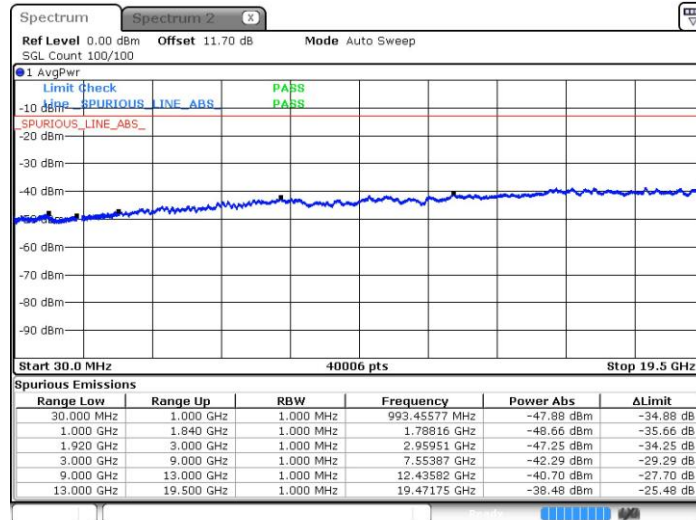




LTE Band 2 / 1.4MHz

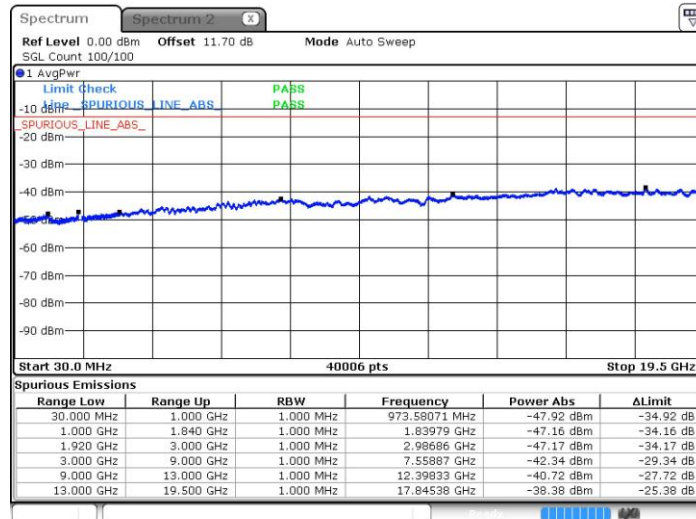
Highest Channel / QPSK



Date: 10 JUL 2018 16:36:51

LTE Band 2 / 3MHz

Lowest Channel / QPSK

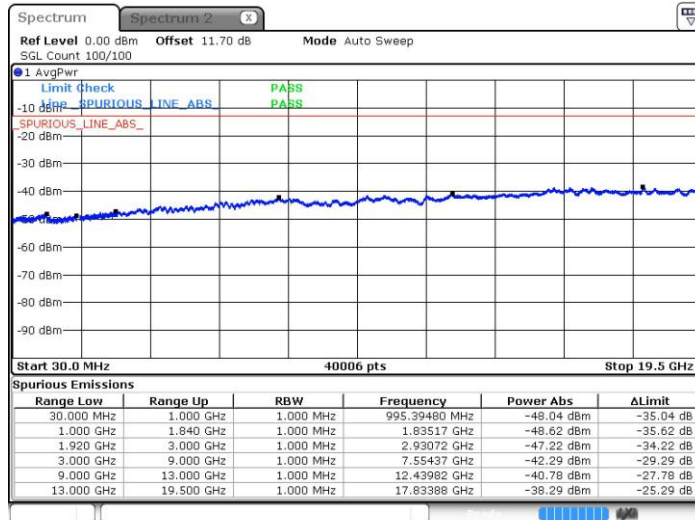


Date: 10 JUL 2018 10:41:53



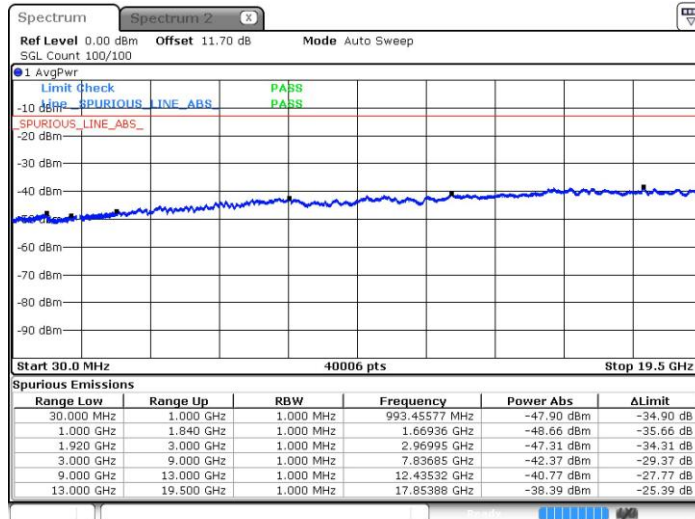
LTE Band 2 / 3MHz

Middle Channel / QPSK



Date: 10 JUL 2018 10:44:30

Highest Channel / QPSK

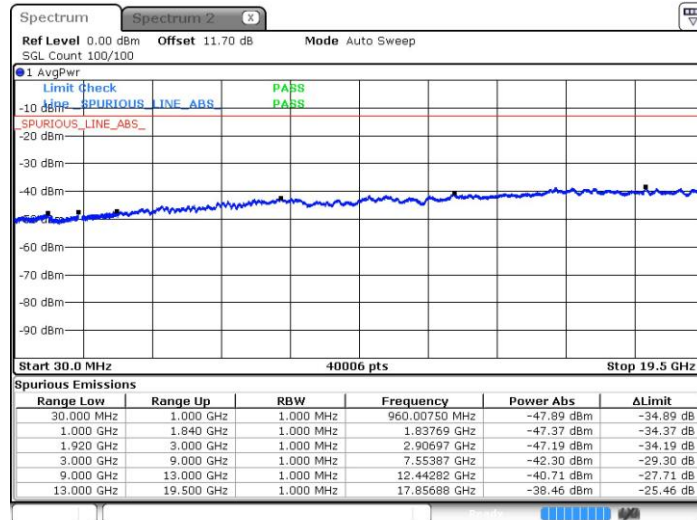


Date: 10 JUL 2018 10:51:48



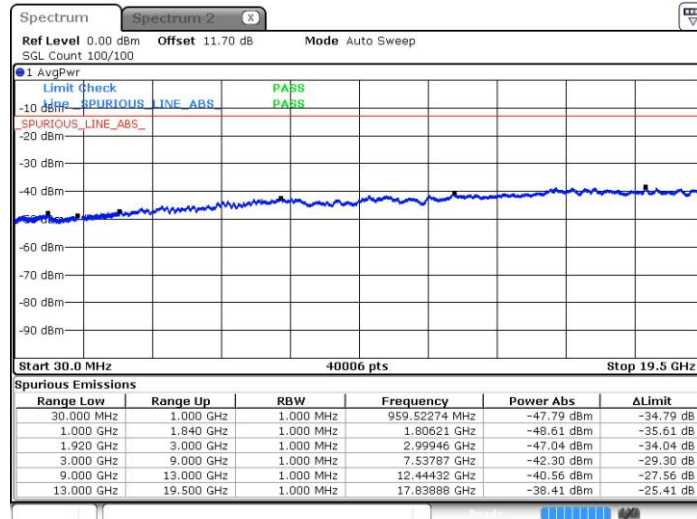
LTE Band 2 / 5MHz

Lowest Channel / QPSK



Date: 10 JUL 2018 10:59:06

Middle Channel / QPSK

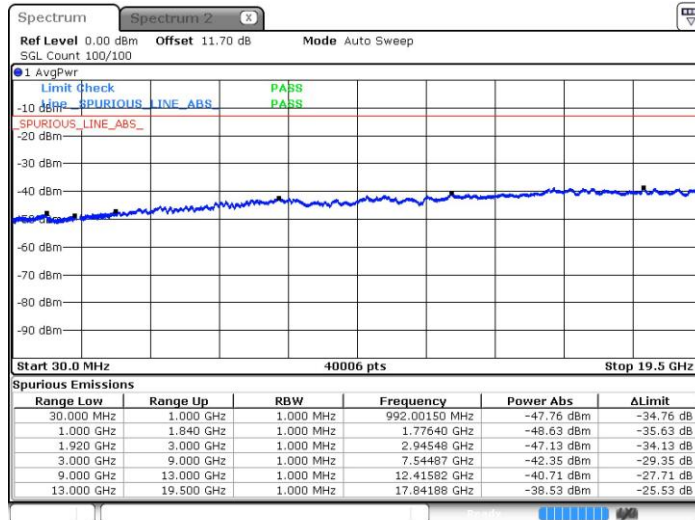


Date: 10 JUL 2018 11:01:44



LTE Band 2 / 5MHz

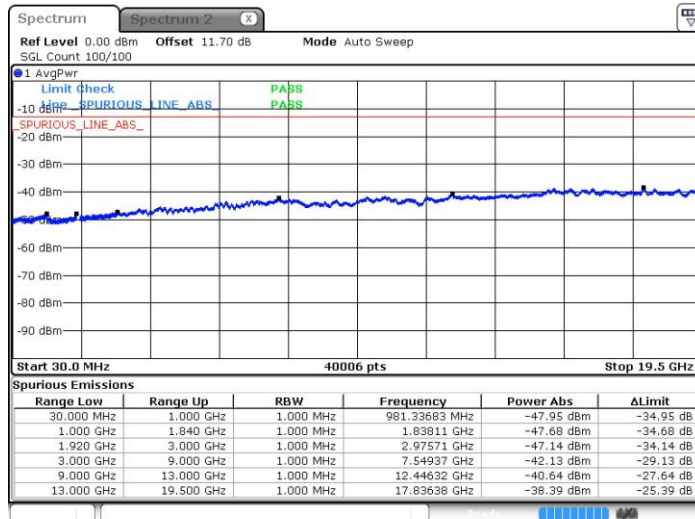
Highest Channel / QPSK



Date: 10 JUL 2018 11:09:02

LTE Band 2 / 10MHz

Lowest Channel / QPSK

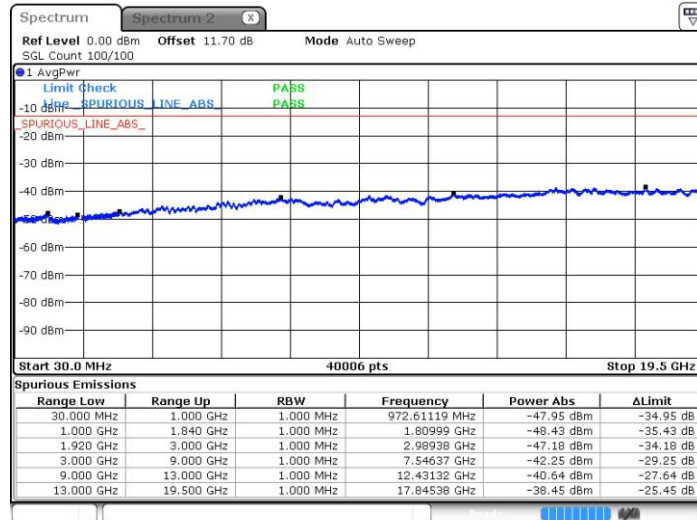


Date: 10 JUL 2018 11:16:20



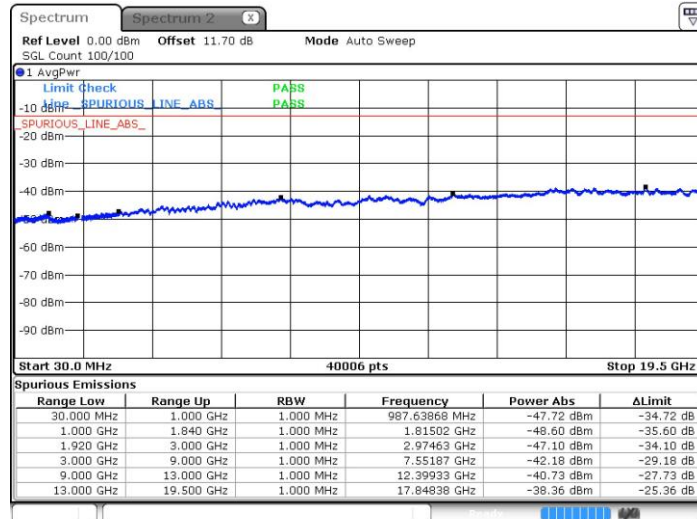
LTE Band 2 / 10MHz

Middle Channel / QPSK



Date: 10 JUL 2018 11:18:58

Highest Channel / QPSK

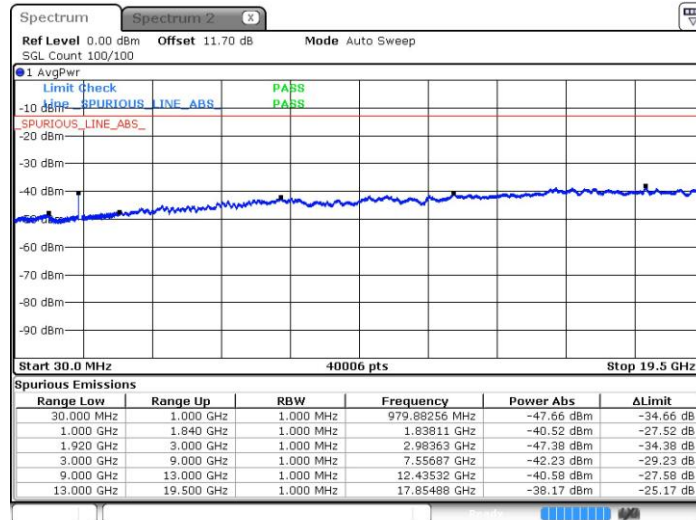


Date: 10 JUL 2018 11:26:16



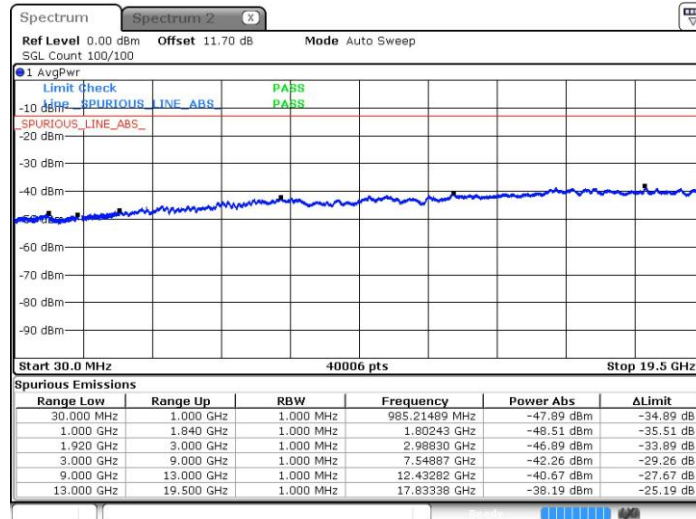
LTE Band 2 / 15MHz

Lowest Channel / QPSK



Date: 10 JUL 2018 11:33:34

Middle Channel / QPSK

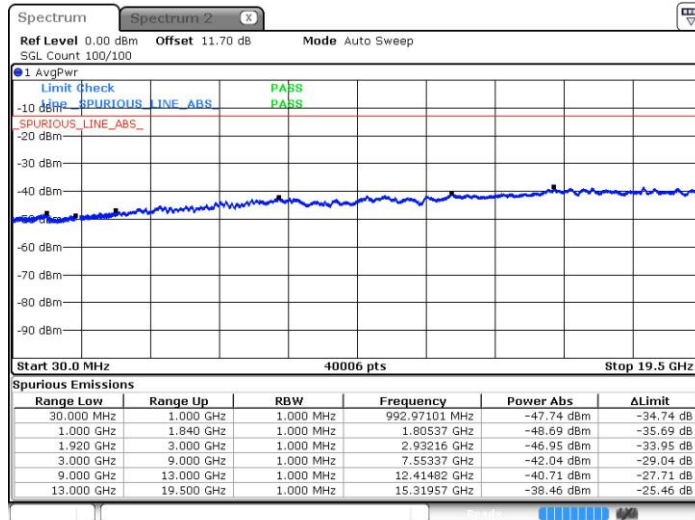


Date: 10 JUL 2018 11:38:12



LTE Band 2 / 15MHz

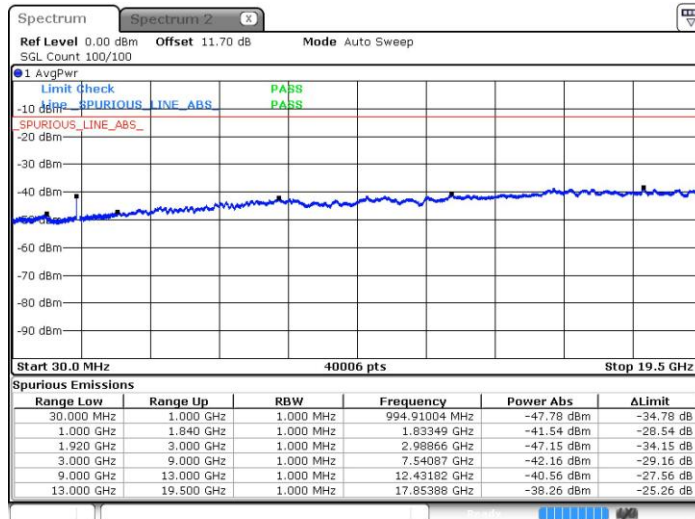
Highest Channel / QPSK



Date: 10 JUL 2018 11:43:30

LTE Band 2 / 20MHz

Lowest Channel / QPSK

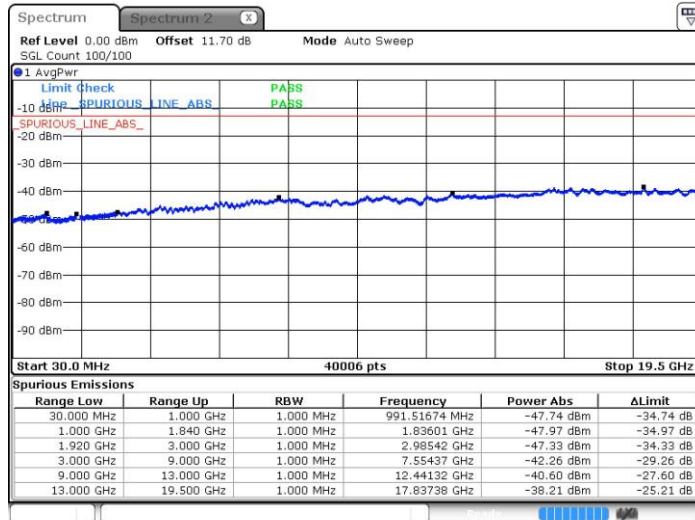


Date: 10 JUL 2018 11:50:48



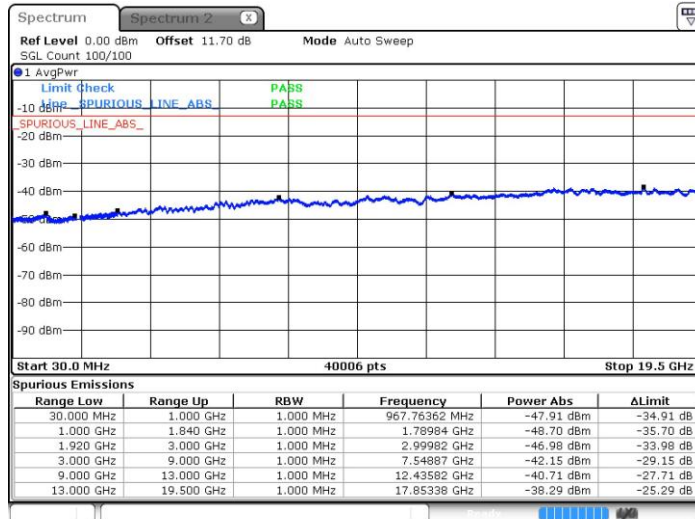
LTE Band 2 / 20MHz

Middle Channel / QPSK



Date: 10 JUL 2018 11:53:25

Highest Channel / QPSK



Date: 10 JUL 2018 12:00:44





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	0.0120	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage =12.0 V. ; Battery End Point (BEP) =10.8 V. ; Maximum Voltage =13.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

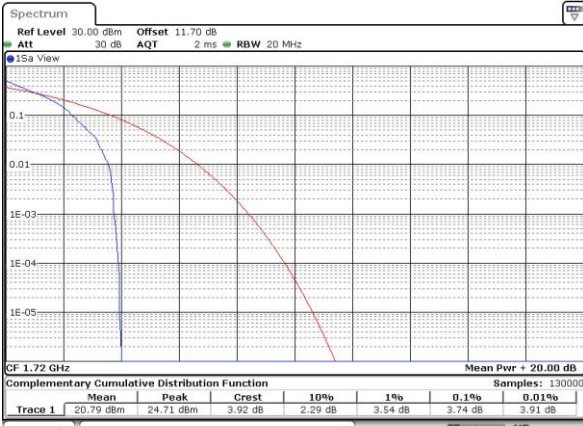
### Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.74	4.49	-	-	PASS
Middle CH	3.80	4.70	-	-	
Highest CH	4.03	4.52	-	-	



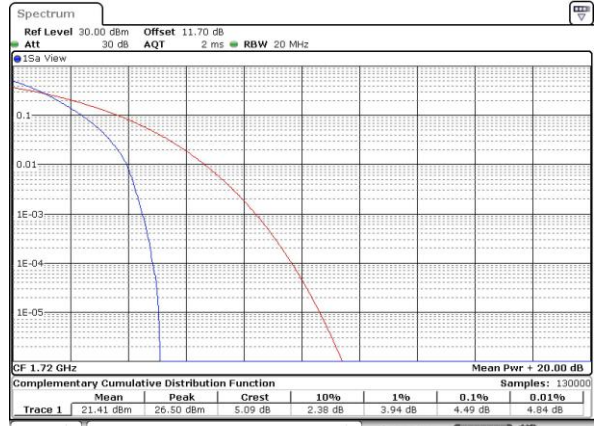
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



Date: 15 JUL 2016 17:56:09

Lowest Channel / Full RB



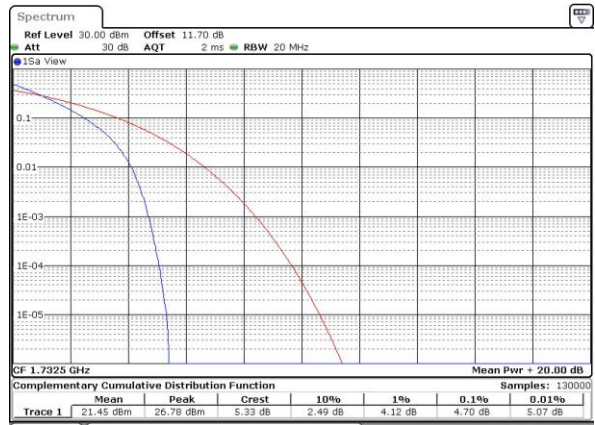
Date: 15 JUL 2016 17:56:19

Middle Channel / 1RB



Date: 15 JUL 2016 17:56:29

Middle Channel / Full RB



Date: 15 JUL 2016 17:56:39

Highest Channel / 1RB



Date: 15 JUL 2016 17:56:49

Highest Channel / Full RB



Date: 15 JUL 2016 17:56:59



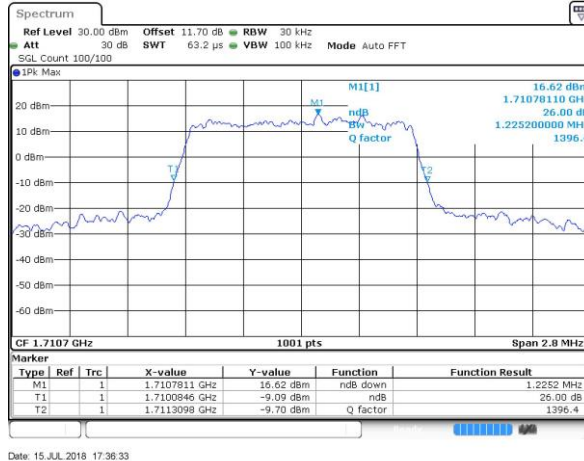
**26dB Bandwidth**

Mode	LTE Band 4 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.23	-	3.03	-	4.92	-	9.83	-	14.12	-	20.14	-
Middle CH	1.24	-	3.03	-	4.91	-	9.69	-	14.48	-	20.14	-
Highest CH	1.25	-	3.08	-	4.86	-	9.77	-	14.51	-	20.10	-

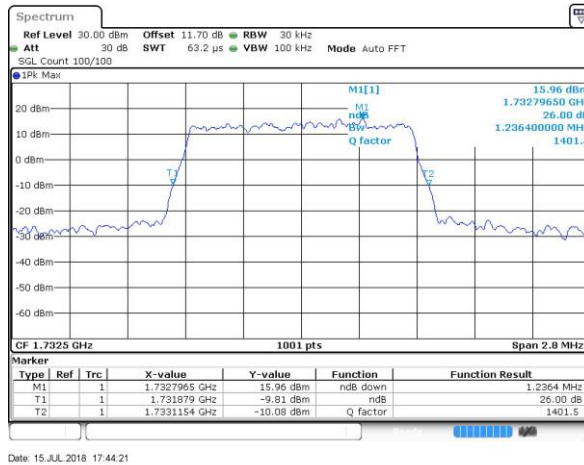


LTE Band 4

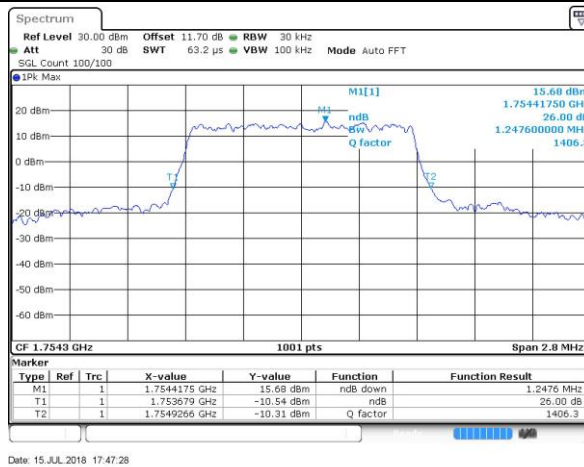
Lowest Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / QPSK



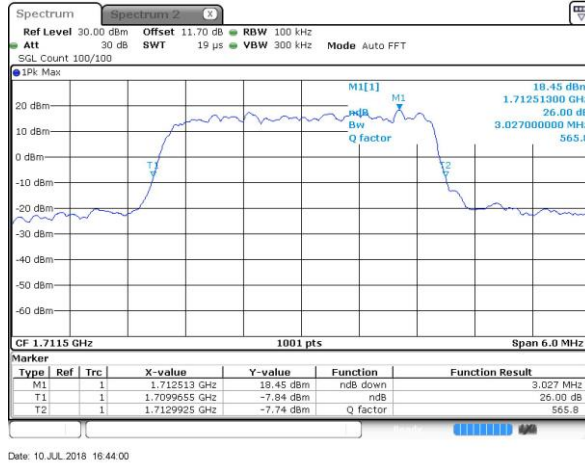
Highest Channel / 1.4MHz / QPSK





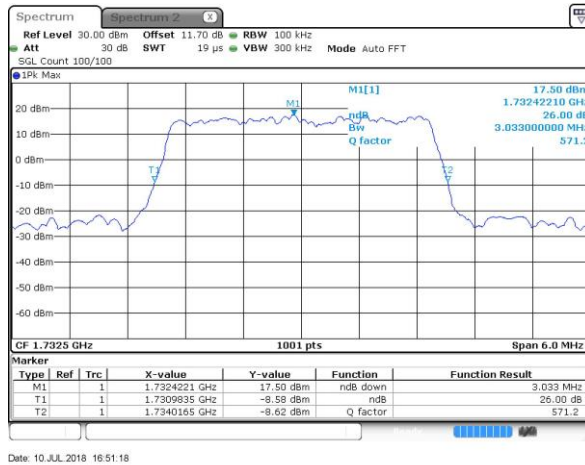
LTE Band 4

Lowest Channel / 3MHz / QPSK



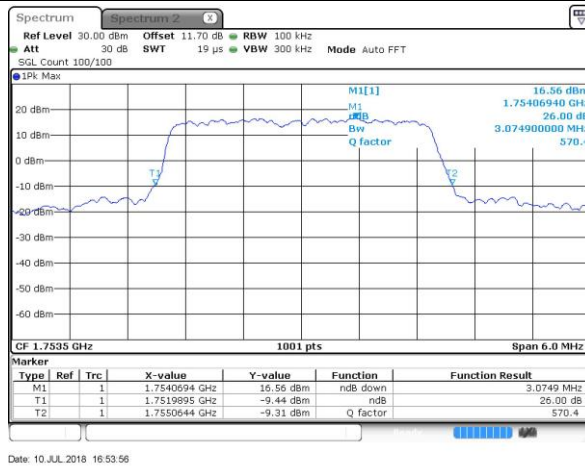
Date: 10 JUL 2018 16:44:00

Middle Channel / 3MHz / QPSK



Date: 10 JUL 2018 16:51:18

Highest Channel / 3MHz / QPSK

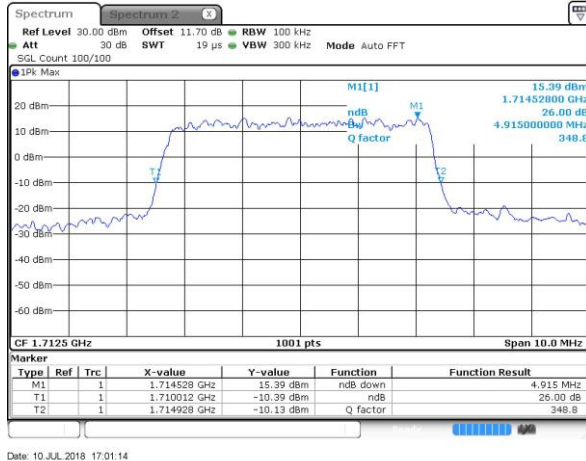


Date: 10 JUL 2018 16:53:56



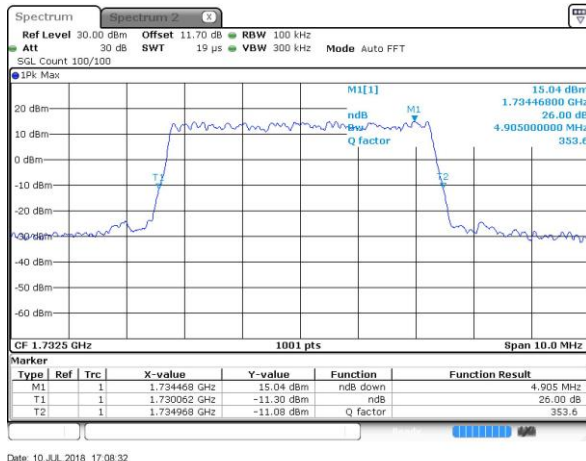
LTE Band 4

Lowest Channel / 5MHz / QPSK



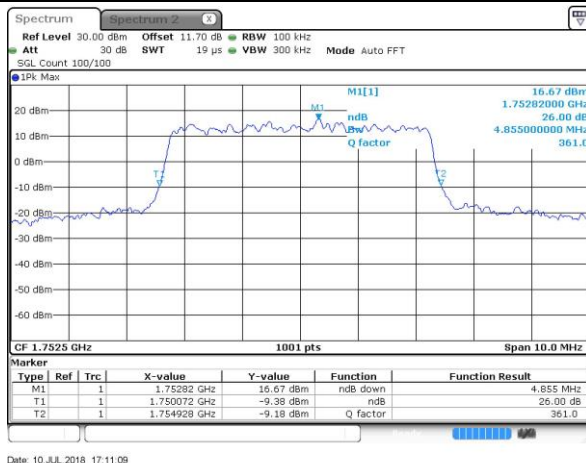
Date: 10.JUL.2018 17:01:14

Middle Channel / 5MHz / QPSK



Date: 10.JUL.2018 17:08:32

Highest Channel / 5MHz / QPSK

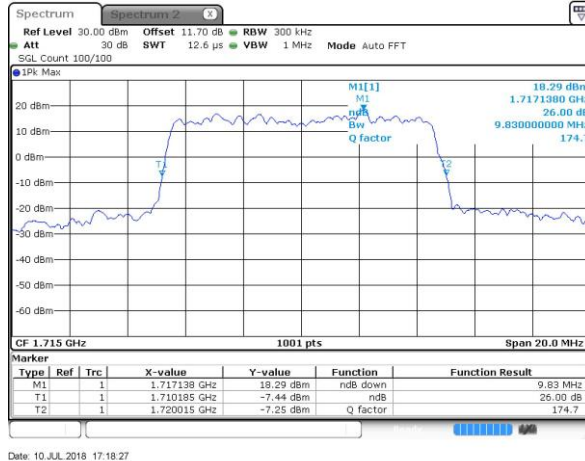


Date: 10.JUL.2018 17:11:09



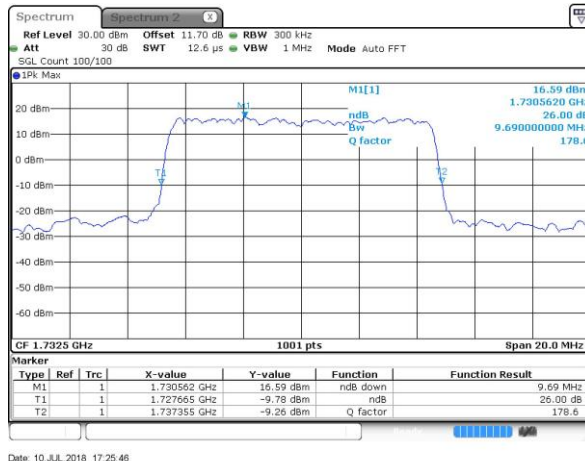
LTE Band 4

Lowest Channel / 10MHz / QPSK



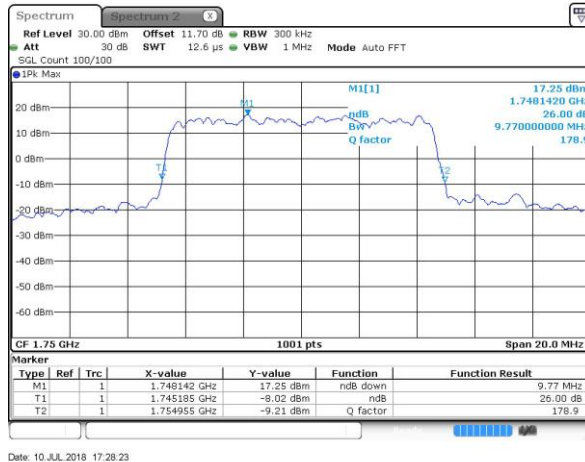
Date: 10.JUL.2018 17:18:27

Middle Channel / 10MHz / QPSK



Date: 10.JUL.2018 17:25:46

Highest Channel / 10MHz / QPSK



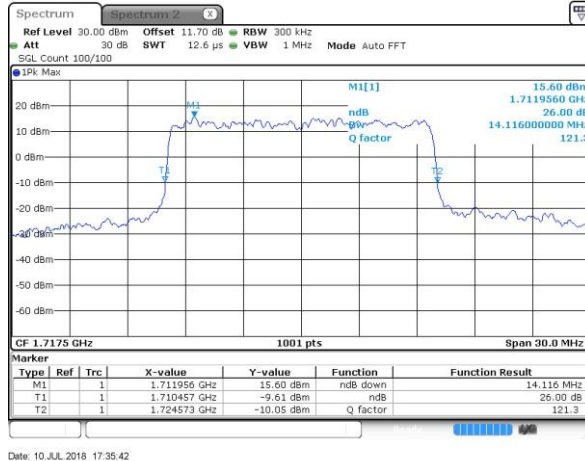
Date: 10.JUL.2018 17:28:23





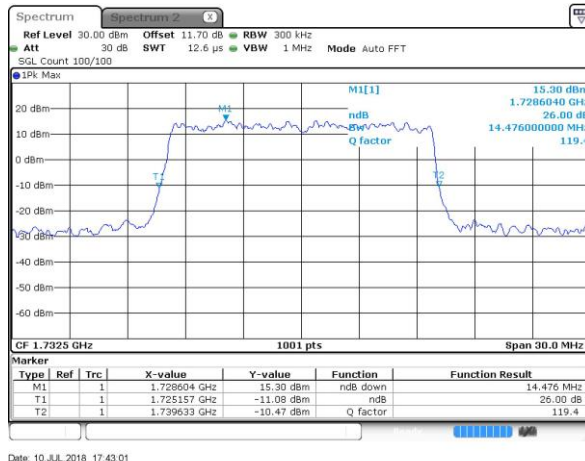
LTE Band 4

Lowest Channel / 15MHz / QPSK



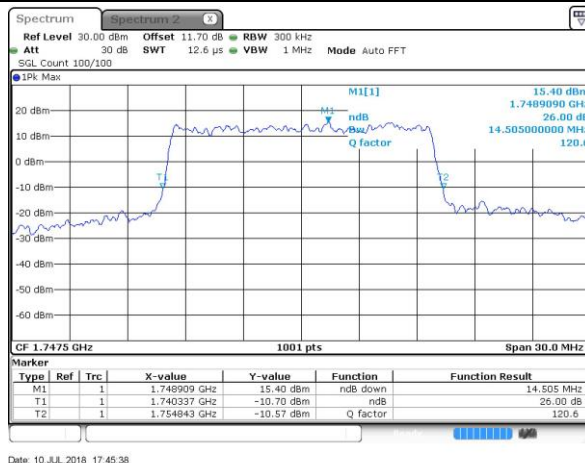
Date: 10.JUL.2018 17:35:42

Middle Channel / 15MHz / QPSK



Date: 10.JUL.2018 17:43:01

Highest Channel / 15MHz / QPSK

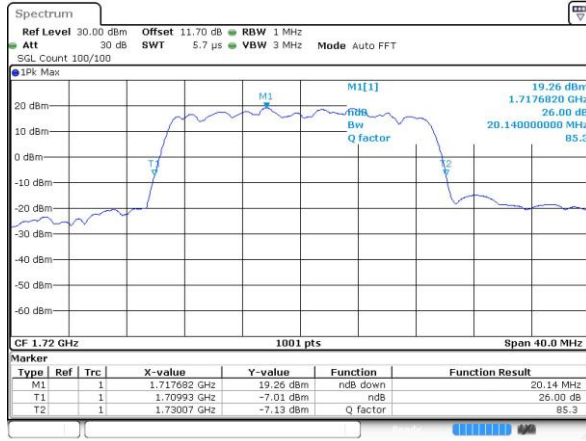


Date: 10.JUL.2018 17:45:38



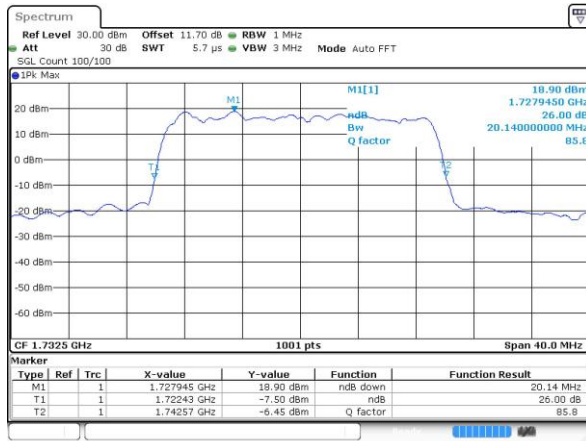
LTE Band 4

Lowest Channel / 20MHz / QPSK



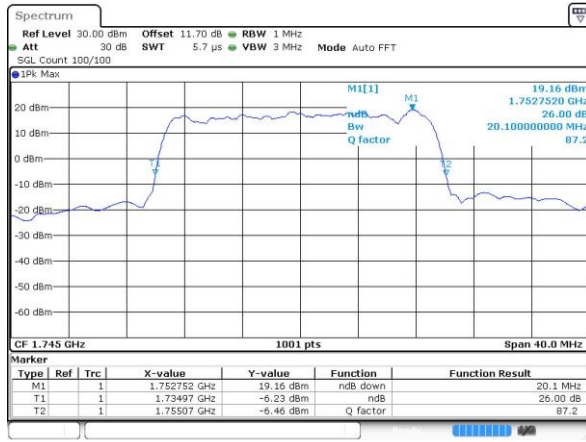
Date: 15 JUL 2018 17:58:46

Middle Channel / 20MHz / QPSK



Date: 15 JUL 2018 18:08:33

Highest Channel / 20MHz / QPSK



Date: 15 JUL 2018 18:09:39



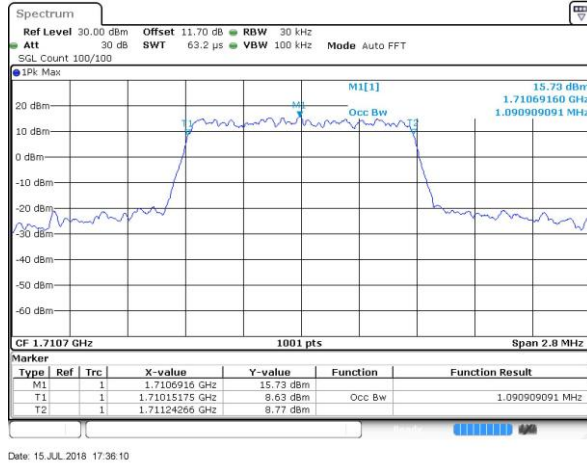
**Occupied Bandwidth**

Mode	LTE Band 4 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	-	2.72	-	4.50	-	9.07	-	13.46	-	18.30	-
Middle CH	1.09	-	2.71	-	4.49	-	9.03	-	13.43	-	18.34	-
Highest CH	1.10	-	2.73	-	4.48	-	9.05	-	13.43	-	18.22	-

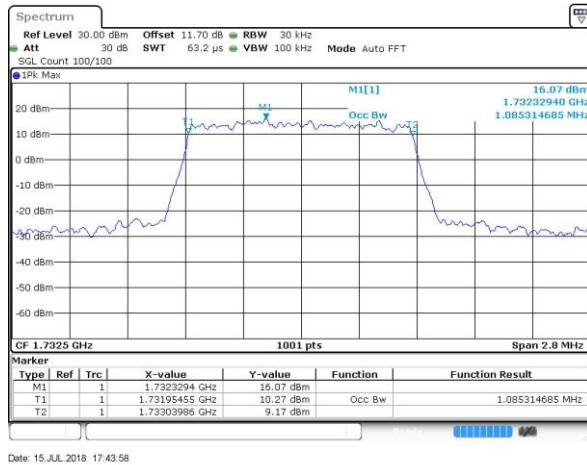


LTE Band 4

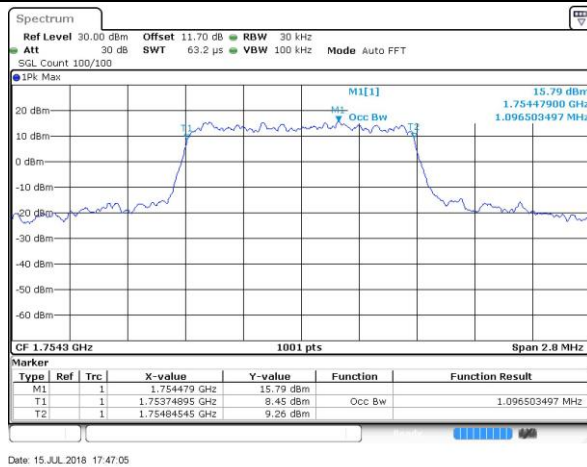
Lowest Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / QPSK



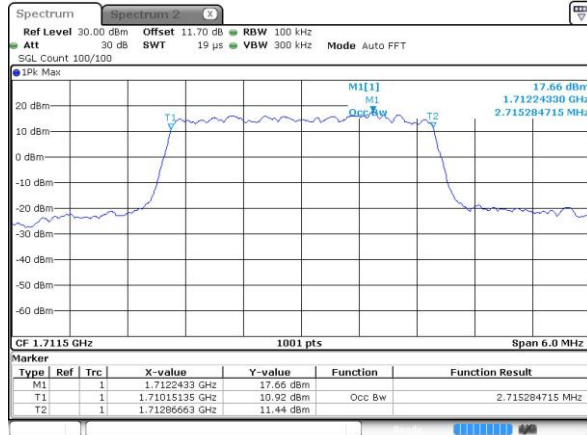
Highest Channel / 1.4MHz / QPSK





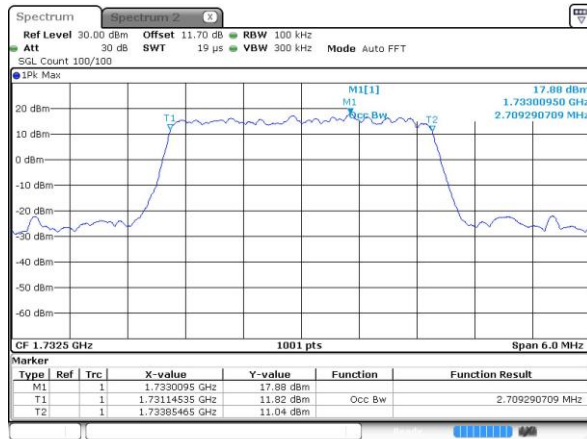
LTE Band 4

Lowest Channel / 3MHz / QPSK



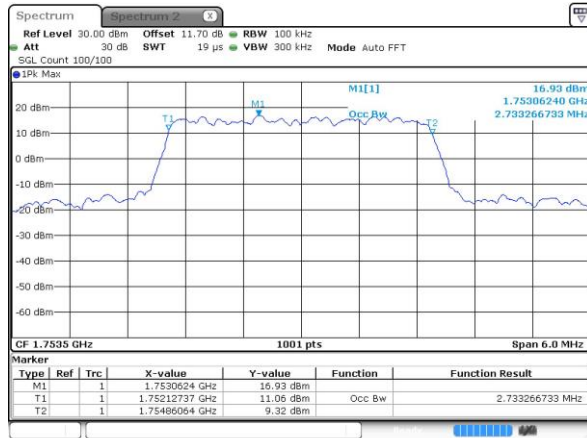
Date: 10 JUL 2018 16:43:37

Middle Channel / 3MHz / QPSK



Date: 10 JUL 2018 16:50:55

Highest Channel / 3MHz / QPSK

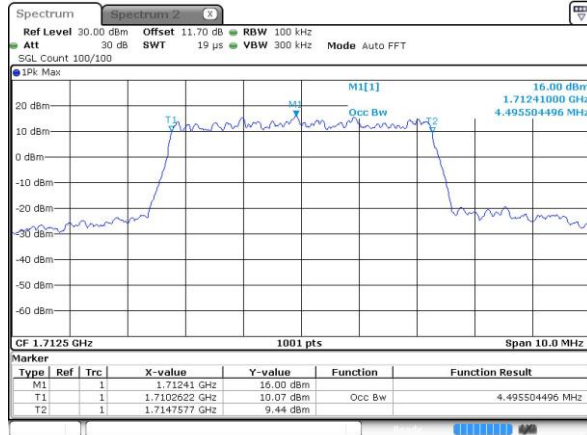


Date: 10 JUL 2018 16:53:32



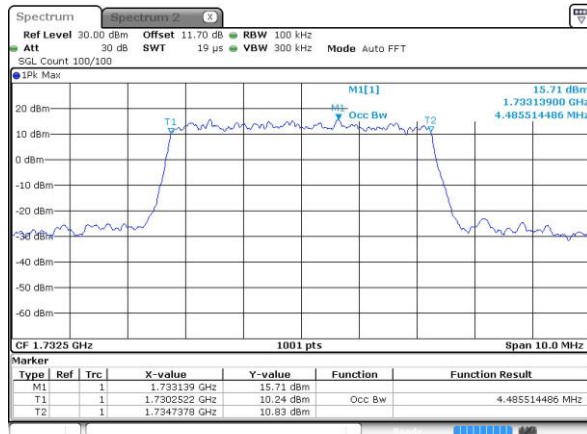
LTE Band 4

Lowest Channel / 5MHz / QPSK



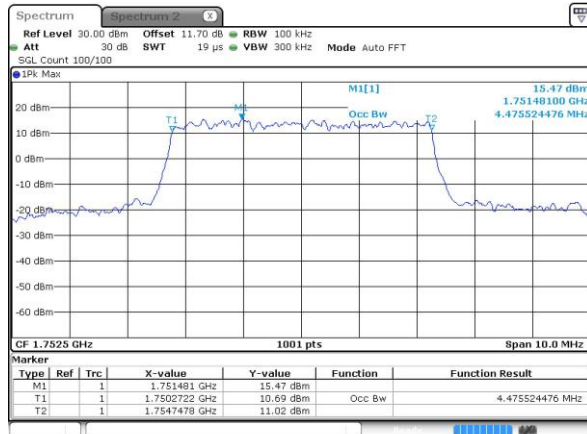
Date: 10.JUL.2018 17:00:51

Middle Channel / 5MHz / QPSK



Date: 10.JUL.2018 17:08:09

Highest Channel / 5MHz / QPSK

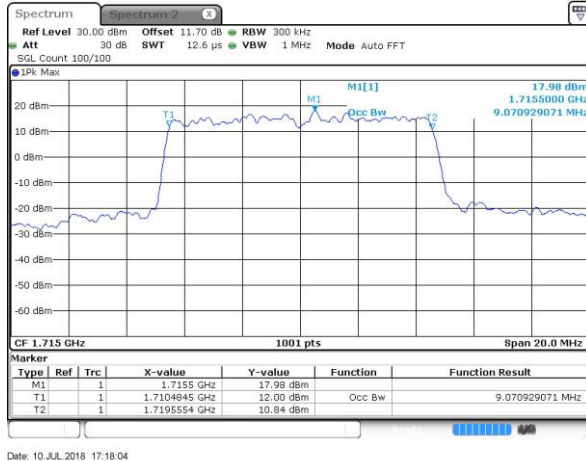


Date: 10.JUL.2018 17:10:46



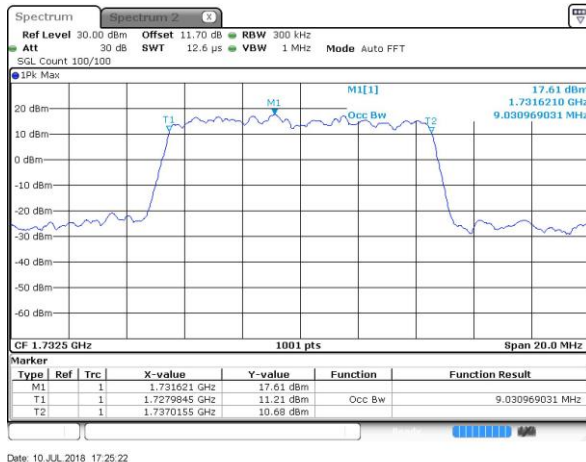
LTE Band 4

Lowest Channel / 10MHz / QPSK



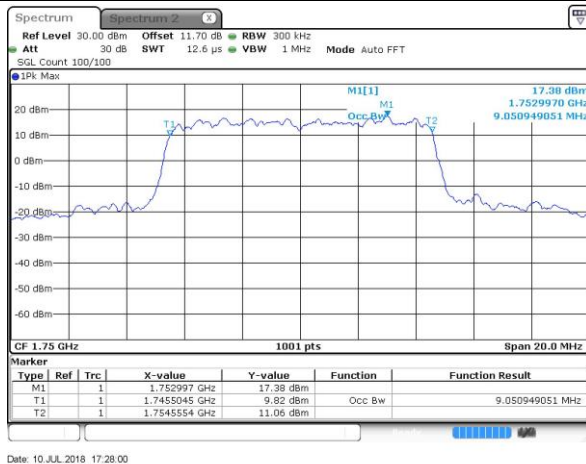
Date: 10.JUL.2018 17:18:04

Middle Channel / 10MHz / QPSK



Date: 10.JUL.2018 17:25:22

Highest Channel / 10MHz / QPSK

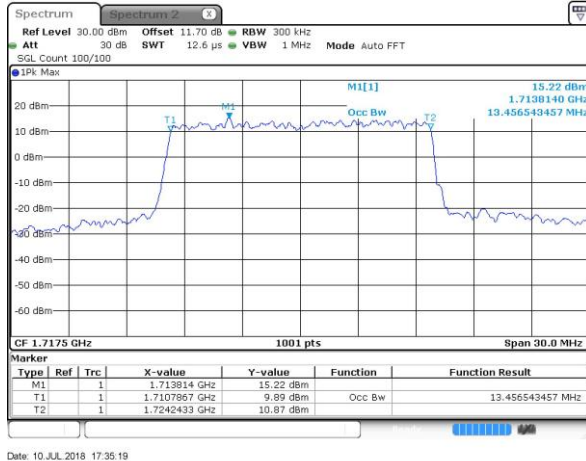


Date: 10.JUL.2018 17:28:00



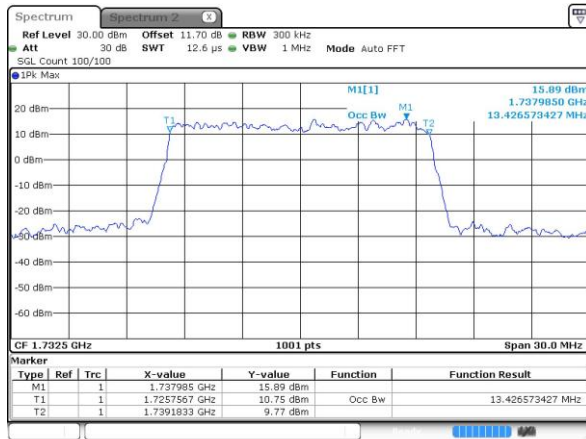
LTE Band 4

Lowest Channel / 15MHz / QPSK



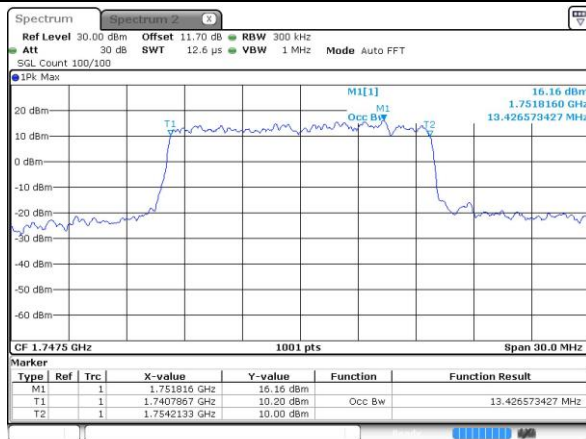
Date: 10.JUL.2018 17:35:19

Middle Channel / 15MHz / QPSK



Date: 10.JUL.2018 17:42:38

Highest Channel / 15MHz / QPSK



Date: 10.JUL.2018 17:45:15





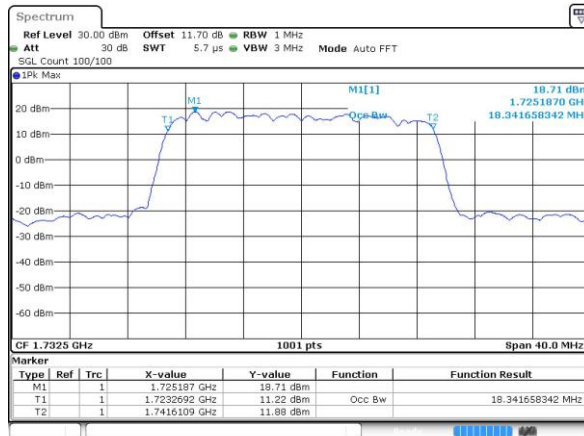
LTE Band 4

Lowest Channel / 20MHz / QPSK



Date: 15 JUL 2018 17:58:23

Middle Channel / 20MHz / QPSK



Date: 15 JUL 2018 18:06:10

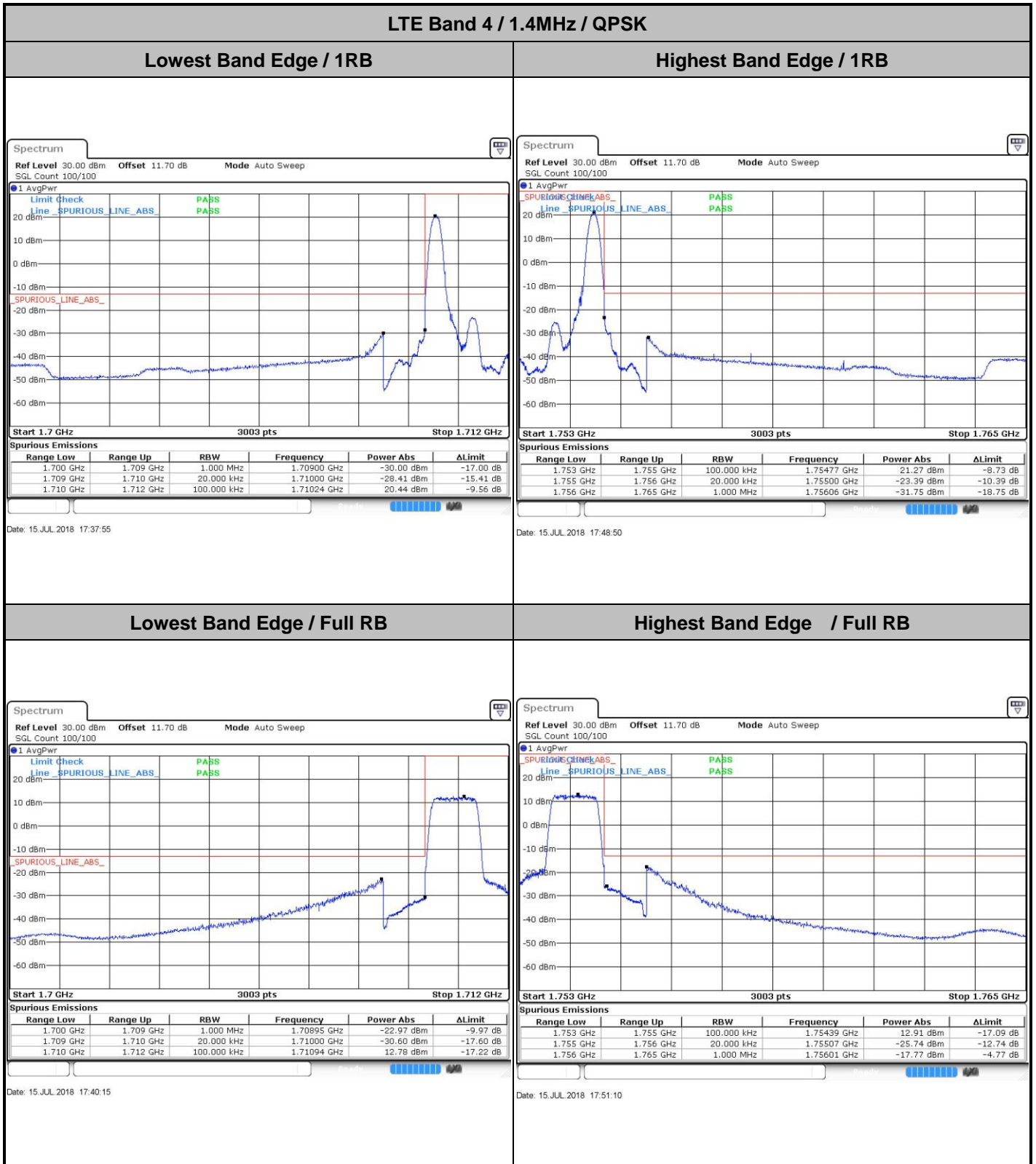
Highest Channel / 20MHz / QPSK



Date: 15 JUL 2018 18:09:16



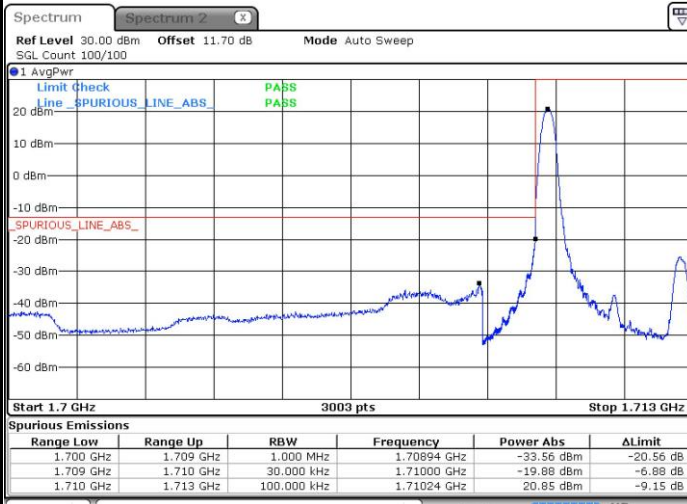
# Conducted Band Edge





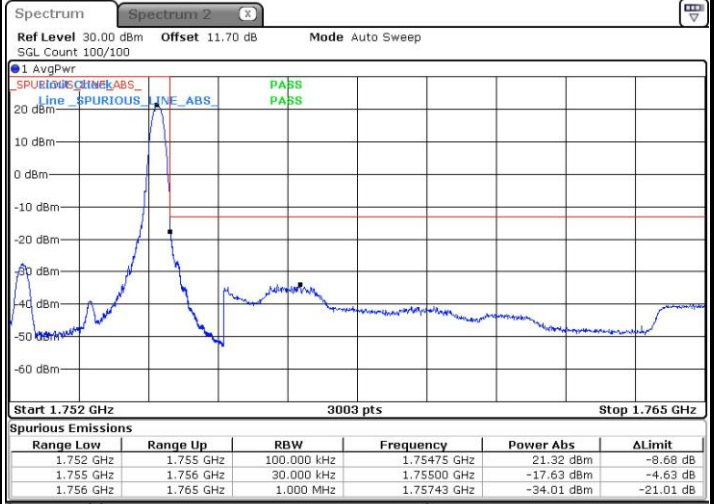
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



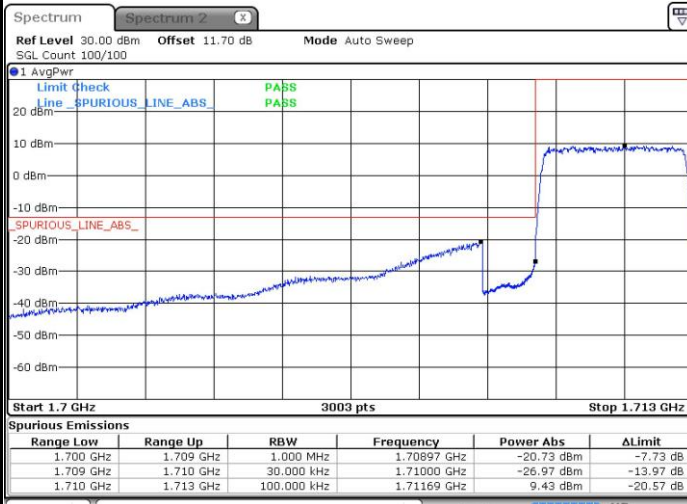
Date: 10 JUL 2018 16:45:22

Highest Band Edge / 1 RB



Date: 10 JUL 2018 16:55:17

Lowest Band Edge / Full RB



Date: 10 JUL 2018 16:47:42

Highest Band Edge / Full RB

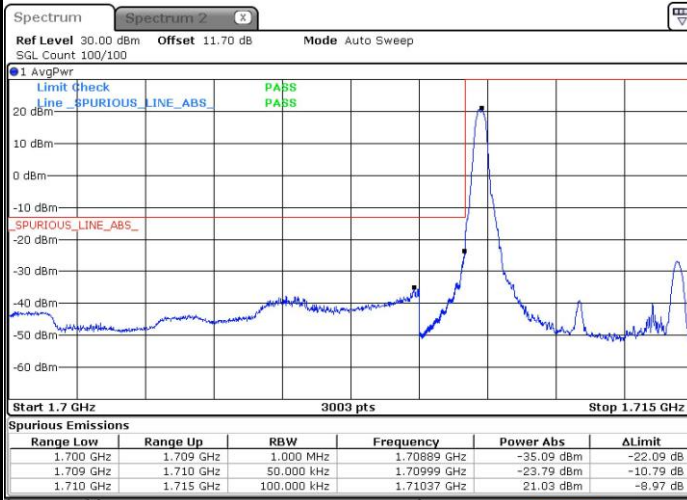


Date: 10 JUL 2018 16:57:37



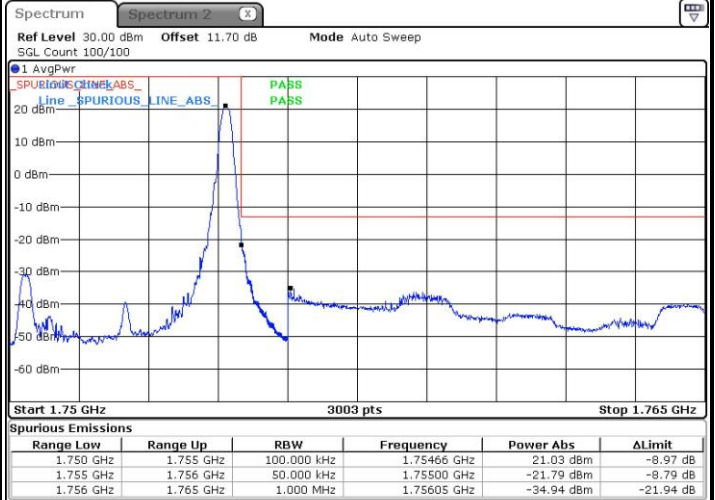
LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Date: 10 JUL 2018 17:02:35

Highest Band Edge / 1 RB



Date: 10 JUL 2018 17:12:31

Lowest Band Edge / Full RB



Date: 10 JUL 2018 17:04:55

Highest Band Edge / Full RB

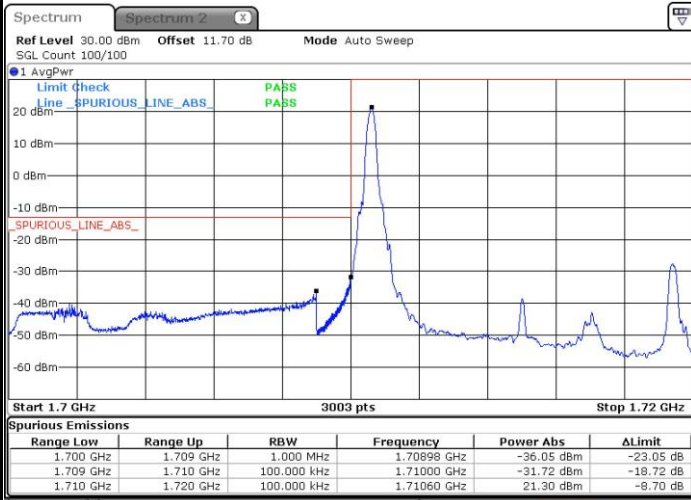


Date: 10 JUL 2018 17:14:51



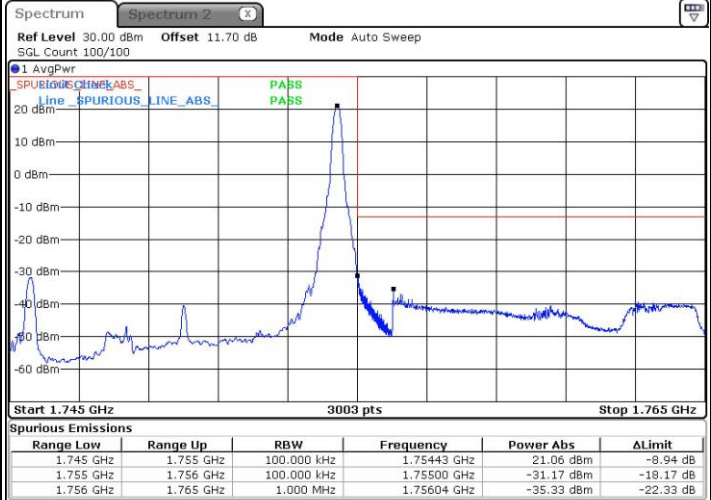
LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / 1 RB



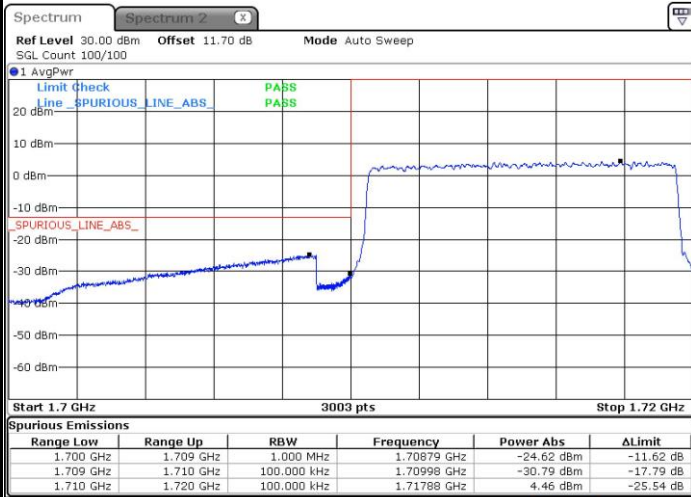
Date: 10 JUL 2018 17:19:49

Highest Band Edge / 1 RB



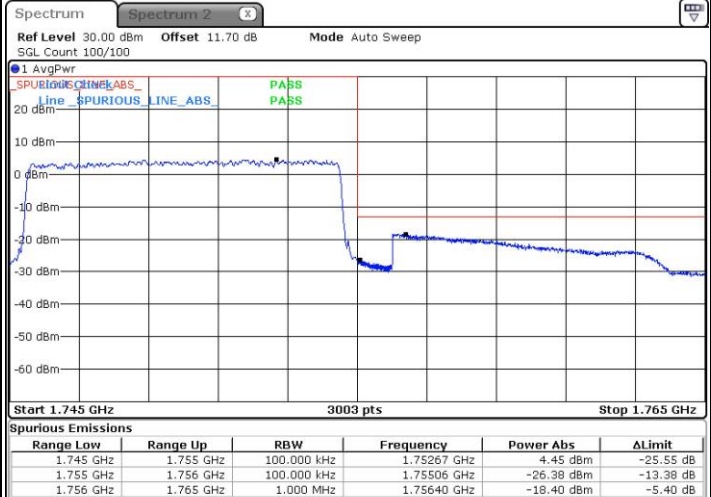
Date: 10 JUL 2018 17:29:45

Lowest Band Edge / Full RB



Date: 10 JUL 2018 17:22:09

Highest Band Edge / Full RB

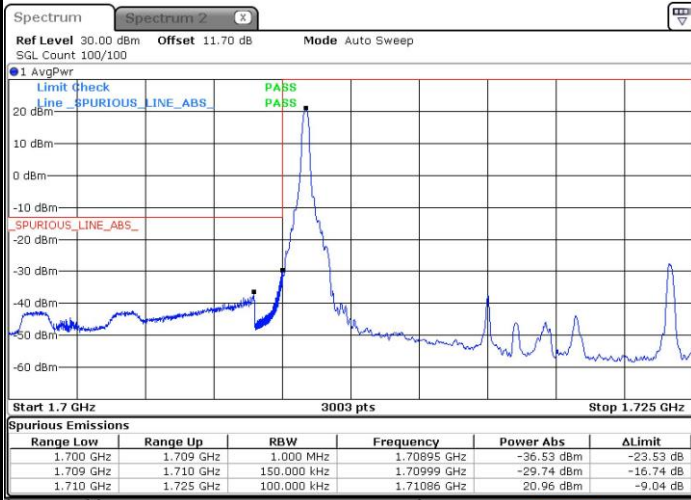


Date: 10 JUL 2018 17:32:05



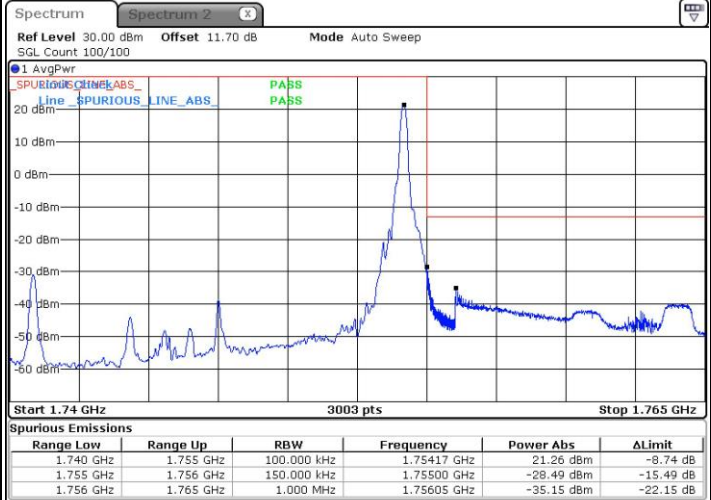
LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / 1 RB



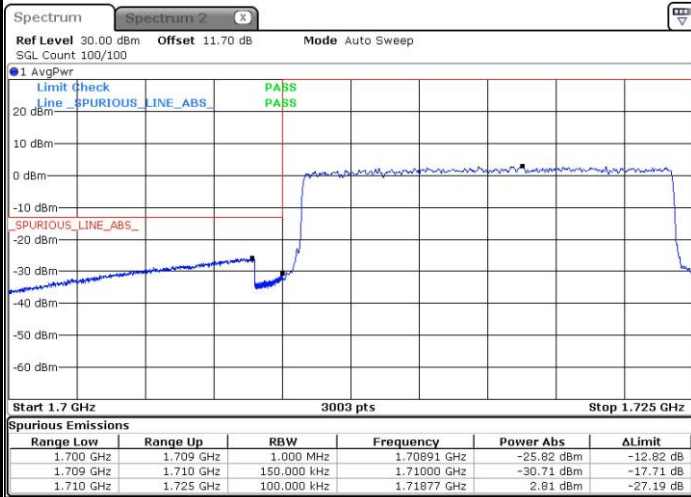
Date: 10 JUL 2018 17:37:03

Highest Band Edge / 1 RB



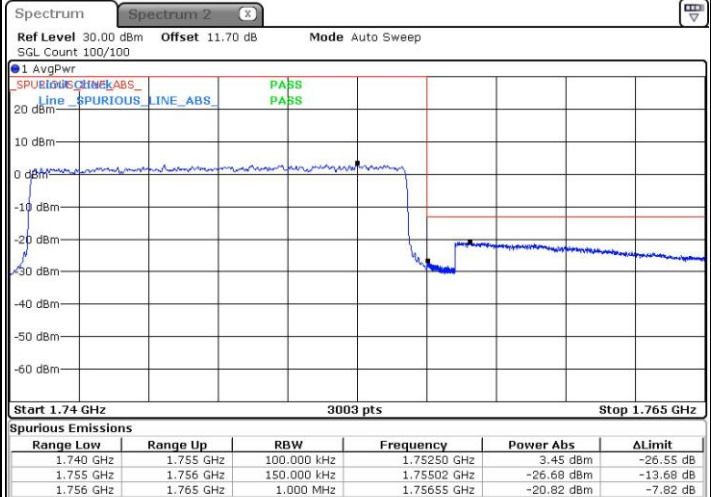
Date: 10 JUL 2018 17:46:59

Lowest Band Edge / Full RB



Date: 10 JUL 2018 17:39:24

Highest Band Edge / Full RB



Date: 10 JUL 2018 17:49:20