



**Occupied Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	4.49	4.48	9.01	9.01	-	-	-	-
Middle CH	-	-	-	-	4.49	4.48	9.05	9.07	-	-	-	-
Highest CH	-	-	-	-	4.48	4.48	9.03	9.05	-	-	-	-

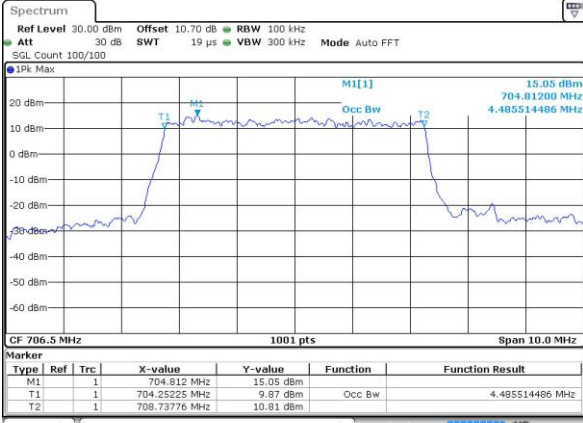
  

Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	9.09	-	-	-	-	-
Middle CH	-	-	-	-	4.51	-	9.09	-	-	-	-	-
Highest CH	-	-	-	-	4.50	-	9.09	-	-	-	-	-



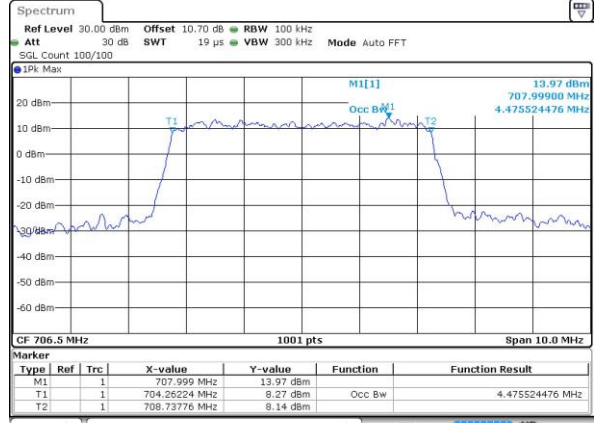
LTE Band 17

Lowest Channel / 5MHz / QPSK



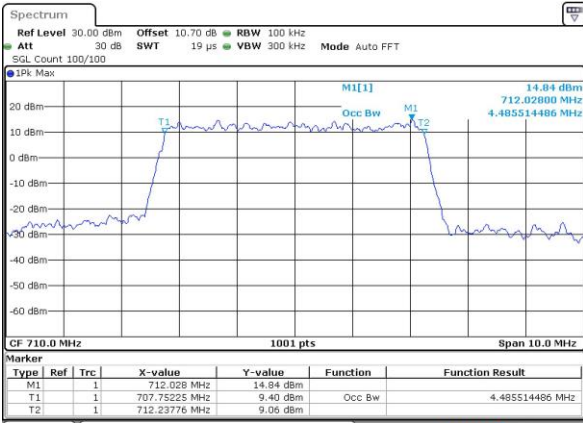
Date: 30 AUG 2018 08:53:51

Lowest Channel / 5MHz / 16QAM



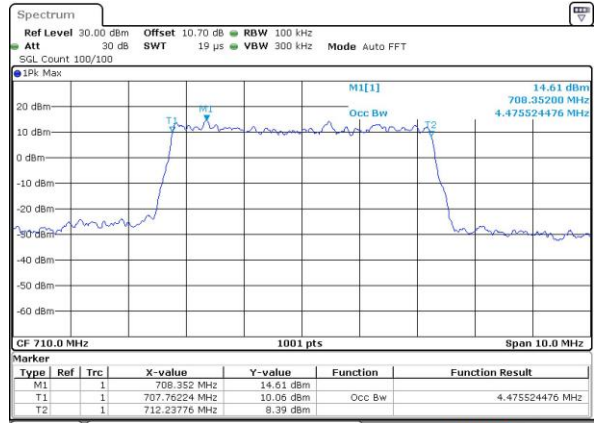
Date: 30 AUG 2018 08:54:02

Middle Channel / 5MHz / QPSK



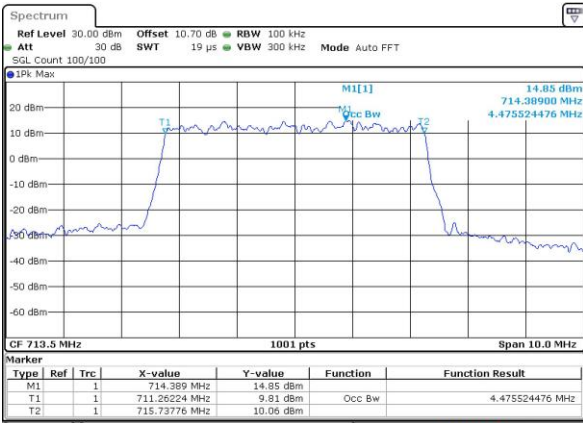
Date: 30 AUG 2018 09:00:17

Middle Channel / 5MHz / 16QAM



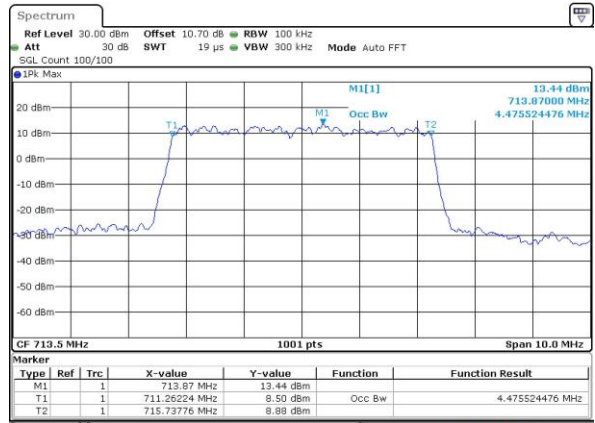
Date: 30 AUG 2018 09:00:28

Highest Channel / 5MHz / QPSK



Date: 30 AUG 2018 09:02:43

Highest Channel / 5MHz / 16QAM

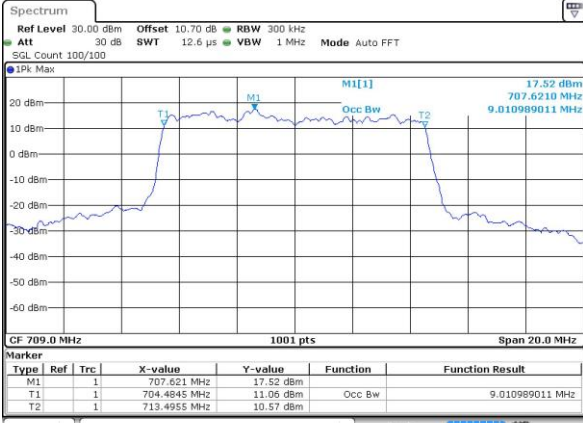


Date: 30 AUG 2018 09:02:54



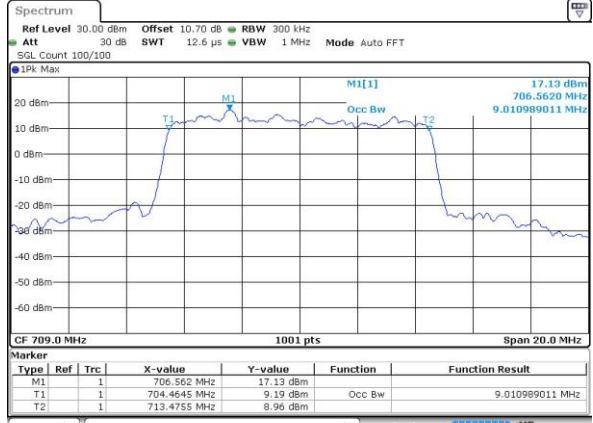
LTE Band 17

Lowest Channel / 10MHz / QPSK



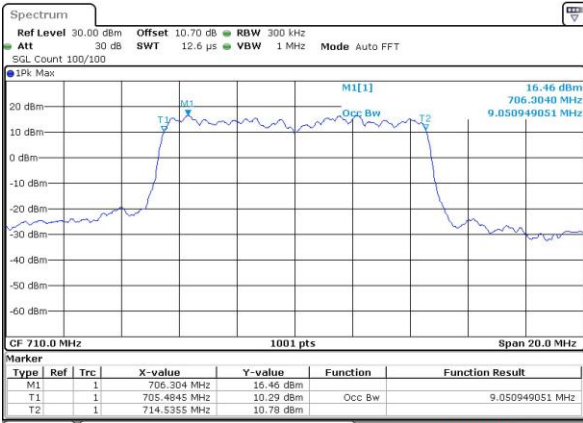
Date: 30 AUG 2018 09:09:09

Lowest Channel / 10MHz / 16QAM



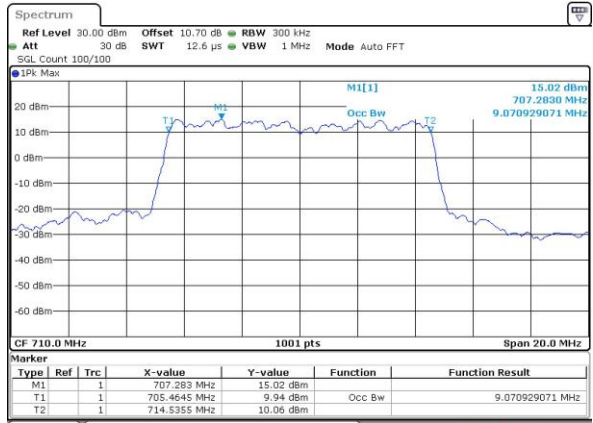
Date: 30 AUG 2018 09:09:21

Middle Channel / 10MHz / QPSK



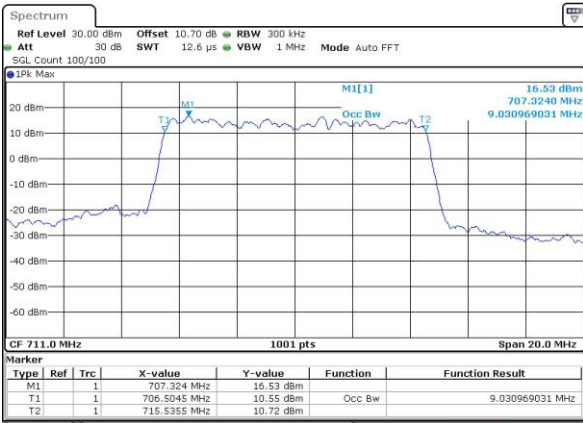
Date: 30 AUG 2018 09:15:36

Middle Channel / 10MHz / 16QAM



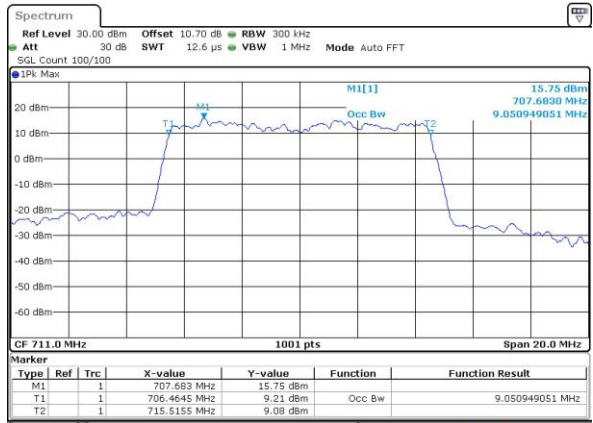
Date: 30 AUG 2018 09:15:47

Highest Channel / 10MHz / QPSK



Date: 30 AUG 2018 09:16:02

Highest Channel / 10MHz / 16QAM

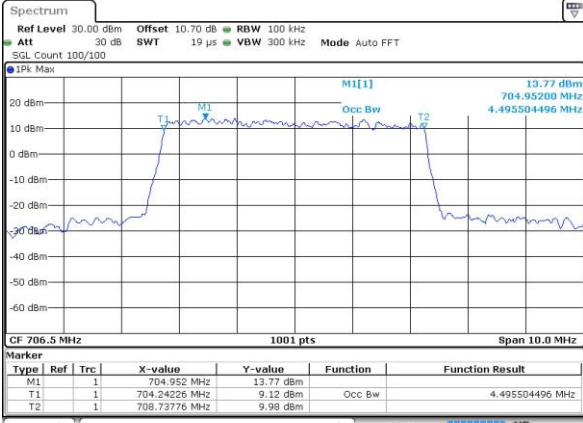


Date: 30 AUG 2018 09:18:13



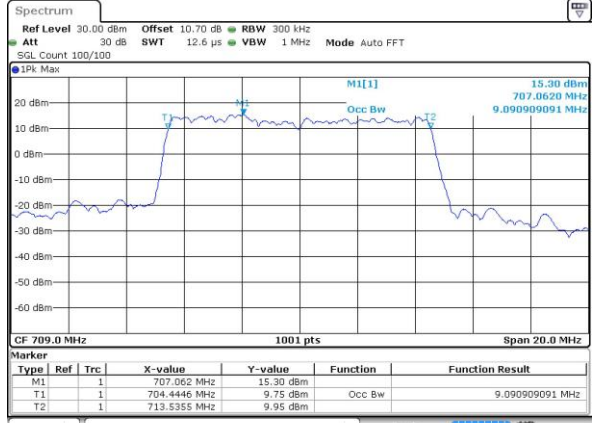
LTE Band 17

Lowest Channel / 5MHz / 64QAM



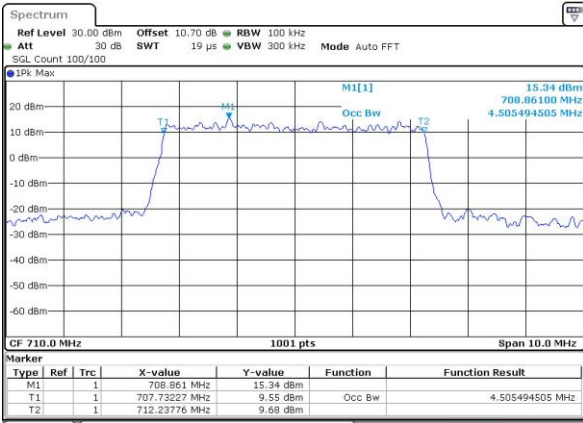
Date: 14 NOV 2018 22:59:56

Lowest Channel / 10MHz / 64QAM



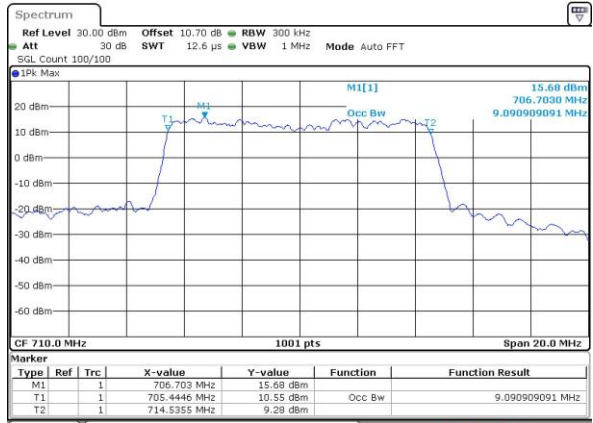
Date: 14 NOV 2018 23:08:08

Middle Channel / 5MHz / 64QAM



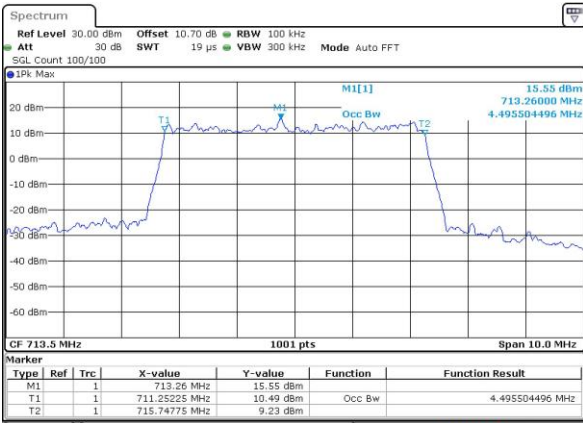
Date: 14 NOV 2018 23:03:20

Middle Channel / 10MHz / 64QAM



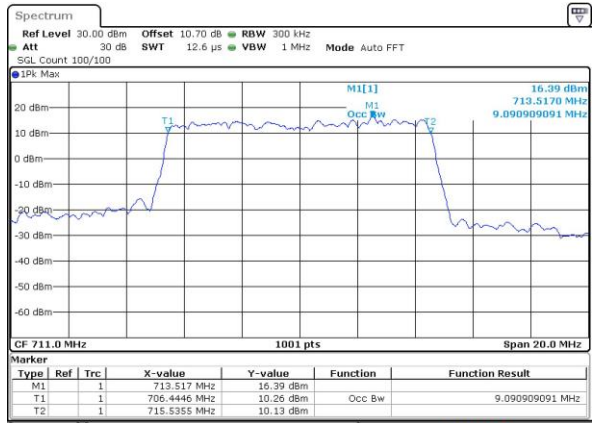
Date: 14 NOV 2018 23:11:31

Highest Channel / 5MHz / 64QAM



Date: 14 NOV 2018 23:04:44

Highest Channel / 10MHz / 64QAM



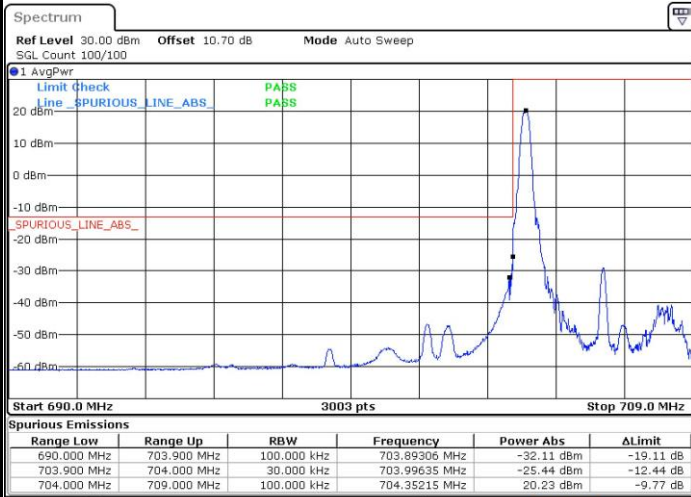
Date: 14 NOV 2018 23:12:56



# Conducted Band Edge

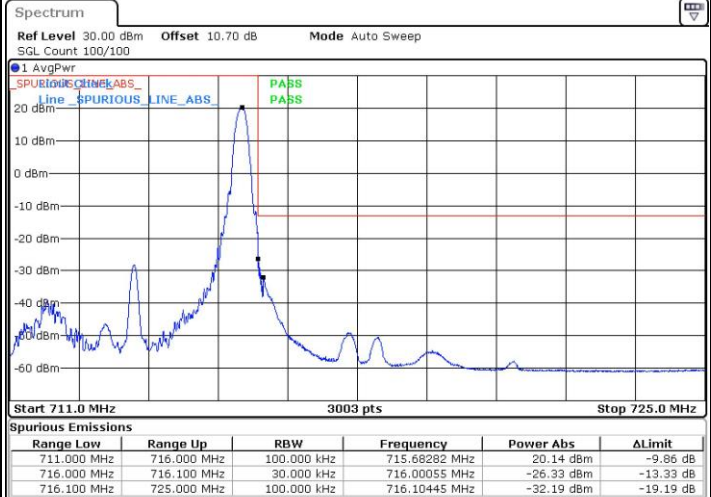
## LTE Band 17 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



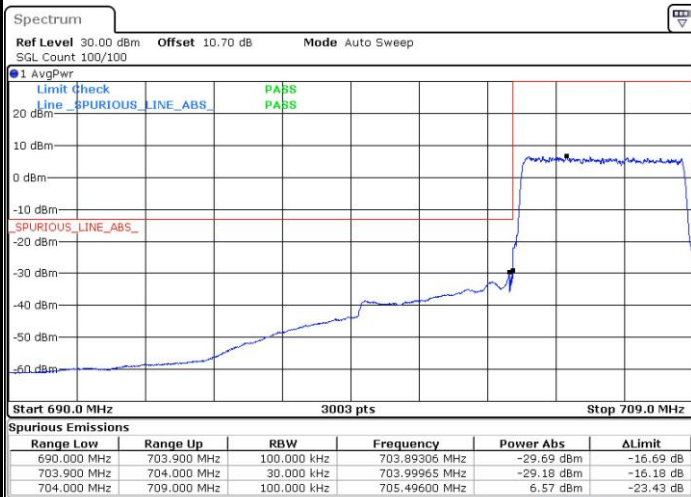
Date: 30 AUG 2018 08:55:25

### Highest Band Edge / 1 RB



Date: 30 AUG 2018 08:04:17

### Lowest Band Edge / Full RB



Date: 30 AUG 2018 08:57:25

### Highest Band Edge / Full RB

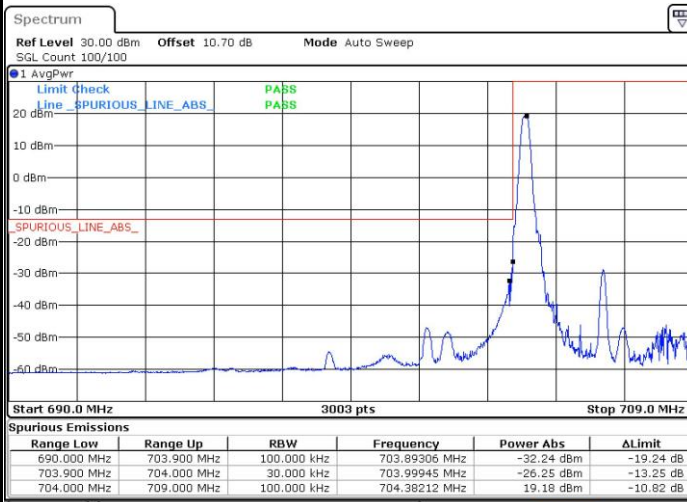


Date: 30 AUG 2018 08:06:17



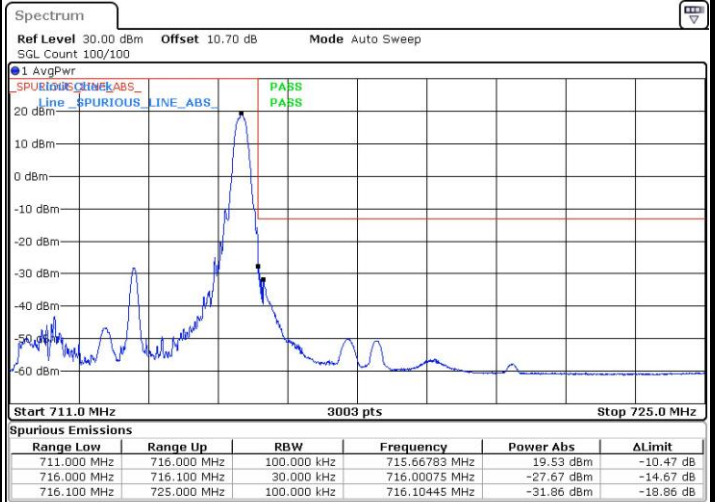
LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



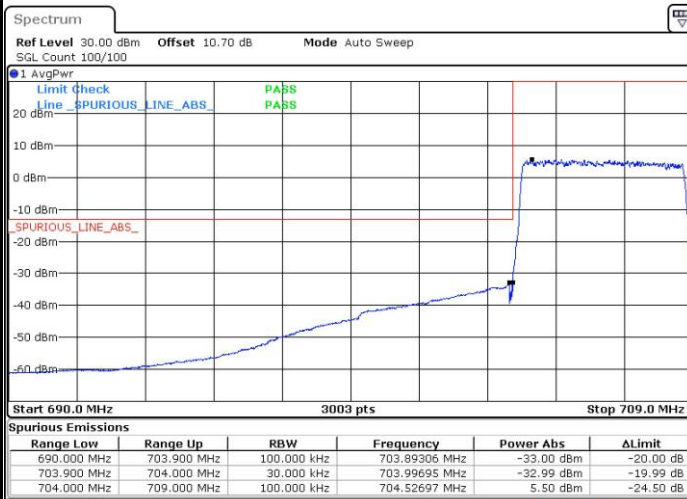
Date: 30 AUG 2018 08:56:25

Highest Band Edge / 1 RB



Date: 30 AUG 2018 09:05:17

Lowest Band Edge / Full RB



Date: 30 AUG 2018 08:58:25

Highest Band Edge / Full RB

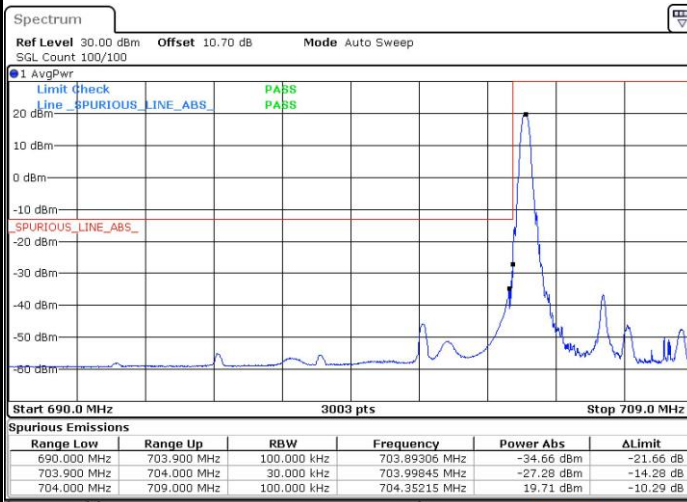


Date: 30 AUG 2018 09:07:17



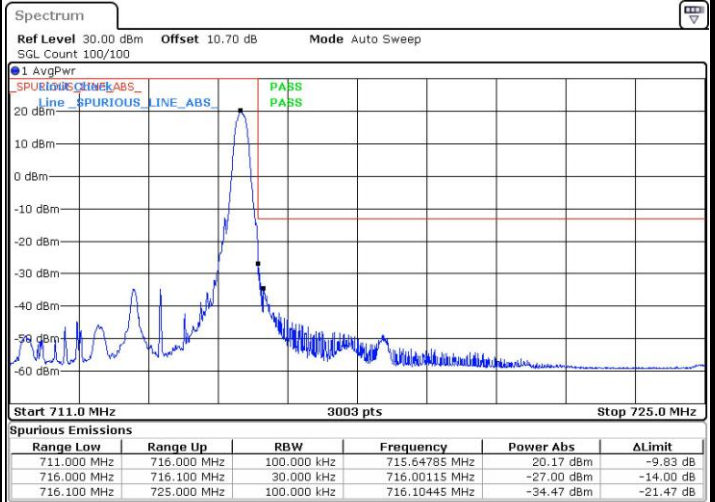
LTE Band 17 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



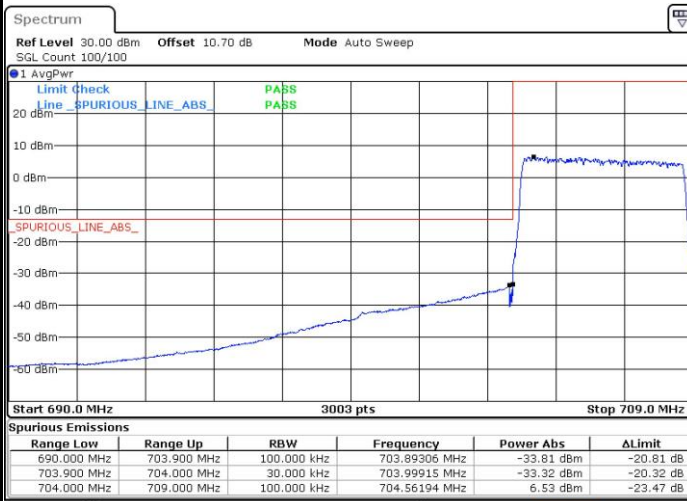
Date: 14.NOV.2018 23:01:08

Highest Band Edge / 1 RB



Date: 14.NOV.2018 23:05:55

Lowest Band Edge / Full RB



Date: 14.NOV.2018 23:02:08

Highest Band Edge / Full RB

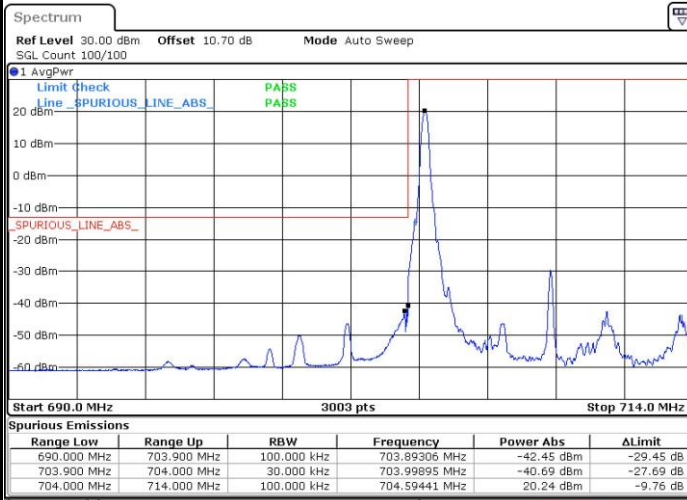


Date: 14.NOV.2018 23:06:55



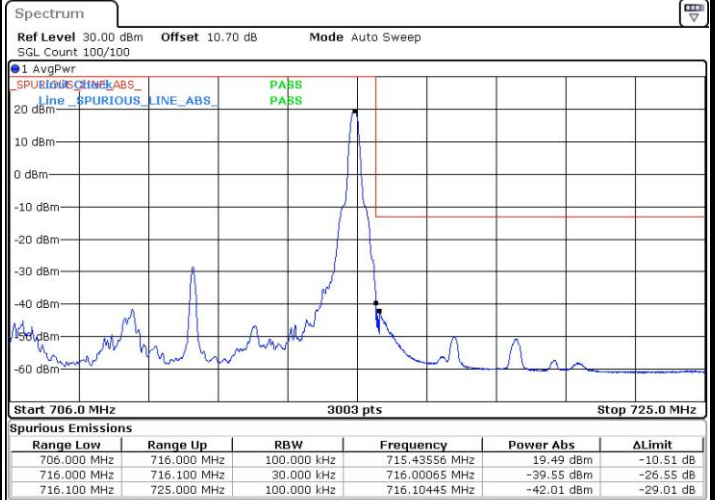
LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB



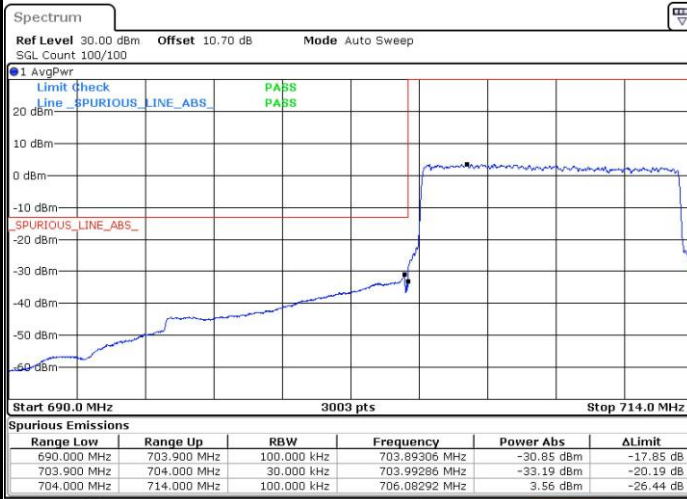
Date: 30 AUG 2018 09:10:43

Highest Band Edge / 1 RB



Date: 30 AUG 2018 09:19:35

Lowest Band Edge / Full RB



Date: 30 AUG 2018 09:12:43

Highest Band Edge / Full RB



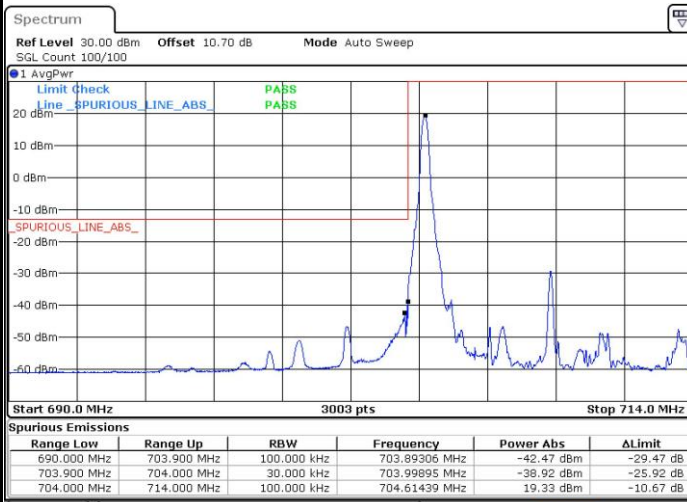
Date: 30 AUG 2018 09:21:36





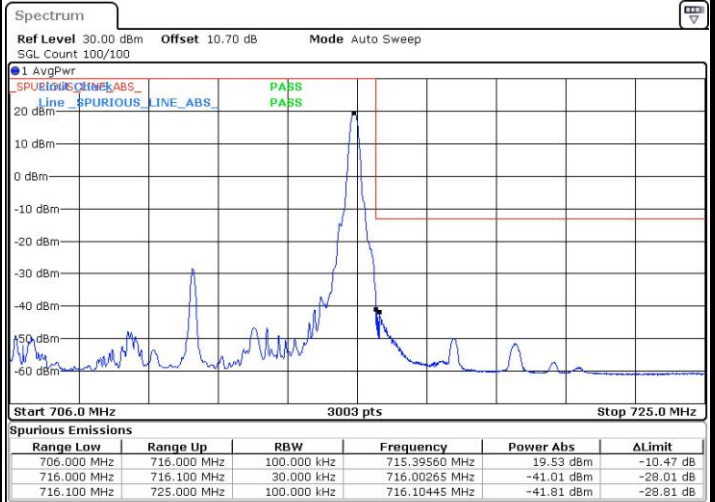
LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



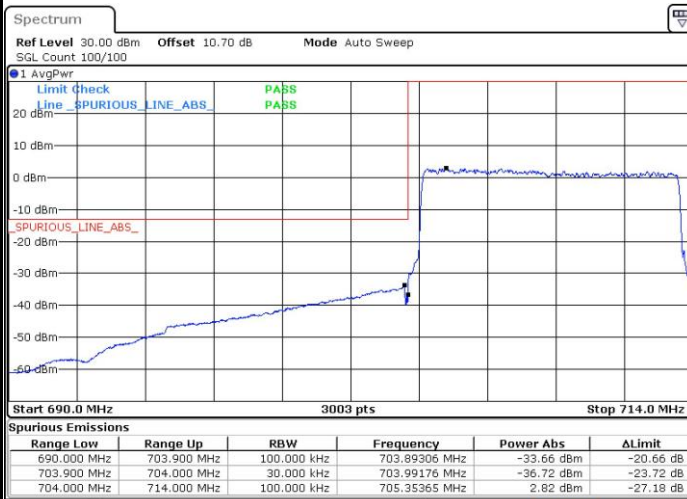
Date: 30 AUG 2018 09:11:43

Highest Band Edge / 1 RB



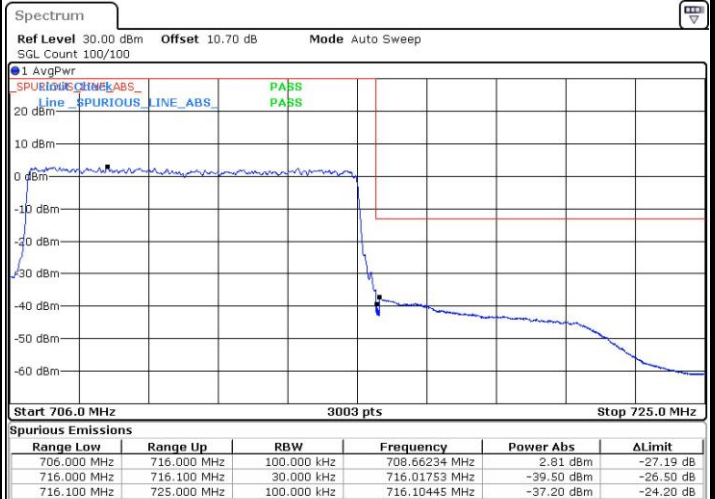
Date: 30 AUG 2018 09:20:36

Lowest Band Edge / Full RB



Date: 30 AUG 2018 09:13:43

Highest Band Edge / Full RB

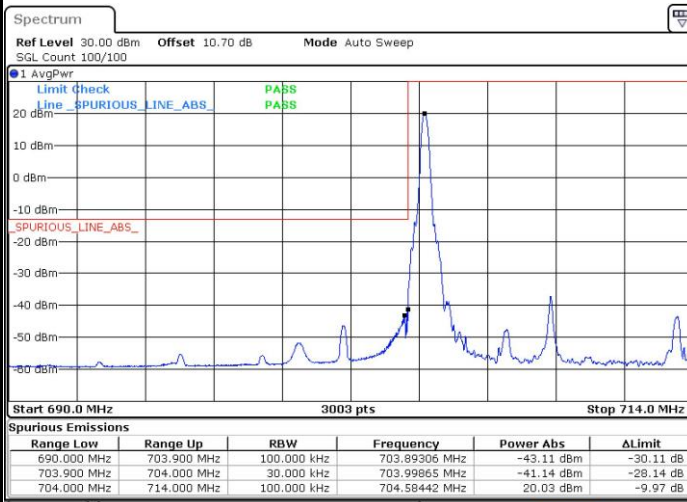


Date: 30 AUG 2018 09:22:36



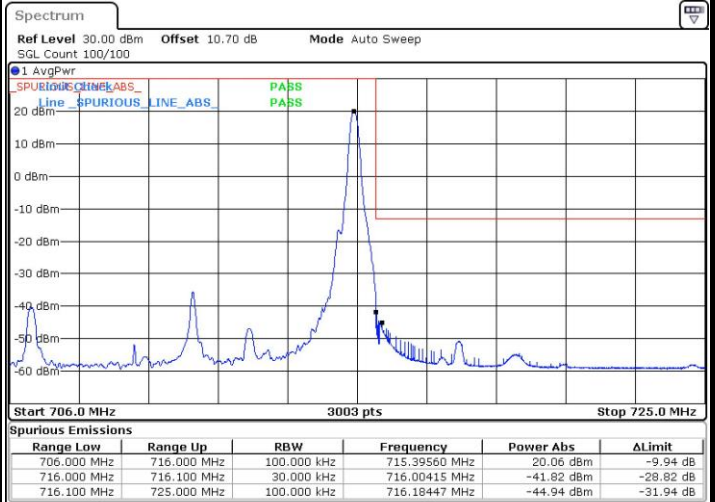
LTE Band 17 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



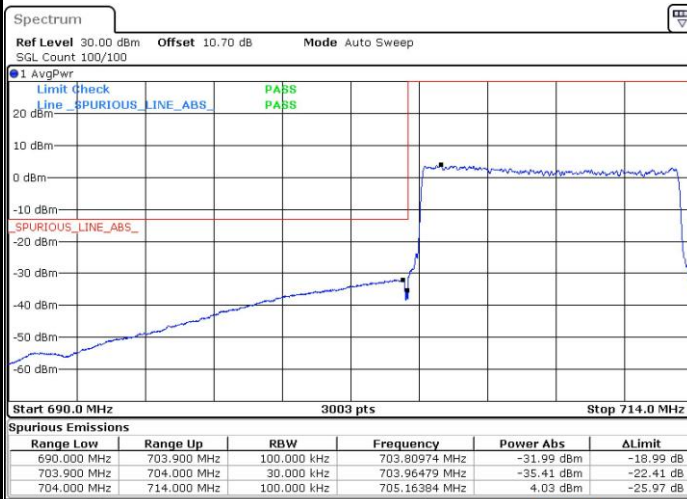
Date: 14.NOV.2018 23:09:20

Highest Band Edge / 1 RB



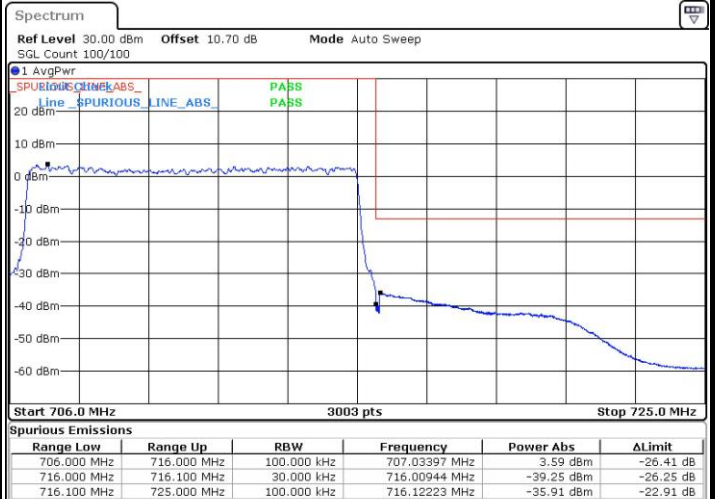
Date: 14.NOV.2018 23:14:07

Lowest Band Edge / Full RB



Date: 14.NOV.2018 23:10:19

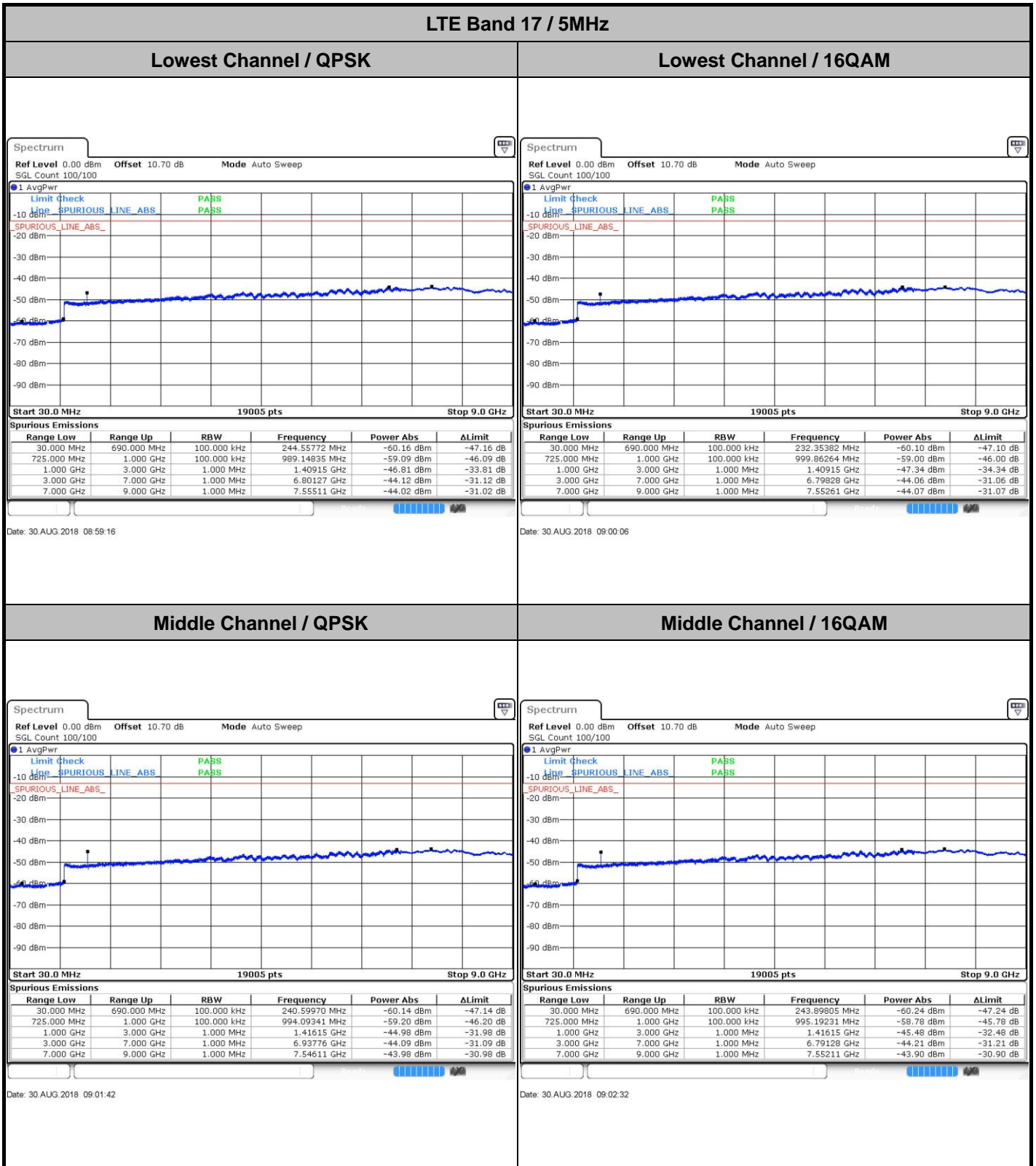
Highest Band Edge / Full RB



Date: 14.NOV.2018 23:15:07



# Conducted Spurious Emission

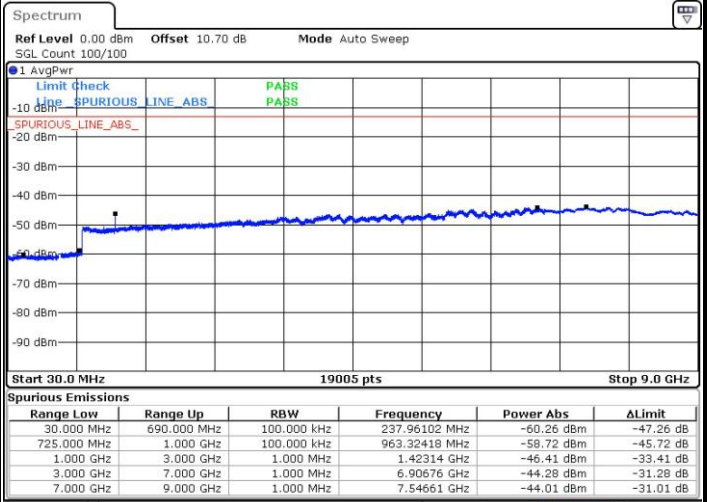
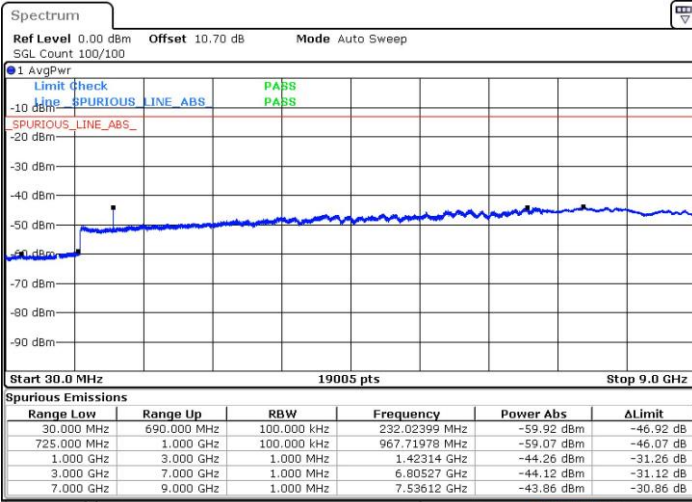




LTE Band 17 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



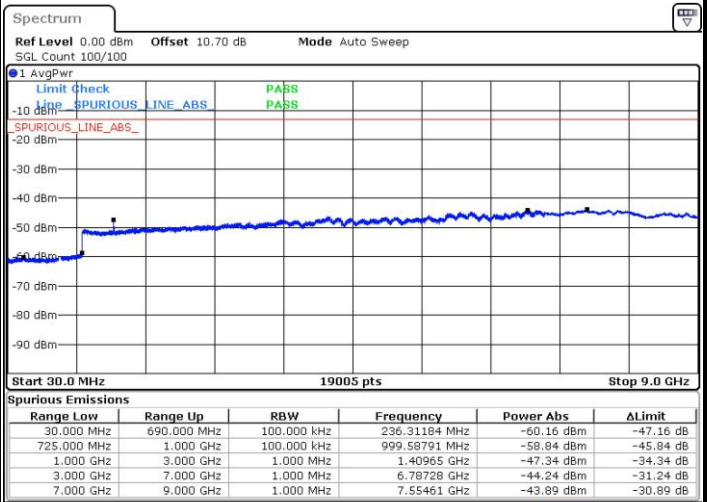
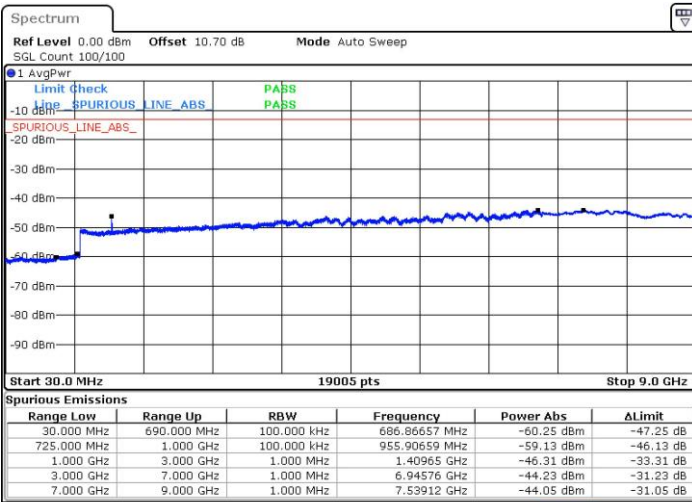
Date: 30 AUG.2018 09:08:08

Date: 30 AUG.2018 09:08:58

LTE Band 17 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 30 AUG.2018 09:14:34

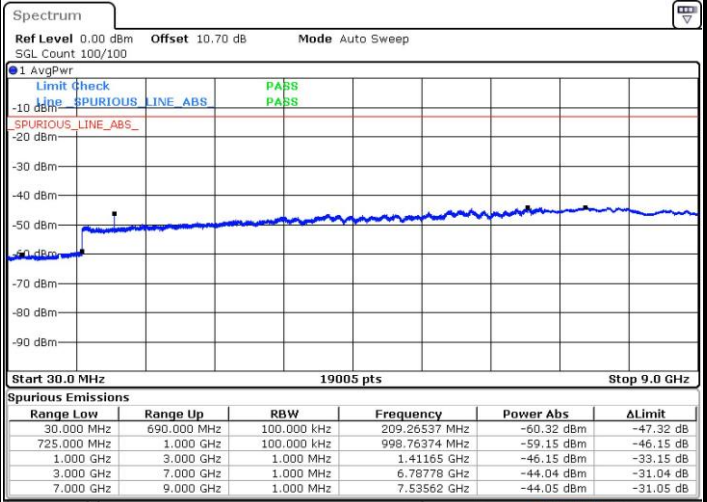
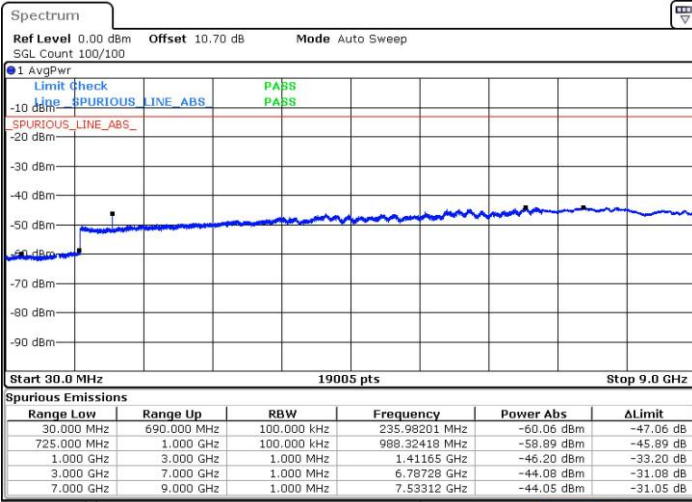
Date: 30 AUG.2018 09:15:24



LTE Band 17 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

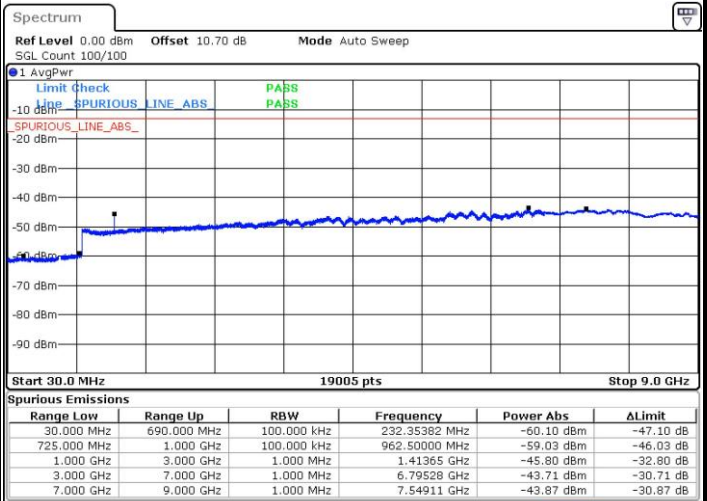
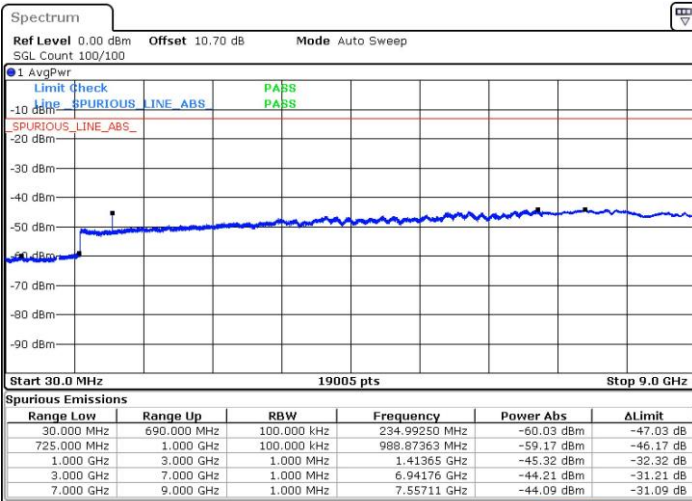


Date: 30.AUG.2018 09:17:00

Date: 30.AUG.2018 09:17:50

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30.AUG.2018 09:44:17

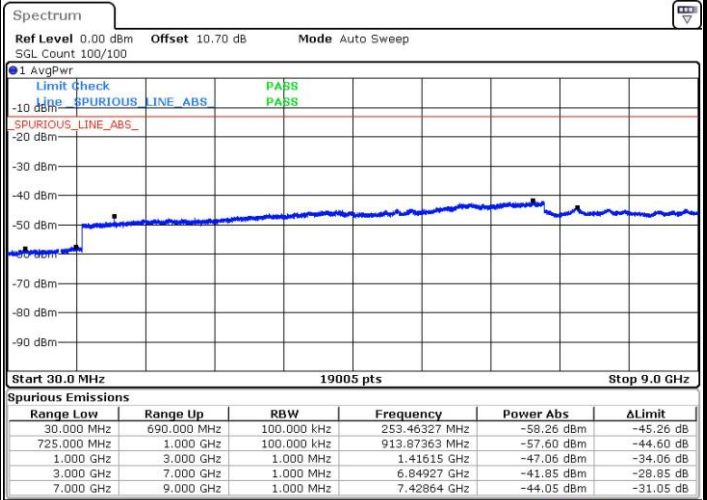
Date: 30.AUG.2018 09:45:08



LTE Band 17 / 5MHz

Lowest Channel / 64QAM

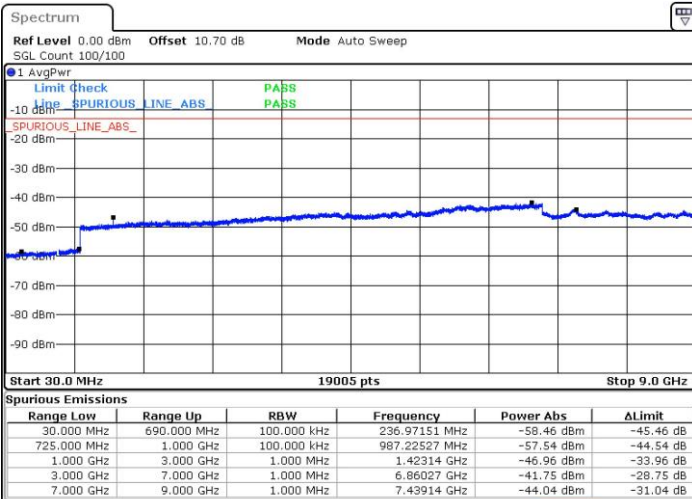
Middle Channel / 64QAM



Date: 14.NOV.2018 23:03:08

Date: 14.NOV.2018 23:04:32

Highest Channel / 64QAM



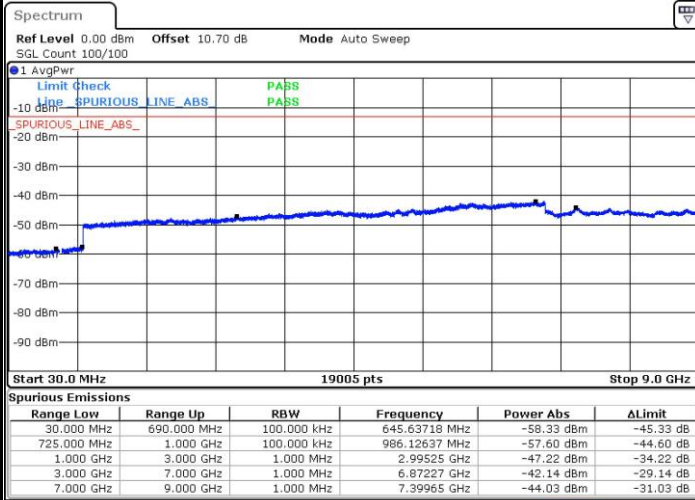
Date: 14.NOV.2018 23:07:55



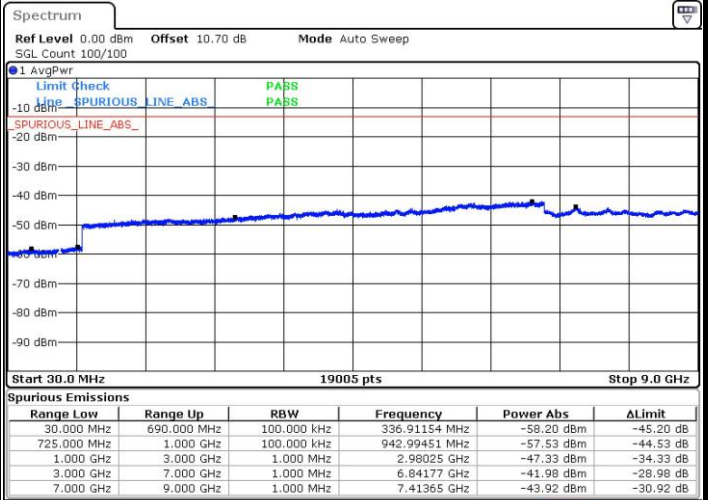
LTE Band 17 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

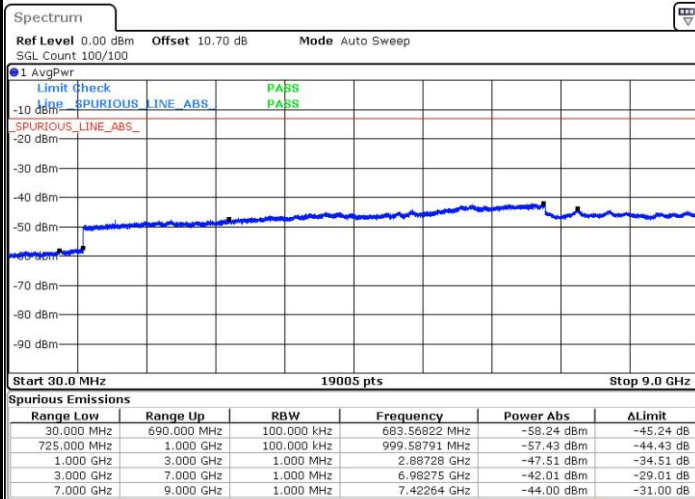


Date: 14.NOV.2018 23:11:19



Date: 14.NOV.2018 23:12:44

Highest Channel / 64QAM



Date: 14.NOV.2018 23:16:07



Frequency Stability

Test Conditions		LTE Band 17 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0010	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0011	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0010	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0121	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0138	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.





# LTE Band 25

## Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.19	3.77	4.14	4.9	PASS
Middle CH	2.17	3.86	3.19	5.13	
Highest CH	2.9	4.06	3.77	5.22	
Mode	LTE Band 25 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.86	6.06	-	-	PASS
Middle CH	5.04	6.32	-	-	
Highest CH	6.00	6.23	-	-	



LTE Band 25 / 20MHz / QPSK

Lowest Channel / 1RB



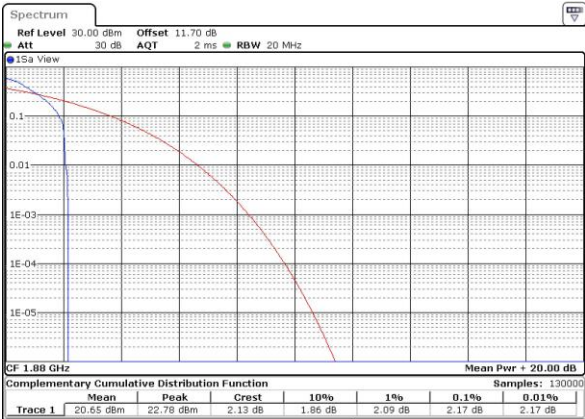
Date: 30 AUG 2018 15:43:57

Lowest Channel / Full RB



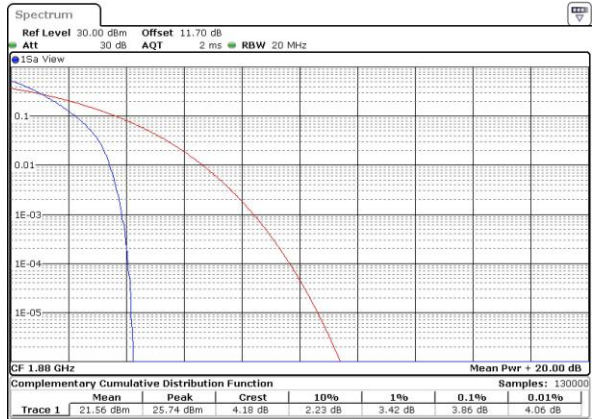
Date: 30 AUG 2018 15:40:56

Middle Channel / 1RB



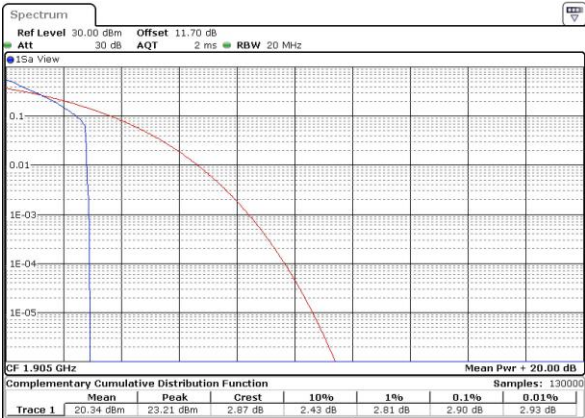
Date: 30 AUG 2018 15:41:29

Middle Channel / Full RB



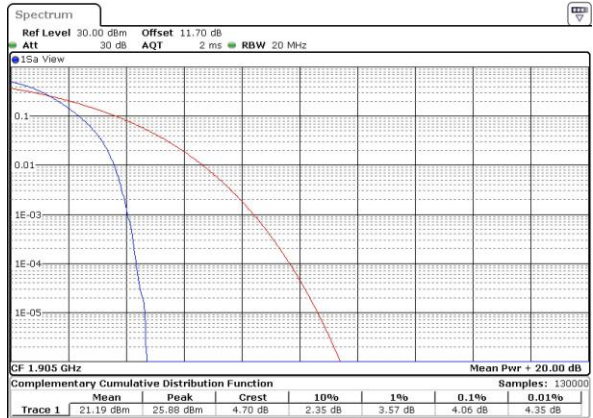
Date: 30 AUG 2018 15:41:40

Highest Channel / 1RB



Date: 30 AUG 2018 15:42:34

Highest Channel / Full RB

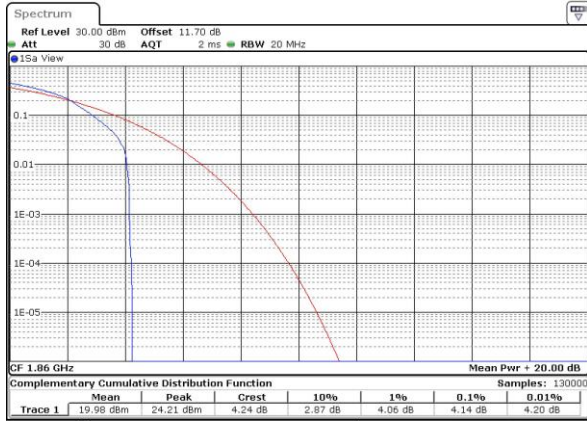


Date: 30 AUG 2018 15:42:45



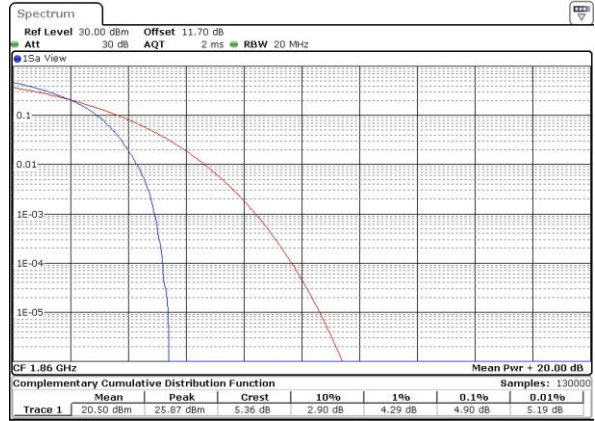
LTE Band 25 / 20MHz / 16QAM

Lowest Channel / 1RB



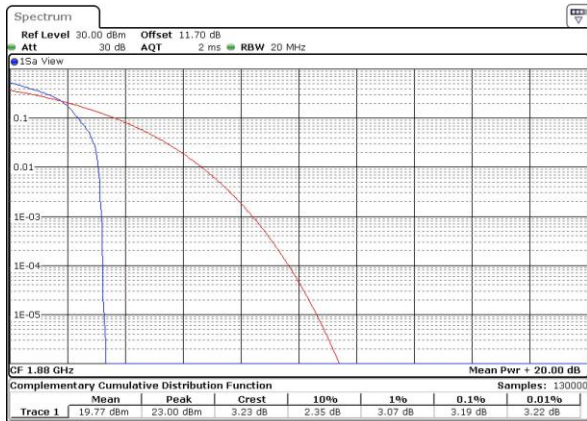
Date: 30 AUG 2018 15:40:27

Lowest Channel / Full RB



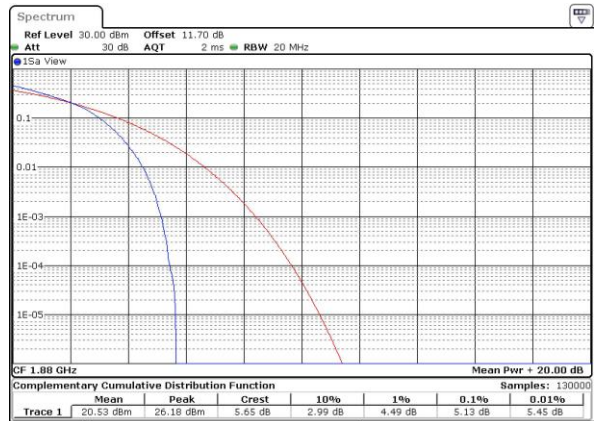
Date: 30 AUG 2018 15:40:38

Middle Channel / 1RB



Date: 30 AUG 2018 15:41:06

Middle Channel / Full RB



Date: 30 AUG 2018 15:41:17

Highest Channel / 1RB



Date: 30 AUG 2018 15:41:52

Highest Channel / Full RB

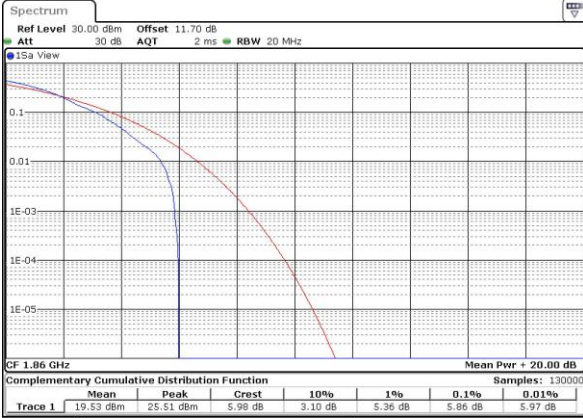


Date: 30 AUG 2018 15:42:23



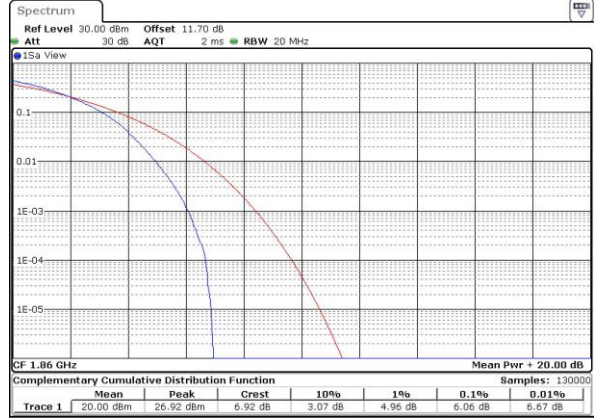
LTE Band 25 / 20MHz / 64QAM

Lowest Channel / 1RB



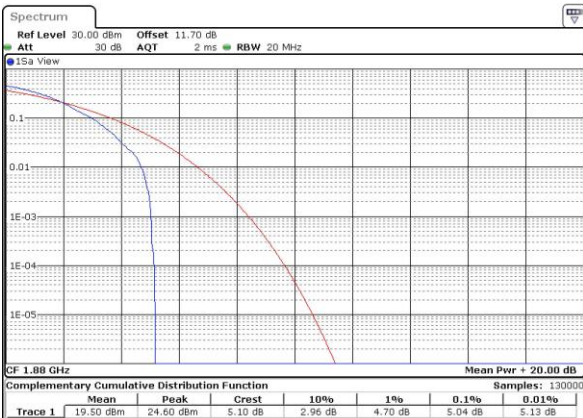
Date: 14.NOV.2018 17:55:24

Lowest Channel / Full RB



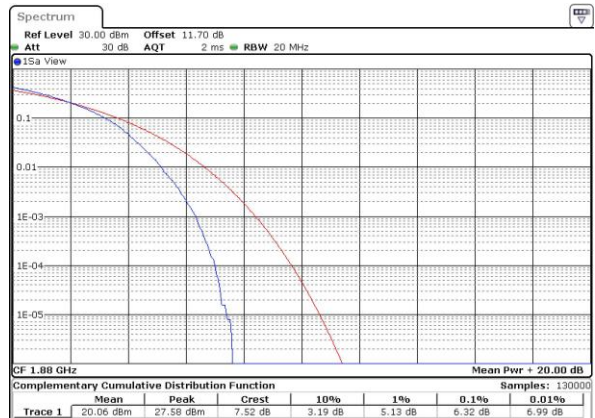
Date: 14.NOV.2018 17:55:35

Middle Channel / 1RB



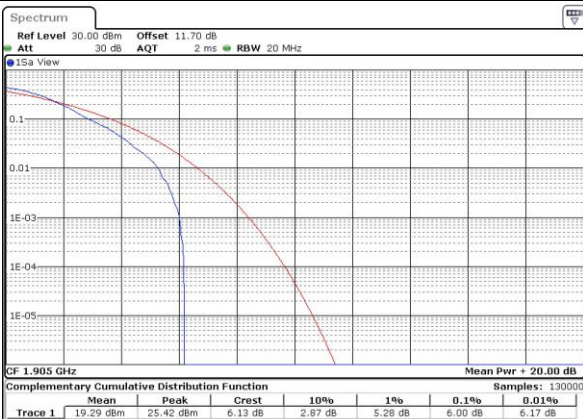
Date: 14.NOV.2018 17:55:48

Middle Channel / Full RB



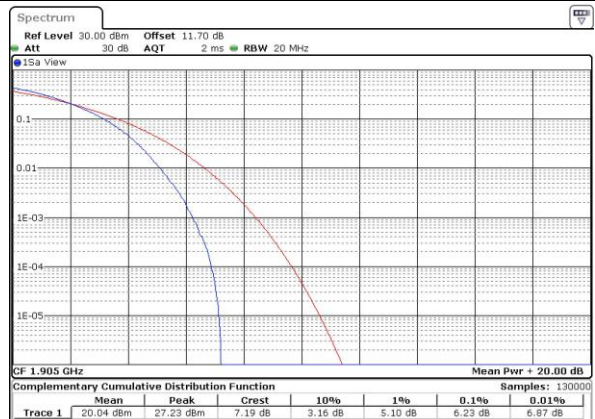
Date: 14.NOV.2018 17:56:05

Highest Channel / 1RB



Date: 14.NOV.2018 17:56:17

Highest Channel / Full RB



Date: 14.NOV.2018 17:56:28



**26dB Bandwidth**

Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.24	1.24	3.04	3.01	4.93	4.87	9.69	9.91	14.21	14.51	20.34	20.14
Middle CH	1.22	1.23	3.02	3.01	4.93	4.85	9.83	9.85	14.24	14.33	20.22	20.18
Highest CH	1.30	1.23	3.06	3.06	4.96	4.95	9.77	9.83	14.66	14.33	20.30	20.06

Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.22	-	2.99	-	4.93	-	9.75	-	14.39	-	20.18	-
Middle CH	1.23	-	3.03	-	4.95	-	9.83	-	14.57	-	20.02	-
Highest CH	1.21	-	2.99	-	4.92	-	9.67	-	14.33	-	20.10	-