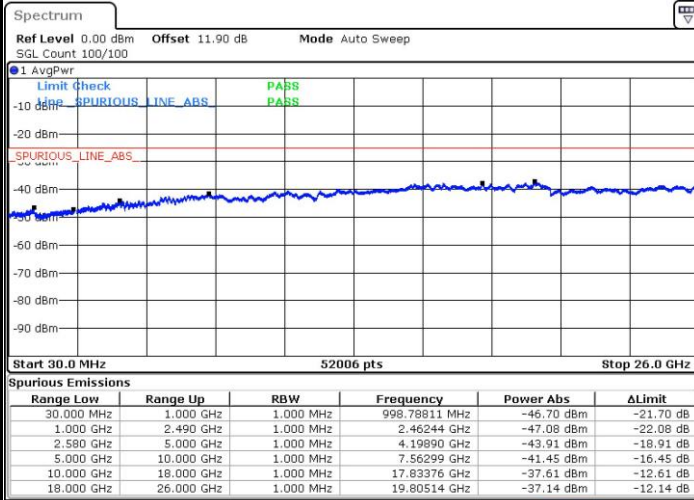




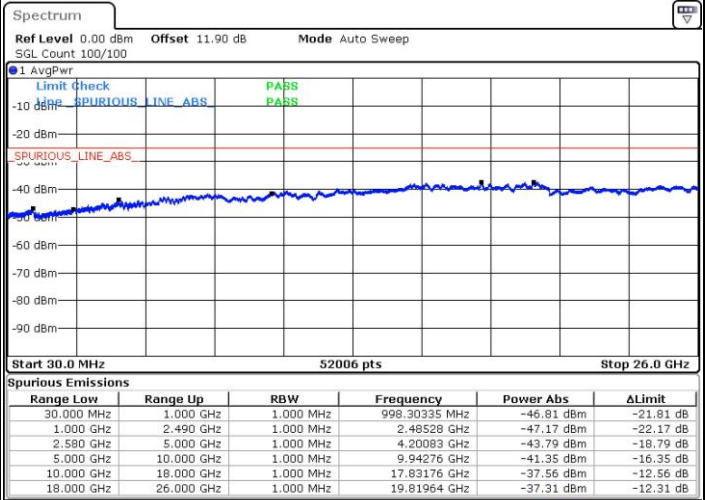
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



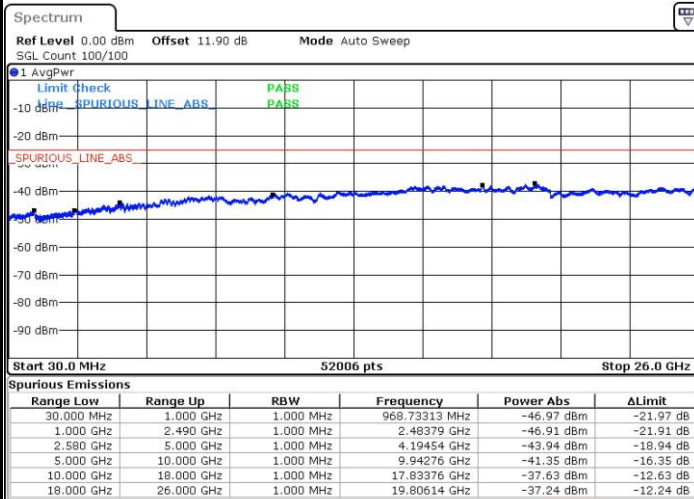
Date: 1 JUL 2019 17:43:53

Middle Channel / 64QAM



Date: 1 JUL 2019 17:45:02

Highest Channel / 64QAM

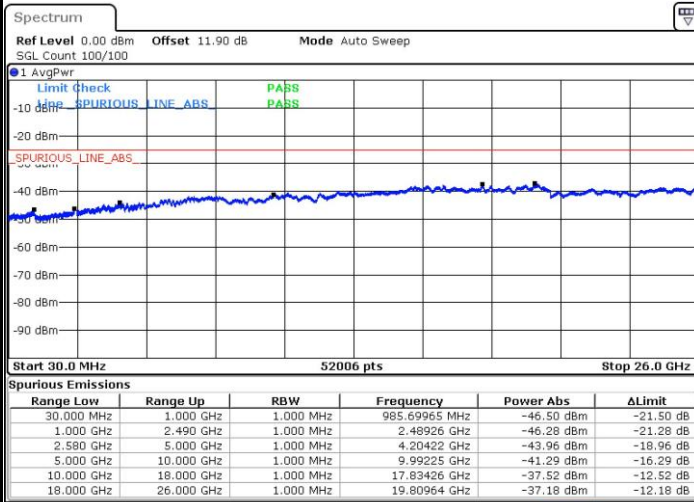


Date: 1 JUL 2019 17:47:25



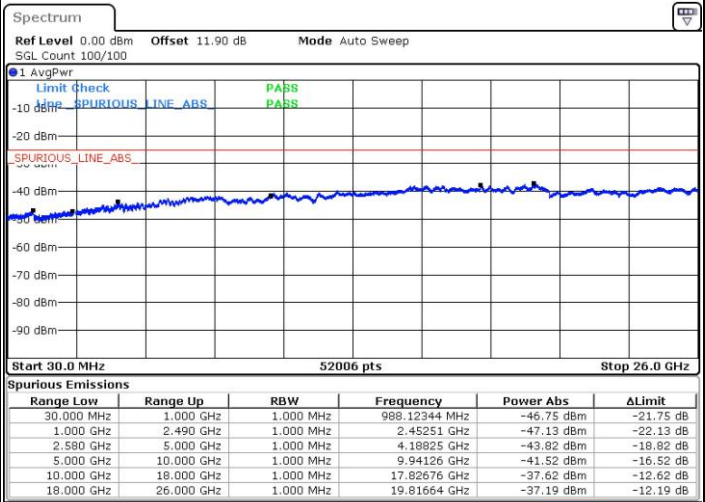
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



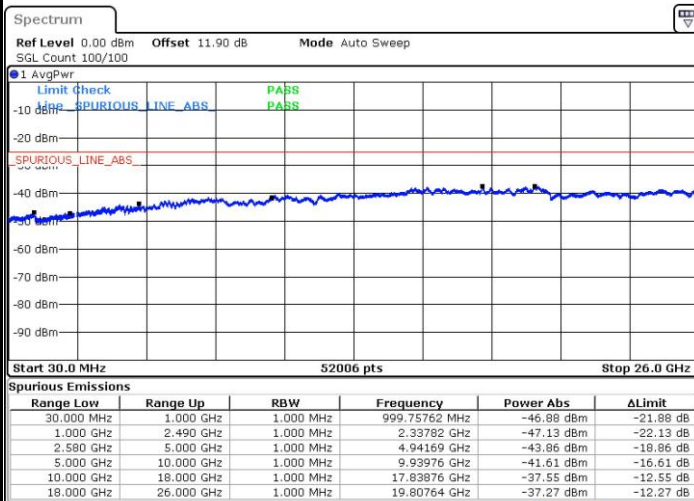
Date: 1 JUL 2019 18:09:09

Middle Channel / 64QAM



Date: 1 JUL 2019 18:10:18

Highest Channel / 64QAM

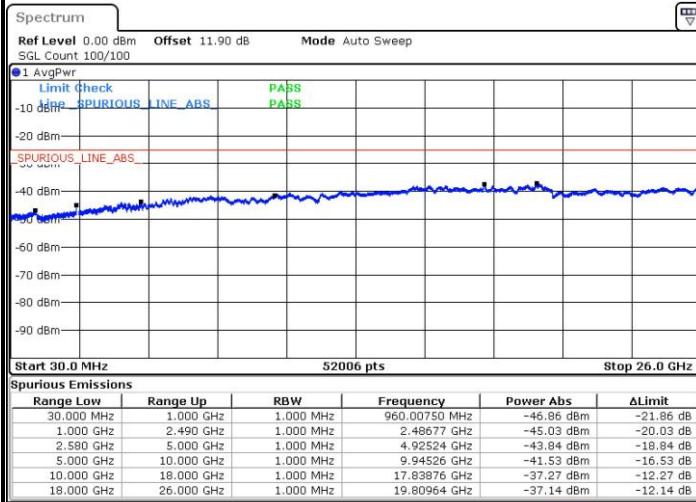


Date: 1 JUL 2019 18:12:41



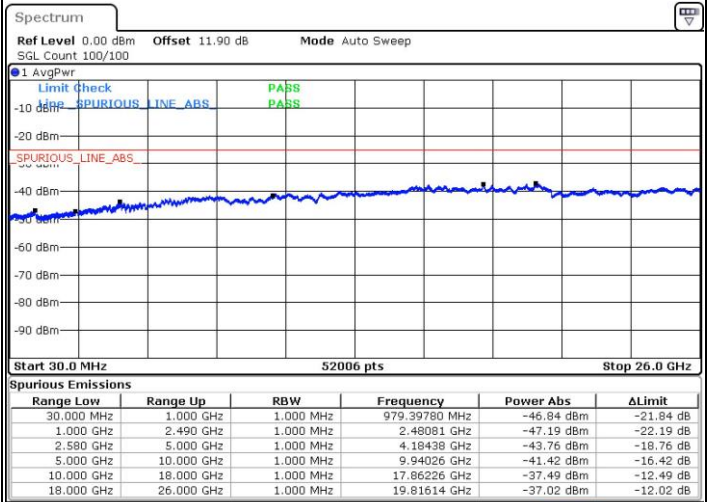
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



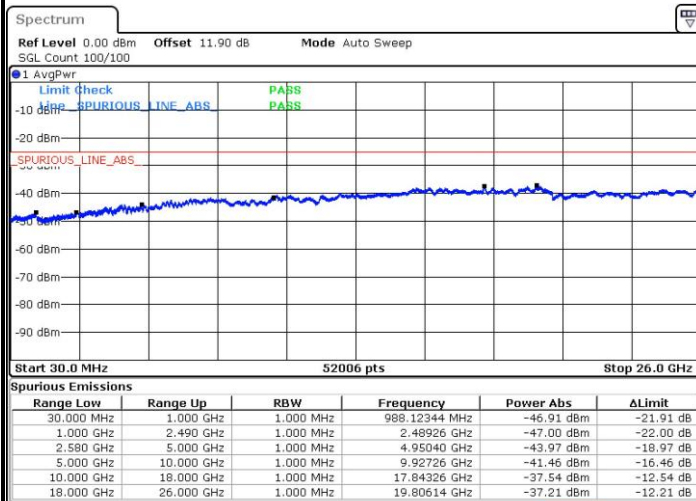
Date: 1 JUL 2019 18:26:58

Middle Channel / 64QAM



Date: 1 JUL 2019 18:28:06

Highest Channel / 64QAM

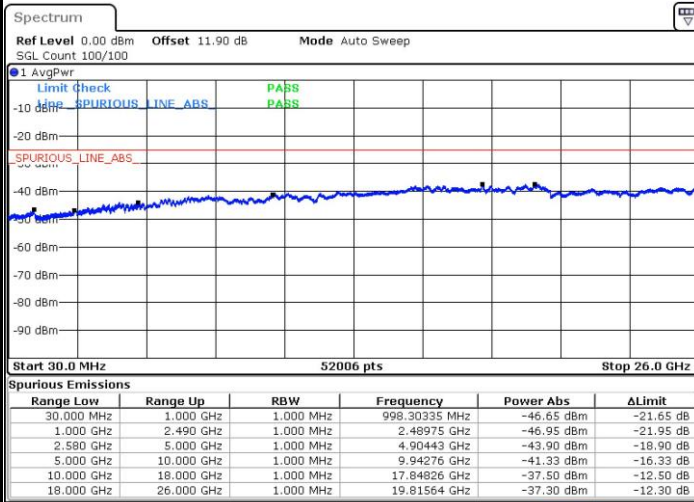


Date: 1 JUL 2019 18:30:29



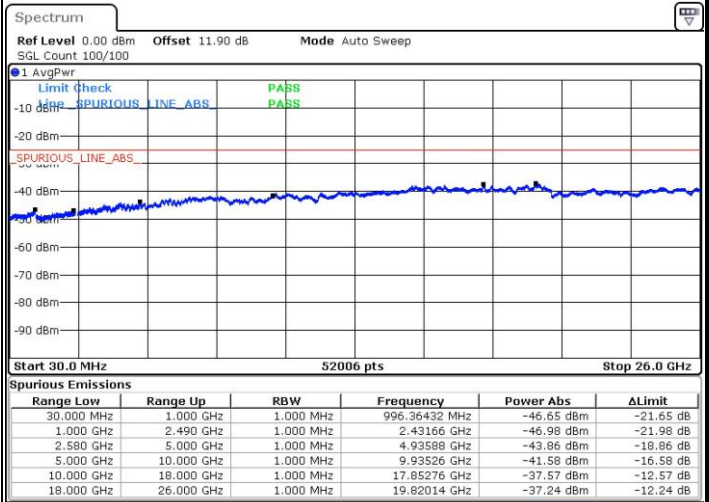
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



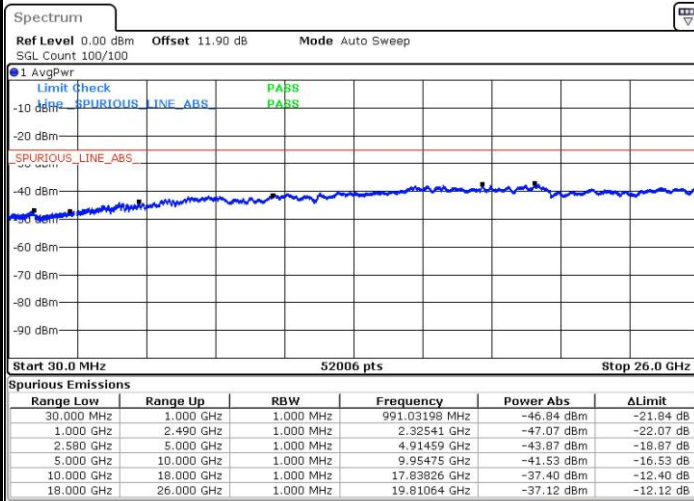
Date: 1 JUL 2019 18:44:47

Middle Channel / 64QAM



Date: 1 JUL 2019 18:45:56

Highest Channel / 64QAM



Date: 1 JUL 2019 18:48:19

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0059	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0057	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0058	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0007	

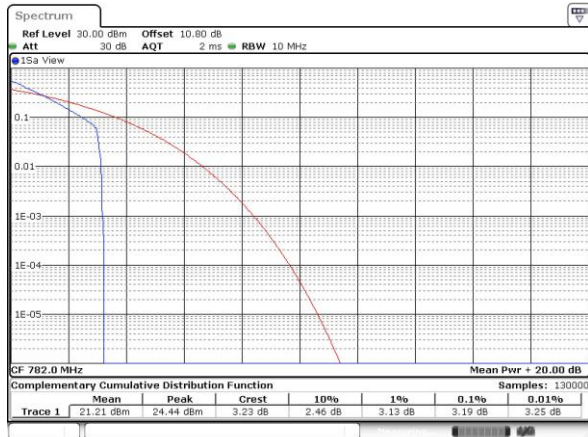
Note:

1. Normal Voltage = 3.85V. ; Battery End Point (BEP) = 3.65 V. ; Maximum Voltage =4.25V
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

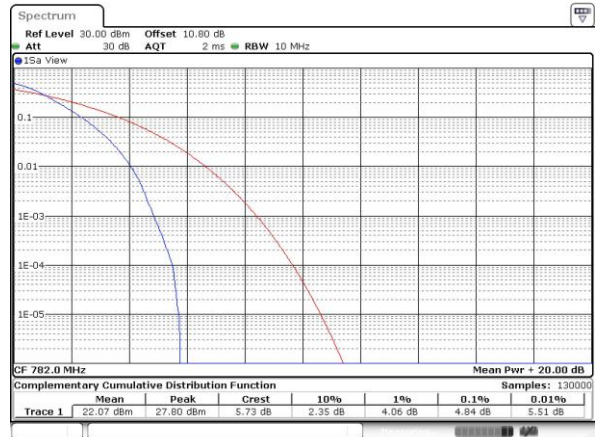
LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.19	4.84	3.80	5.65	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.90	6.26	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB


Date: 2 JUL 2019 03:45:16

Middle Channel / Full RB


Date: 2 JUL 2019 03:45:27

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB

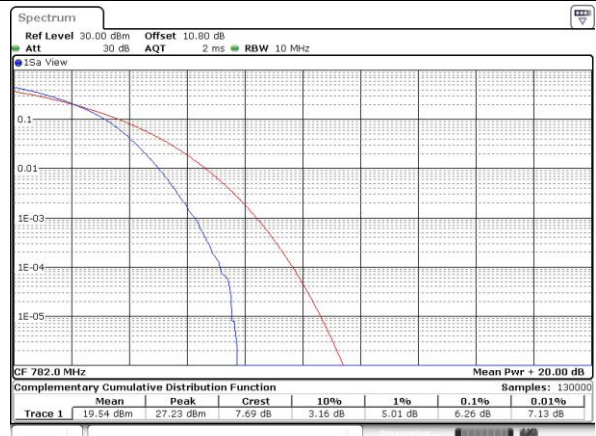

Date: 2 JUL 2019 03:44:40

Middle Channel / Full RB


Date: 2 JUL 2019 03:45:05

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB


Date: 2 JUL 2019 03:44:17

Middle Channel / Full RB


Date: 2 JUL 2019 03:44:28

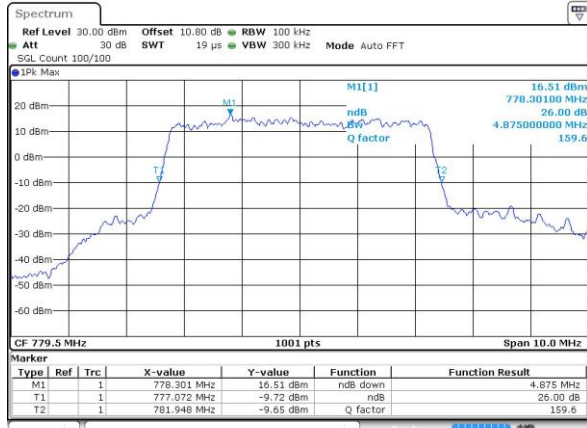
**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.88	4.83	-	-	-	-	-	-
Middle CH	-	-	-	-	4.94	4.93	9.83	9.87	-	-	-	-
Highest CH	-	-	-	-	4.86	4.92	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.91	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.87	-	9.83	-	-	-	-	-
Highest CH	-	-	-	-	4.88	-	-	-	-	-	-	-



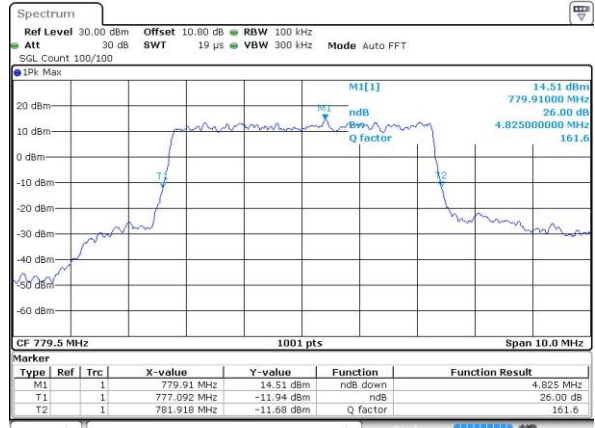
LTE Band 13

Lowest Channel / 5MHz / QPSK



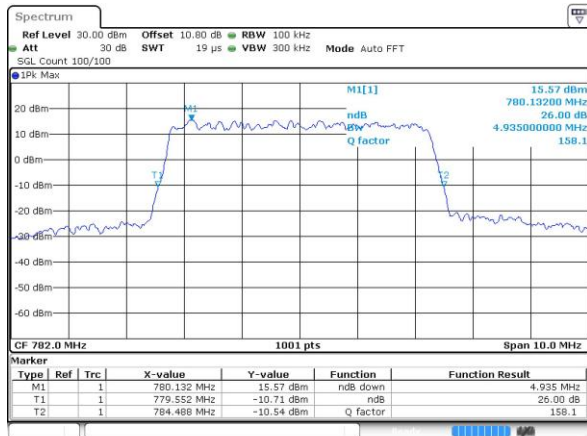
Date: 2 JUL 2019 02:49:16

Lowest Channel / 5MHz / 16QAM



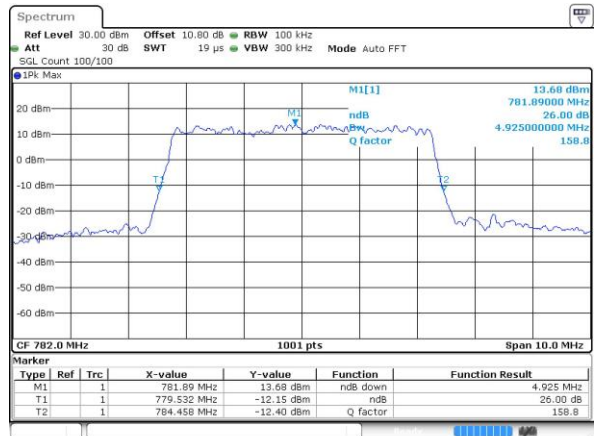
Date: 2 JUL 2019 02:49:04

Middle Channel / 5MHz / QPSK



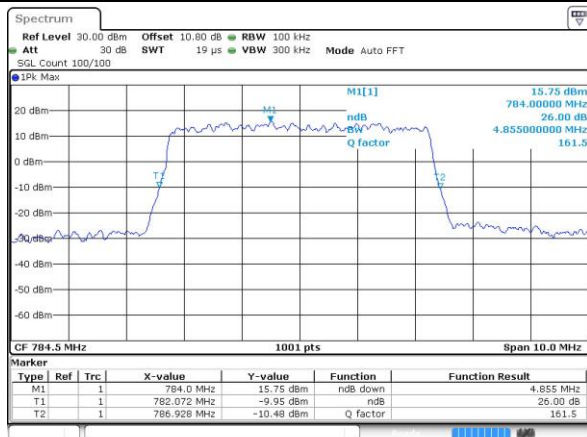
Date: 2 JUL 2019 02:59:17

Middle Channel / 5MHz / 16QAM



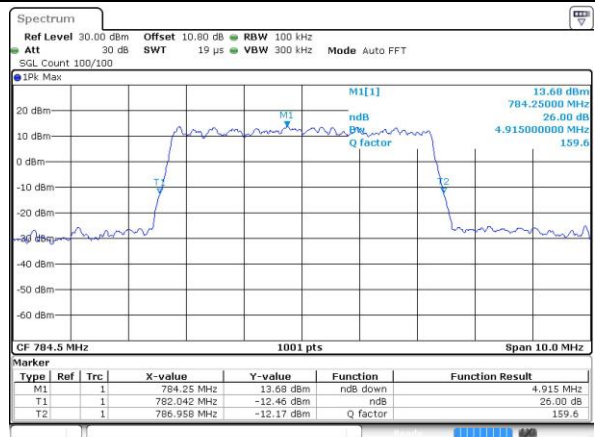
Date: 2 JUL 2019 02:59:29

Highest Channel / 5MHz / QPSK



Date: 2 JUL 2019 03:00:42

Highest Channel / 5MHz / 16QAM

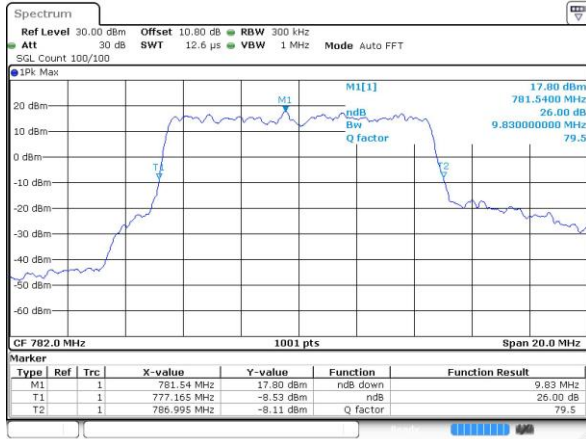


Date: 2 JUL 2019 03:00:29



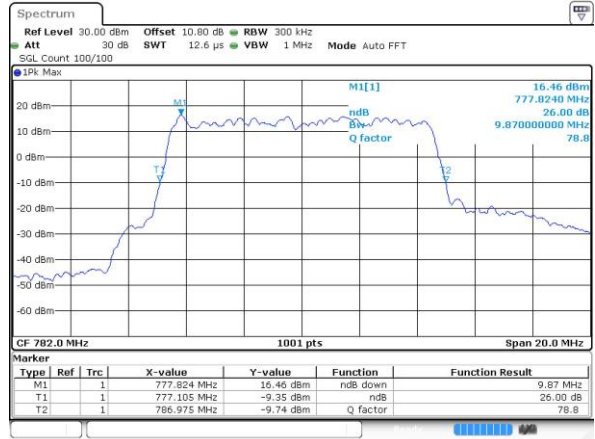
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 2 JUL 2019 03:20:03

Middle Channel / 10MHz / 16QAM

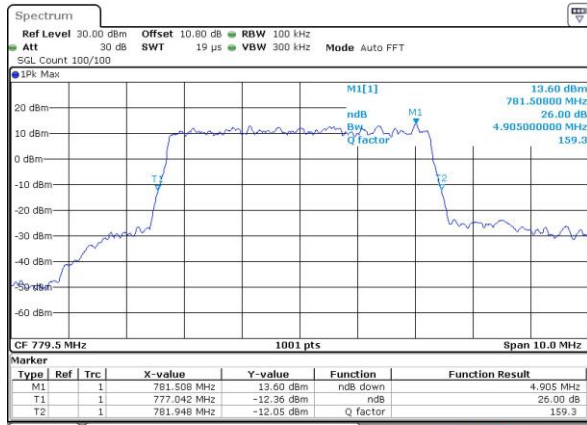


Date: 2 JUL 2019 03:19:51

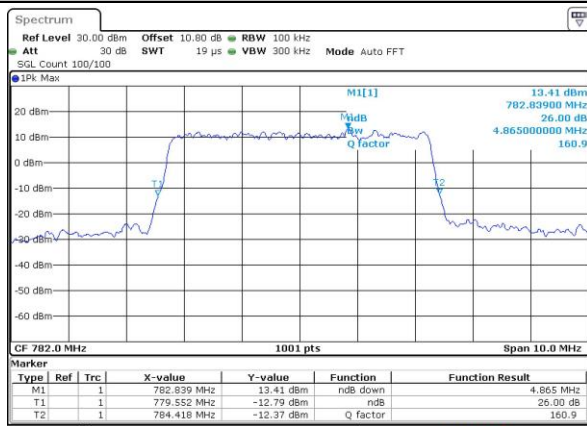


LTE Band 13

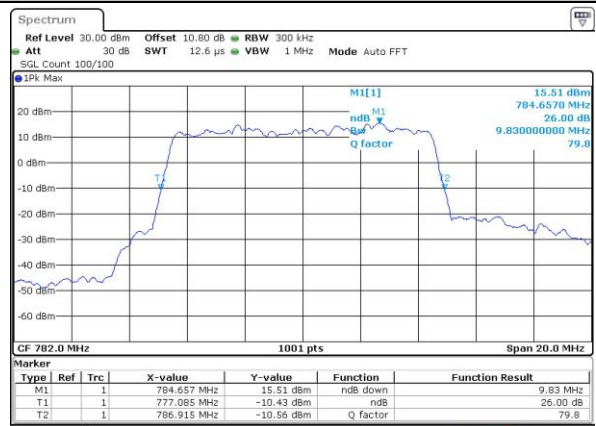
Lowest Channel / 5MHz / 64QAM



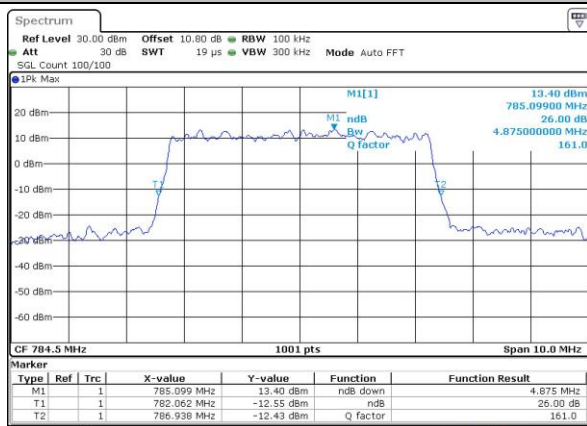
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



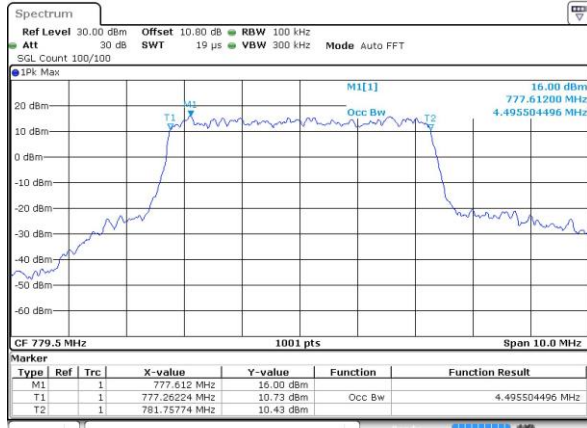
**Occupied Bandwidth**

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	-	-	-	-	4.50	4.50	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.49	9.05	8.99	-	-	-	-
Highest CH	-	-	-	-	4.53	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.53	-	8.99	-	-	-	-	-
Highest CH	-	-	-	-	4.52	-	-	-	-	-	-	-



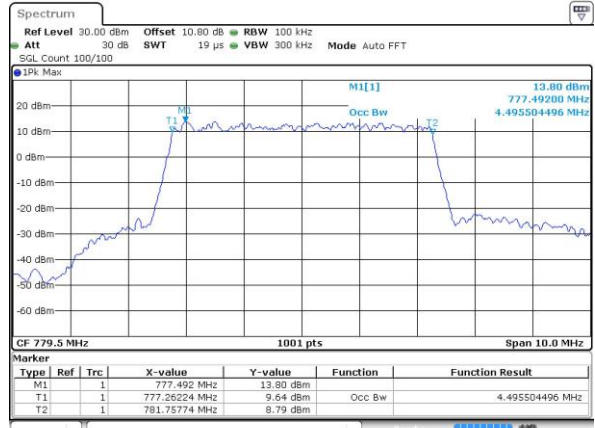
LTE Band 13

Lowest Channel / 5MHz / QPSK



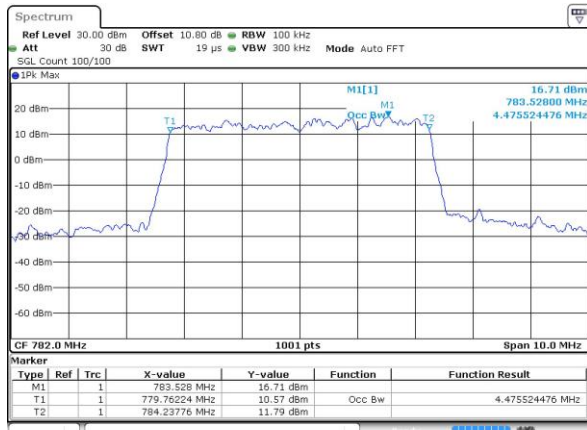
Date: 2 JUL 2019 02:48:39

Lowest Channel / 5MHz / 16QAM



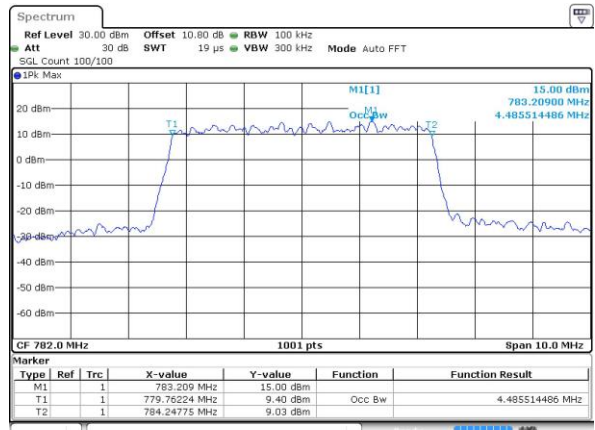
Date: 2 JUL 2019 02:48:51

Middle Channel / 5MHz / QPSK



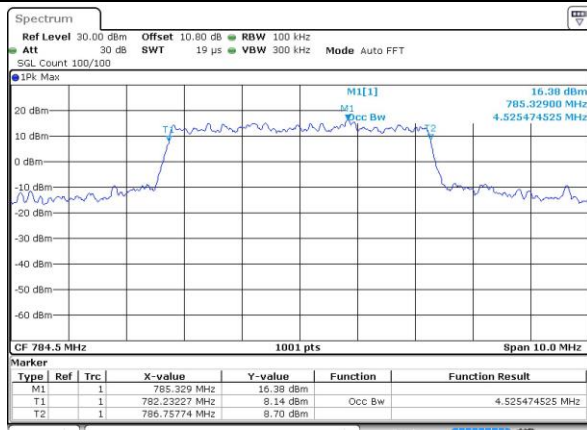
Date: 2 JUL 2019 02:59:53

Middle Channel / 5MHz / 16QAM



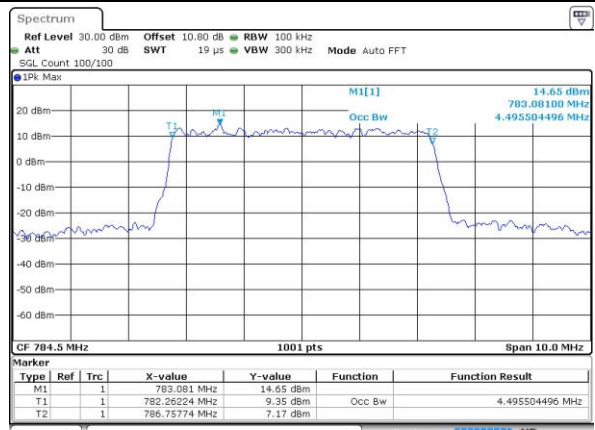
Date: 2 JUL 2019 02:59:41

Highest Channel / 5MHz / QPSK



Date: 2 JUL 2019 03:00:05

Highest Channel / 5MHz / 16QAM

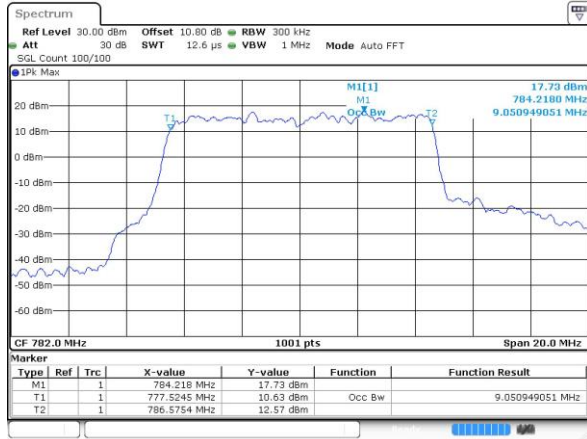


Date: 2 JUL 2019 03:00:17



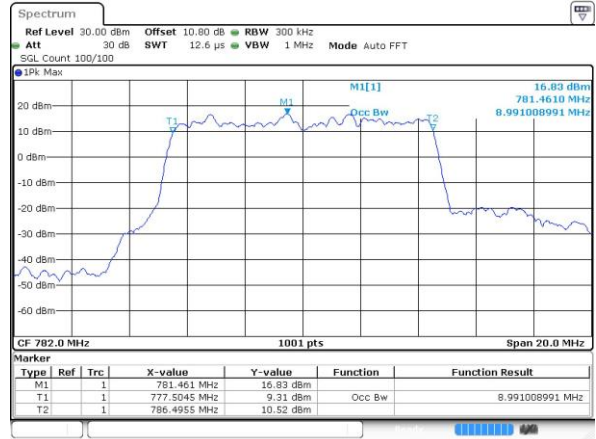
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 2 JUL 2019 03:19:27

Middle Channel / 10MHz / 16QAM

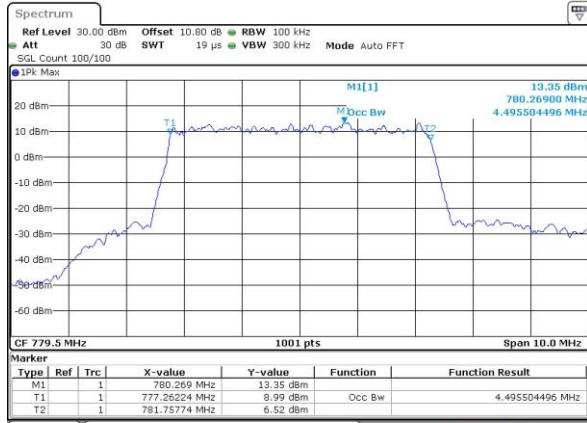


Date: 2 JUL 2019 03:19:39



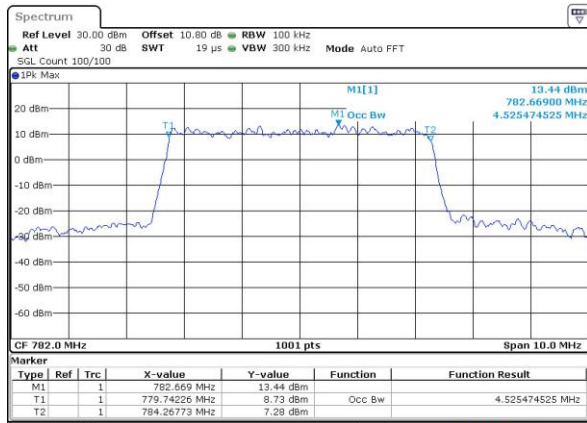
LTE Band 13

Lowest Channel / 5MHz / 64QAM



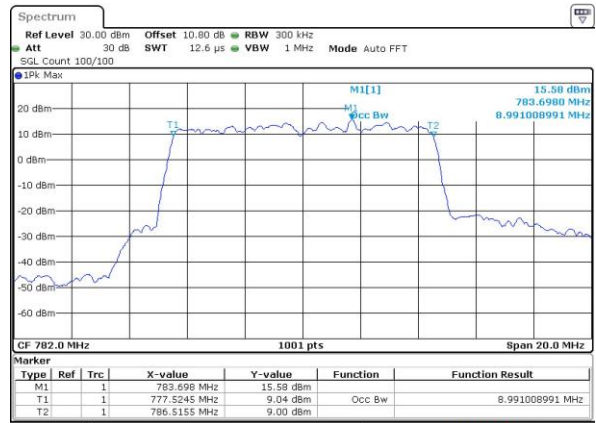
Date: 2 JUL 2019 03:09:12

Middle Channel / 5MHz / 64QAM



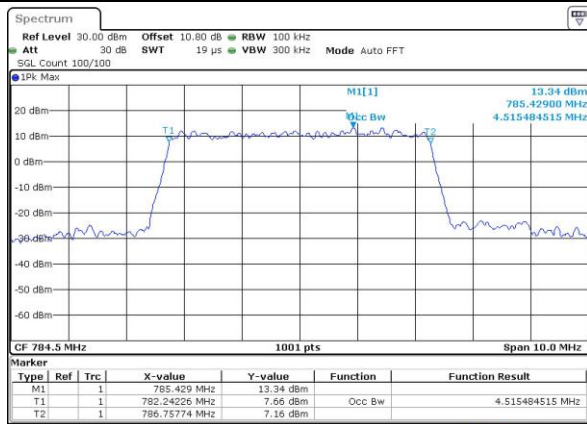
Date: 2 JUL 2019 03:14:42

Middle Channel / 10MHz / 64QAM

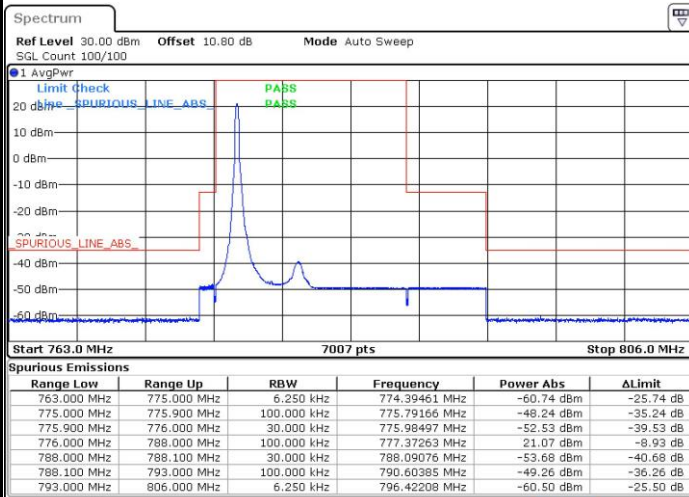
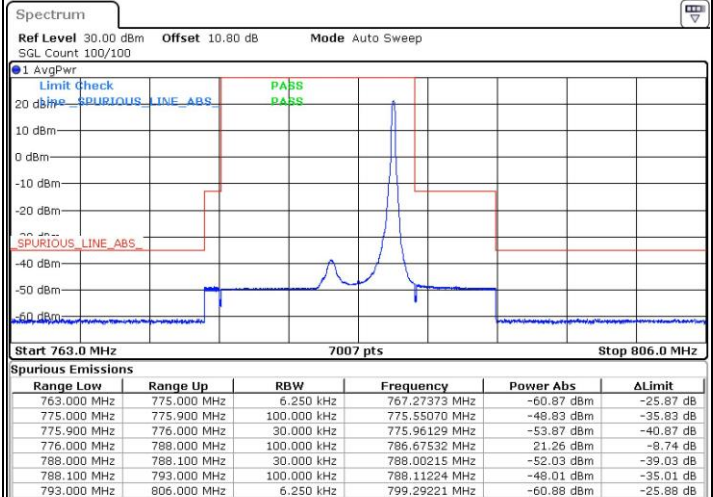
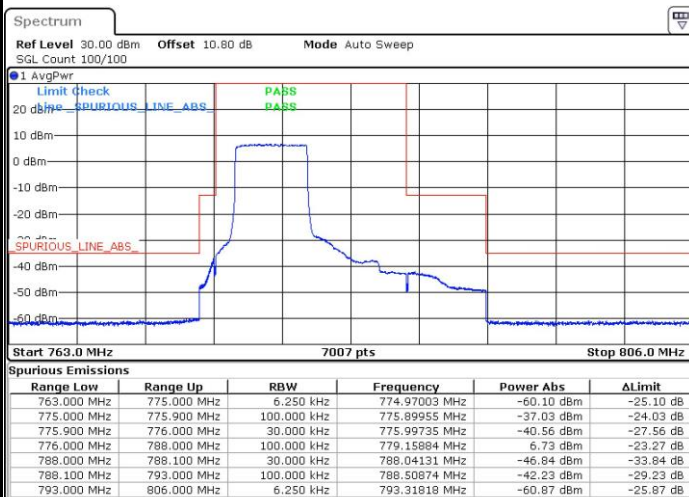
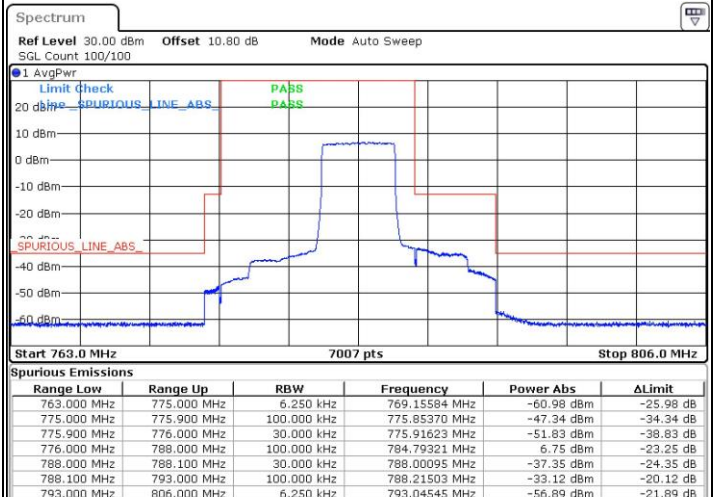


Date: 2 JUL 2019 03:31:50

Highest Channel / 5MHz / 64QAM



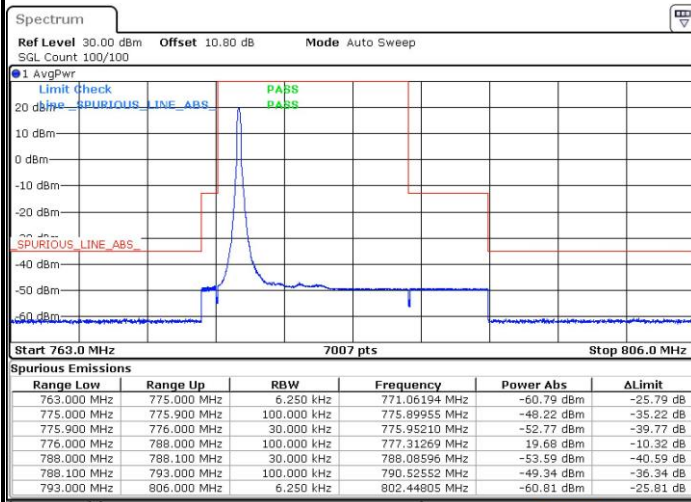
Date: 2 JUL 2019 03:14:54

**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**

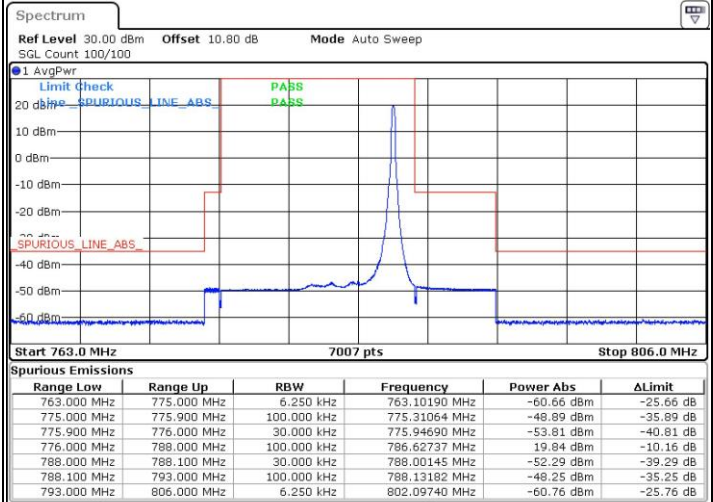


LTE Band 13 / 5MHz / 16QAM

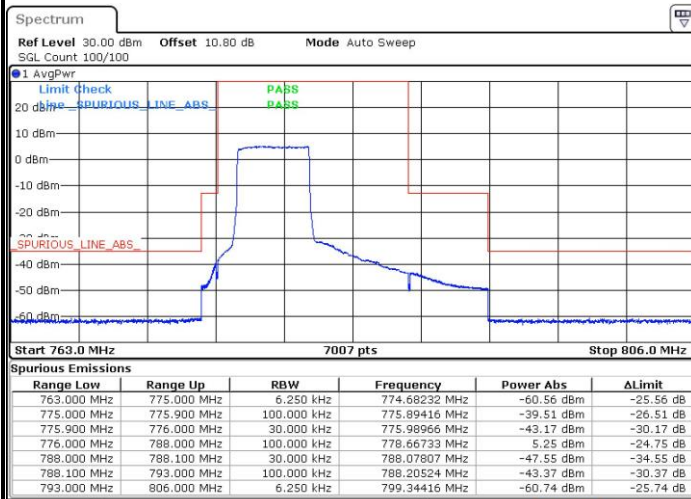
Lowest Band Edge / 1 RB



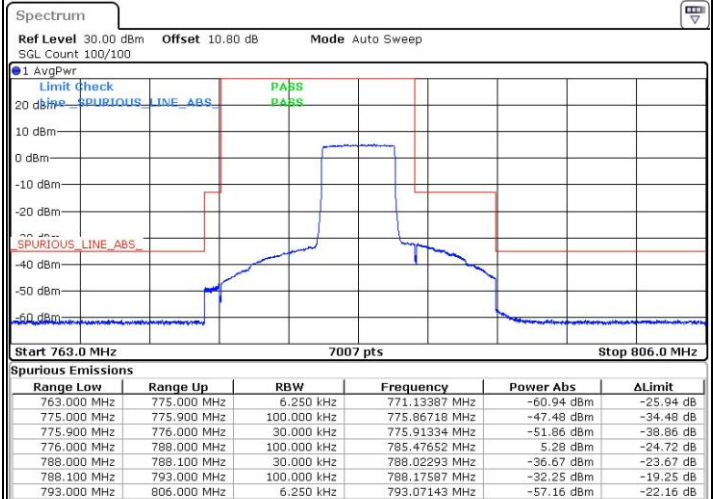
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



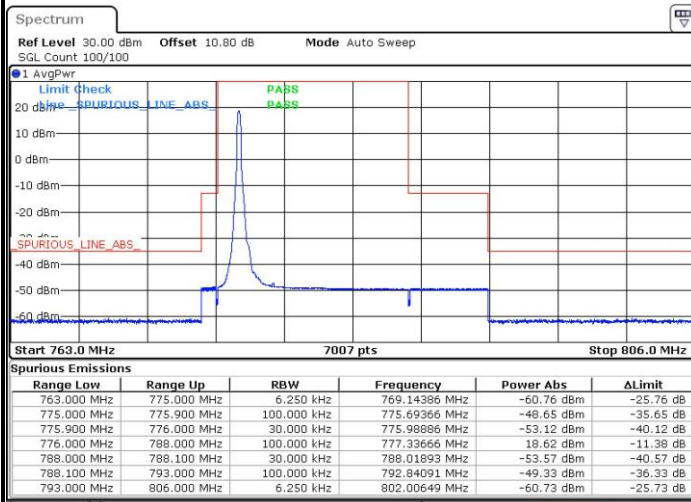
Highest Band Edge / Full RB



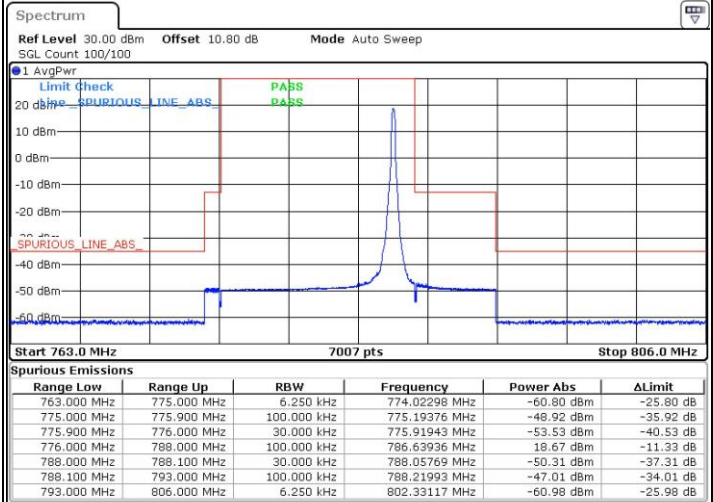


LTE Band 13 / 5MHz / 64QAM

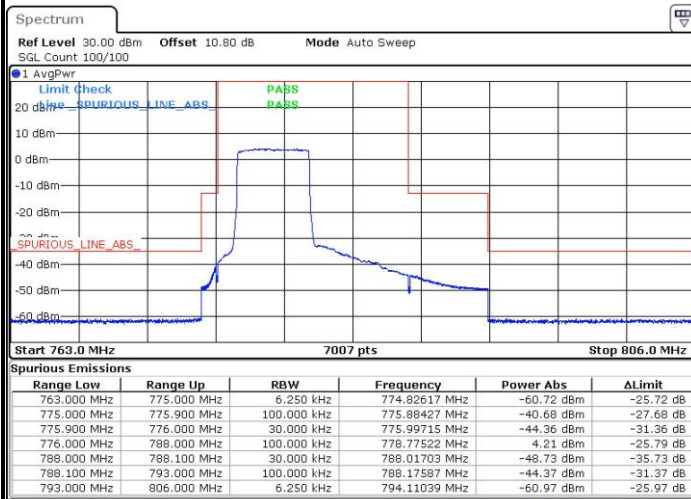
Lowest Band Edge / 1 RB



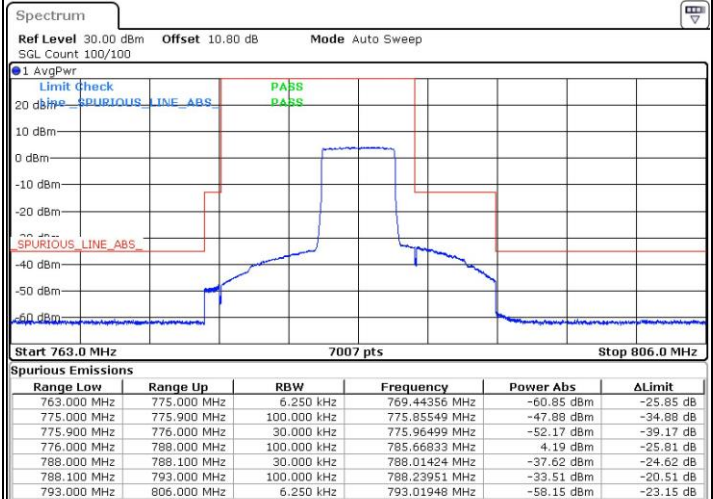
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



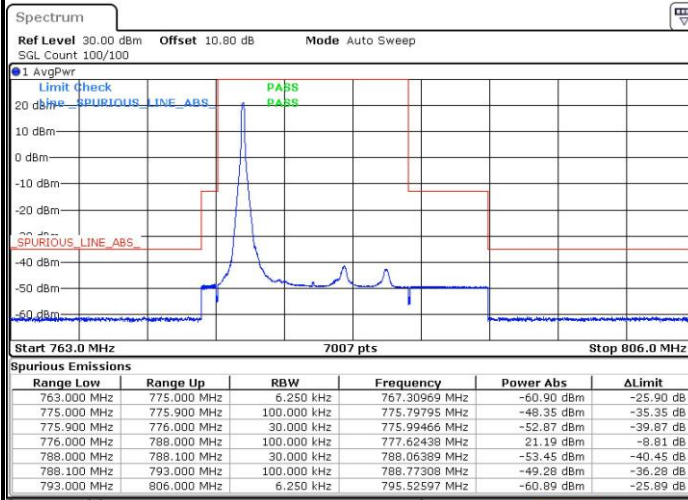
Highest Band Edge / Full RB





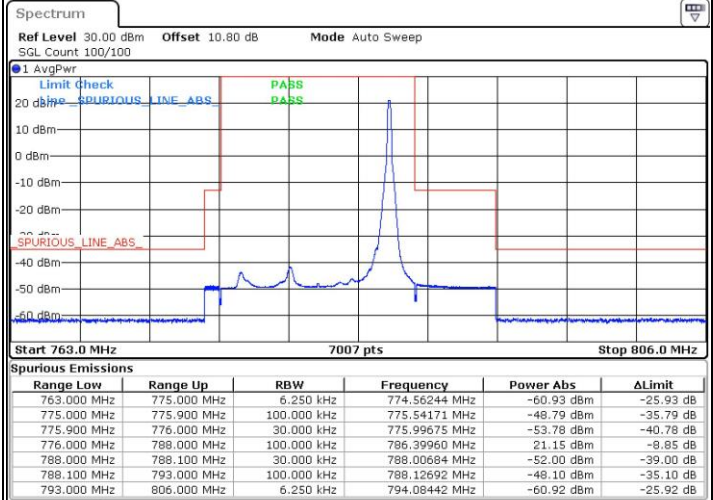
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



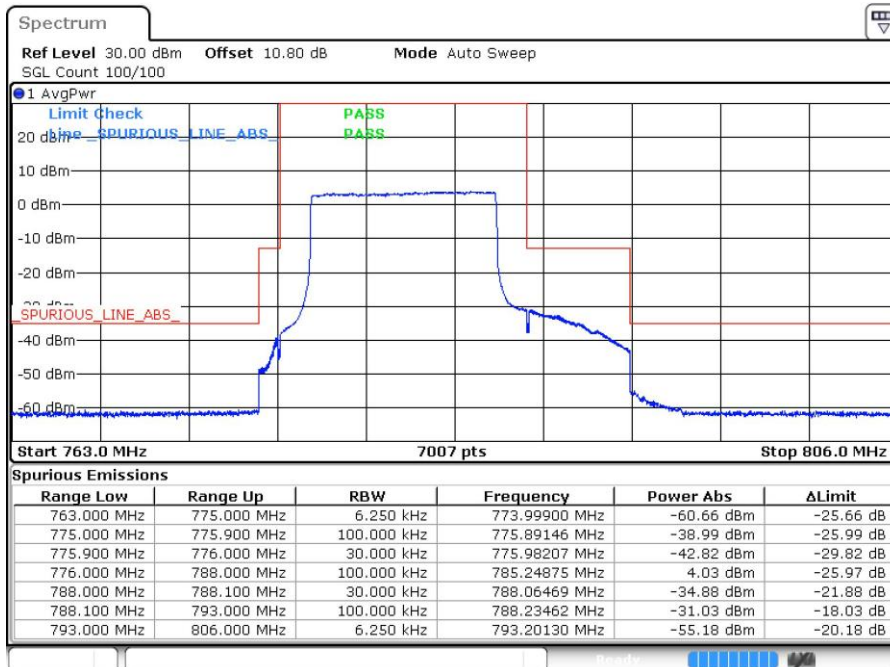
Date: 2 JUL 2019 03:26:45

Highest Band Edge / 1 RB



Date: 2 JUL 2019 03:28:26

Band Edge / Full RB

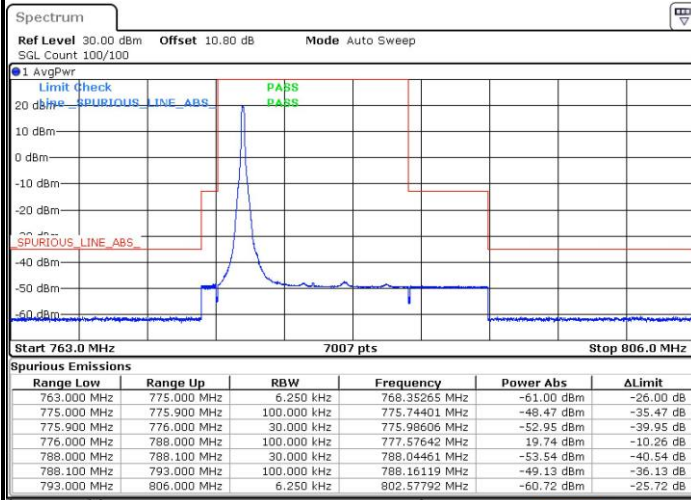


Date: 2 JUL 2019 03:21:43



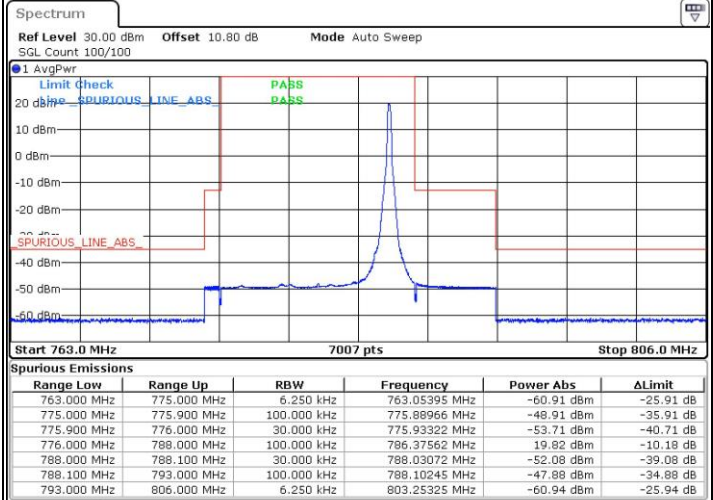
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



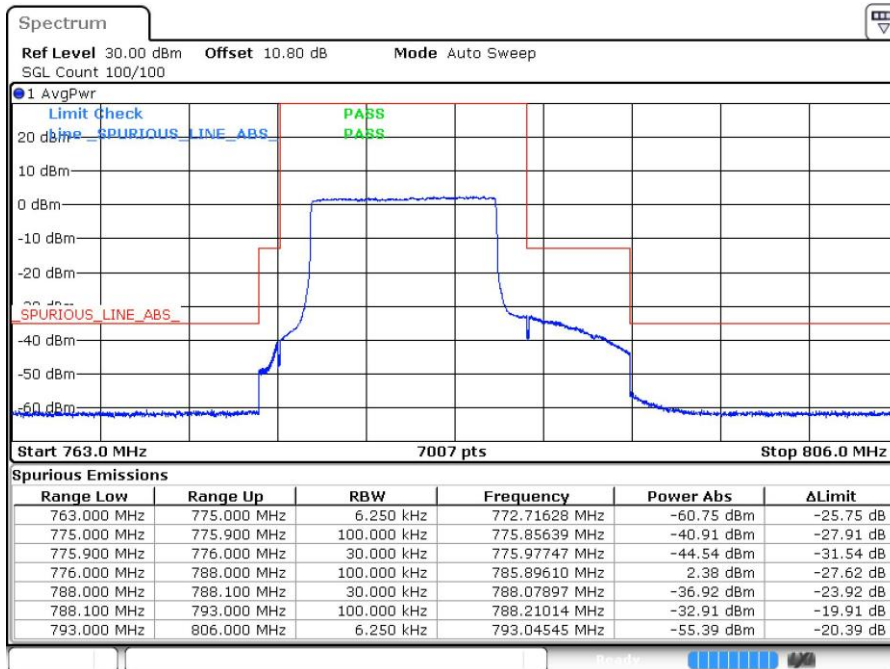
Date: 2 JUL 2019 03:25:05

Highest Band Edge / 1 RB



Date: 2 JUL 2019 03:30:07

Band Edge / Full RB

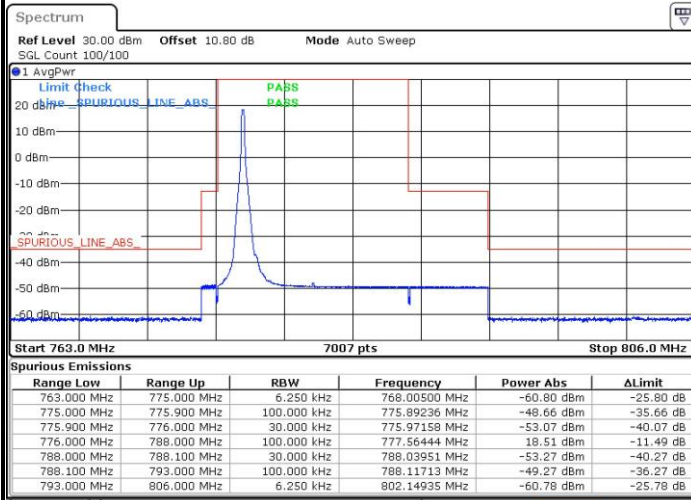


Date: 2 JUL 2019 03:23:24



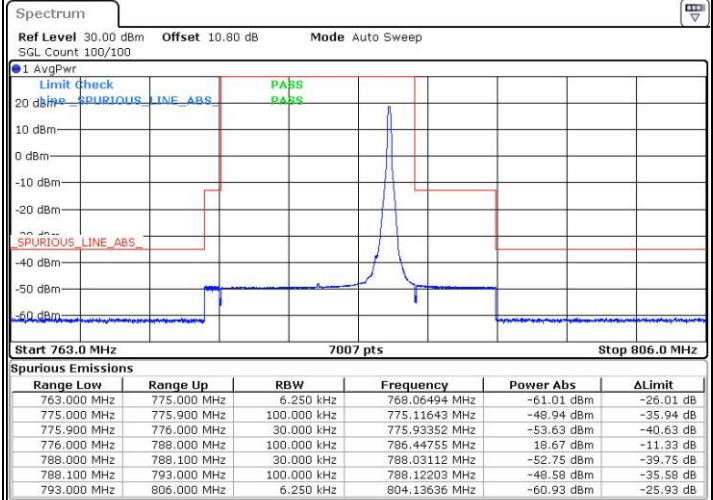
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



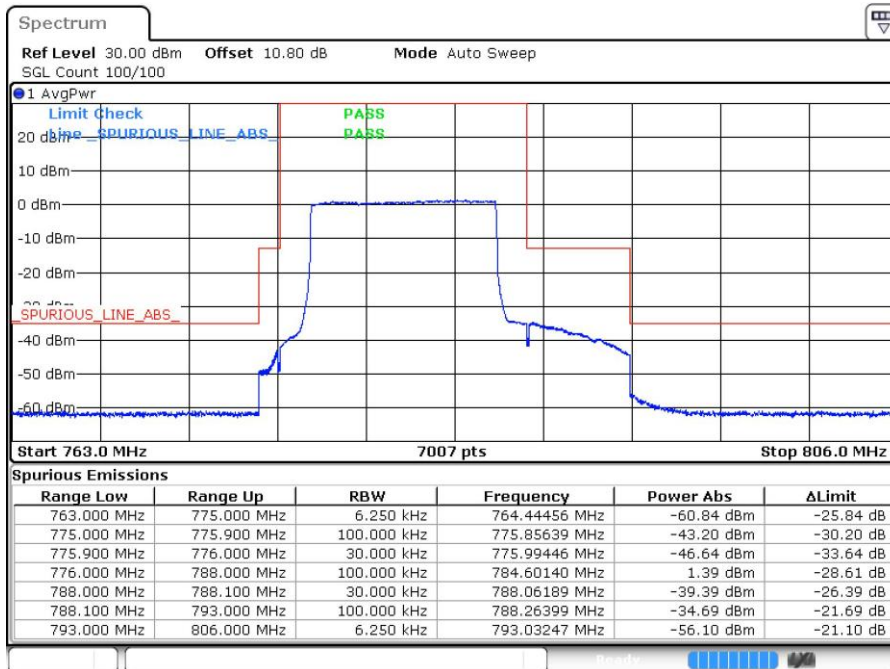
Date: 2 JUL 2019 03:35:23

Highest Band Edge / 1 RB

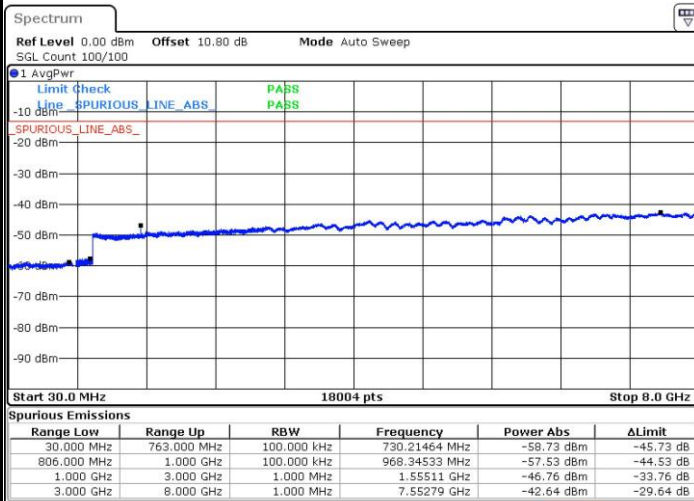


Date: 2 JUL 2019 03:49:49

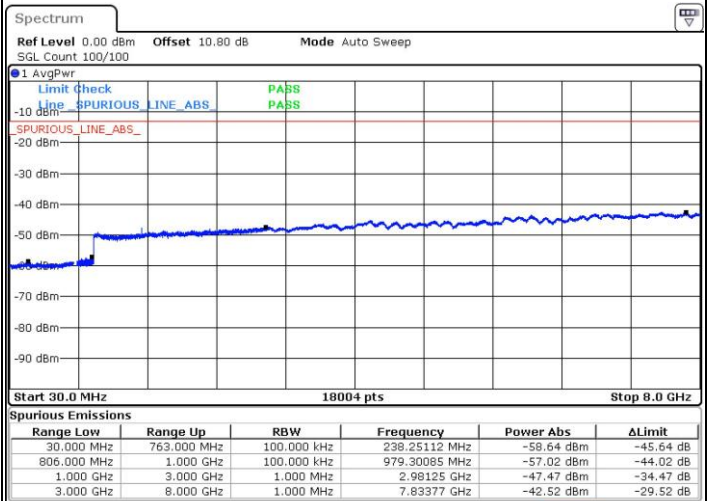
Band Edge / Full RB



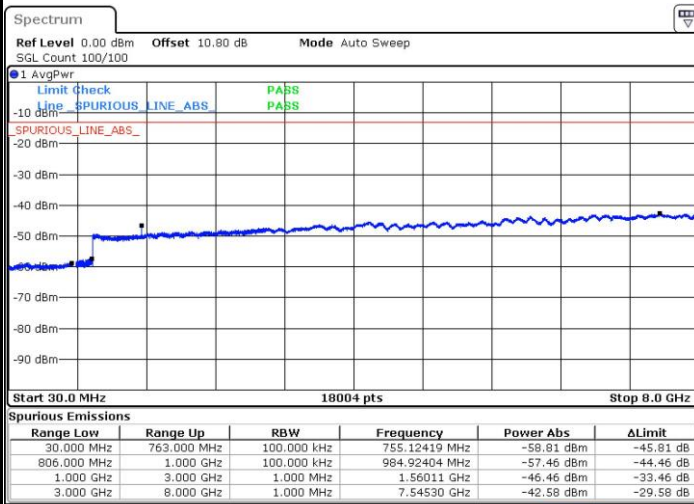
Date: 2 JUL 2019 03:33:42

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

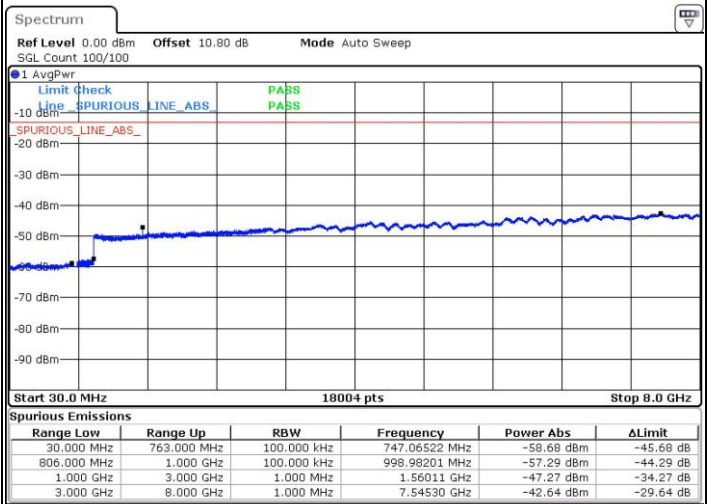
Date: 2 JUL 2019 02:56:48

Lowest Channel / 16QAM

Date: 2 JUL 2019 02:57:34

Middle Channel / QPSK

Date: 2 JUL 2019 02:59:05

Middle Channel / 16QAM

Date: 2 JUL 2019 02:58:20