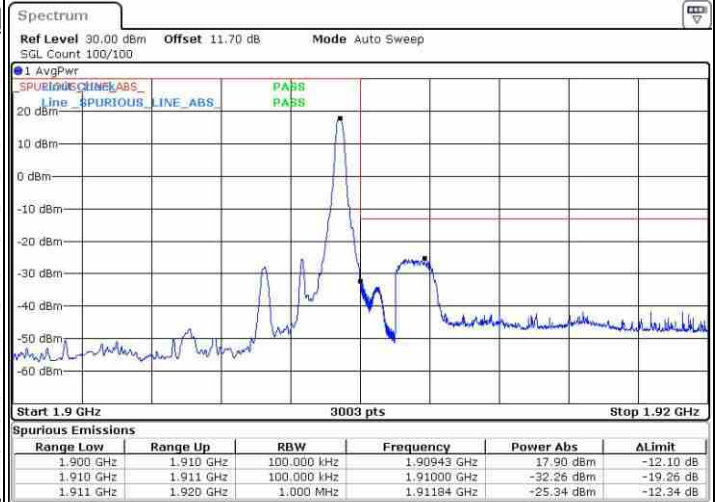


LTE Band 2 / 10MHz / 16QAM

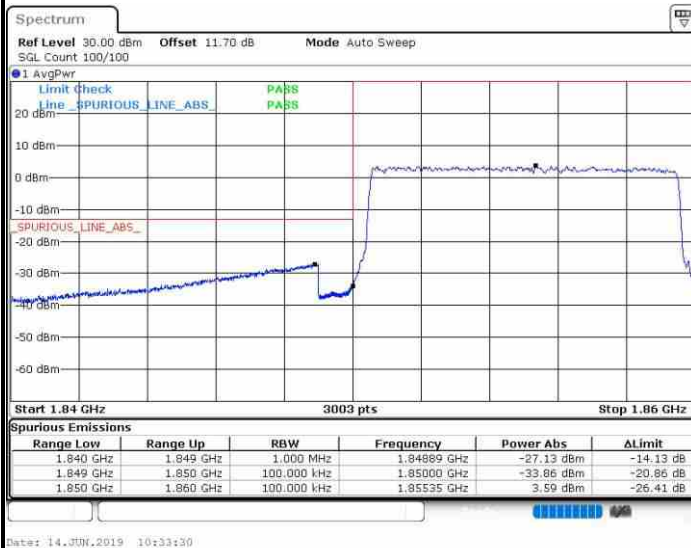
Lowest Band Edge / 1 RB



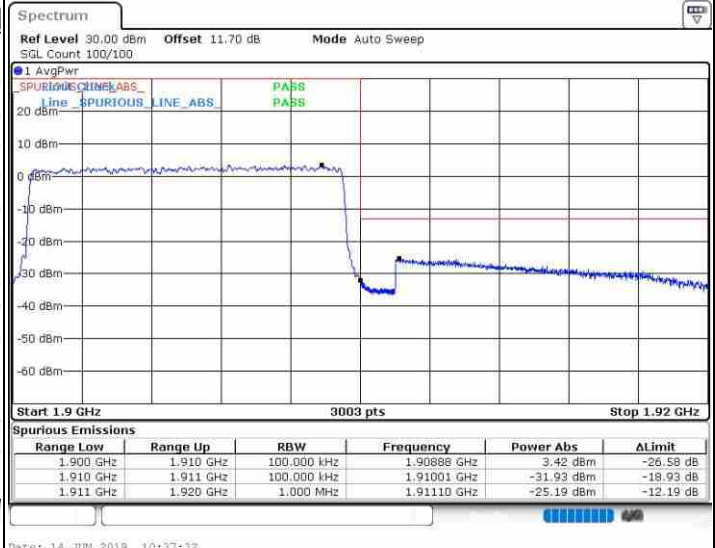
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



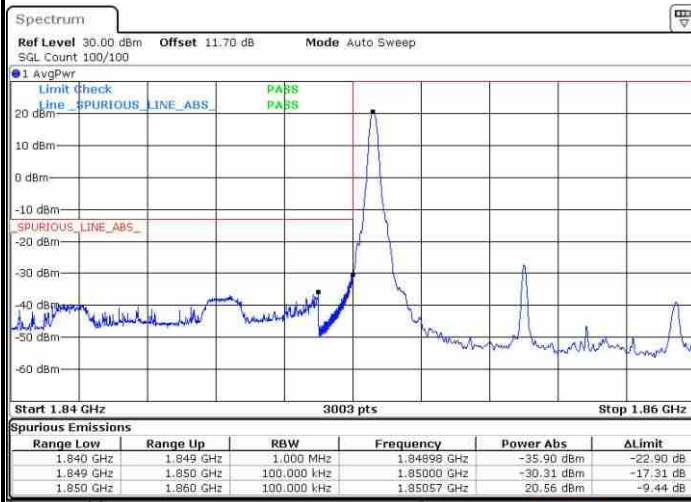
Highest Band Edge / Full RB



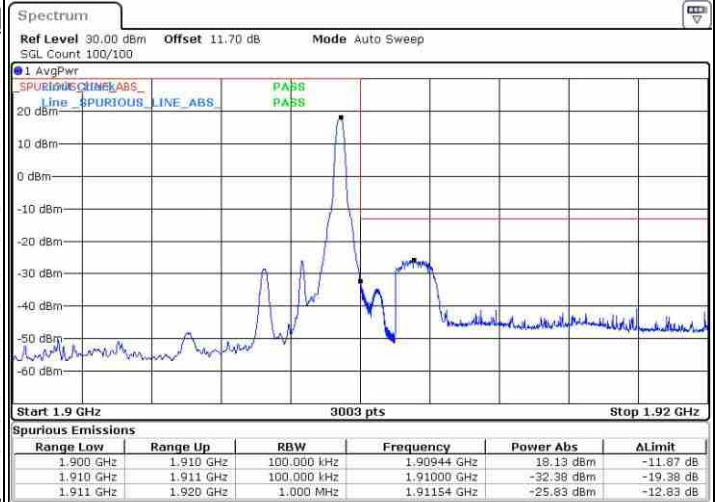


LTE Band 2 / 10MHz / 64QAM

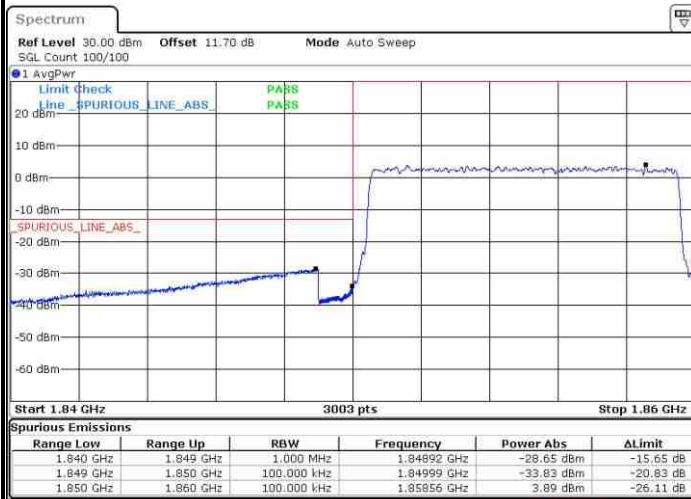
Lowest Band Edge / 1 RB



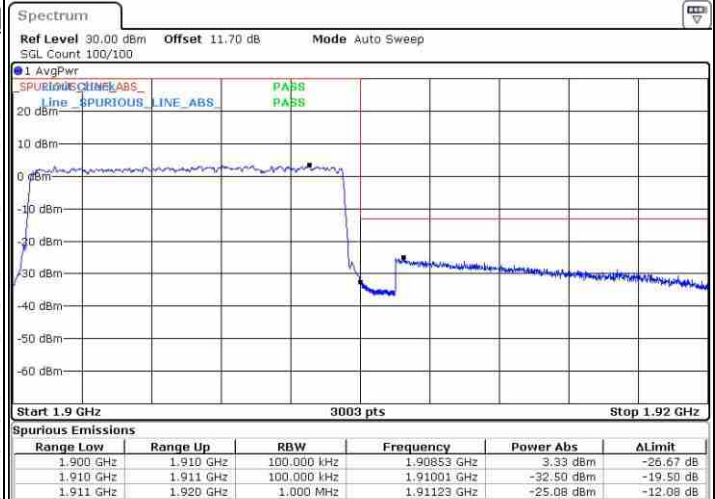
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



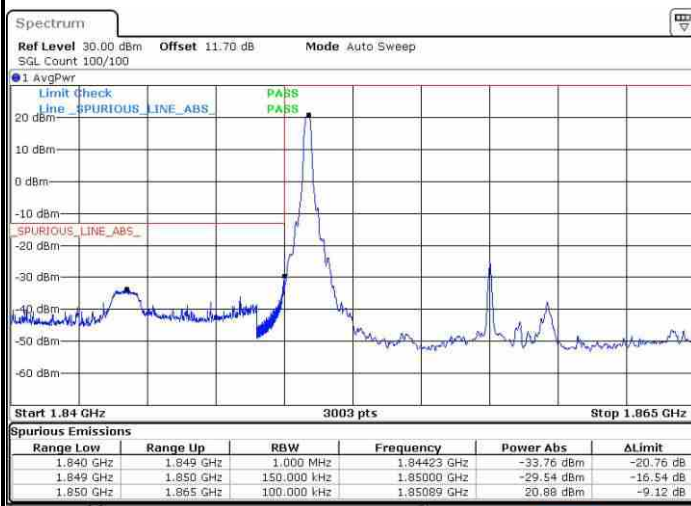
Highest Band Edge / Full RB





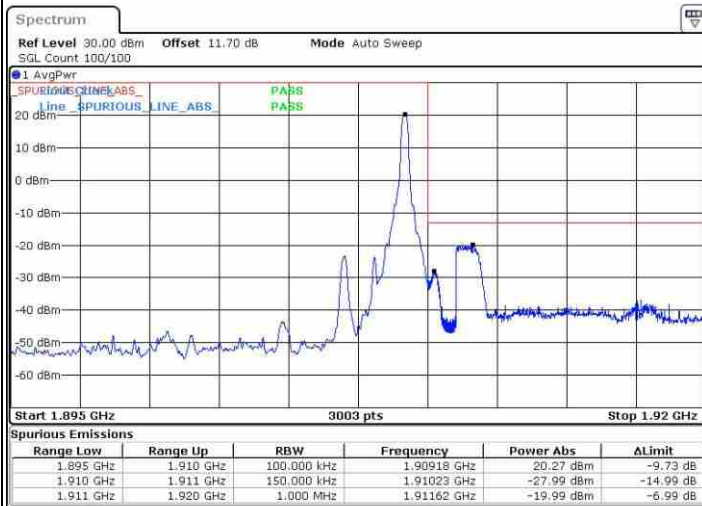
LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / 1 RB



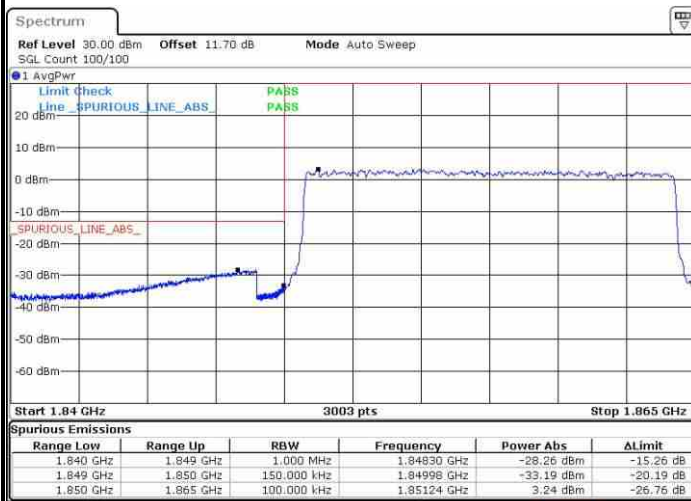
Date: 14 JUN 2019 10:38:33

Highest Band Edge / 1 RB



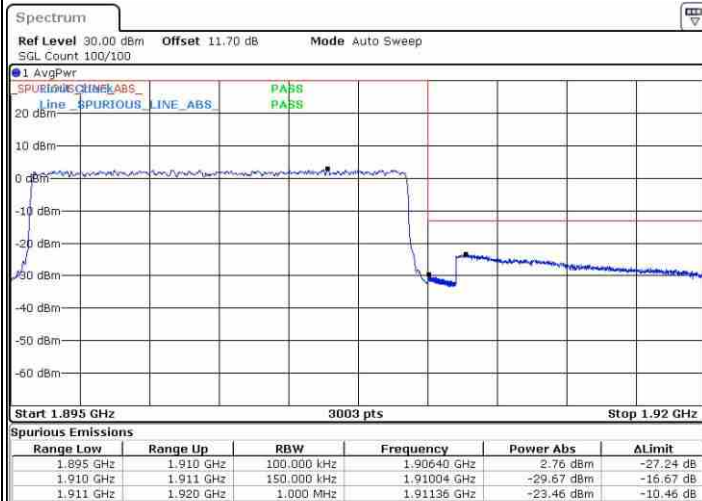
Date: 14 JUN 2019 10:42:35

Lowest Band Edge / Full RB



Date: 14 JUN 2019 10:40:34

Highest Band Edge / Full RB

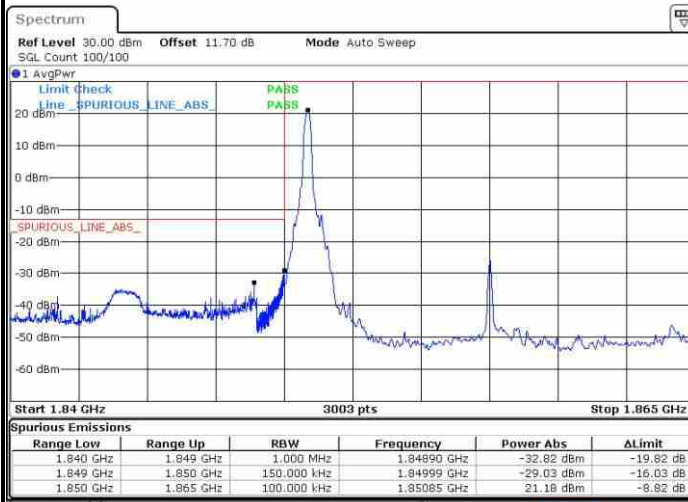


Date: 14 JUN 2019 10:44:36



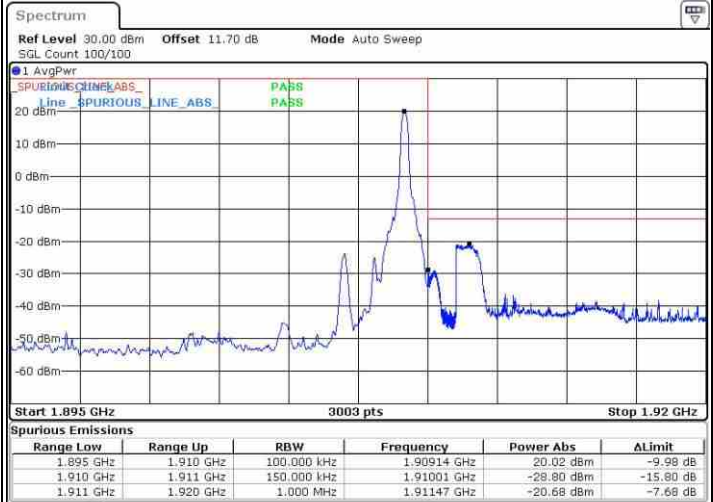
LTE Band 2 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



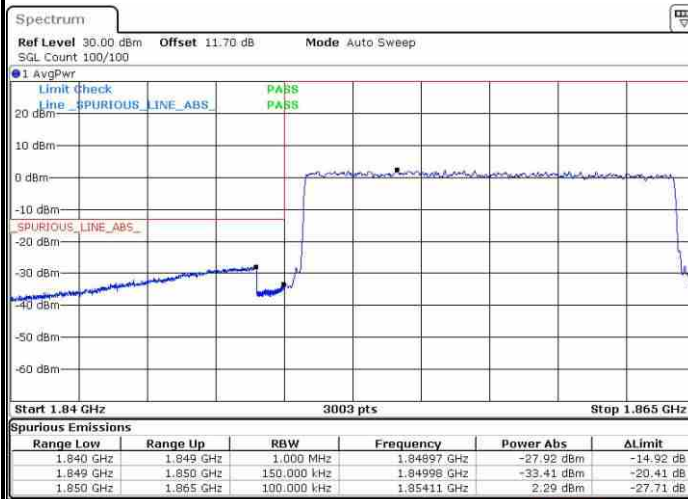
Date: 14 JUN 2019 10:39:33

Highest Band Edge / 1 RB



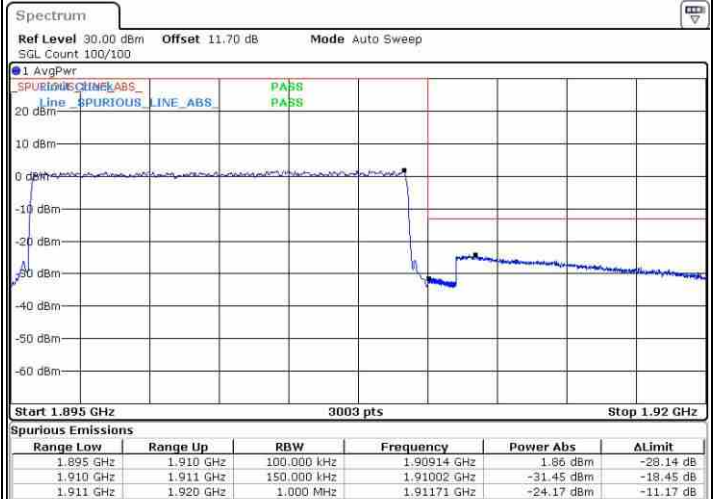
Date: 14 JUN 2019 10:43:35

Lowest Band Edge / Full RB



Date: 14 JUN 2019 10:41:34

Highest Band Edge / Full RB

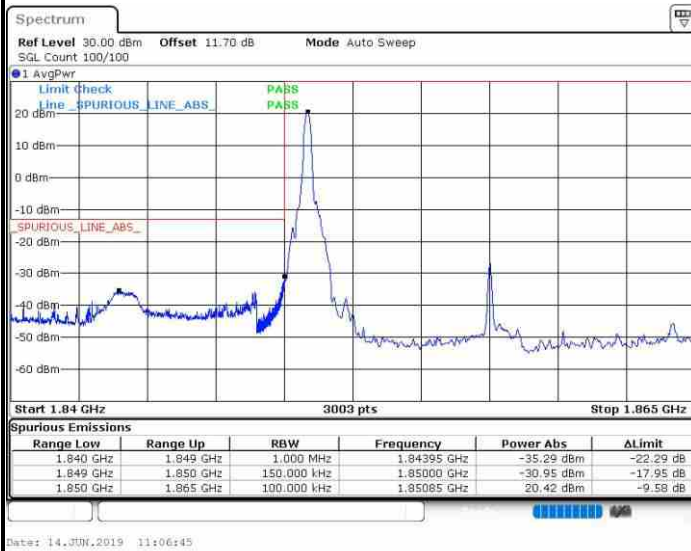


Date: 14 JUN 2019 10:45:36

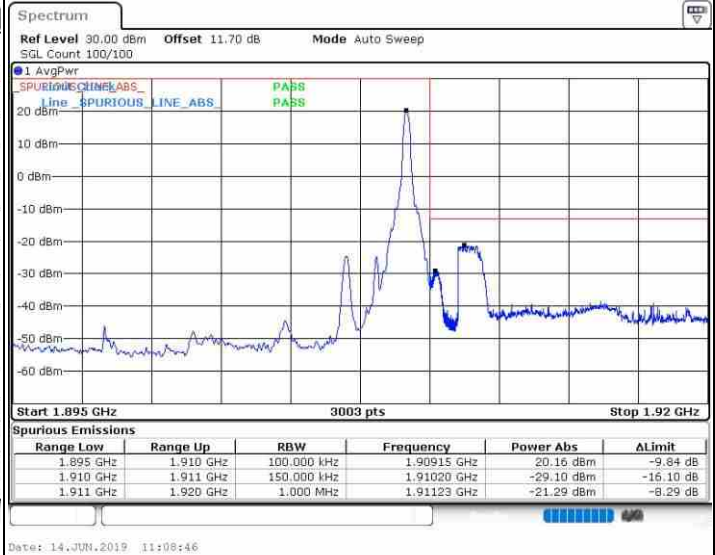


LTE Band 2 / 15MHz / 64QAM

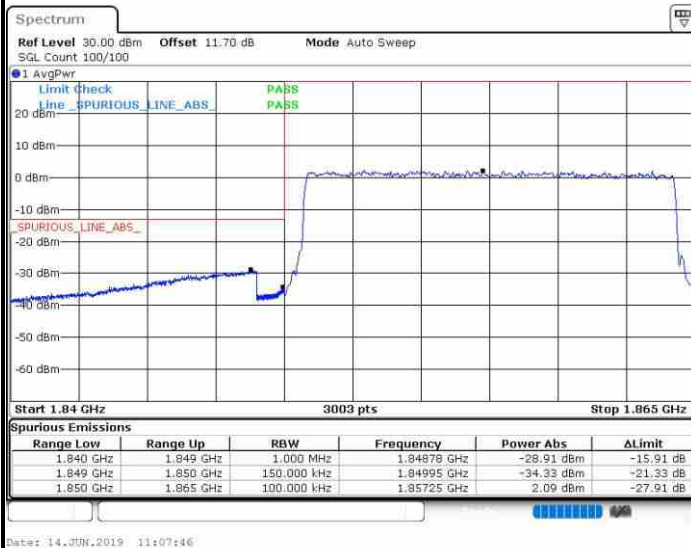
Lowest Band Edge / 1 RB



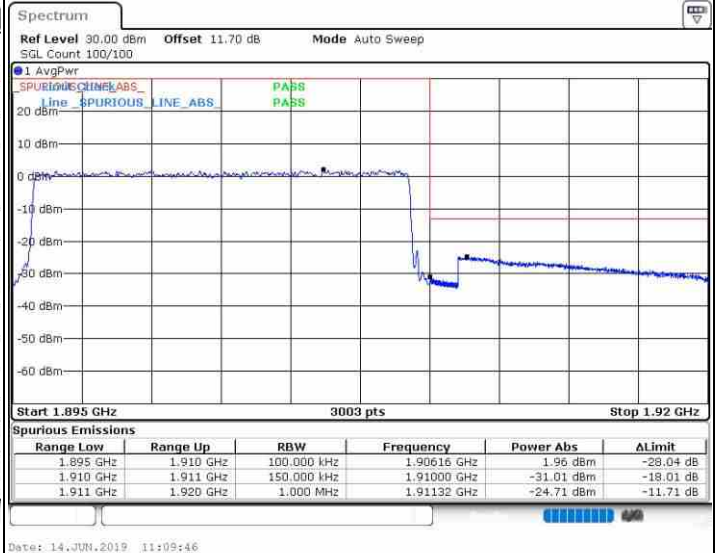
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



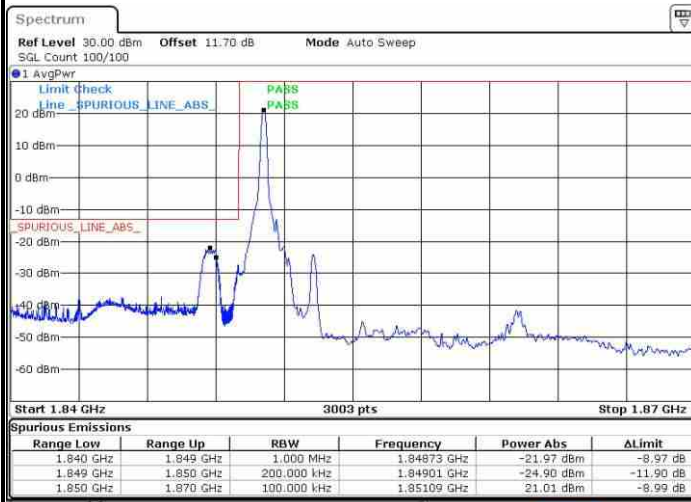
Highest Band Edge / Full RB





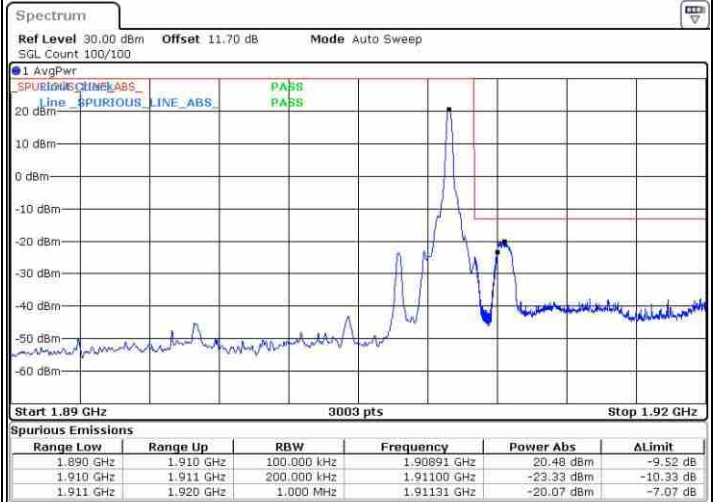
LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / 1 RB



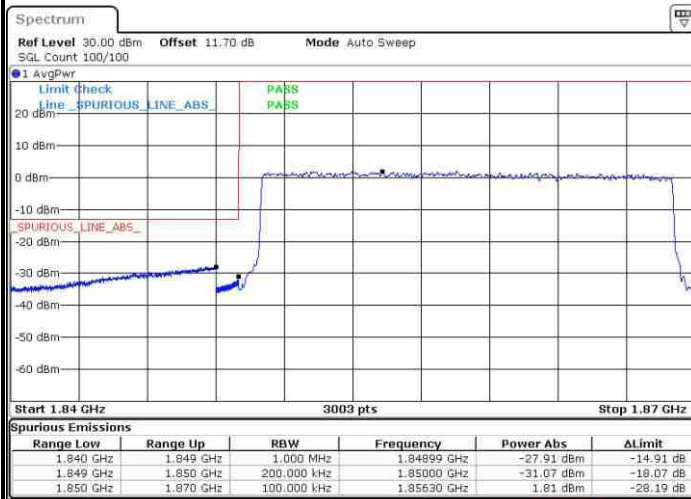
Date: 14 JUN 2019 10:46:37

Highest Band Edge / 1 RB



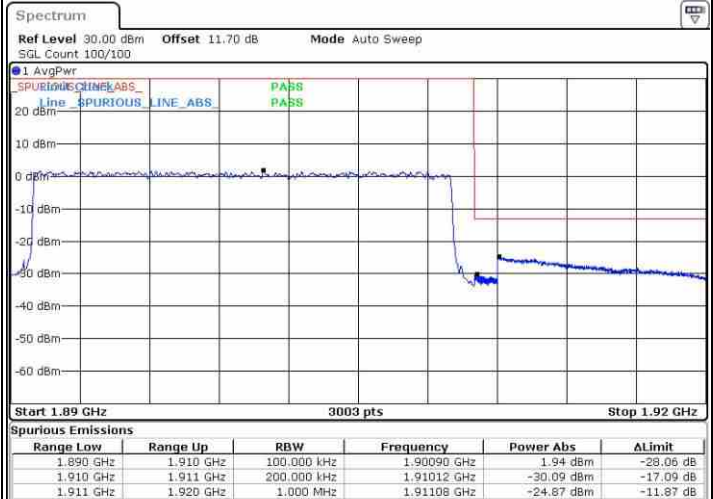
Date: 14 JUN 2019 10:50:38

Lowest Band Edge / Full RB



Date: 14 JUN 2019 10:48:38

Highest Band Edge / Full RB

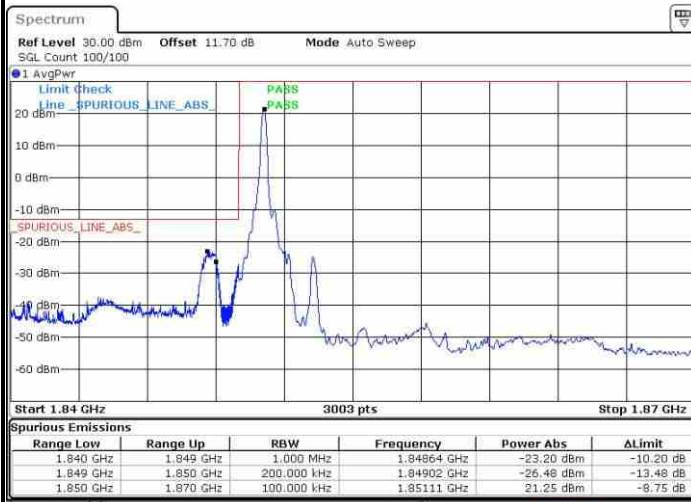


Date: 14 JUN 2019 10:52:39

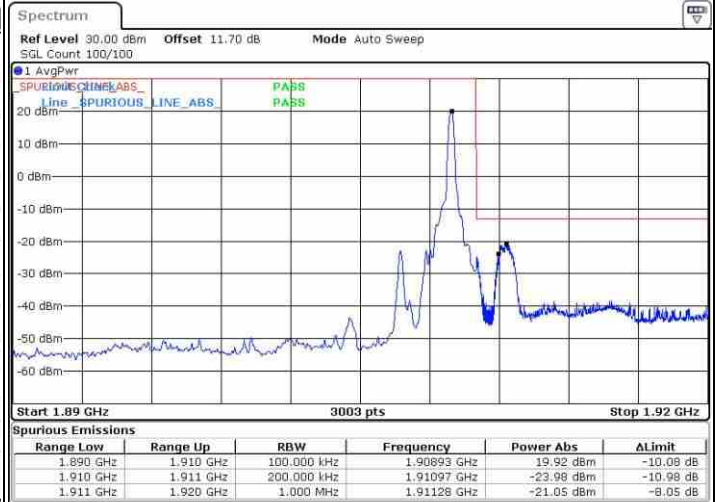


LTE Band 2 / 20MHz / 16QAM

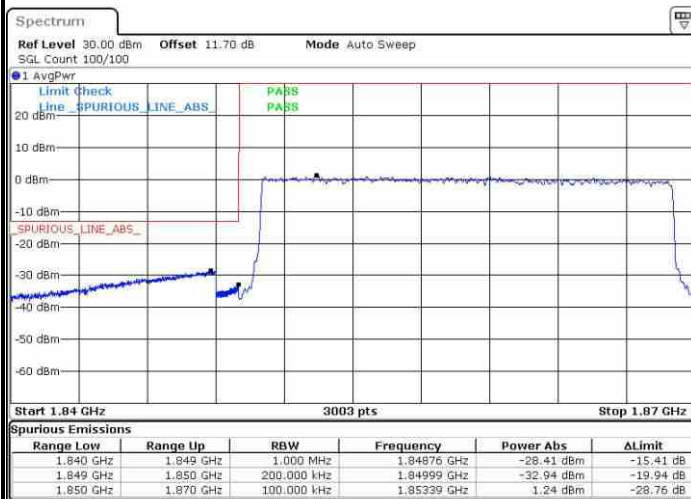
Lowest Band Edge / 1 RB



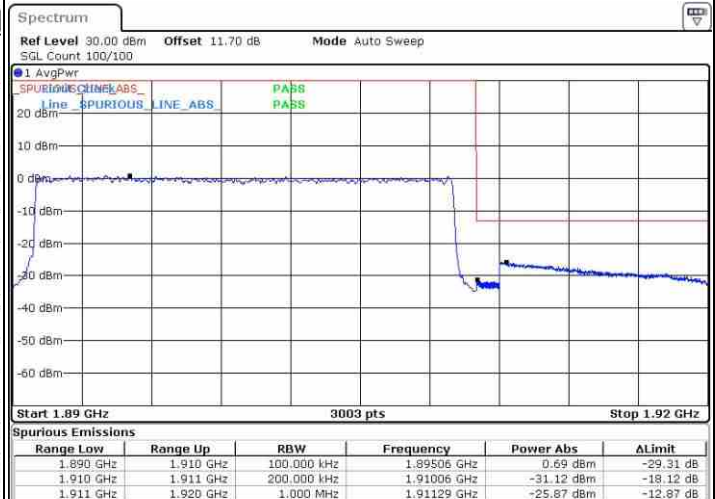
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



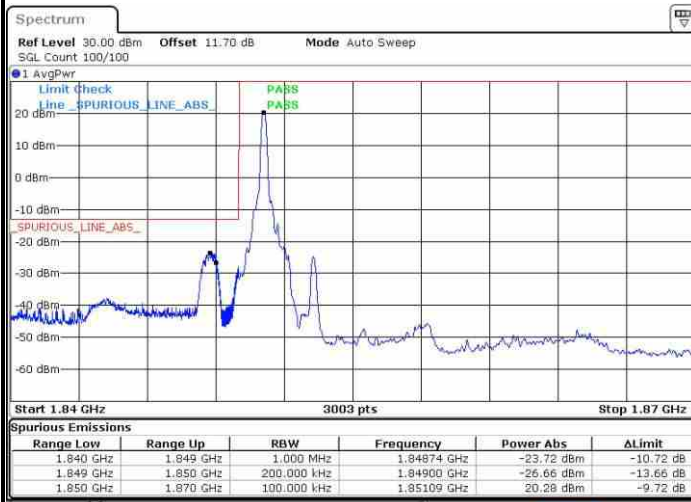
Highest Band Edge / Full RB



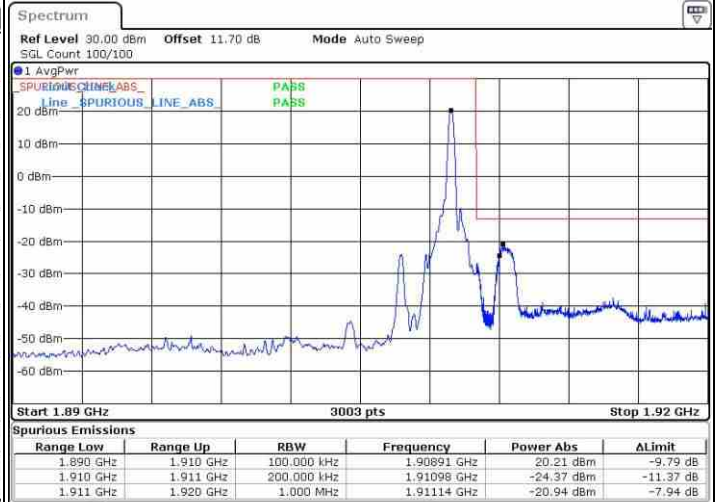


LTE Band 2 / 20MHz / 64QAM

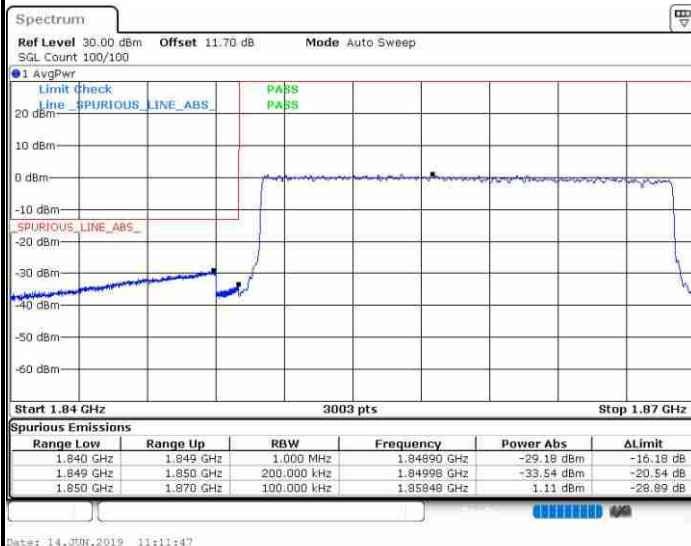
Lowest Band Edge / 1 RB



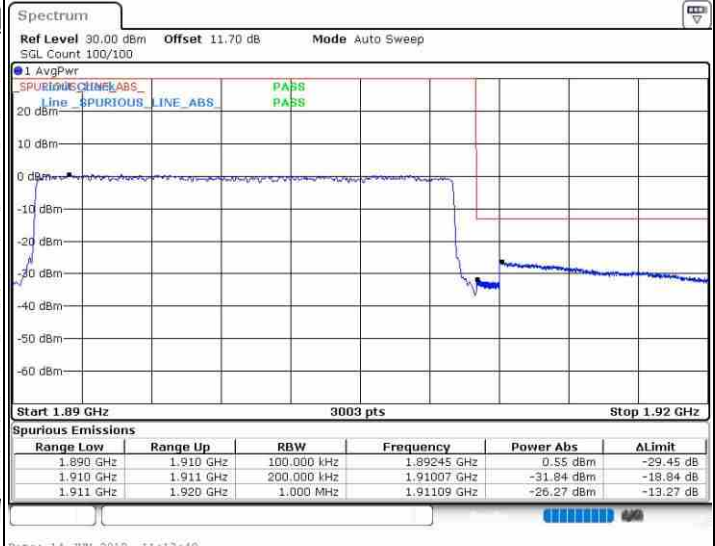
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



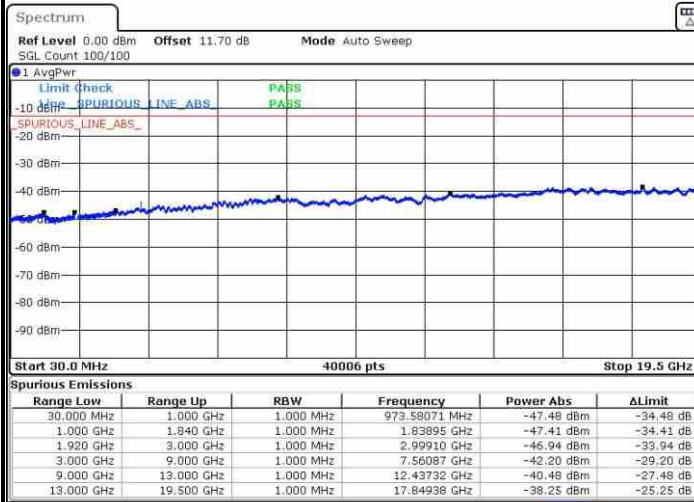


Conducted Spurious Emission



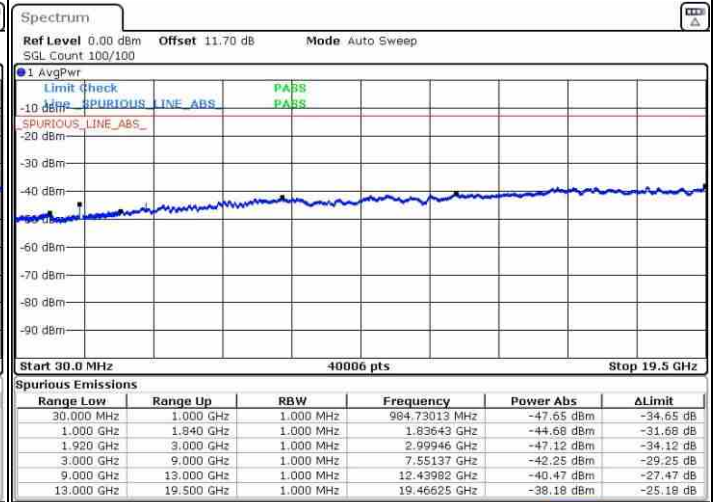
LTE Band 2 / 1.4MHz

Lowest Channel / QPSK



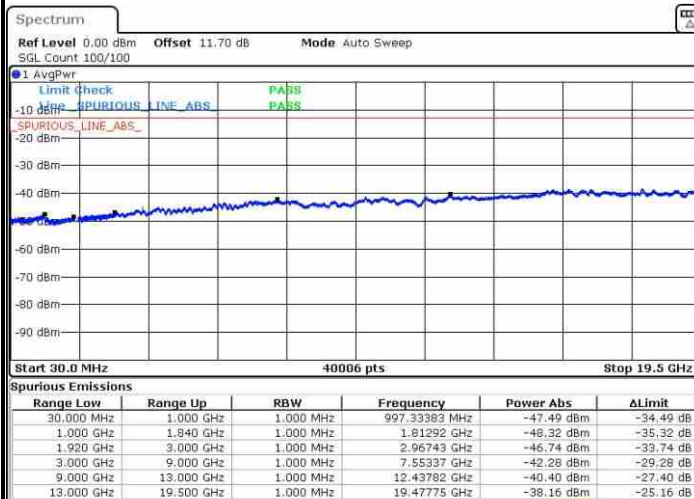
Date: 23 MAY 2019 16:11:54

Lowest Channel / 16QAM



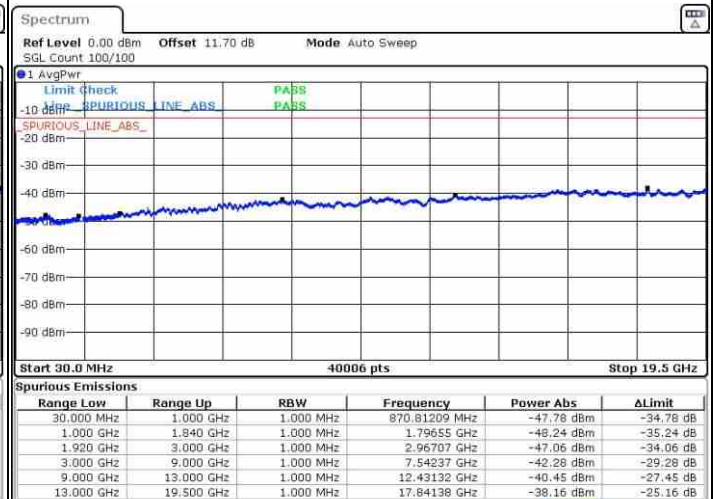
Date: 23 MAY 2019 16:12:36

Middle Channel / QPSK



Date: 23 MAY 2019 16:14:04

Middle Channel / 16QAM

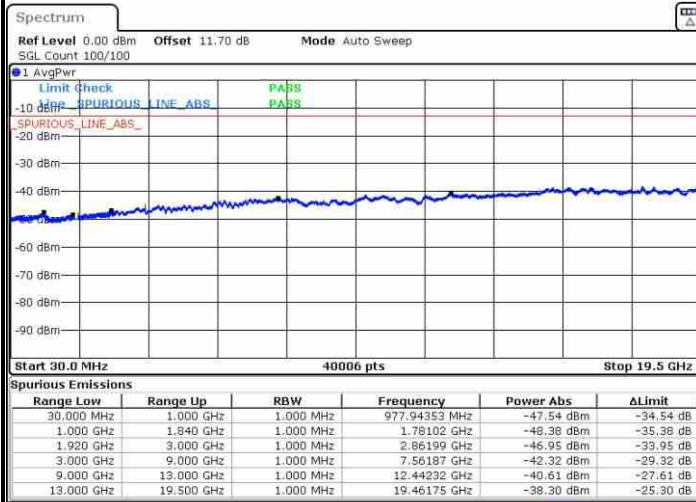


Date: 23 MAY 2019 16:14:45



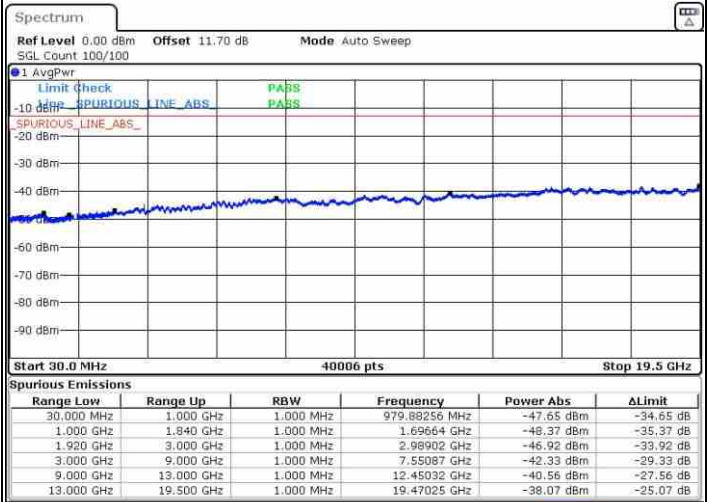
LTE Band 2 / 1.4MHz

Highest Channel / QPSK



Date: 23 MAY 2019 16:20:33

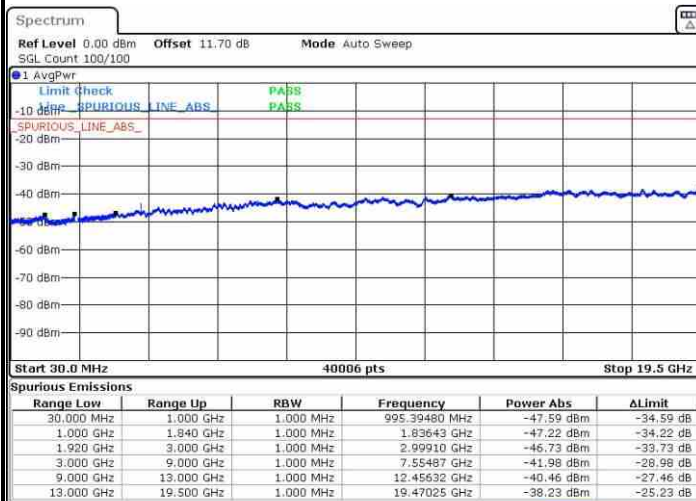
Highest Channel / 16QAM



Date: 23 MAY 2019 16:21:15

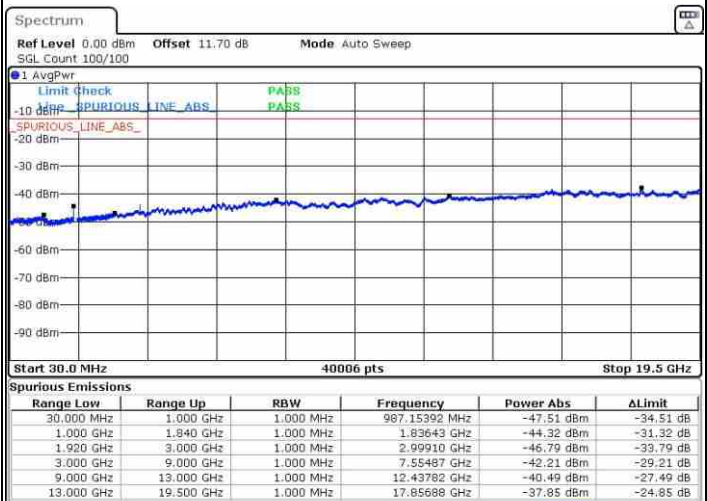
LTE Band 2 / 3MHz

Lowest Channel / QPSK



Date: 23 MAY 2019 13:50:29

Lowest Channel / 16QAM

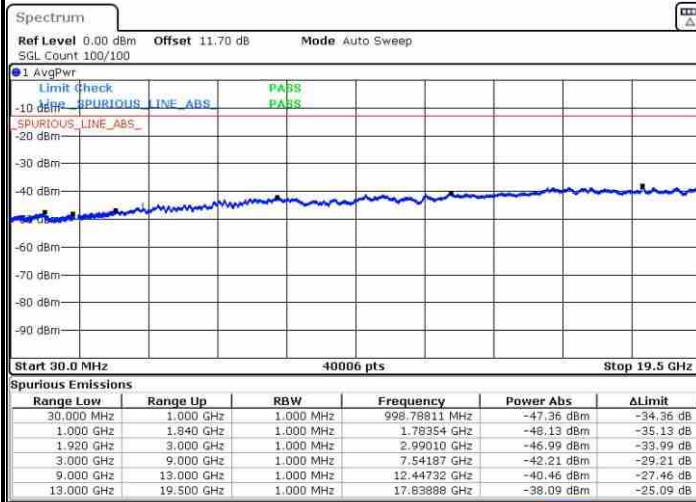


Date: 23 MAY 2019 13:51:11



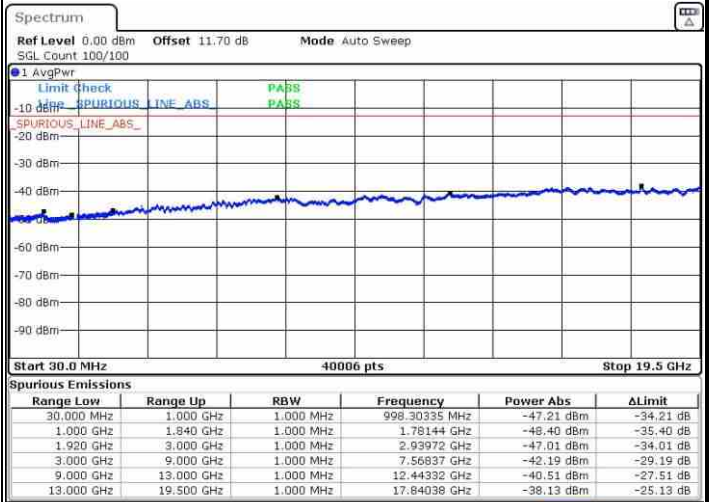
LTE Band 2 / 3MHz

Middle Channel / QPSK



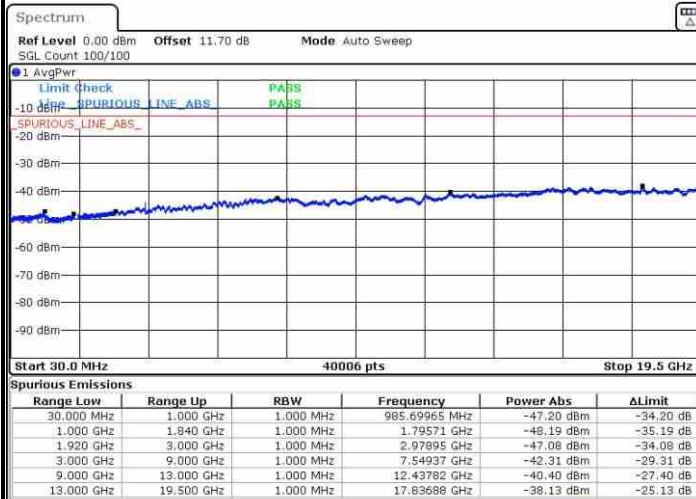
Date: 23 MAY 2019 13:52:39

Middle Channel / 16QAM



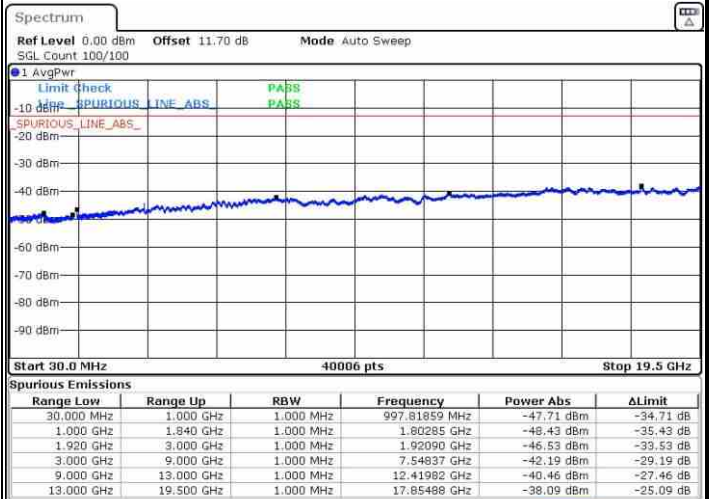
Date: 23 MAY 2019 13:53:20

Highest Channel / QPSK



Date: 23 MAY 2019 13:57:39

Highest Channel / 16QAM

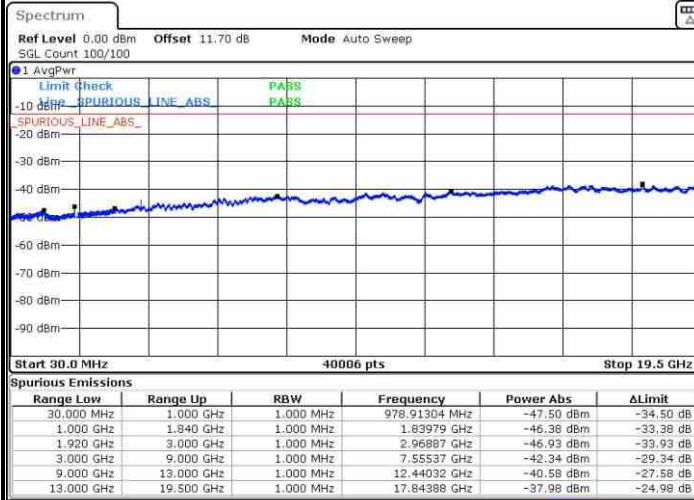


Date: 23 MAY 2019 13:58:20



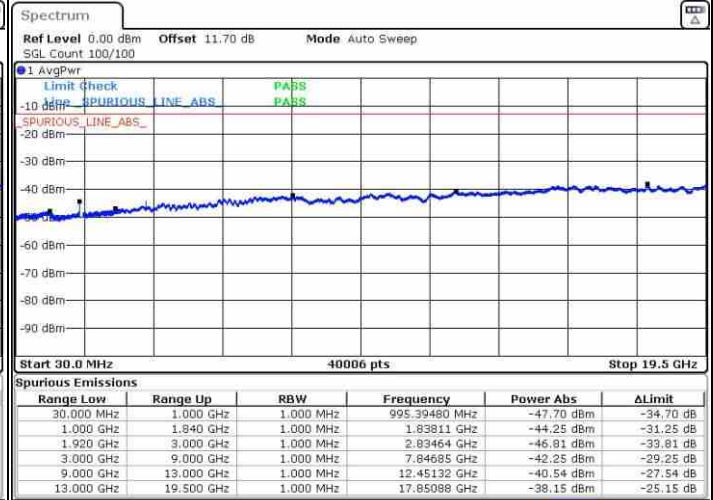
LTE Band 2 / 5MHz

Lowest Channel / QPSK



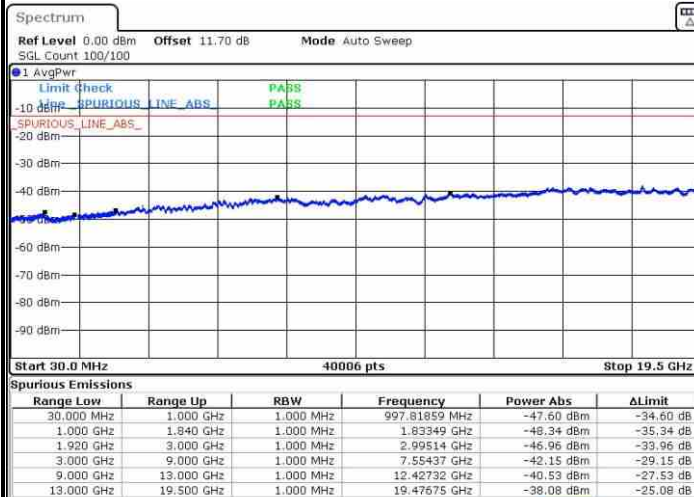
Date: 23 MAY 2019 14:02:36

Lowest Channel / 16QAM



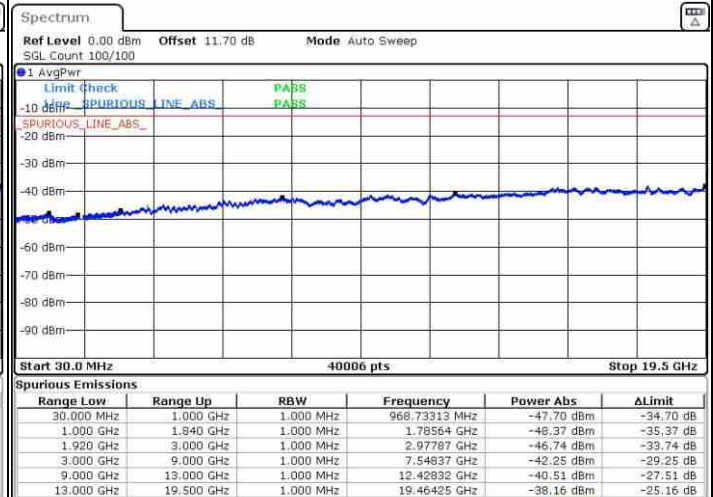
Date: 23 MAY 2019 14:03:17

Middle Channel / QPSK



Date: 23 MAY 2019 14:04:46

Middle Channel / 16QAM

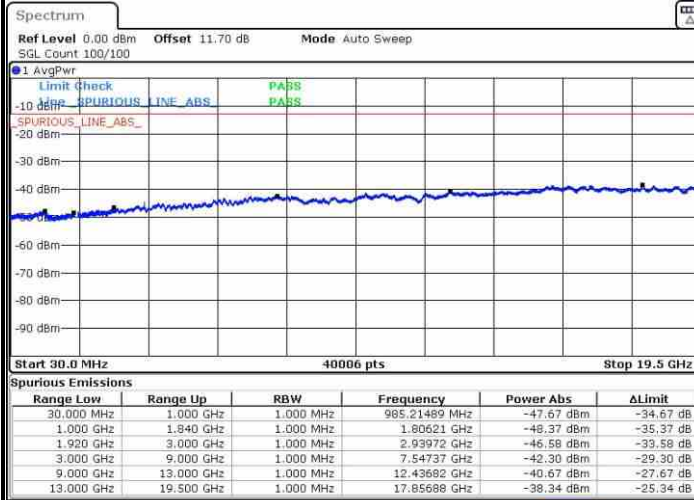


Date: 23 MAY 2019 14:05:27



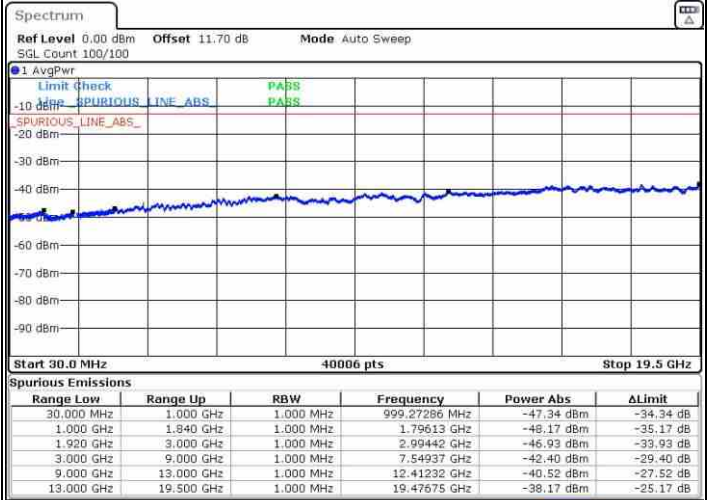
LTE Band 2 / 5MHz

Highest Channel / QPSK



Date: 23 MAY 2019 14:09:42

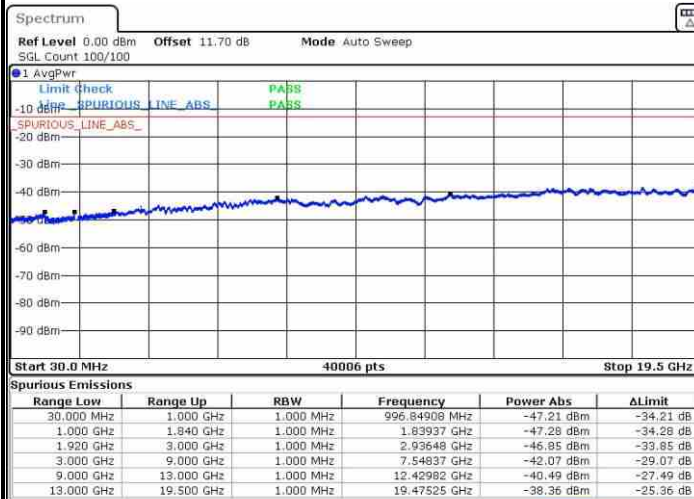
Highest Channel / 16QAM



Date: 23 MAY 2019 14:10:26

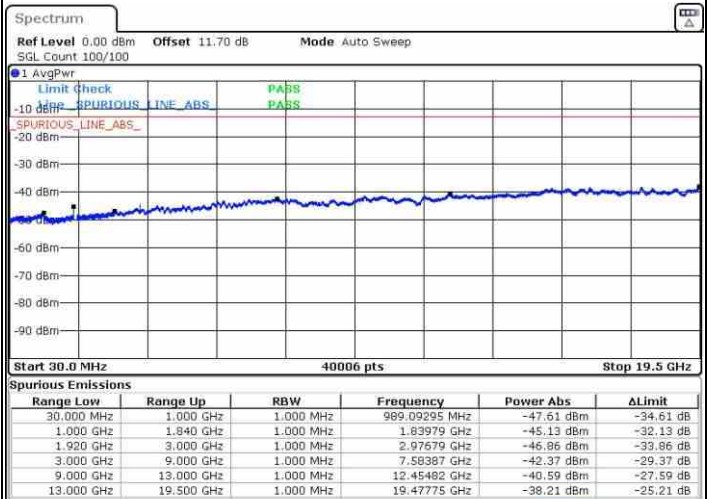
LTE Band 2 / 10MHz

Lowest Channel / QPSK



Date: 23 MAY 2019 14:14:52

Lowest Channel / 16QAM

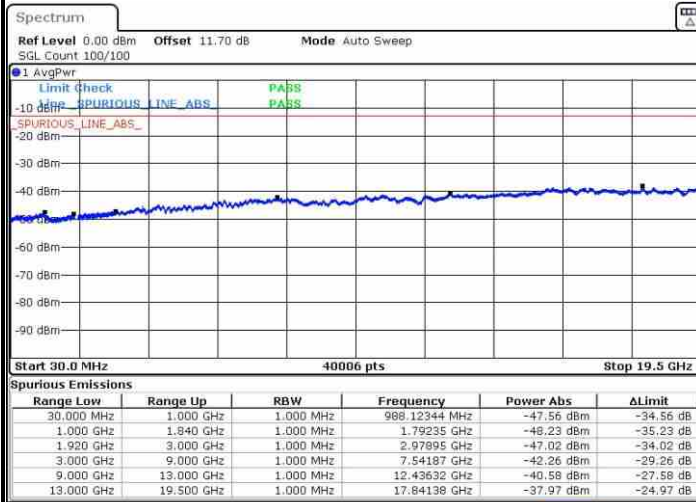


Date: 23 MAY 2019 14:15:34



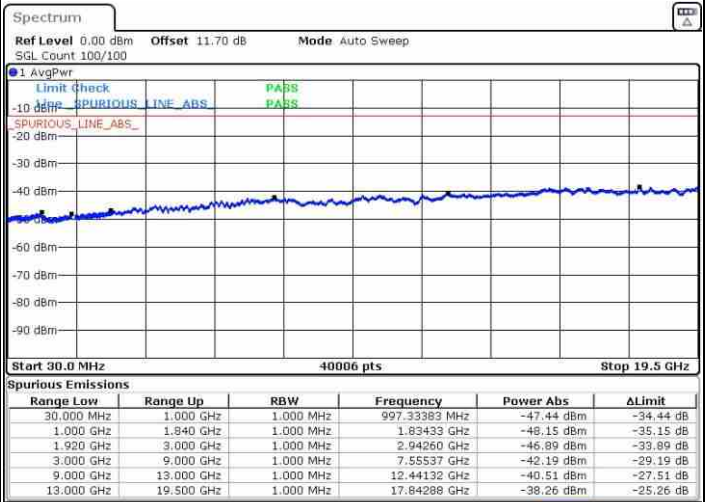
LTE Band 2 / 10MHz

Middle Channel / QPSK



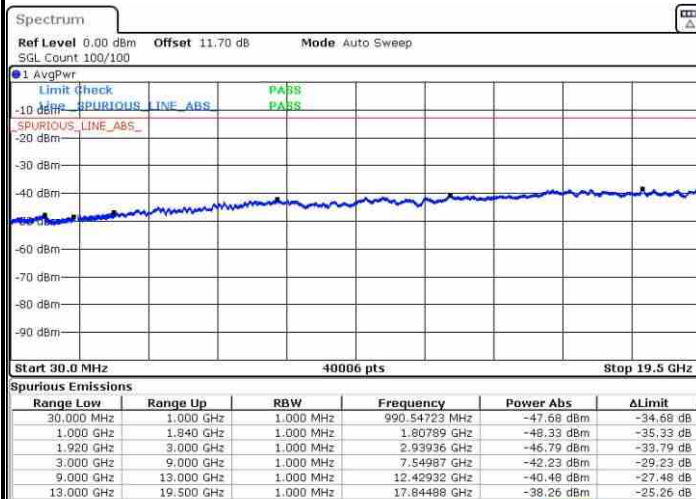
Date: 23 MAY 2019 14:17:05

Middle Channel / 16QAM



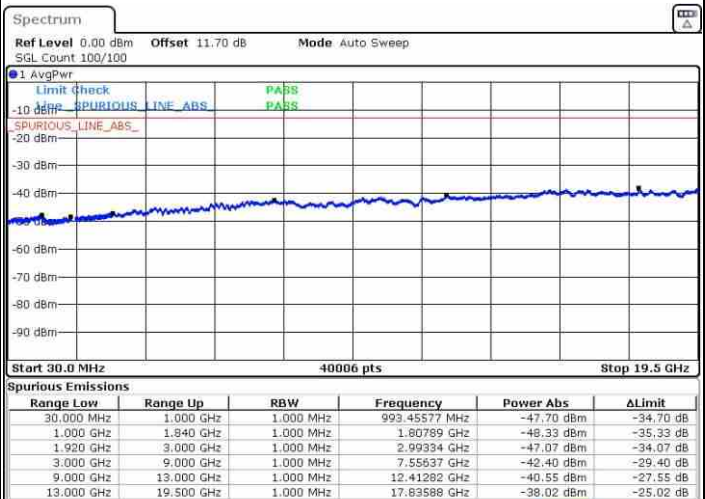
Date: 23 MAY 2019 14:17:47

Highest Channel / QPSK



Date: 23 MAY 2019 14:22:07

Highest Channel / 16QAM

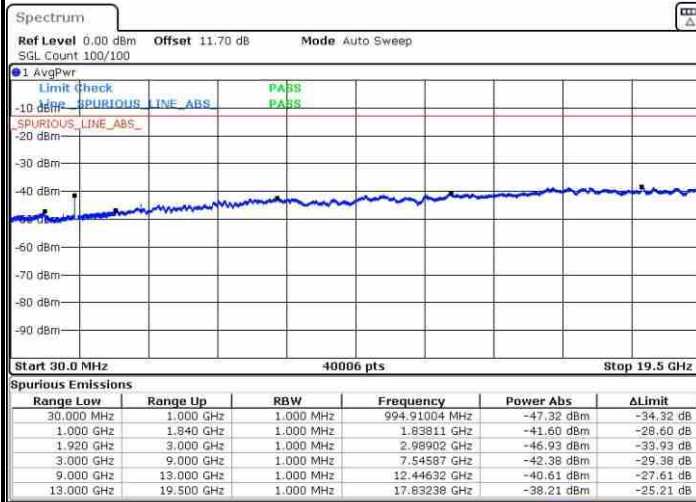


Date: 23 MAY 2019 14:22:48



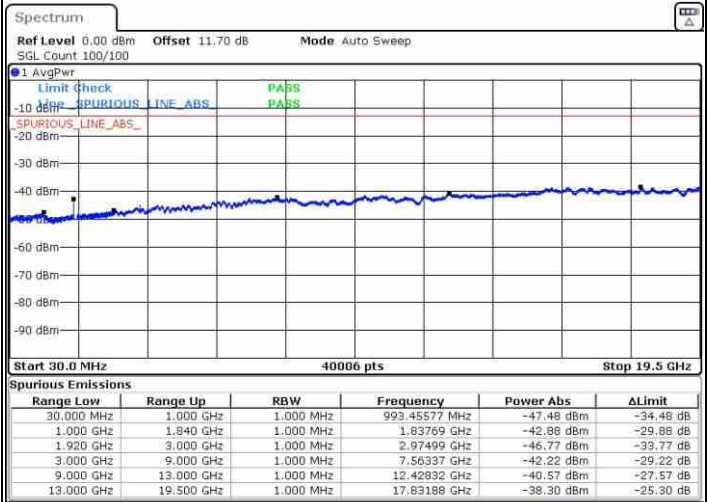
LTE Band 2 / 15MHz

Lowest Channel / QPSK



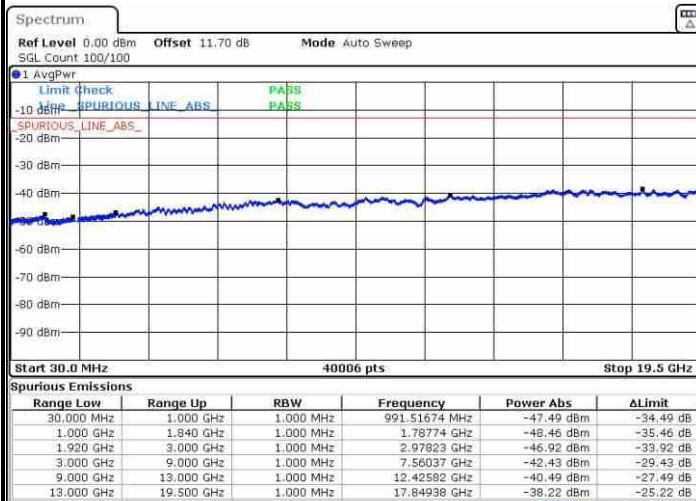
Date: 23 MAY 2019 14:27:04

Lowest Channel / 16QAM



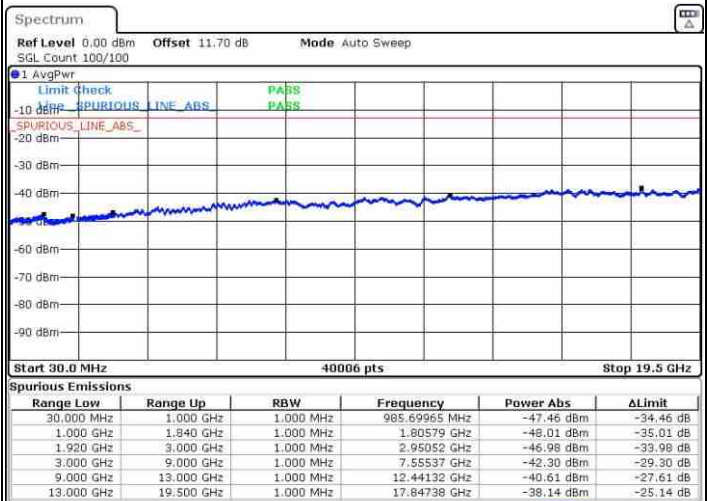
Date: 23 MAY 2019 14:27:45

Middle Channel / QPSK



Date: 23 MAY 2019 14:28:19

Middle Channel / 16QAM

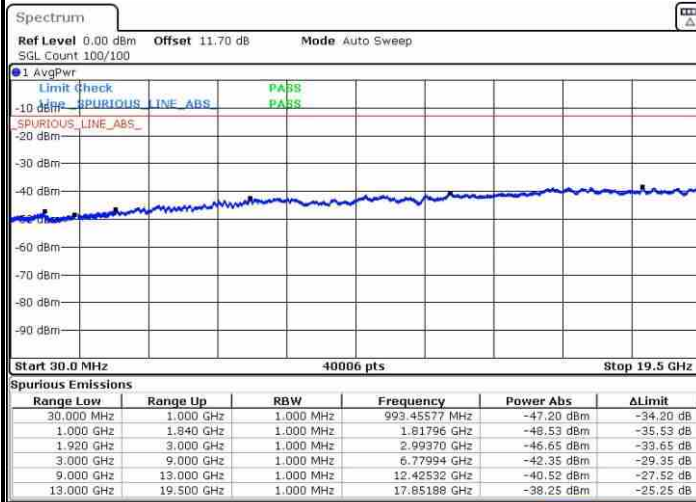


Date: 23 MAY 2019 14:30:03



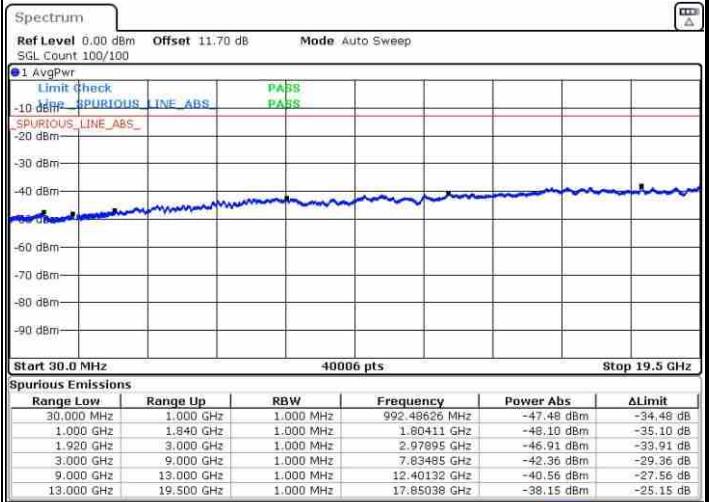
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 23 MAY 2019 14:34:26

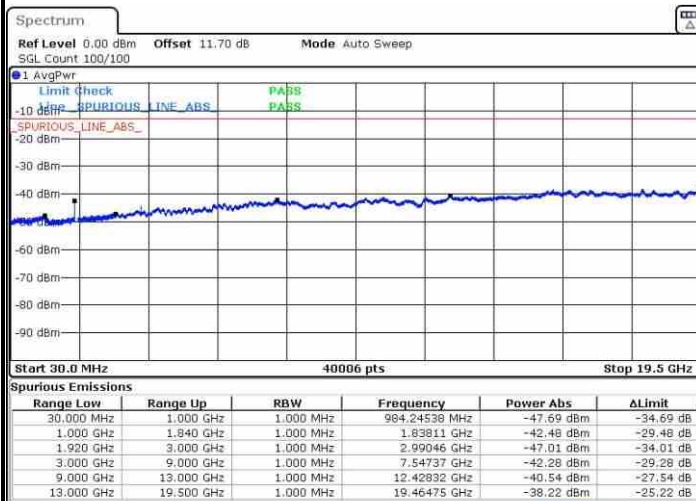
Highest Channel / 16QAM



Date: 23 MAY 2019 14:35:07

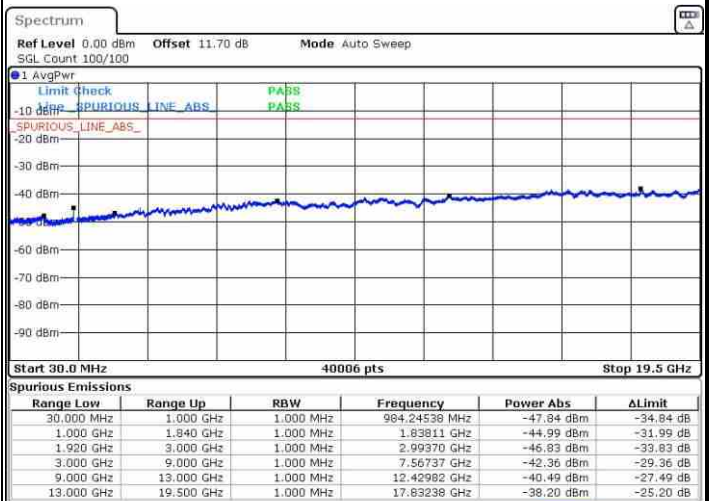
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 23 MAY 2019 14:39:23

Lowest Channel / 16QAM

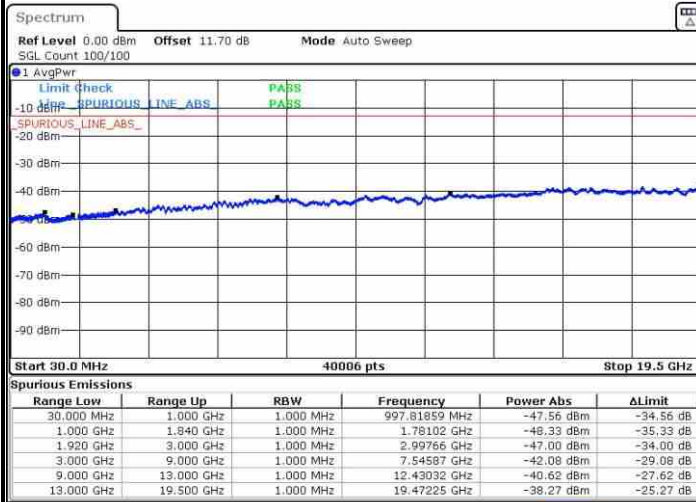


Date: 23 MAY 2019 14:40:05



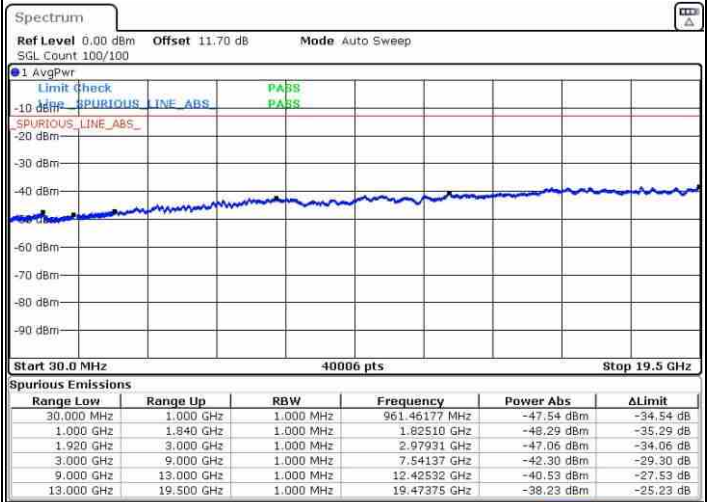
LTE Band 2 / 20MHz

Middle Channel / QPSK



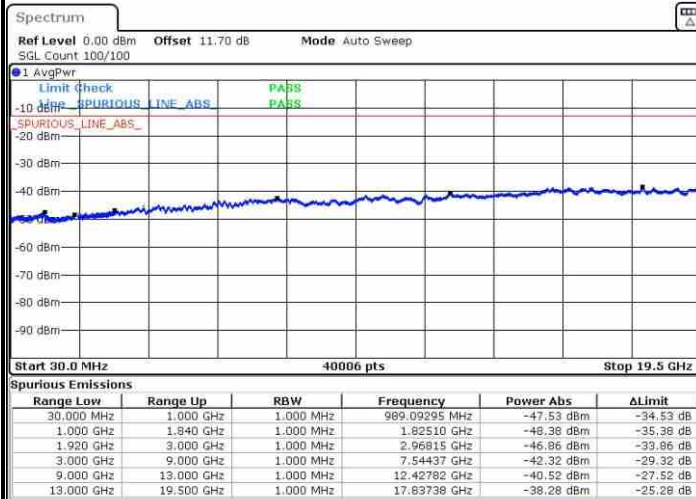
Date: 23 MAY 2019 14:41:33

Middle Channel / 16QAM



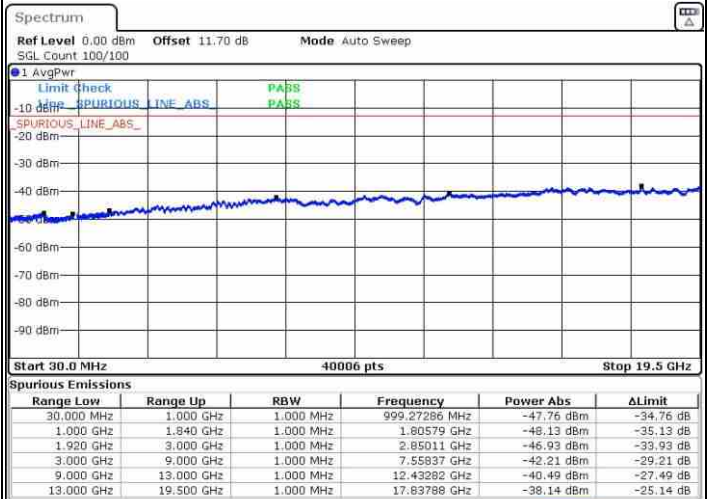
Date: 23 MAY 2019 14:42:16

Highest Channel / QPSK



Date: 23 MAY 2019 14:46:43

Highest Channel / 16QAM

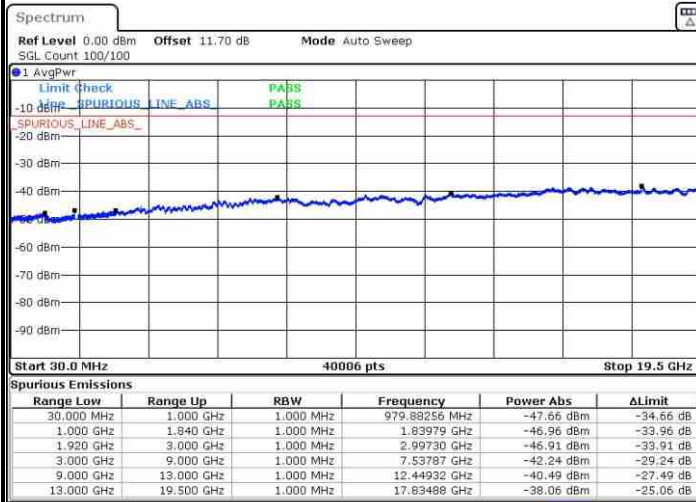


Date: 23 MAY 2019 14:47:27



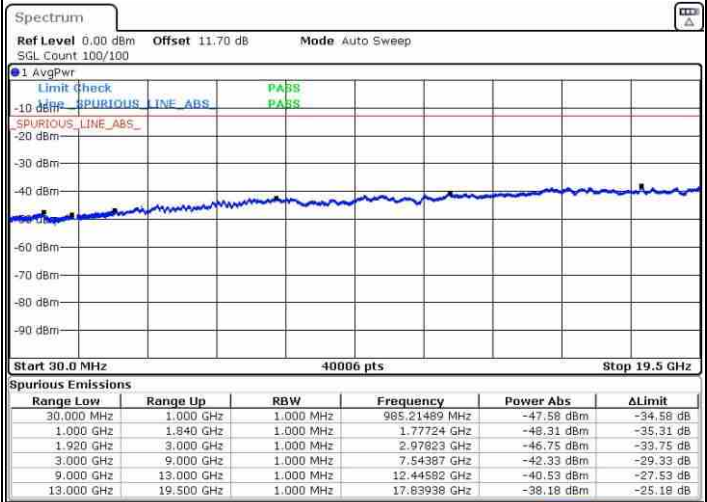
LTE Band 2 / 1.4MHz

Lowest Channel / 64QAM



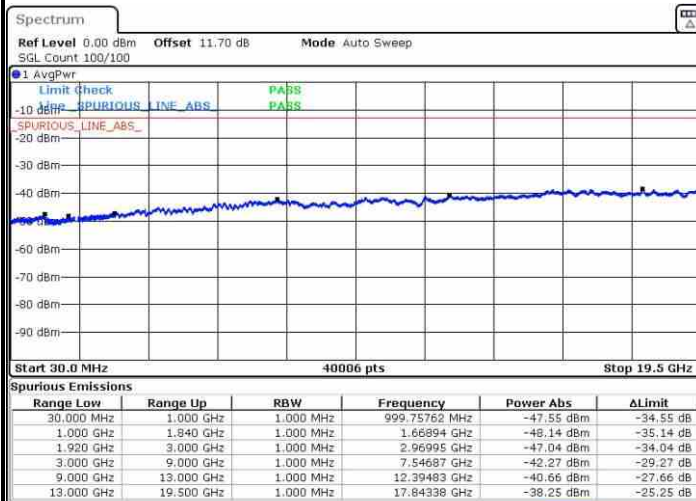
Date: 23 MAY 2019 16:01:46

Middle Channel / 64QAM



Date: 23 MAY 2019 16:02:51

Highest Channel / 64QAM

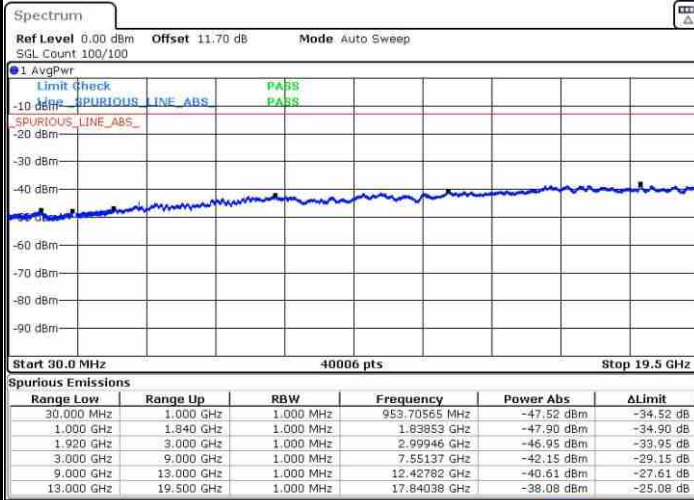


Date: 23 MAY 2019 16:08:05



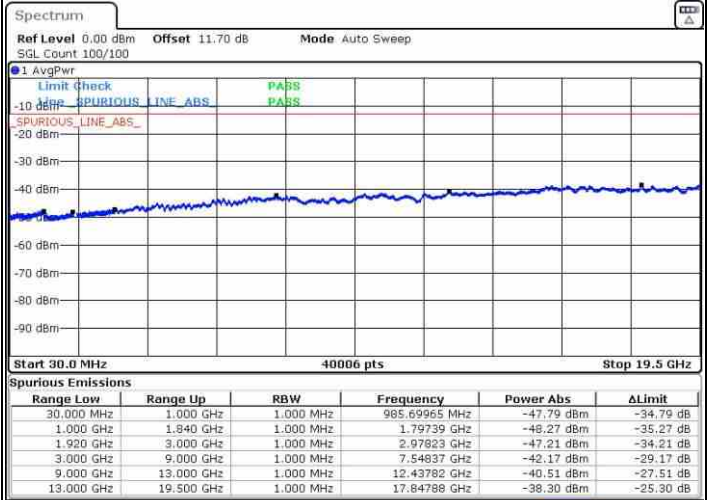
LTE Band 2 / 3MHz

Lowest Channel / 64QAM



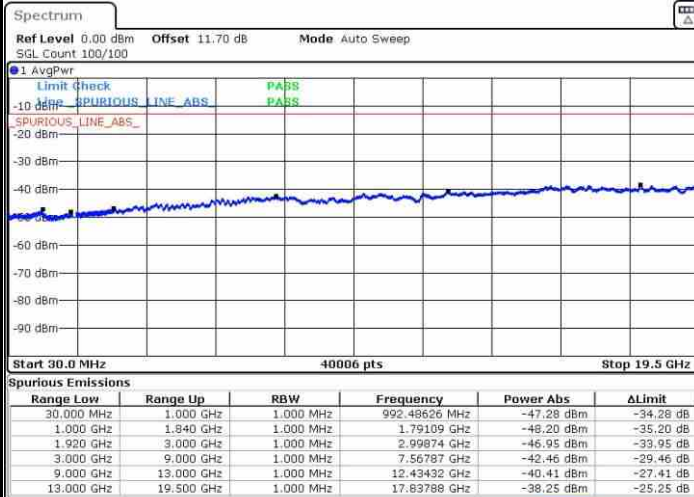
Date: 23 MAY 2019 14:50:07

Middle Channel / 64QAM



Date: 23 MAY 2019 14:51:13

Highest Channel / 64QAM

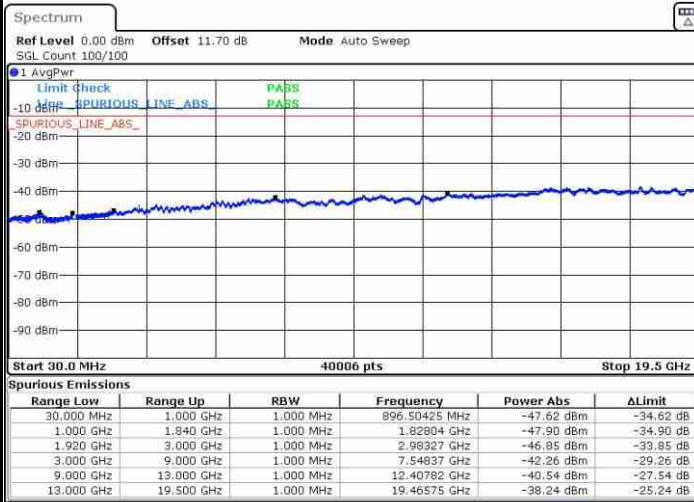


Date: 23 MAY 2019 14:53:48



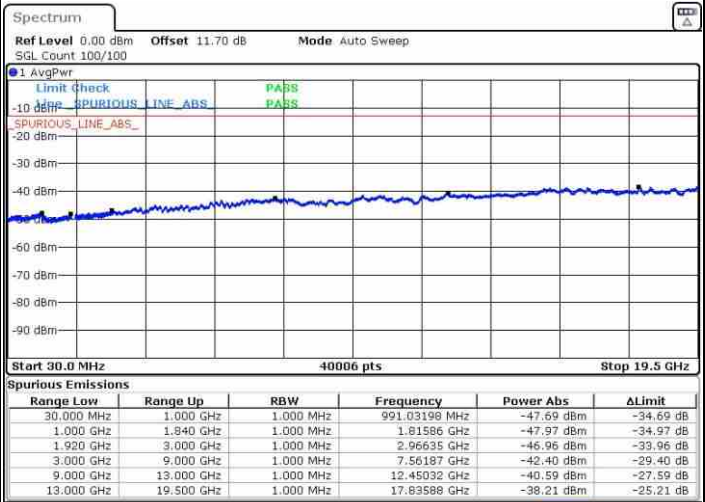
LTE Band 2 / 5MHz

Lowest Channel / 64QAM



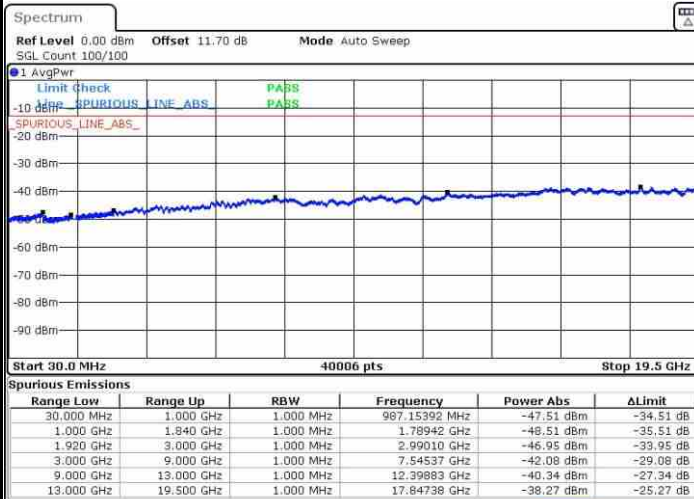
Date: 23 MAY 2019 14:56:19

Middle Channel / 64QAM



Date: 23 MAY 2019 14:57:23

Highest Channel / 64QAM

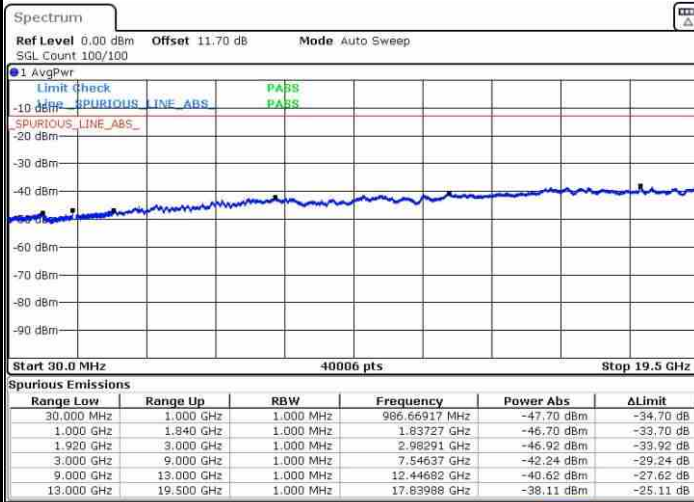


Date: 23 MAY 2019 15:00:02



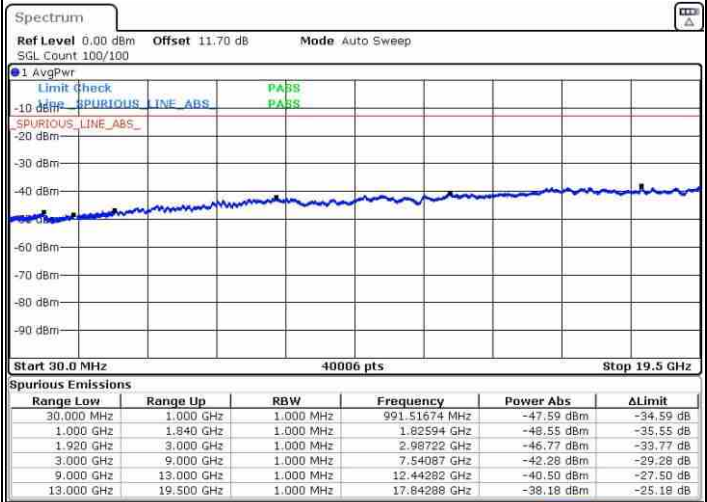
LTE Band 2 / 10MHz

Lowest Channel / 64QAM



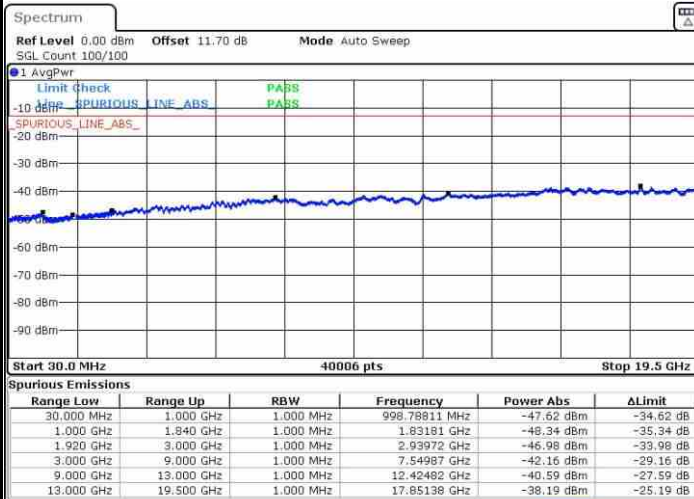
Date: 23 MAY 2019 15:02:35

Middle Channel / 64QAM



Date: 23 MAY 2019 15:03:44

Highest Channel / 64QAM

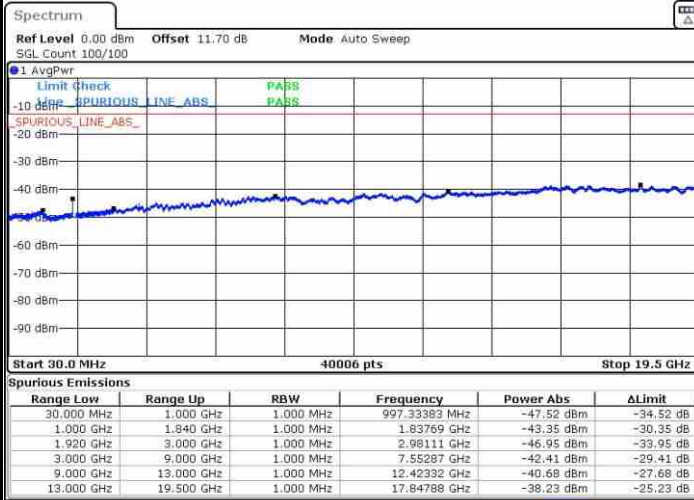


Date: 23 MAY 2019 15:06:12



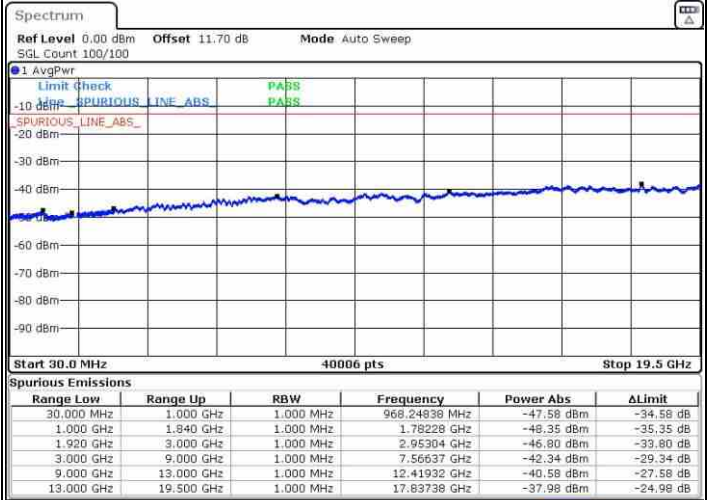
LTE Band 2 / 15MHz

Lowest Channel / 64QAM



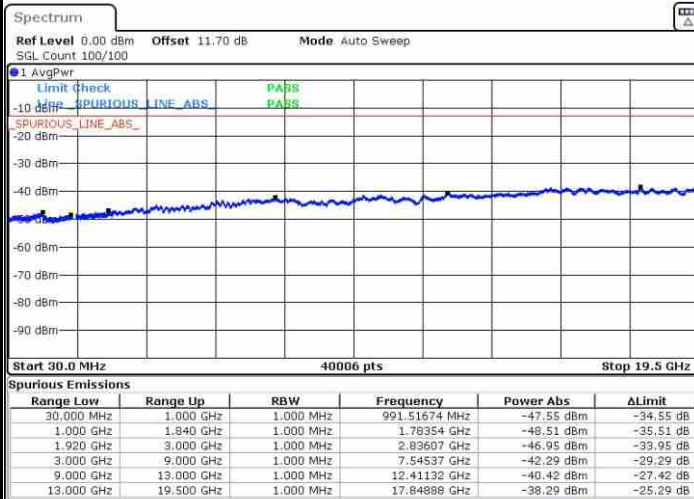
Date: 23 MAY 2019 15:08:41

Middle Channel / 64QAM



Date: 23 MAY 2019 15:09:45

Highest Channel / 64QAM

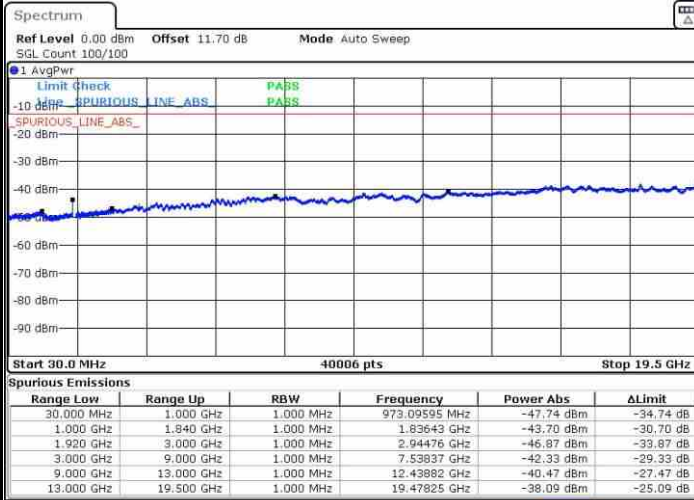


Date: 23 MAY 2019 15:12:13



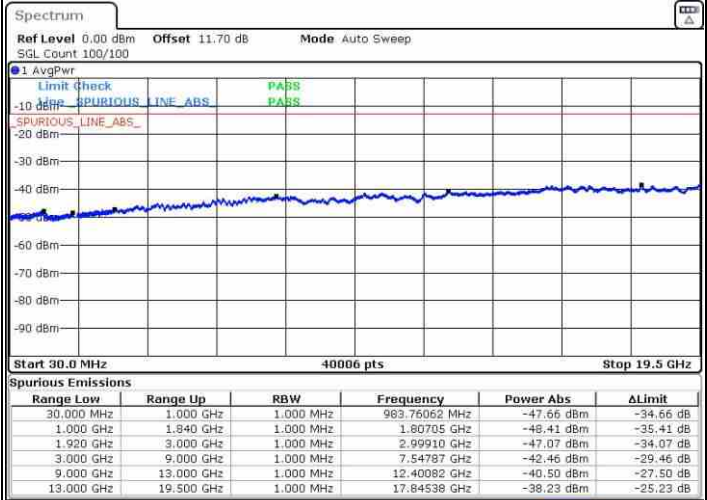
LTE Band 2 / 20MHz

Lowest Channel / 64QAM



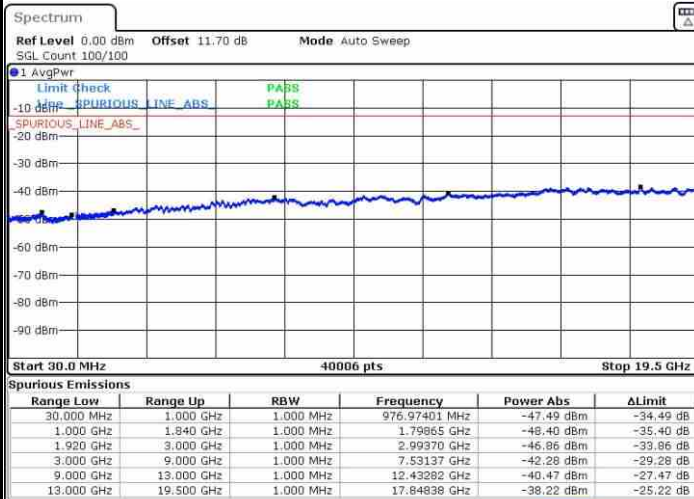
Date: 23 MAY 2019 15:14:41

Middle Channel / 64QAM



Date: 23 MAY 2019 15:15:46

Highest Channel / 64QAM



Date: 23 MAY 2019 15:18:14

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0028	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0028	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

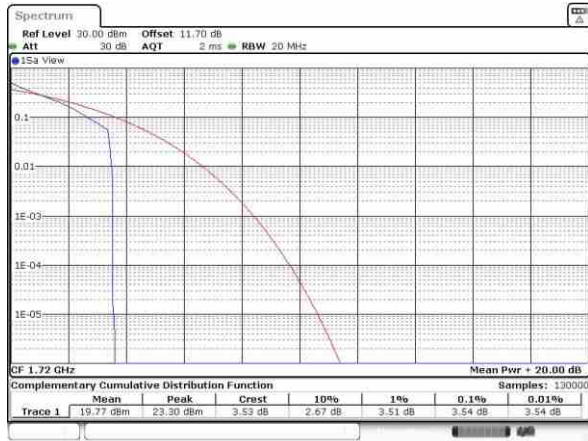
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



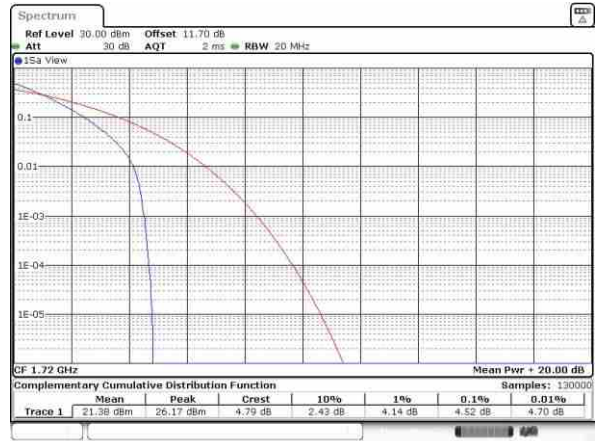
LTE Band 4

Peak-to-Average Ratio

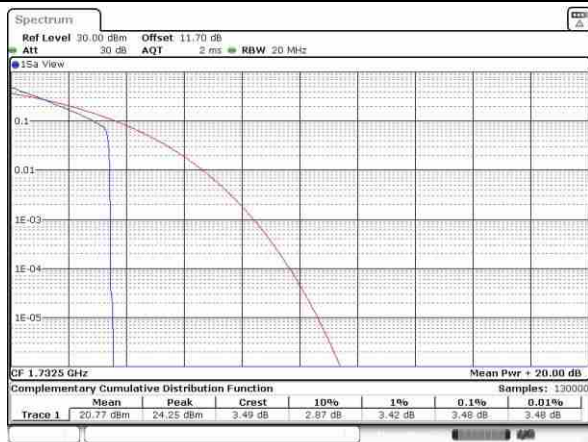
Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.54	4.52	4.00	5.62	PASS
Middle CH	3.48	4.55	4.12	5.65	
Highest CH	3.65	4.58	3.97	5.59	
Mode	LTE Band 4 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.45	6.58	-	-	PASS
Middle CH	5.33	5.77	-	-	
Highest CH	4.09	5.74	-	-	

LTE Band 4 / 20MHz / QPSK
Lowest Channel / 1RB


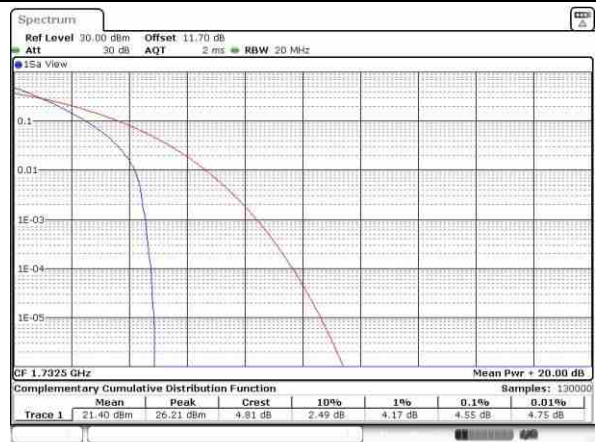
Date: 23 MAY 2019 19:00:31

Lowest Channel / Full RB


Date: 23 MAY 2019 19:00:42

Middle Channel / 1RB


Date: 23 MAY 2019 19:00:52

Middle Channel / Full RB


Date: 23 MAY 2019 19:01:02

Highest Channel / 1RB


Date: 23 MAY 2019 19:01:13

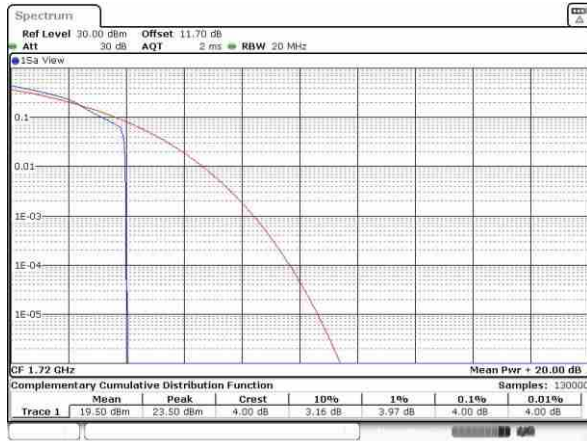
Highest Channel / Full RB


Date: 23 MAY 2019 19:01:23

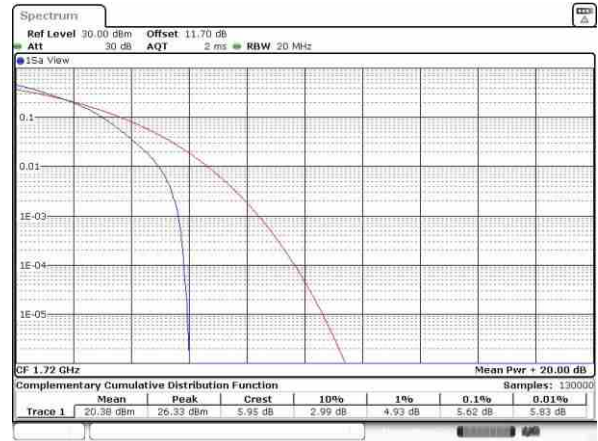


LTE Band 4 / 20MHz / 16QAM

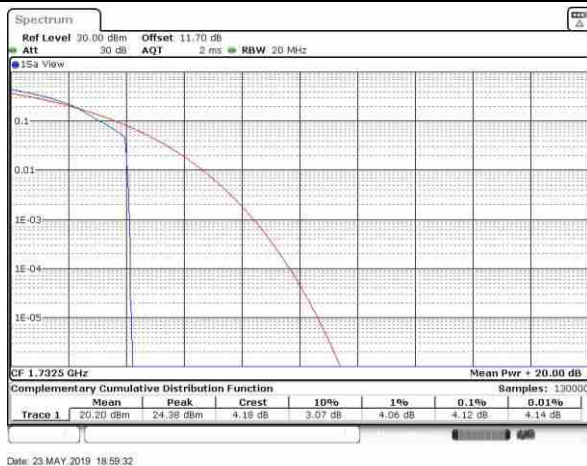
Lowest Channel / 1RB



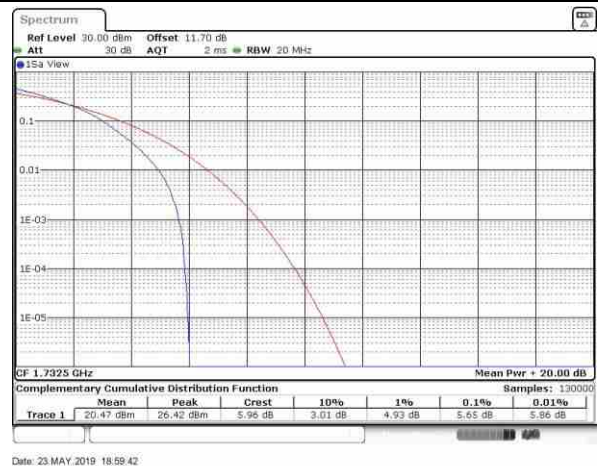
Lowest Channel / Full RB



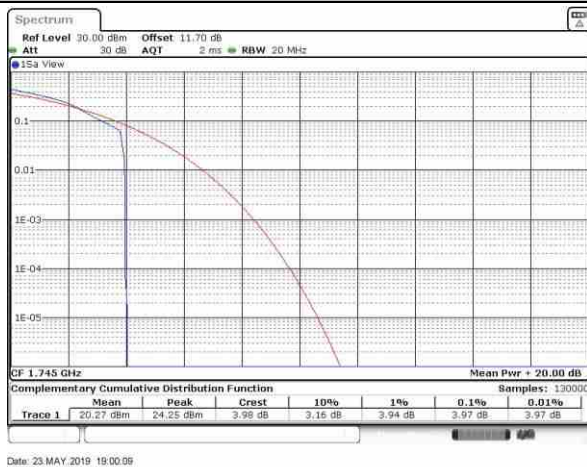
Middle Channel / 1RB



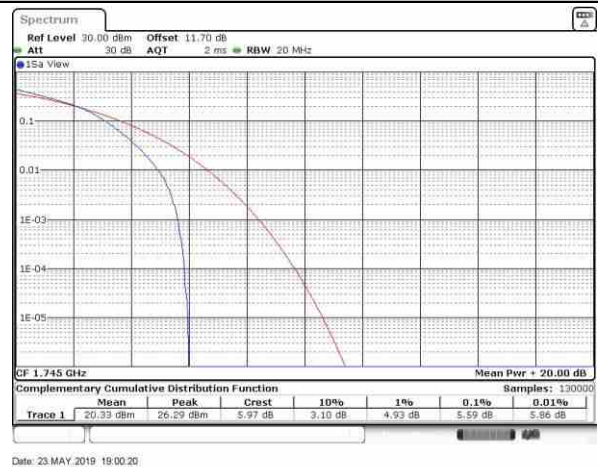
Middle Channel / Full RB

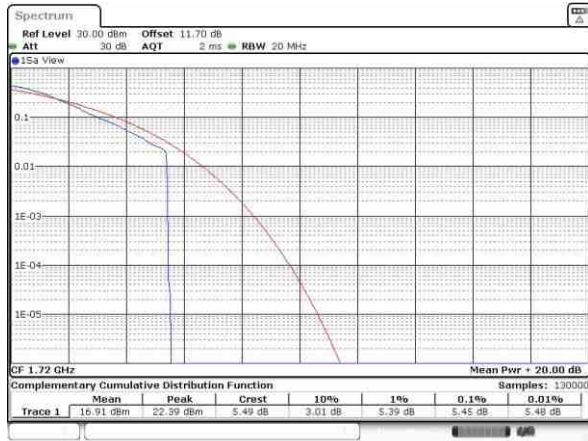


Highest Channel / 1RB

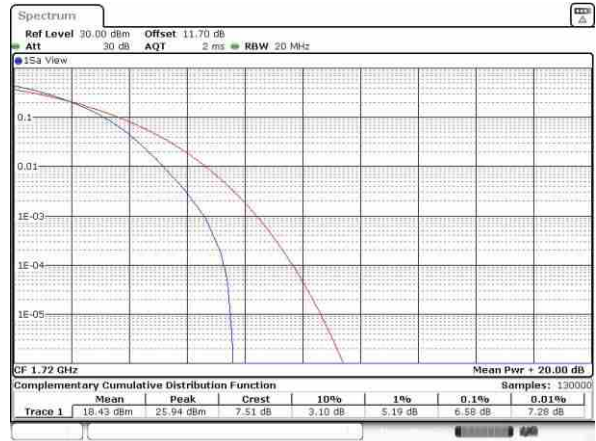


Highest Channel / Full RB

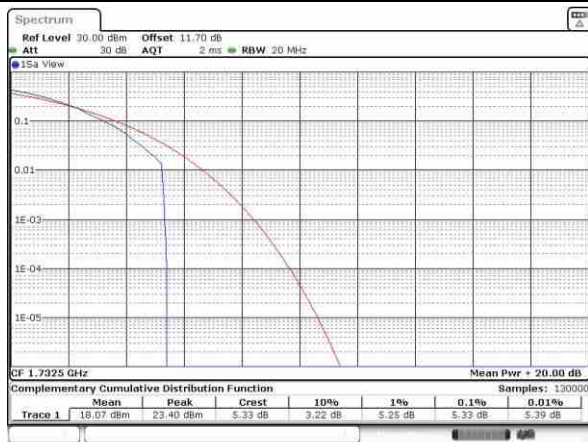


LTE Band 4 / 20MHz / 64QAM
Lowest Channel / 1RB


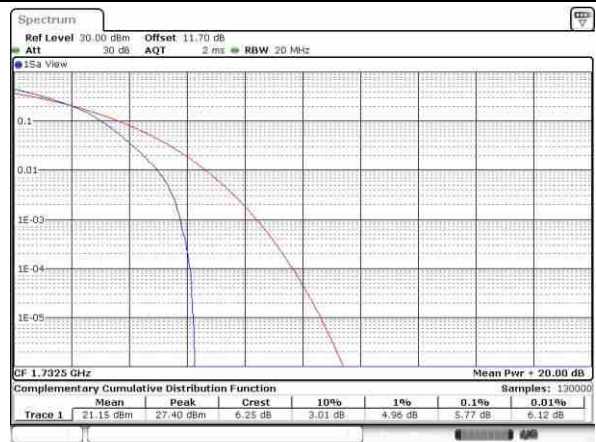
Date: 23 MAY 2019 19:01:34

Lowest Channel / Full RB


Date: 23 MAY 2019 19:01:45

Middle Channel / 1RB


Date: 23 MAY 2019 19:01:55

Middle Channel / Full RB


Date: 25 MAY 2019 08:13:44

Highest Channel / 1RB


Date: 25 MAY 2019 08:14:23

Highest Channel / Full RB


Date: 25 MAY 2019 08:14:06

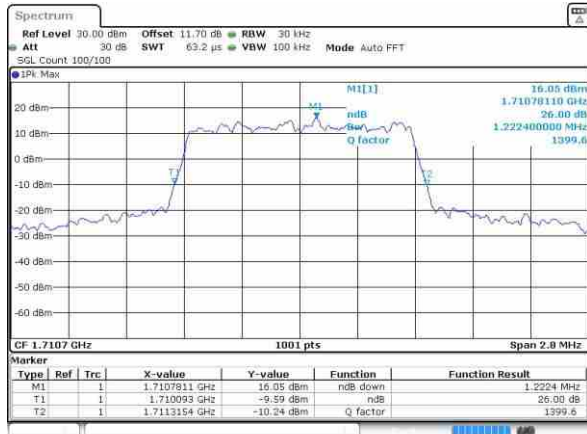
**26dB Bandwidth**

Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.22	1.23	3.00	3.04	4.93	4.87	9.67	9.65	14.18	14.42	18.86	19.06
Middle CH	1.22	1.24	3.06	3.02	4.94	4.86	9.79	9.87	14.48	14.60	18.70	18.90
Highest CH	1.23	1.24	3.03	2.98	4.98	4.87	9.91	9.81	14.39	14.39	19.06	18.94
Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.24	-	3.02	-	4.92	-	9.77	-	14.24	-	18.82	-
Middle CH	1.23	-	3.00	-	4.87	-	9.87	-	14.62	-	18.98	-
Highest CH	1.23	-	3.01	-	4.92	-	9.71	-	14.42	-	19.22	-

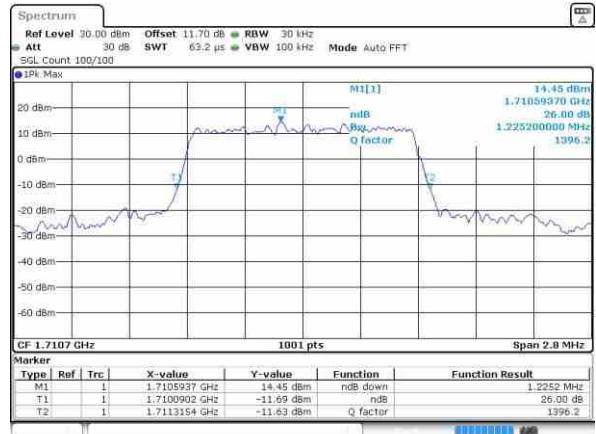


LTE Band 4

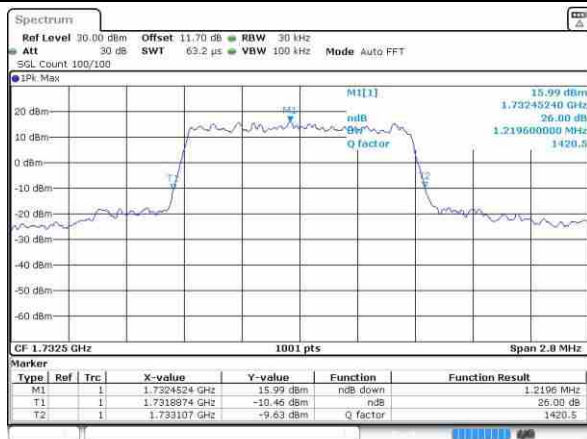
Lowest Channel / 1.4MHz / QPSK



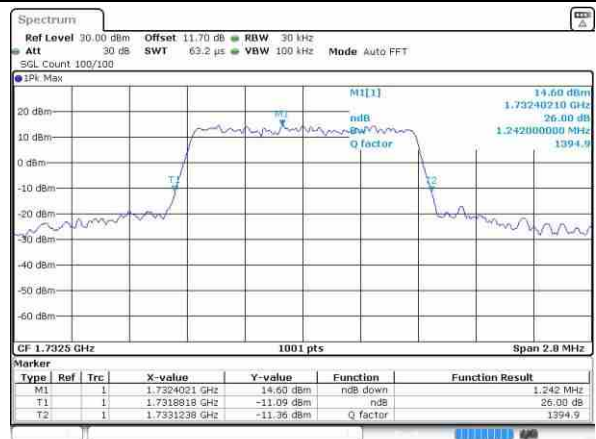
Lowest Channel / 1.4MHz / 16QAM



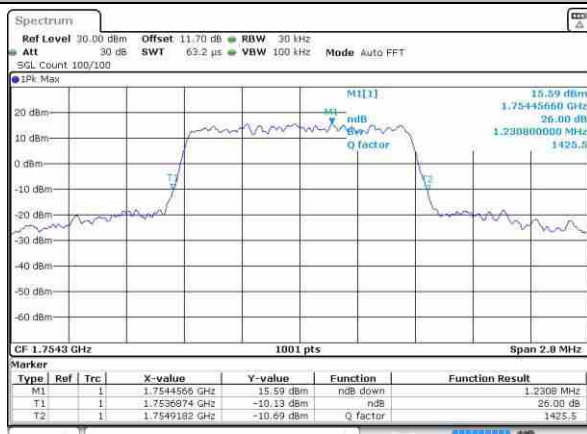
Middle Channel / 1.4MHz / QPSK



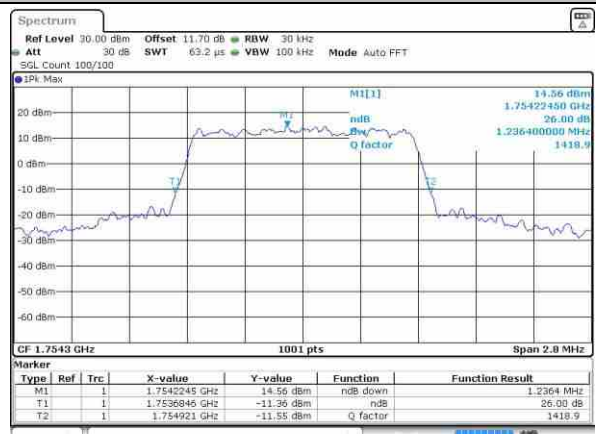
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



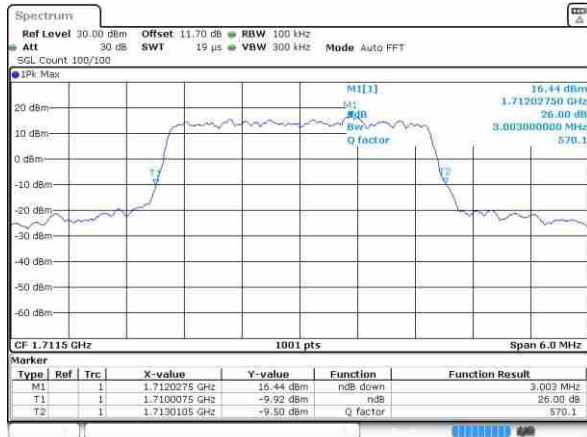
Highest Channel / 1.4MHz / 16QAM





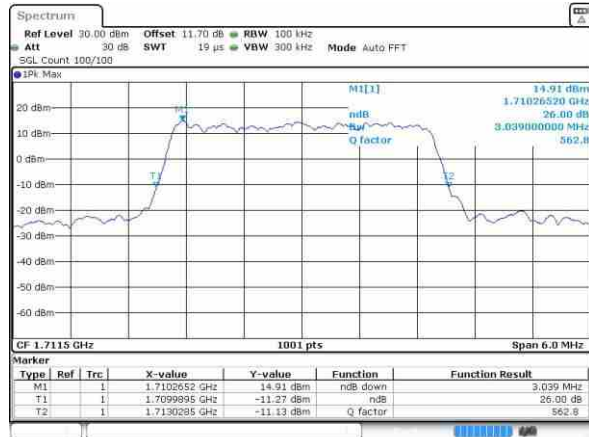
LTE Band 4

Lowest Channel / 3MHz / QPSK



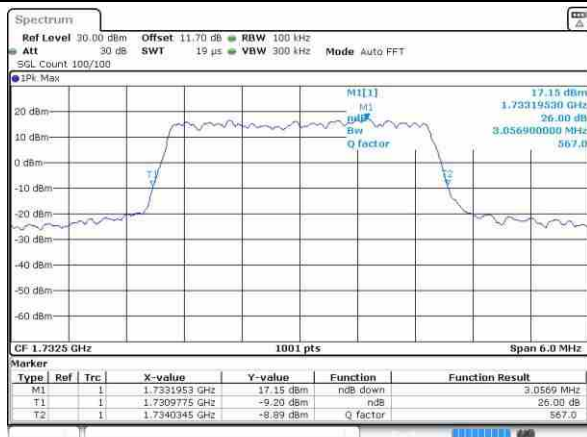
Date: 23 MAY 2019 17:02:05

Lowest Channel / 3MHz / 16QAM



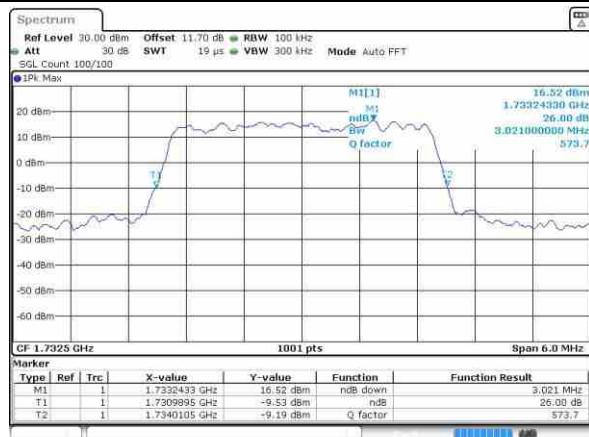
Date: 23 MAY 2019 17:02:18

Middle Channel / 3MHz / QPSK



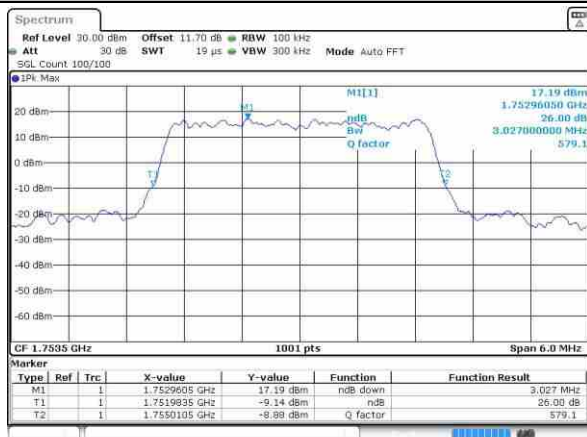
Date: 23 MAY 2019 17:08:23

Middle Channel / 3MHz / 16QAM



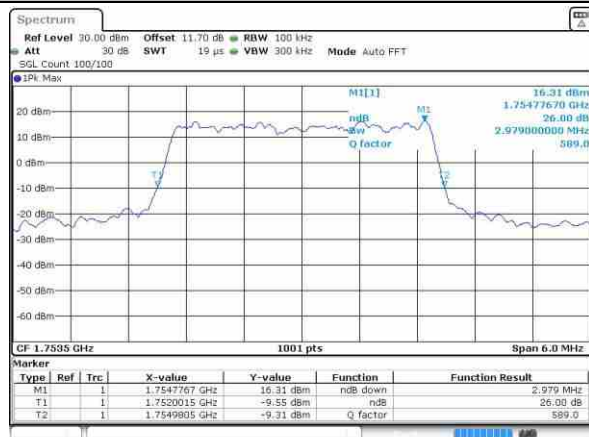
Date: 23 MAY 2019 17:08:35

Highest Channel / 3MHz / QPSK



Date: 23 MAY 2019 17:10:33

Highest Channel / 3MHz / 16QAM

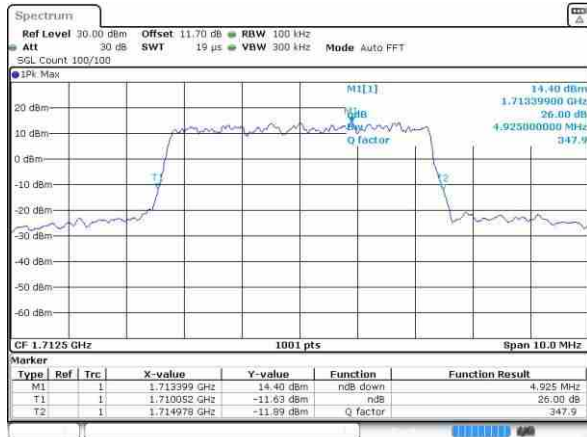


Date: 23 MAY 2019 17:10:45

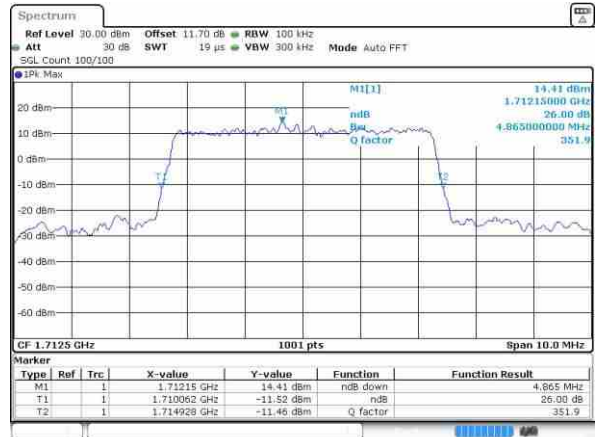


LTE Band 4

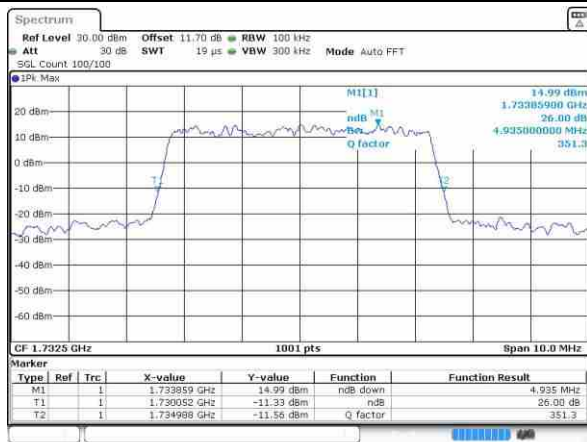
Lowest Channel / 5MHz / QPSK



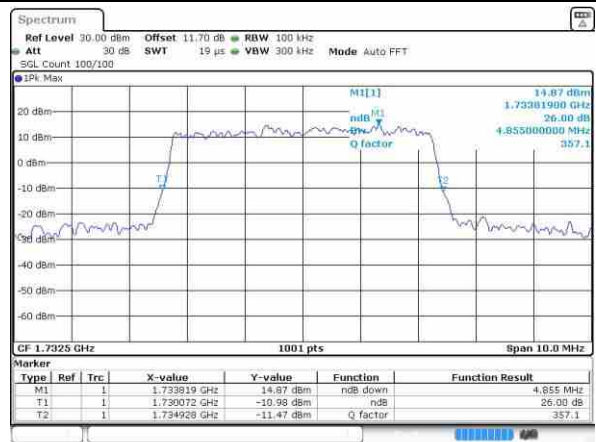
Lowest Channel / 5MHz / 16QAM



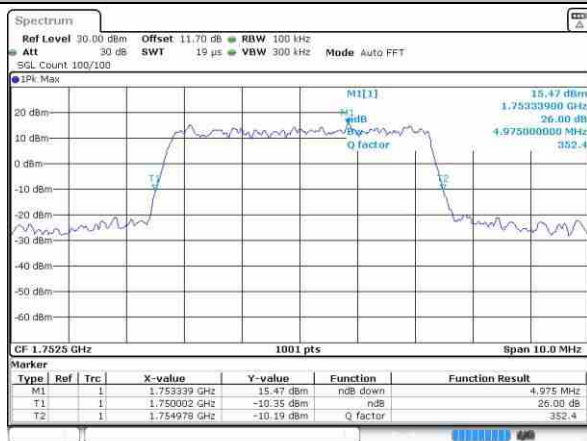
Middle Channel / 5MHz / QPSK



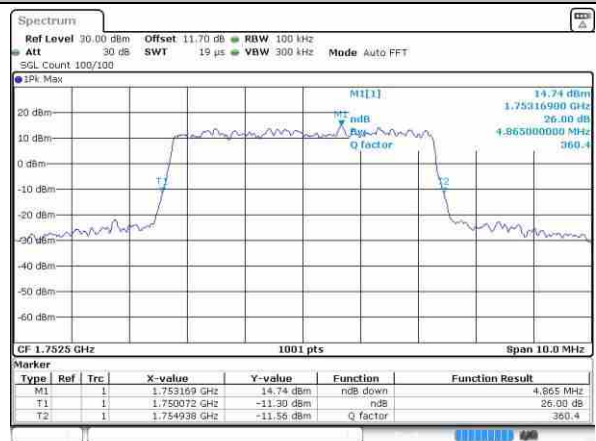
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



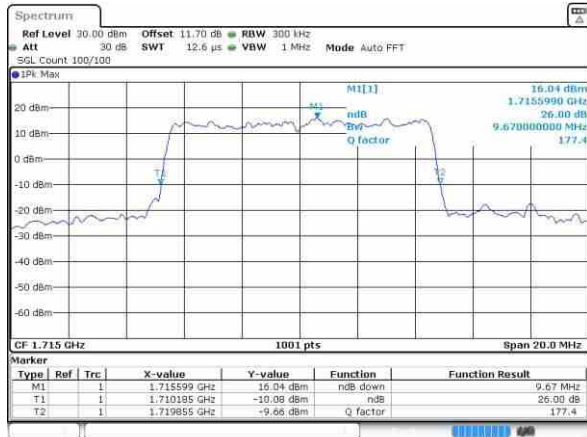
Highest Channel / 5MHz / 16QAM





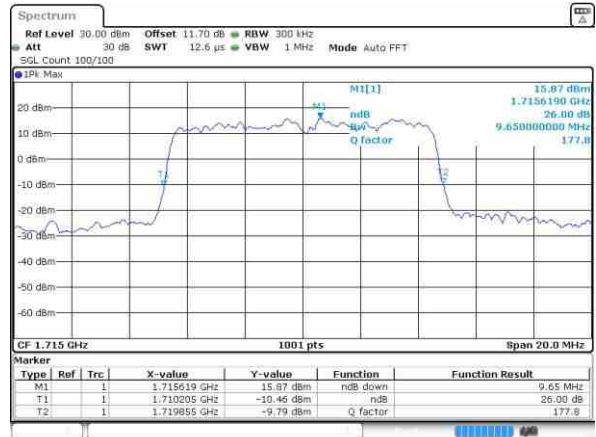
LTE Band 4

Lowest Channel / 10MHz / QPSK



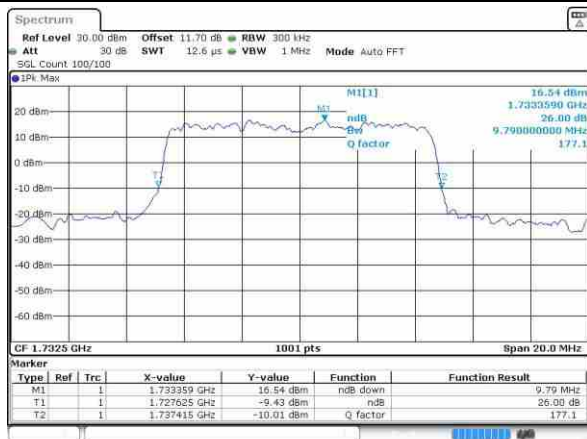
Date: 23 MAY 2019 17:33:16

Lowest Channel / 10MHz / 16QAM



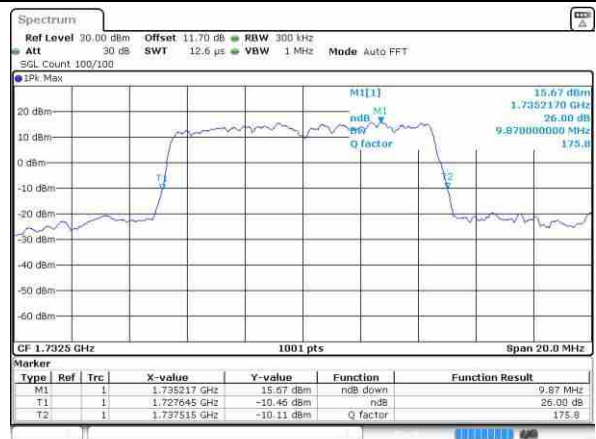
Date: 23 MAY 2019 17:33:28

Middle Channel / 10MHz / QPSK



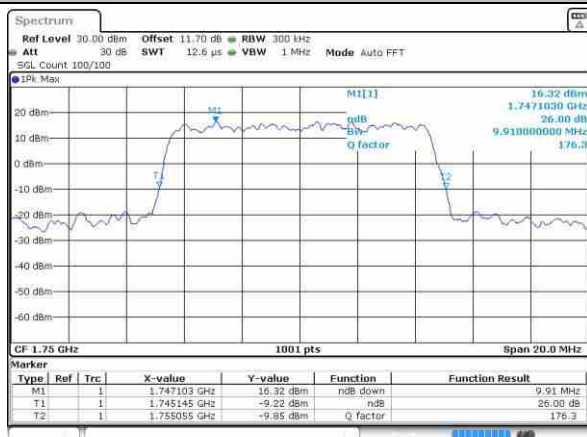
Date: 23 MAY 2019 17:38:31

Middle Channel / 10MHz / 16QAM



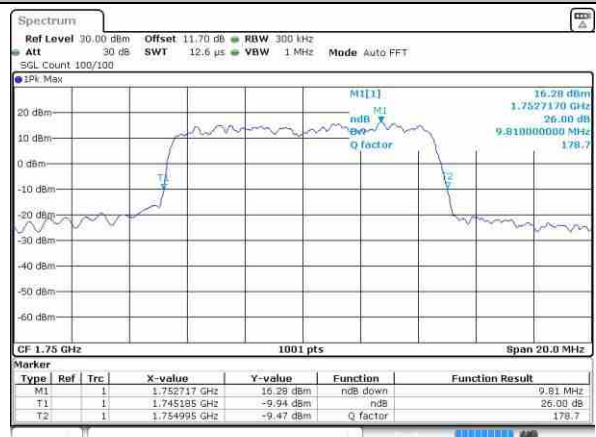
Date: 23 MAY 2019 17:38:43

Highest Channel / 10MHz / QPSK



Date: 23 MAY 2019 17:41:41

Highest Channel / 10MHz / 16QAM

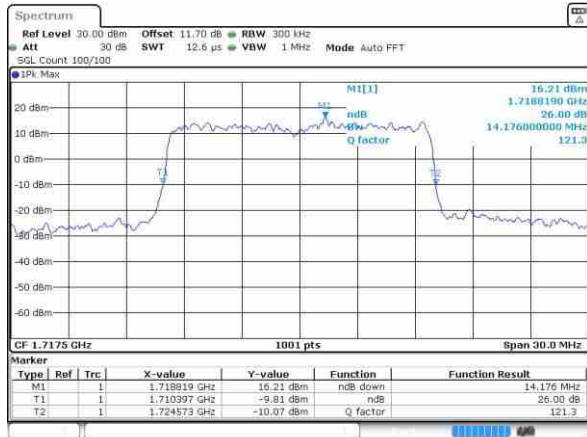


Date: 23 MAY 2019 17:41:53

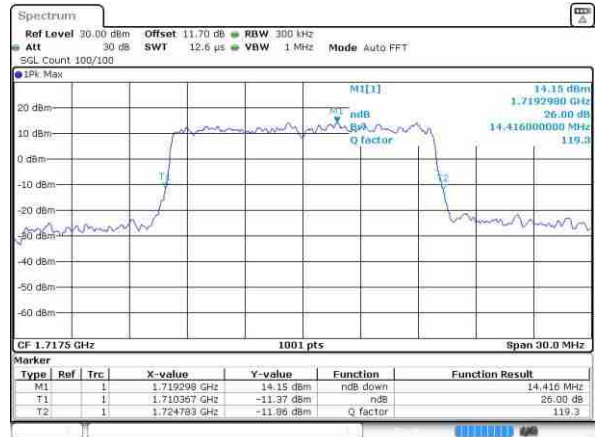


LTE Band 4

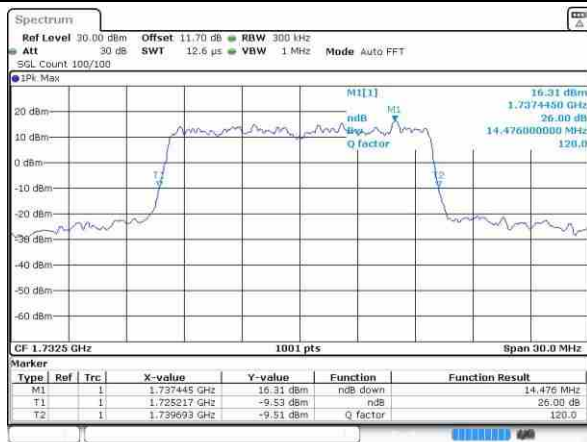
Lowest Channel / 15MHz / QPSK



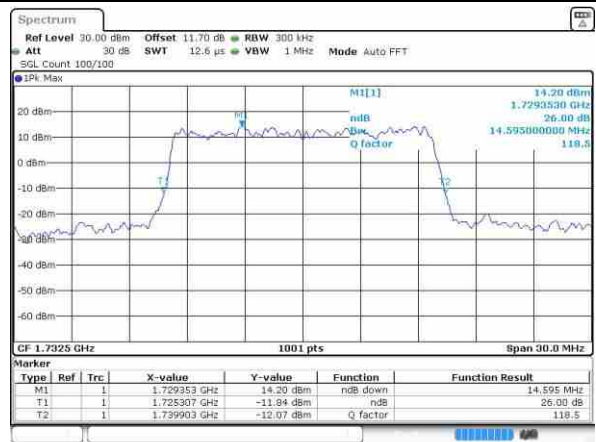
Lowest Channel / 15MHz / 16QAM



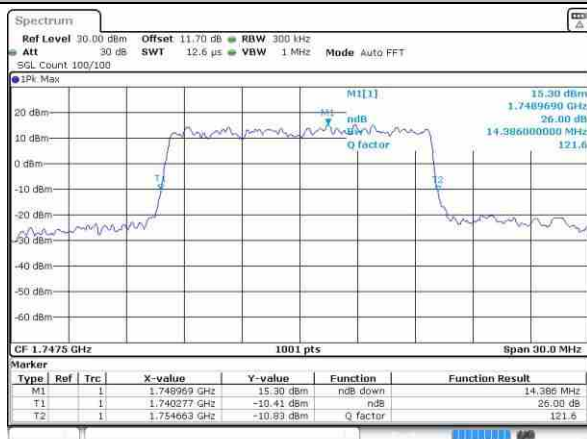
Middle Channel / 15MHz / QPSK



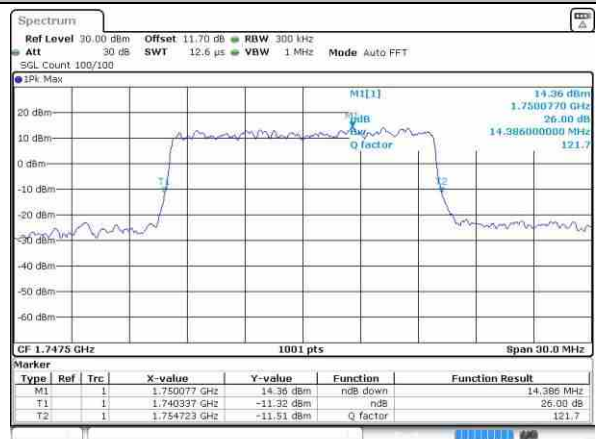
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



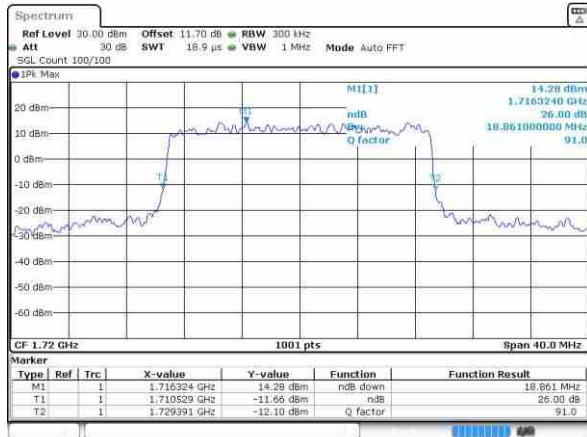
Highest Channel / 15MHz / 16QAM



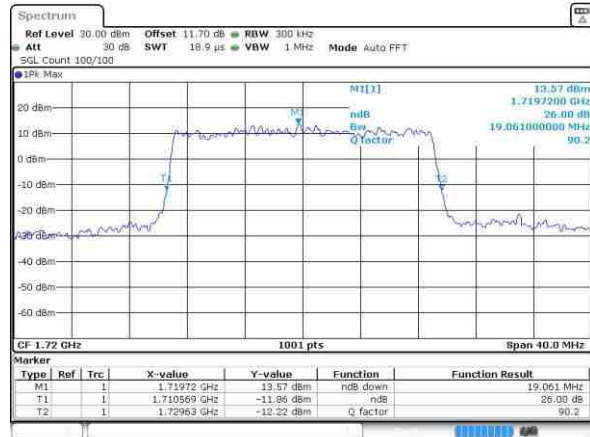


LTE Band 4

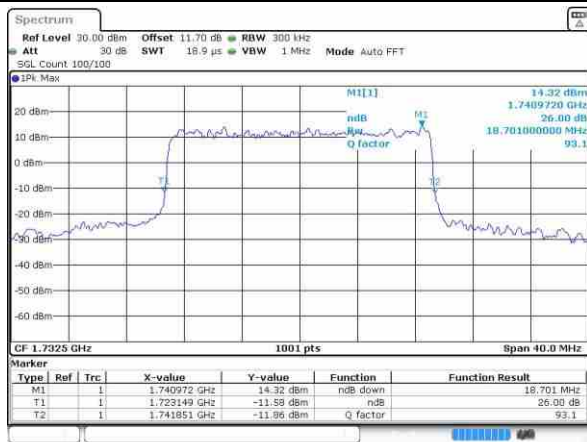
Lowest Channel / 20MHz / QPSK



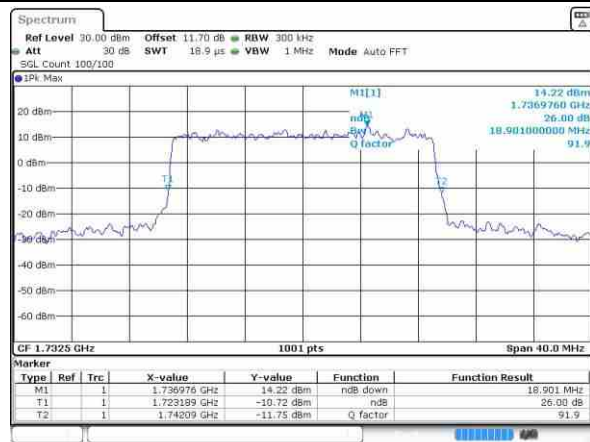
Lowest Channel / 20MHz / 16QAM



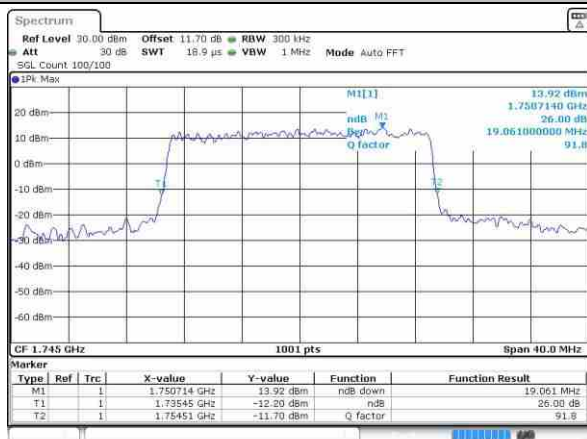
Middle Channel / 20MHz / QPSK



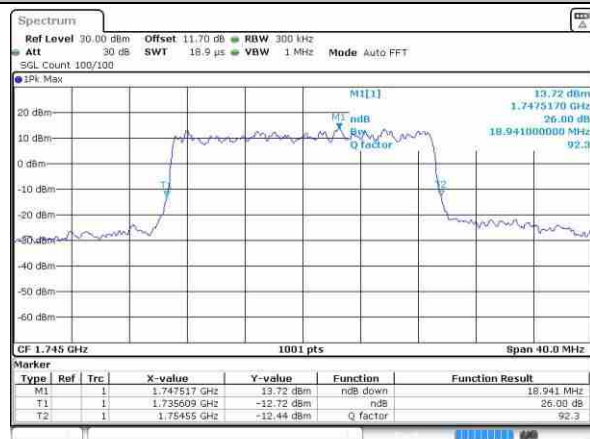
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



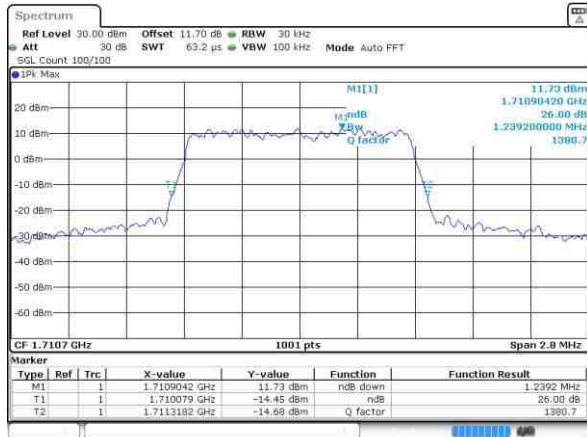
Highest Channel / 20MHz / 16QAM



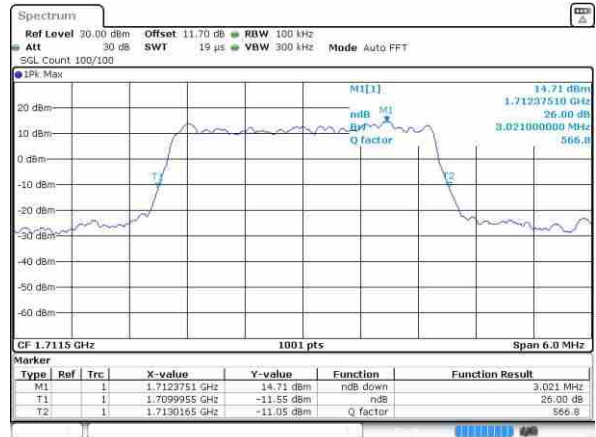


LTE Band 4

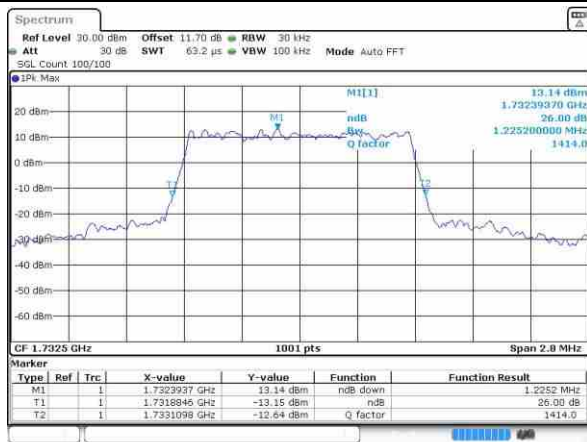
Lowest Channel / 1.4MHz / 64QAM



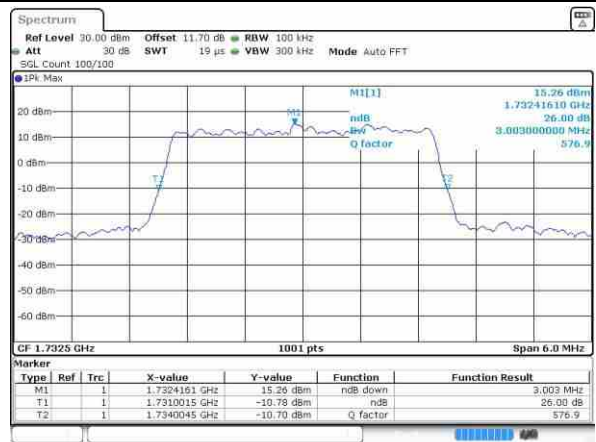
Lowest Channel / 3MHz / 64QAM



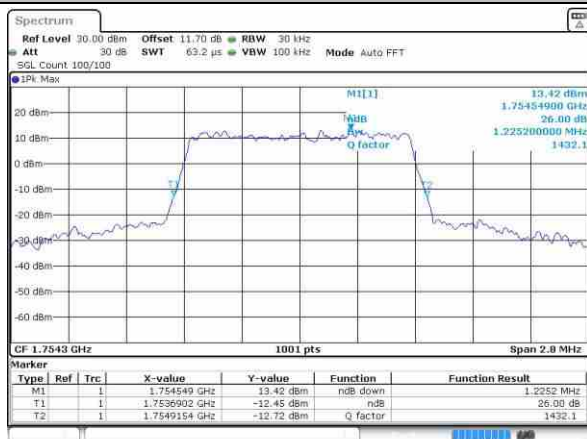
Middle Channel / 1.4MHz / 64QAM



Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



Highest Channel / 3MHz / 64QAM

