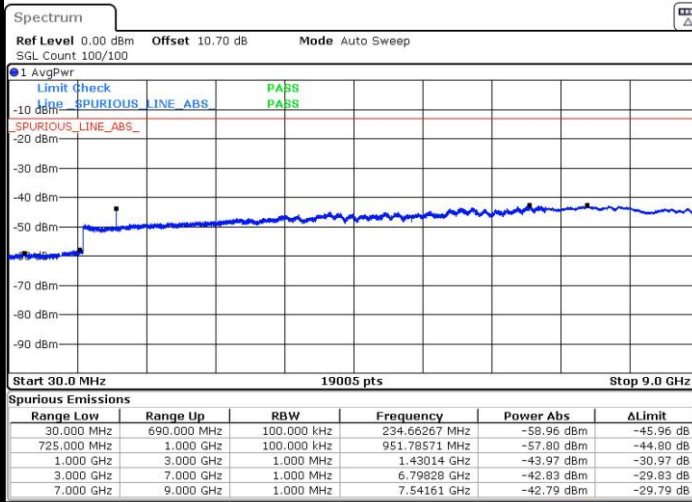




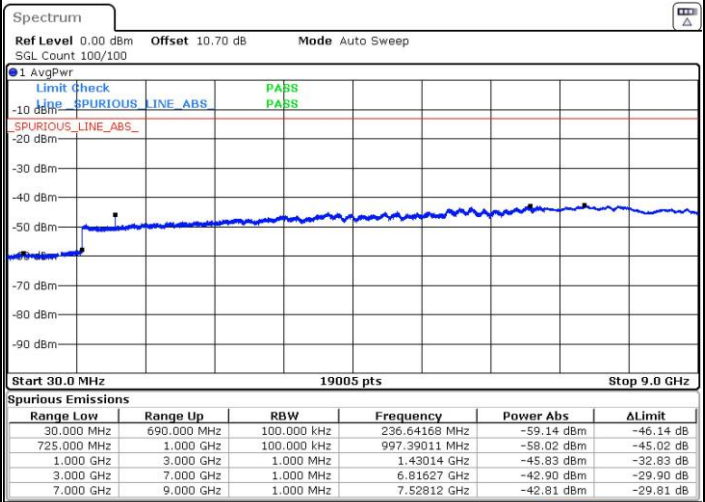
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 28 JUN 2019 17:31:29

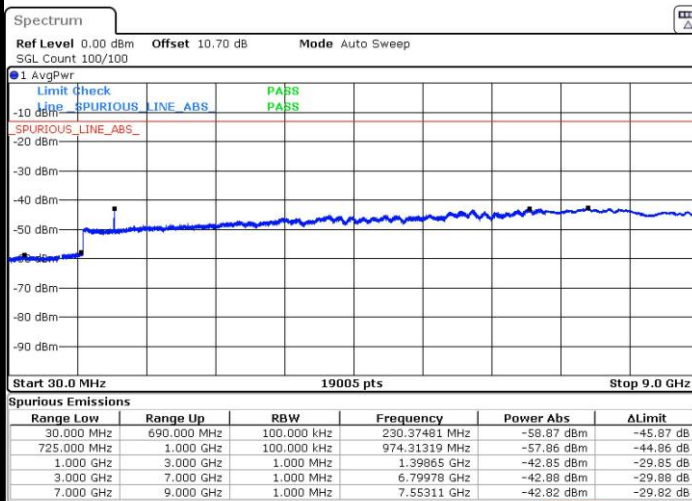
Highest Channel / 16QAM



Date: 28 JUN 2019 17:32:15

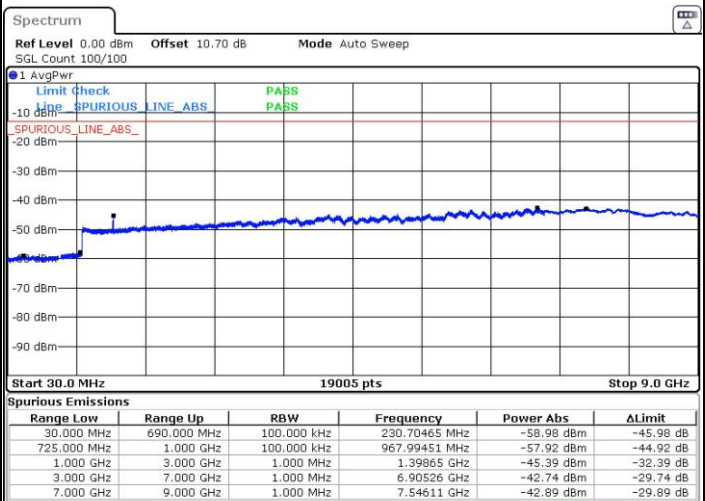
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 28 JUN 2019 18:38:54

Lowest Channel / 16QAM

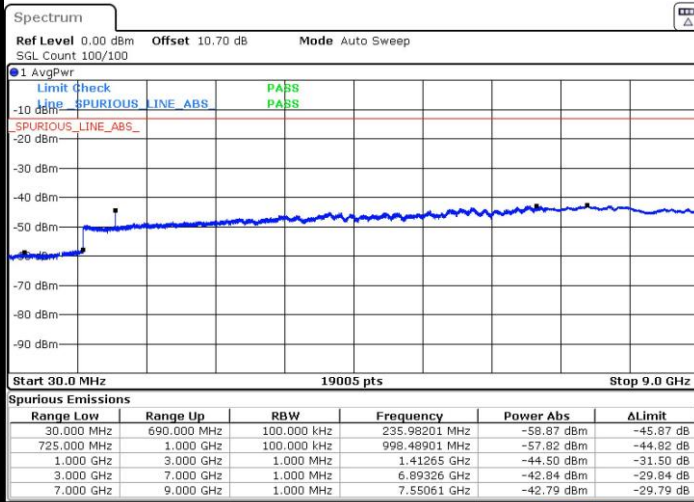


Date: 28 JUN 2019 18:39:40



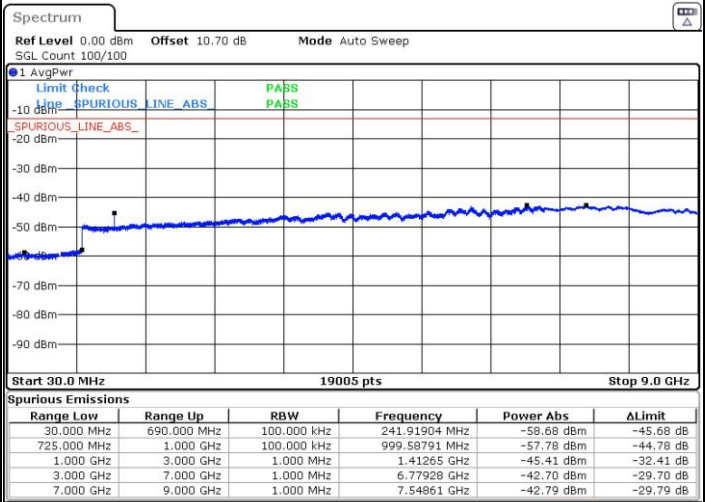
LTE Band 12 / 3MHz

Middle Channel / QPSK



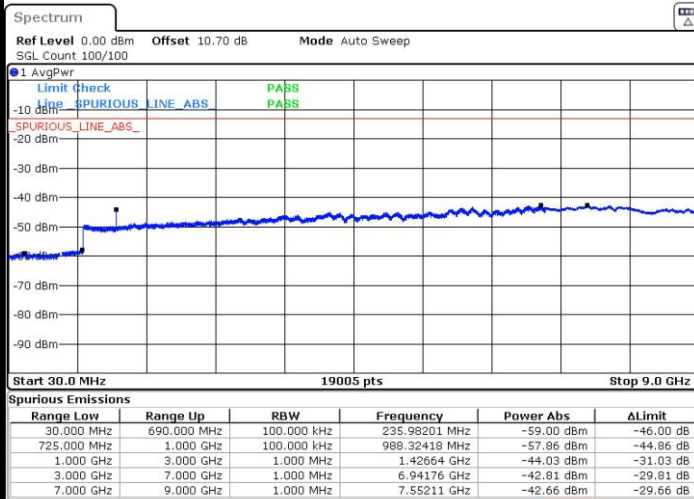
Date: 28 JUN 2019 18:41:58

Middle Channel / 16QAM



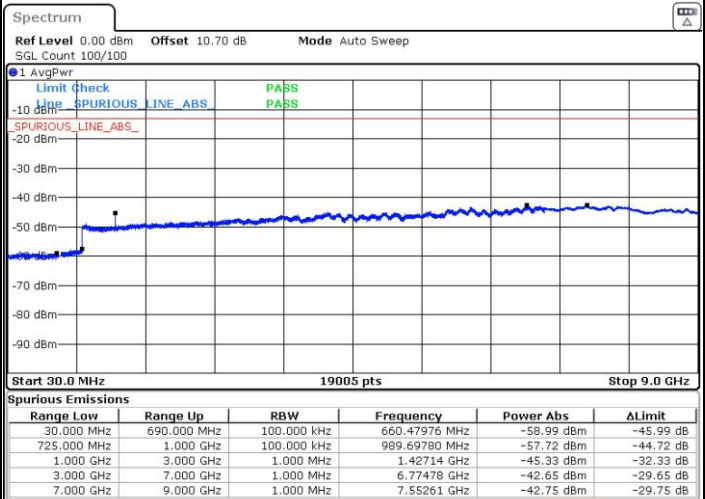
Date: 28 JUN 2019 18:41:13

Highest Channel / QPSK



Date: 28 JUN 2019 18:45:57

Highest Channel / 16QAM

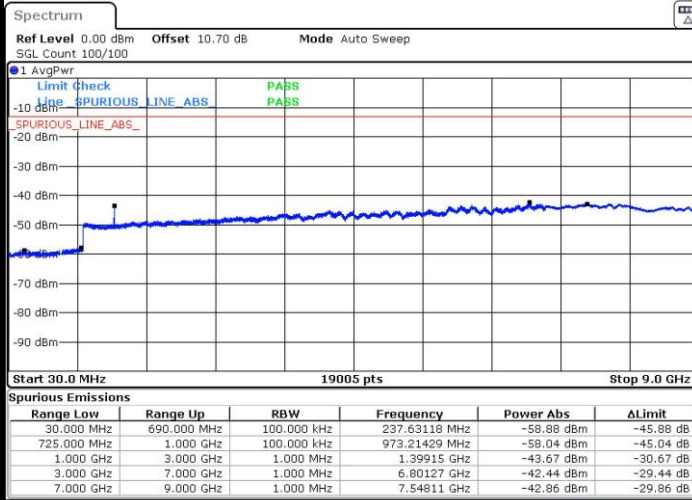


Date: 28 JUN 2019 18:46:43



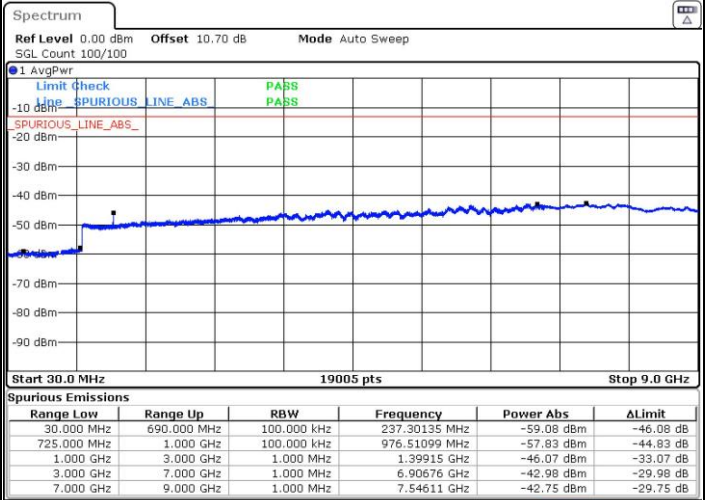
LTE Band 12 / 5MHz

Lowest Channel / QPSK



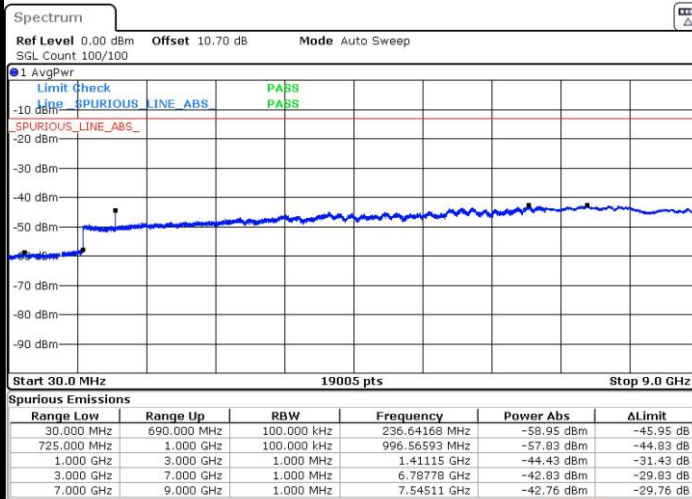
Date: 28 JUN 2019 19:02:31

Lowest Channel / 16QAM



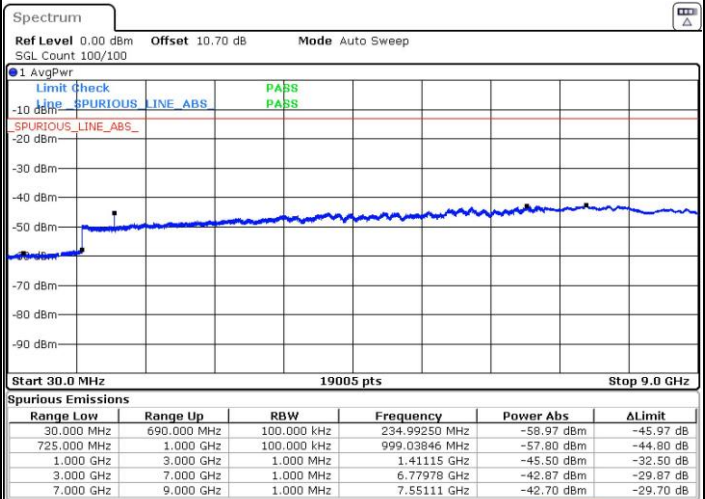
Date: 28 JUN 2019 19:03:17

Middle Channel / QPSK



Date: 28 JUN 2019 19:05:36

Middle Channel / 16QAM

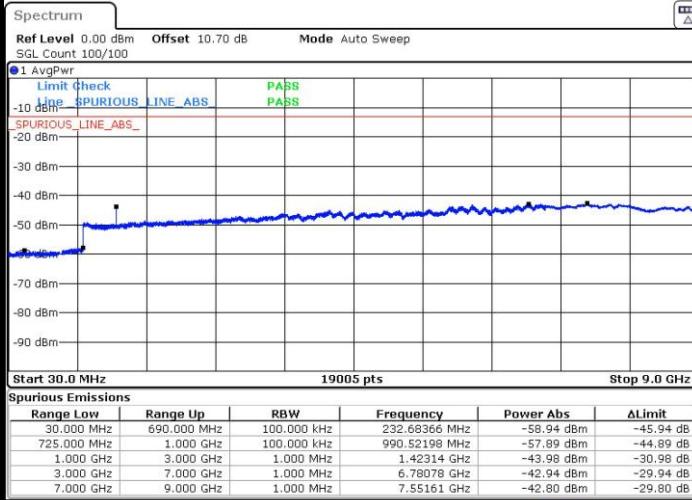


Date: 28 JUN 2019 19:04:50



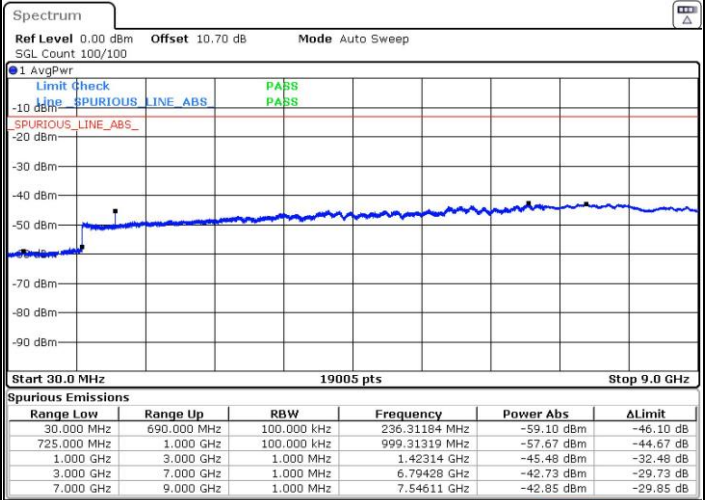
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 28 JUN 2019 19:10:20

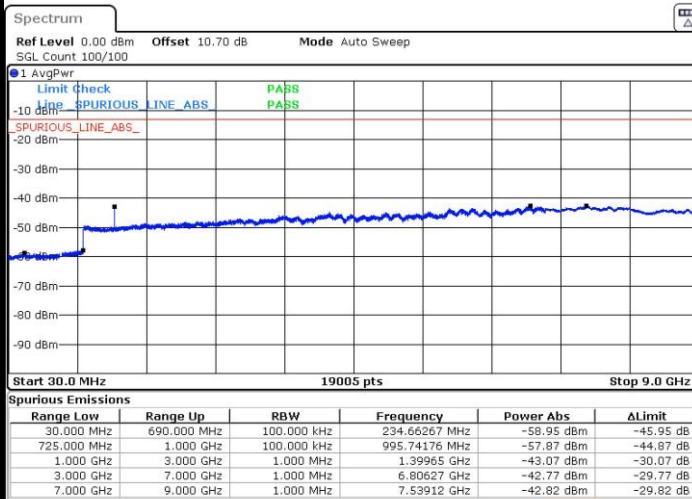
Highest Channel / 16QAM



Date: 28 JUN 2019 19:09:34

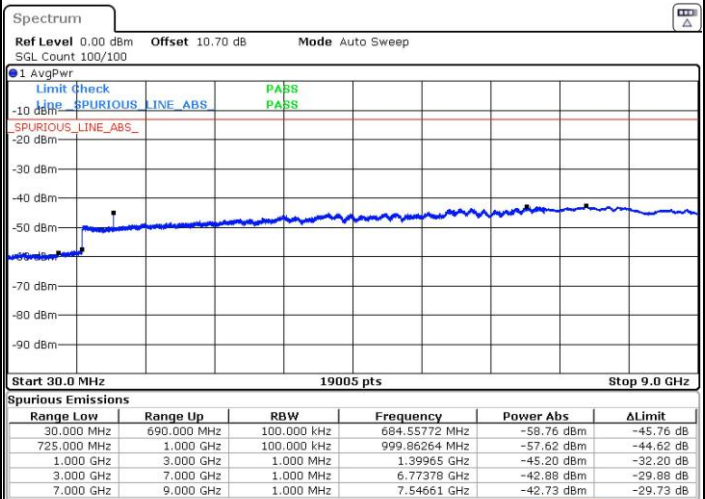
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 28 JUN 2019 19:14:20

Lowest Channel / 16QAM

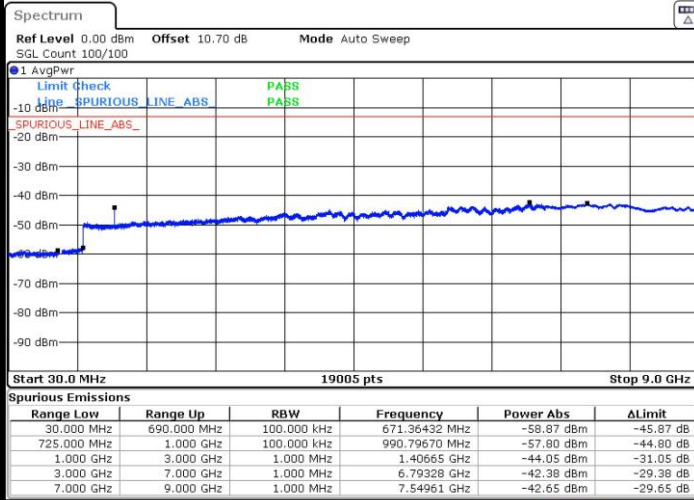


Date: 28 JUN 2019 19:15:06



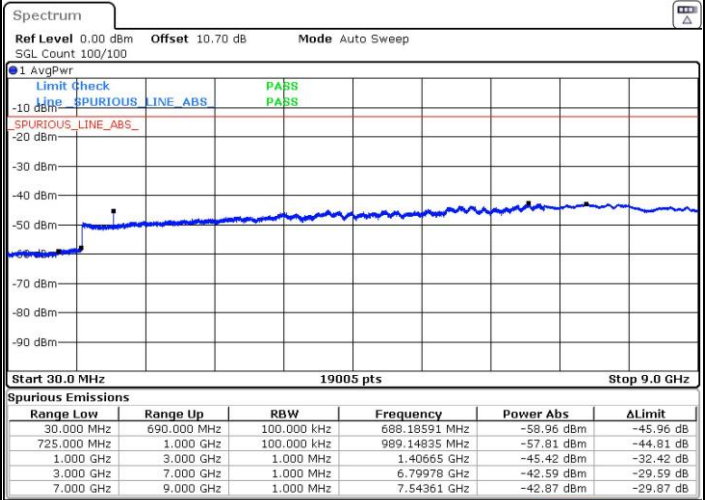
LTE Band 12 / 10MHz

Middle Channel / QPSK



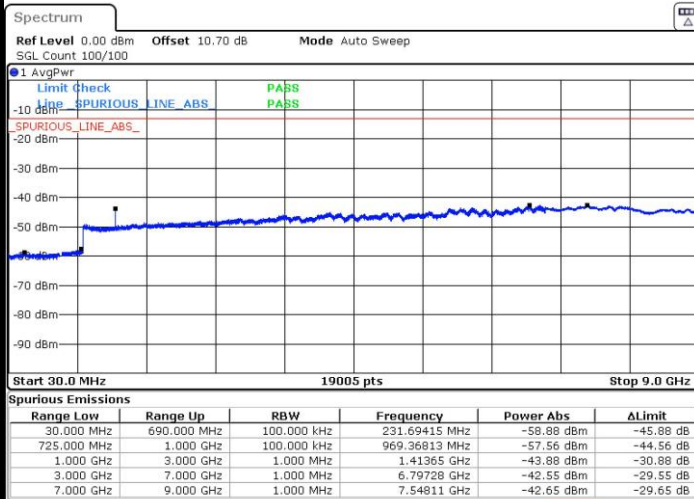
Date: 28 JUN 2019 19:17:24

Middle Channel / 16QAM



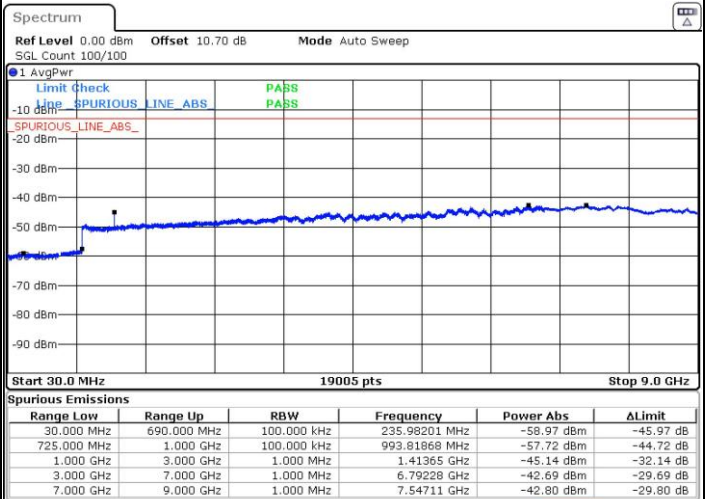
Date: 28 JUN 2019 19:16:38

Highest Channel / QPSK



Date: 28 JUN 2019 19:21:22

Highest Channel / 16QAM

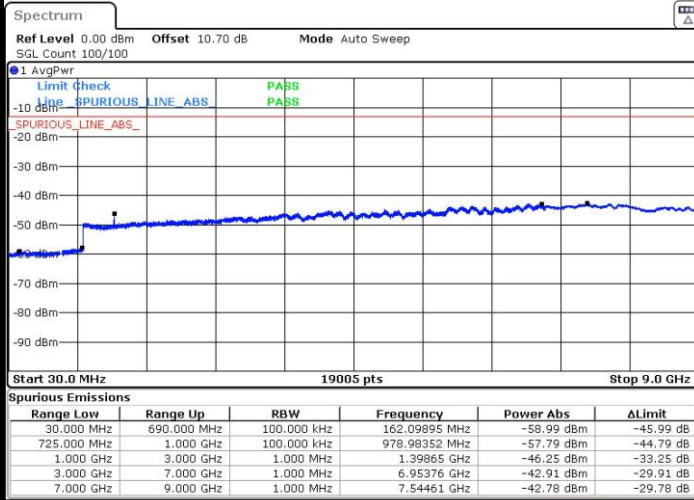


Date: 28 JUN 2019 19:22:08



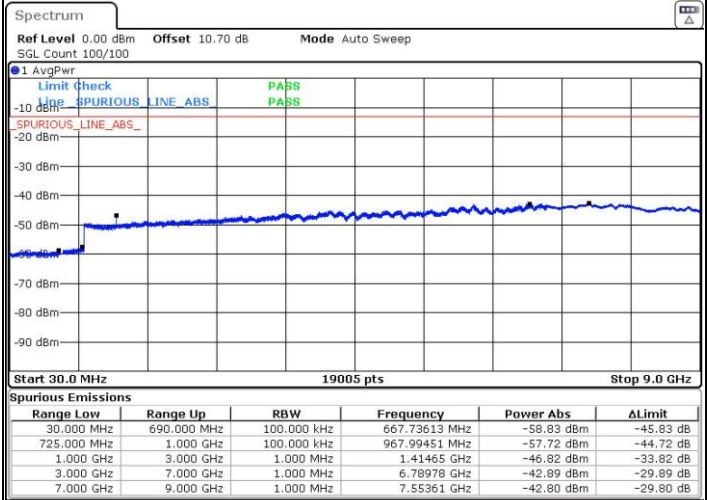
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



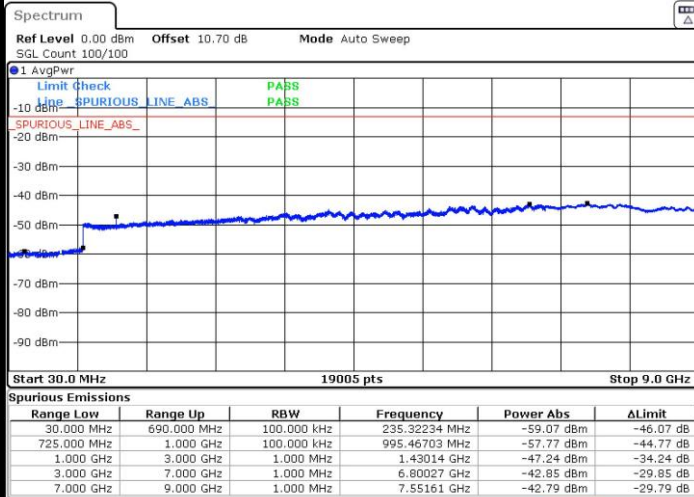
Date: 28 JUN 2019 17:34:38

Middle Channel / 64QAM



Date: 28 JUN 2019 17:35:48

Highest Channel / 64QAM

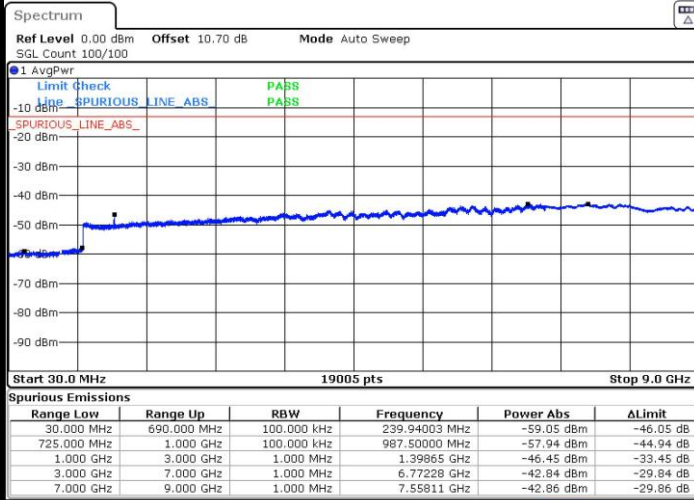


Date: 28 JUN 2019 17:38:11



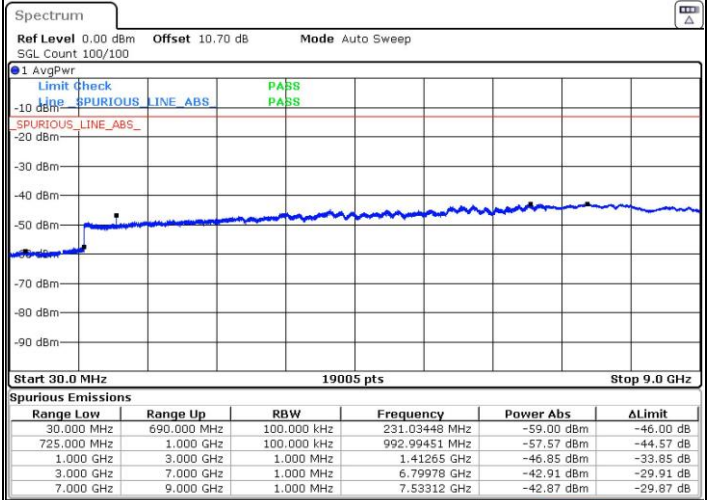
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



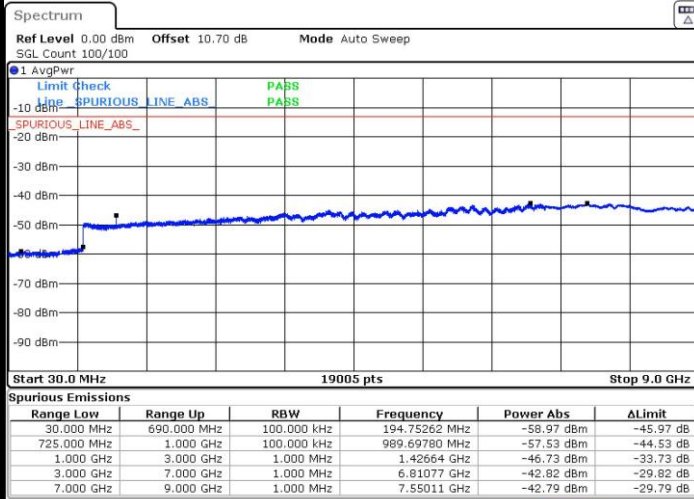
Date: 28 JUN 2019 18:49:06

Middle Channel / 64QAM



Date: 28 JUN 2019 18:50:15

Highest Channel / 64QAM

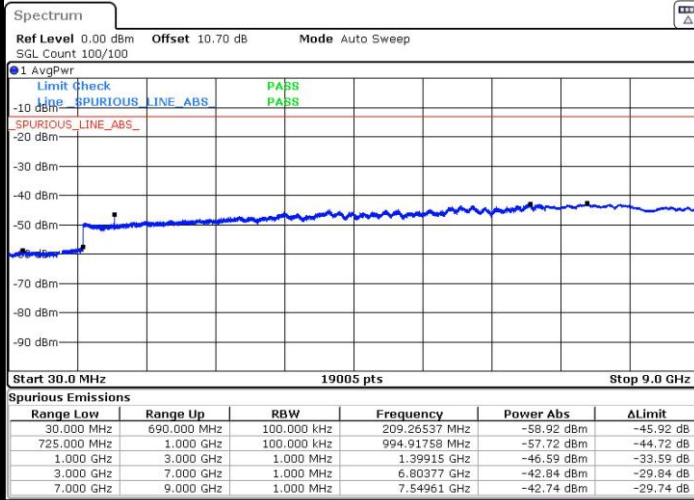


Date: 28 JUN 2019 18:52:37



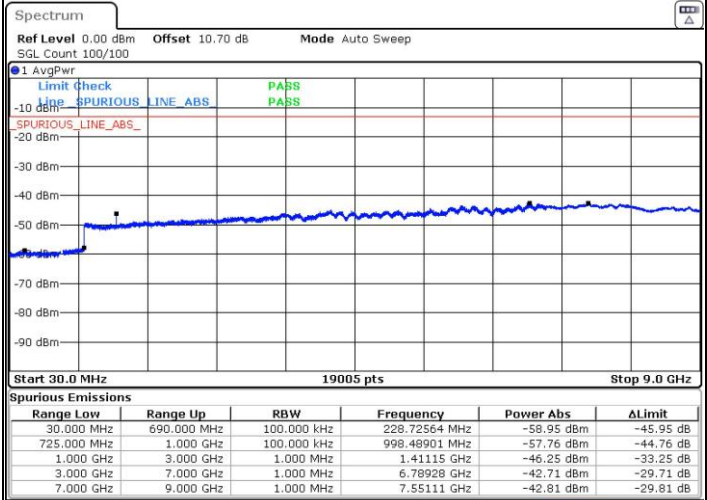
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



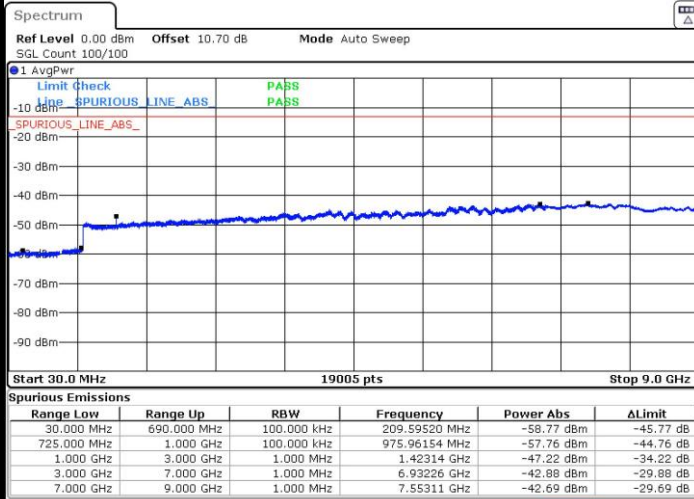
Date: 28 JUN 2019 18:55:00

Middle Channel / 64QAM



Date: 28 JUN 2019 18:56:09

Highest Channel / 64QAM

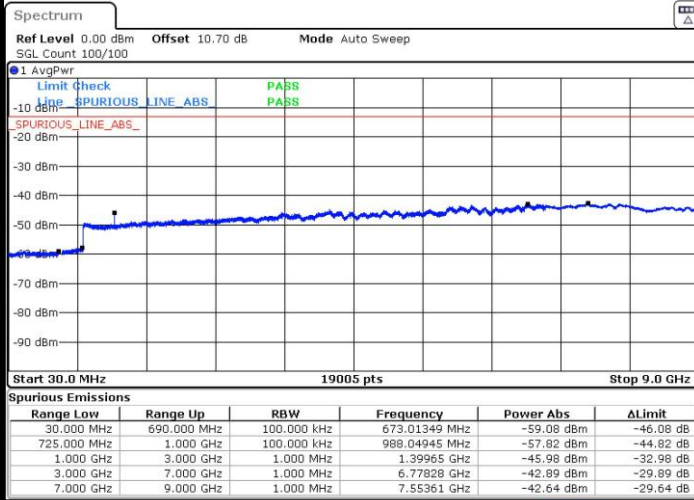


Date: 28 JUN 2019 18:58:32



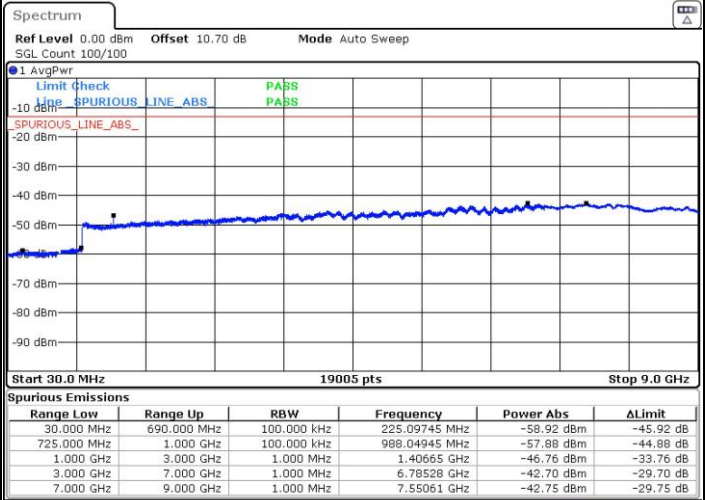
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



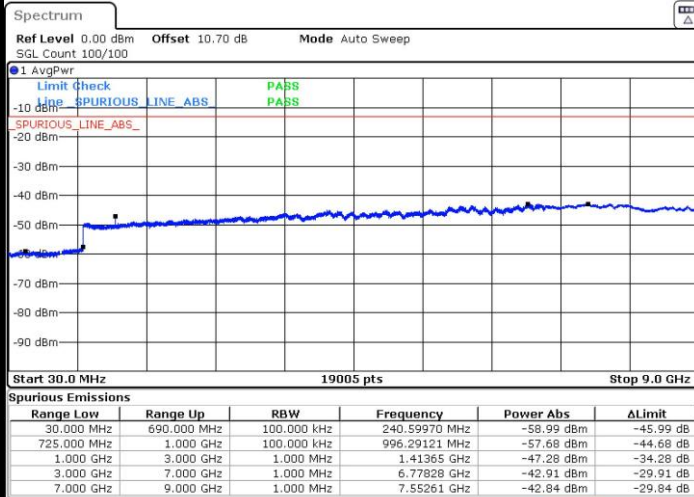
Date: 28 JUN 2019 19:24:30

Middle Channel / 64QAM



Date: 28 JUN 2019 19:25:39

Highest Channel / 64QAM



Date: 28 JUN 2019 19:28:01

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0071	
30	Normal Voltage	0.0082	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0066	
0	Normal Voltage	0.0204	
-10	Normal Voltage	0.0069	
-20	Normal Voltage	0.0082	
-30	Normal Voltage	0.0127	
20	Maximum Voltage	0.0172	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0082	

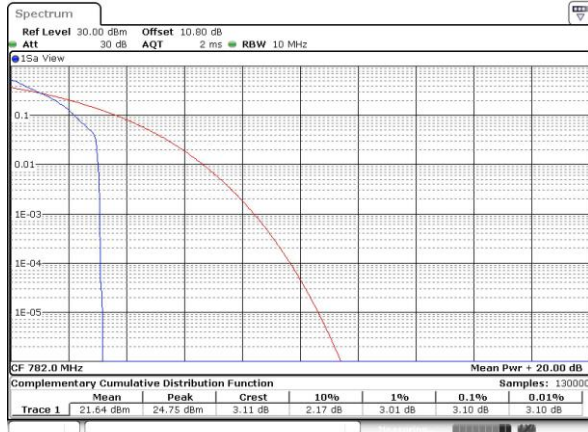
Note:

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

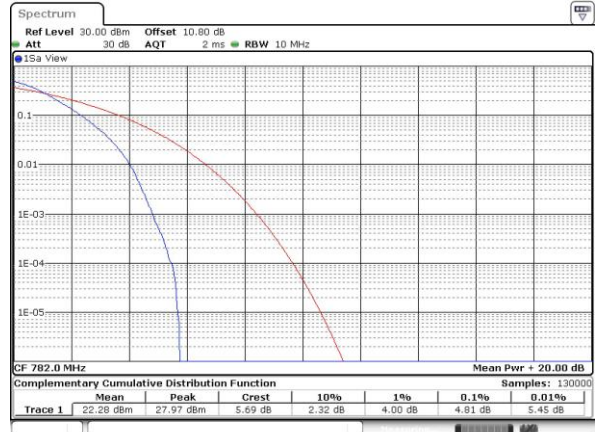
LTE Band 13

Peak-to-Average Ratio

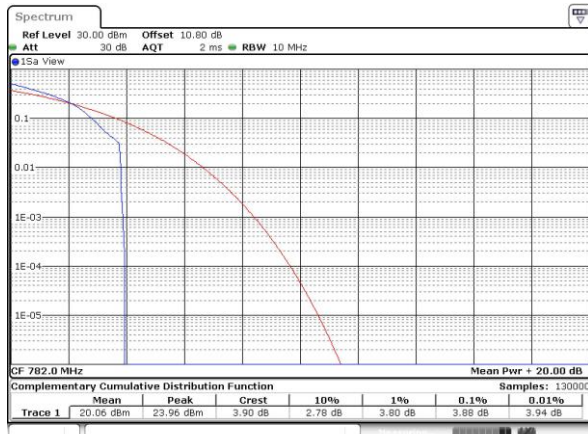
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.10	4.81	3.88	5.57	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.52	6.14	-	-	
Highest CH	-	-	-	-	

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


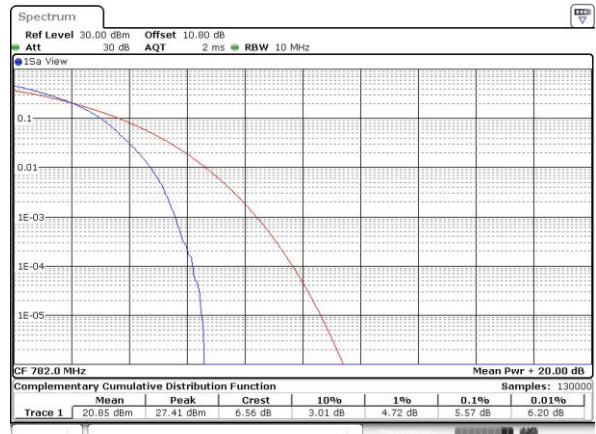
Date: 1 JUL 2019 04:25:41

Middle Channel / Full RB


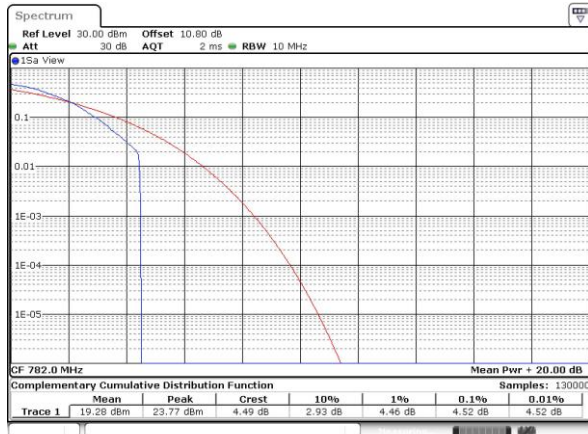
Date: 1 JUL 2019 04:25:56

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


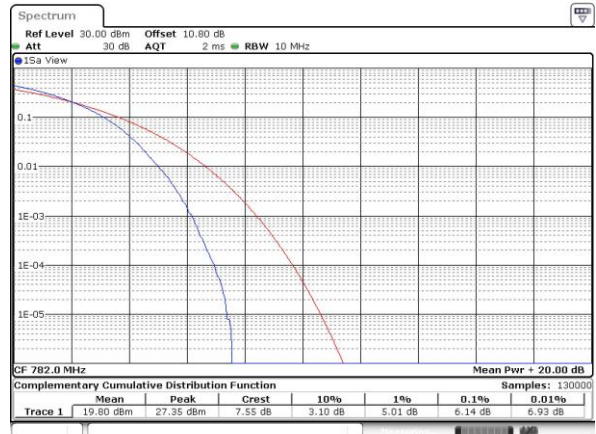
Date: 1 JUL 2019 04:25:19

Middle Channel / Full RB


Date: 1 JUL 2019 04:25:30

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


Date: 1 JUL 2019 04:24:57

Middle Channel / Full RB


Date: 1 JUL 2019 04:25:08

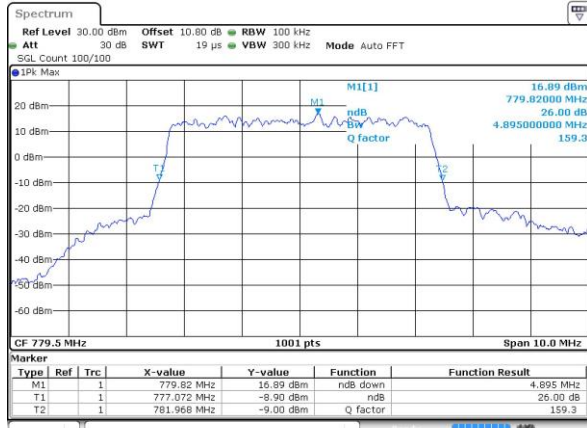
**26dB Bandwidth**

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	-	-	-	-	4.90	4.90	-	-	-	-	-	-
Middle CH	-	-	-	-	4.82	4.86	9.71	9.75	-	-	-	-
Highest CH	-	-	-	-	4.91	4.83	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.87	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.84	-	9.81	-	-	-	-	-
Highest CH	-	-	-	-	4.88	-	-	-	-	-	-	-



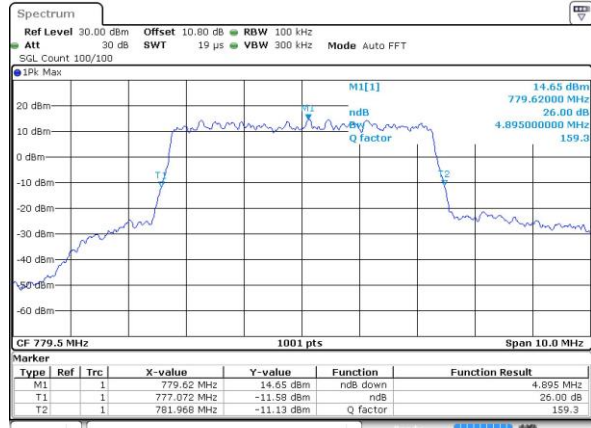
LTE Band 13

Lowest Channel / 5MHz / QPSK



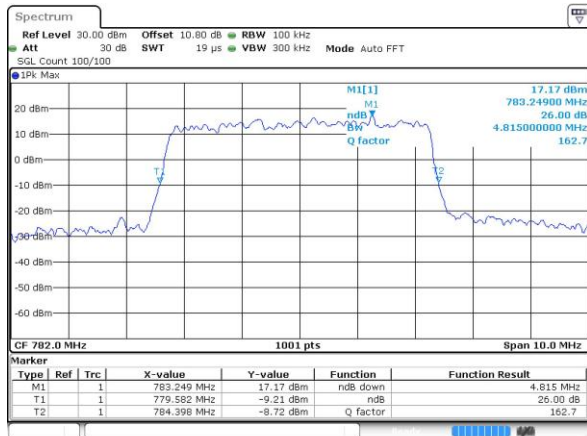
Date: 1 JUL 2019 03:35:1

Lowest Channel / 5MHz / 16QAM



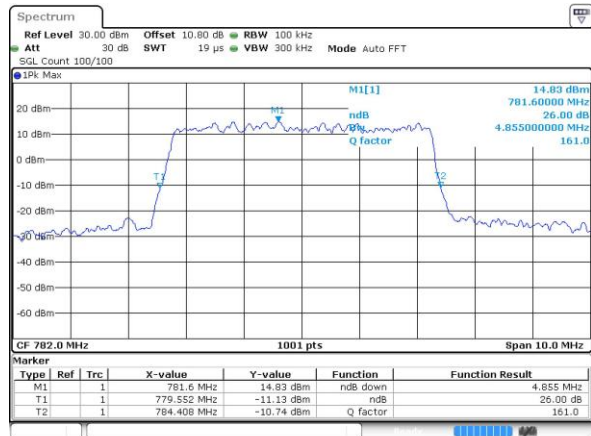
Date: 1 JUL 2019 03:35:38

Middle Channel / 5MHz / QPSK



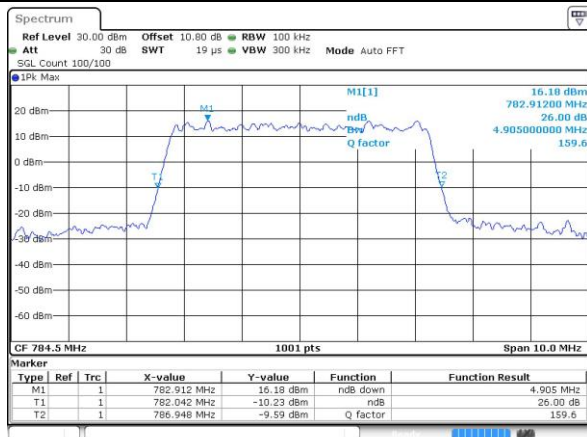
Date: 1 JUL 2019 03:45:30

Middle Channel / 5MHz / 16QAM



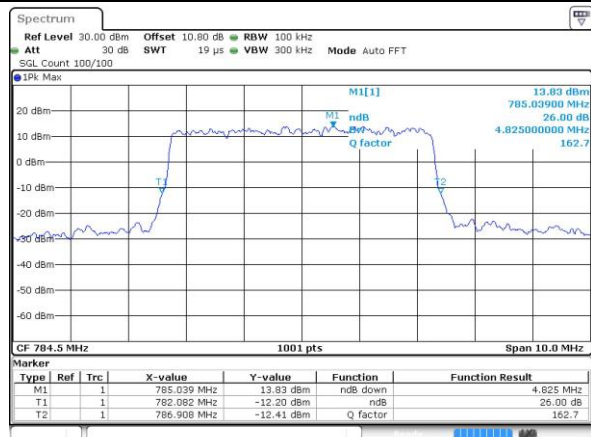
Date: 1 JUL 2019 03:45:42

Highest Channel / 5MHz / QPSK



Date: 1 JUL 2019 03:46:55

Highest Channel / 5MHz / 16QAM

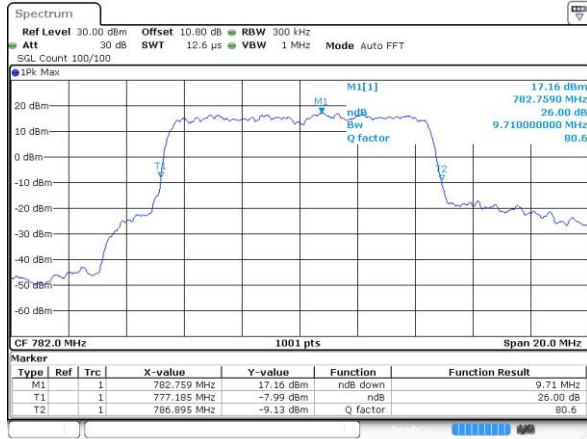


Date: 1 JUL 2019 03:46:42



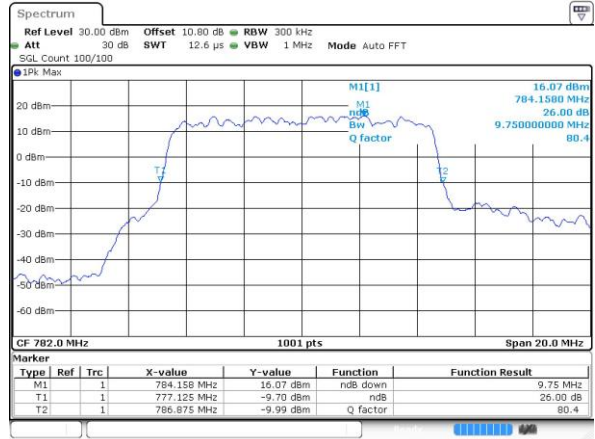
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 1 JUL 2019 04:05:49

Middle Channel / 10MHz / 16QAM

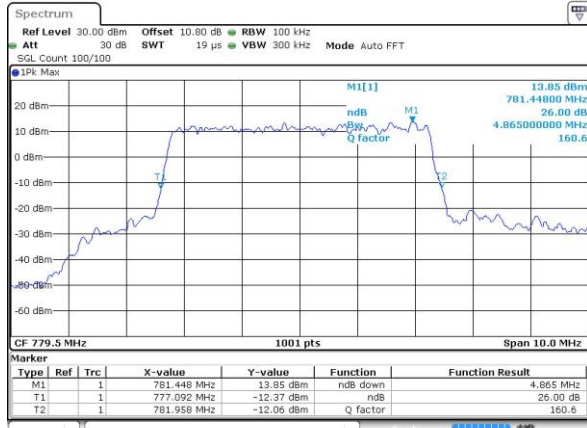


Date: 1 JUL 2019 04:05:38

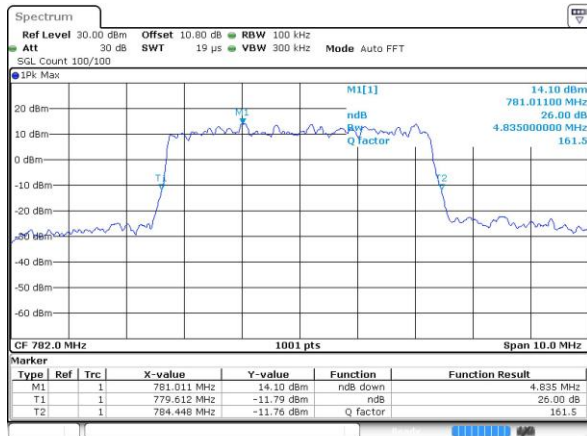


LTE Band 13

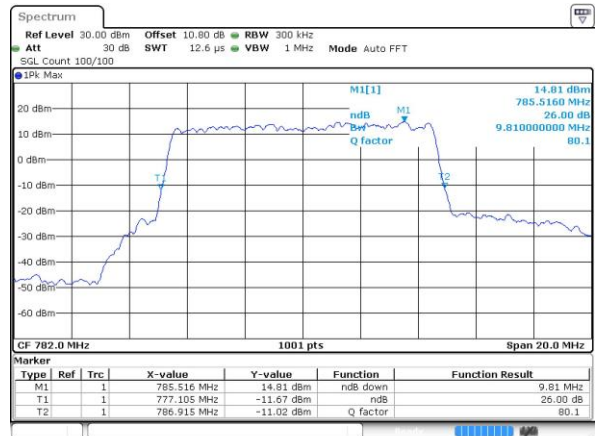
Lowest Channel / 5MHz / 64QAM



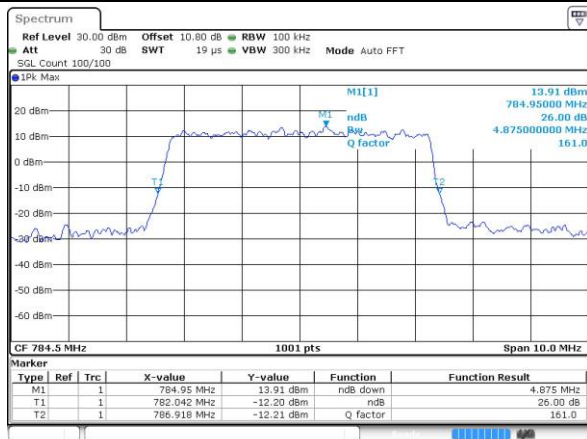
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



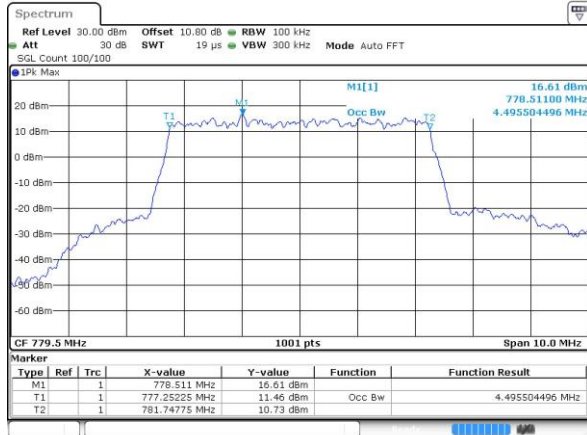
**Occupied Bandwidth**

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	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.49	9.05	9.01	-	-	-	-
Highest CH	-	-	-	-	4.49	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	-	-	-	-	4.48	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	-	-	-	-	-	-



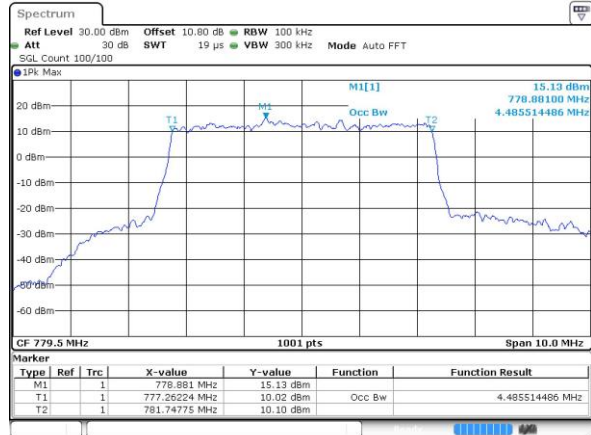
LTE Band 13

Lowest Channel / 5MHz / QPSK



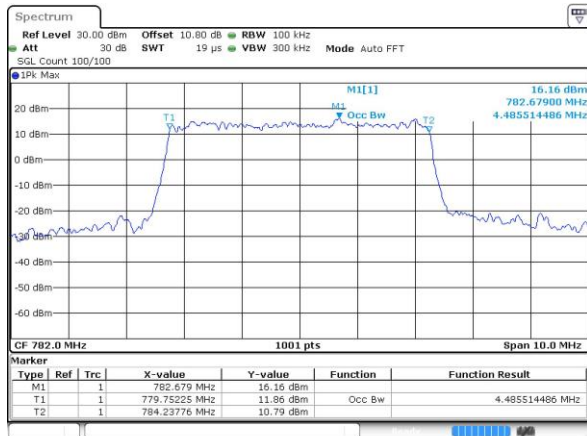
Date: 1 JUL 2019 03:35:14

Lowest Channel / 5MHz / 16QAM



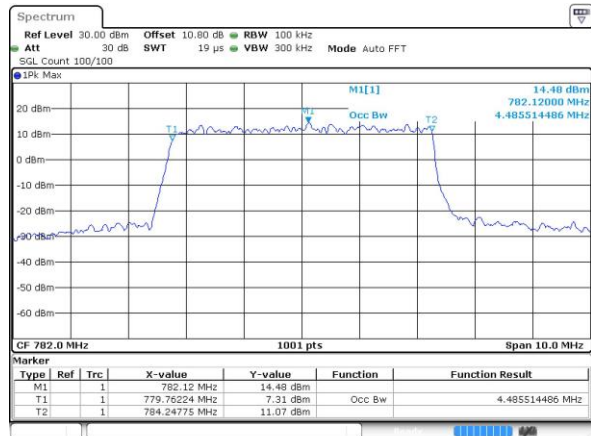
Date: 1 JUL 2019 03:35:26

Middle Channel / 5MHz / QPSK



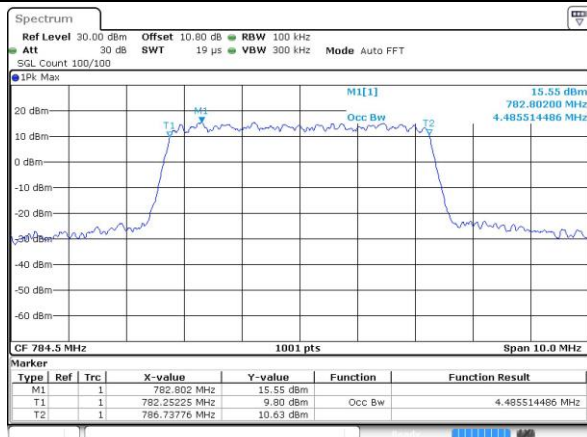
Date: 1 JUL 2019 03:46:06

Middle Channel / 5MHz / 16QAM



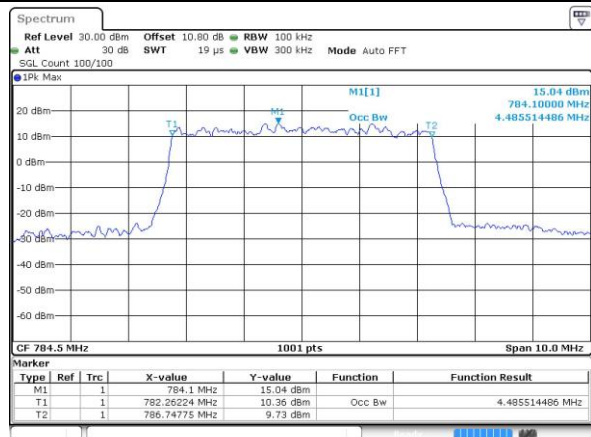
Date: 1 JUL 2019 03:45:54

Highest Channel / 5MHz / QPSK



Date: 1 JUL 2019 03:46:18

Highest Channel / 5MHz / 16QAM

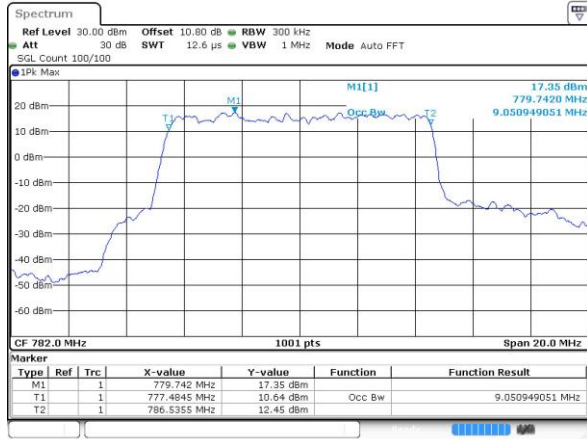


Date: 1 JUL 2019 03:46:30



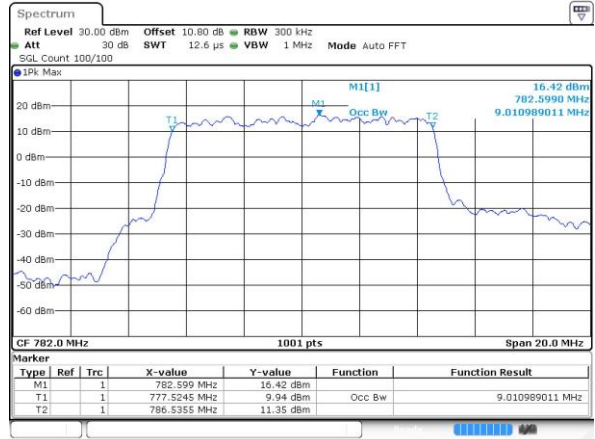
LTE Band 13

Middle Channel / 10MHz / QPSK

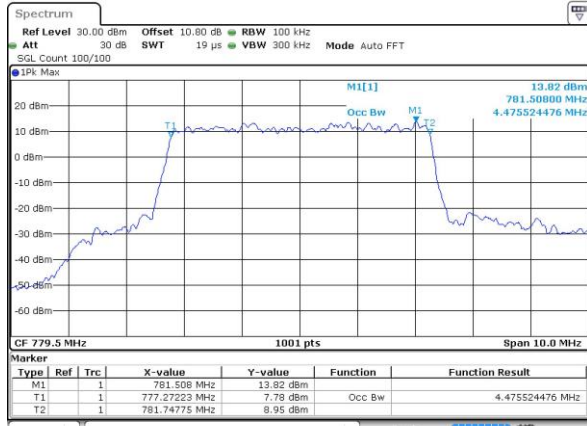


Date: 1 JUL 2019 04:05:14

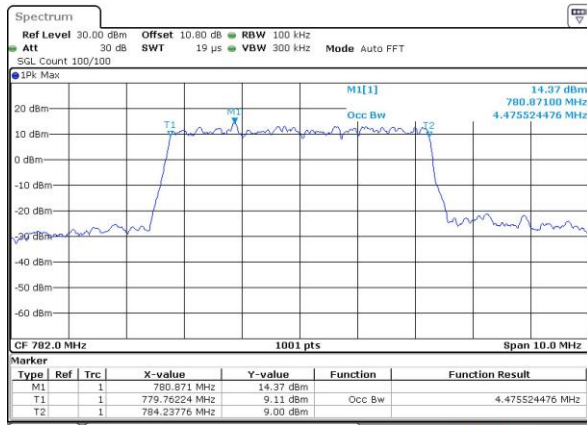
Middle Channel / 10MHz / 16QAM



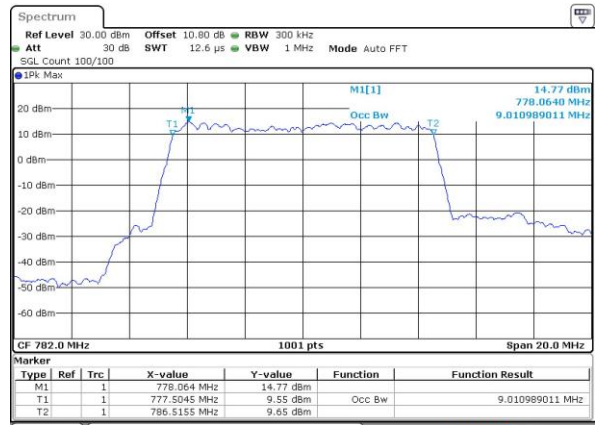
Date: 1 JUL 2019 04:05:26

LTE Band 13
Lowest Channel / 5MHz / 64QAM


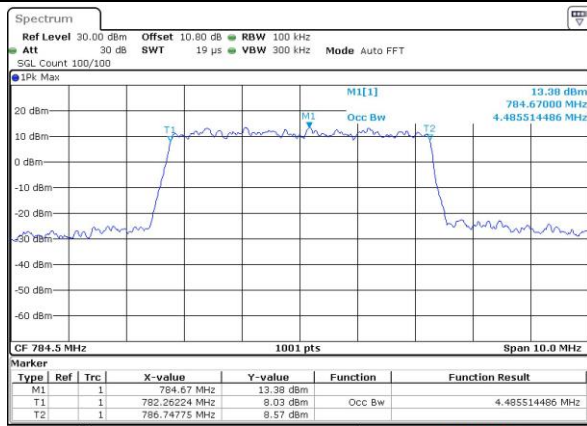
Date: 1 JUL 2019 03:55:14

Middle Channel / 5MHz / 64QAM


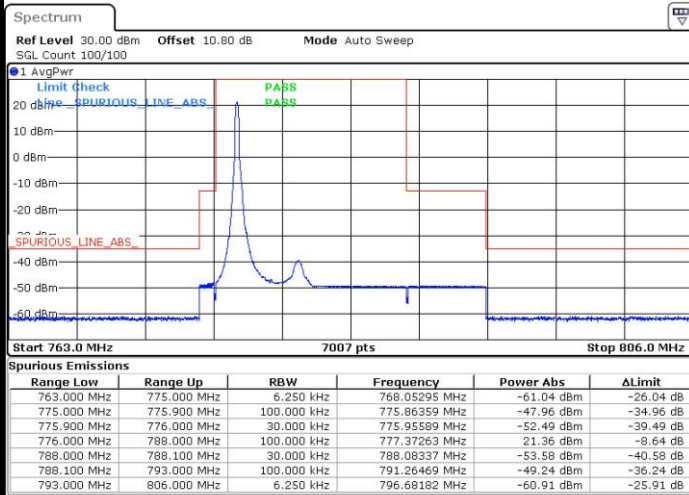
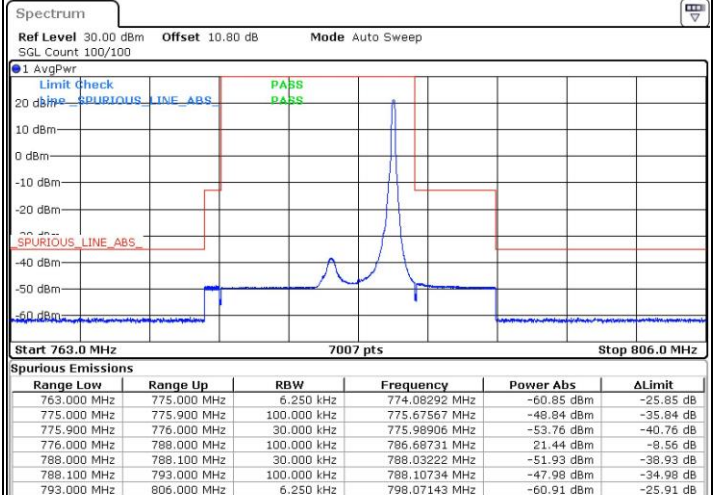
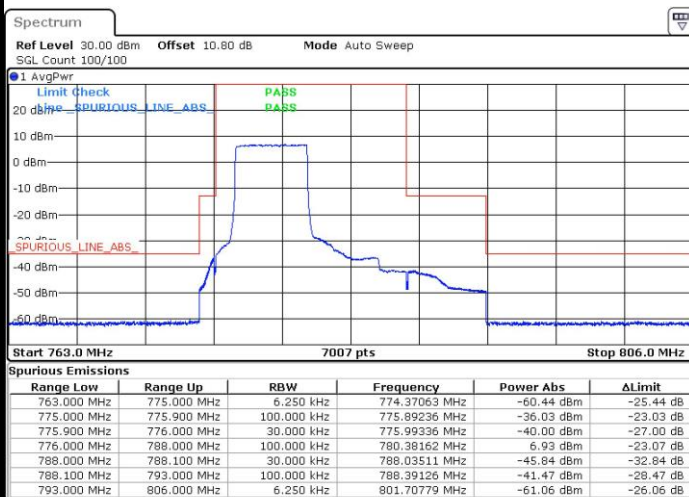
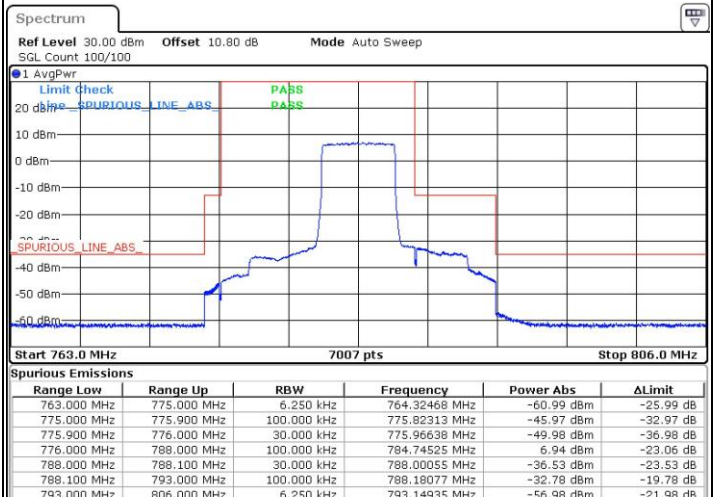
Date: 1 JUL 2019 04:00:34

Middle Channel / 10MHz / 64QAM


Date: 1 JUL 2019 04:17:25

Highest Channel / 5MHz / 64QAM


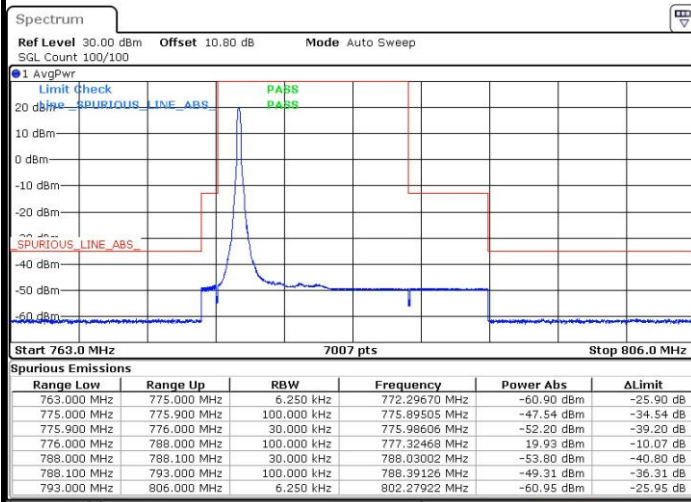
Date: 1 JUL 2019 04:00:46

**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**

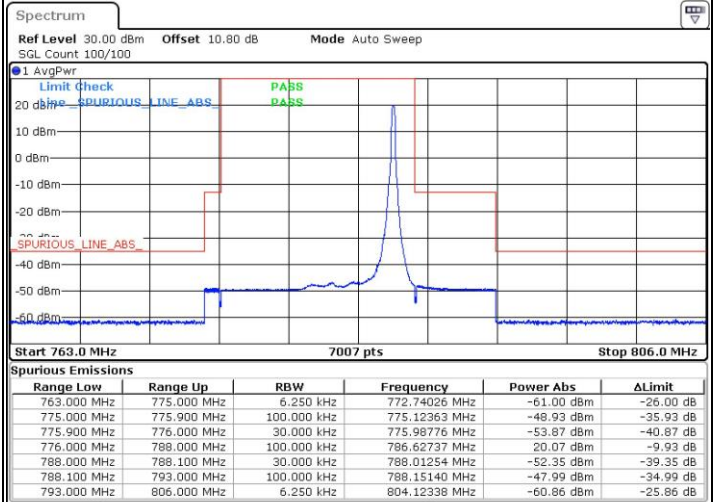


LTE Band 13 / 5MHz / 16QAM

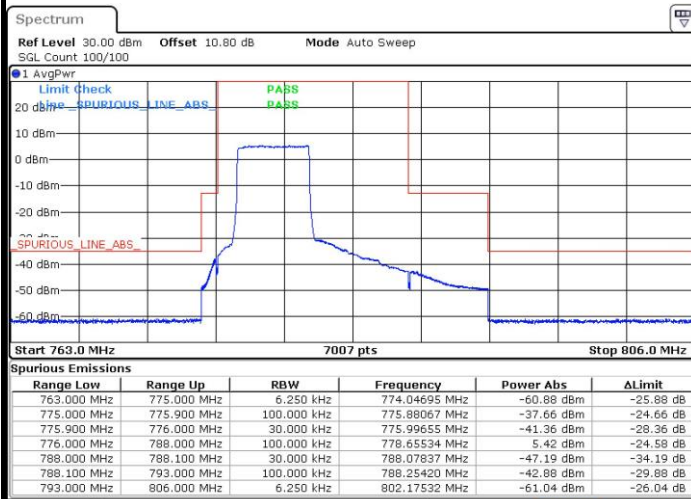
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

