

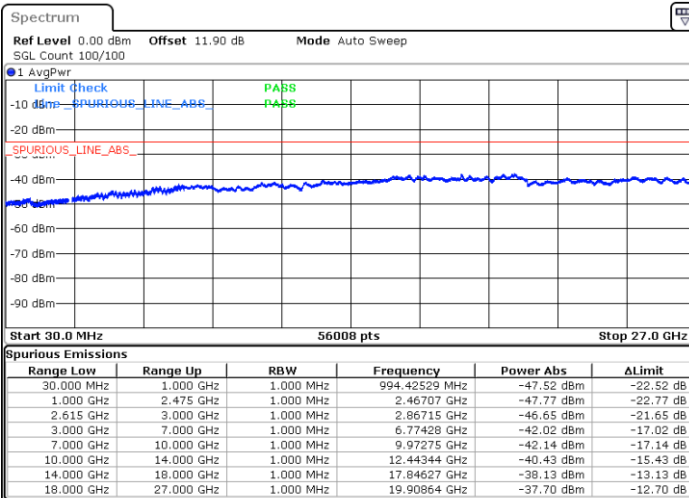


LTE Band 7C / 20MHz+15MHz

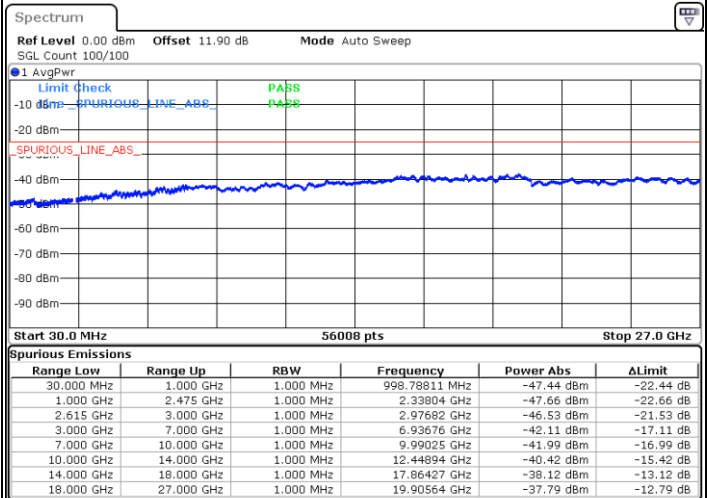
64QAM

MiddleChannel / 1RB0 and 1RB74

Middle Channel / 1RB99 and 1RB0



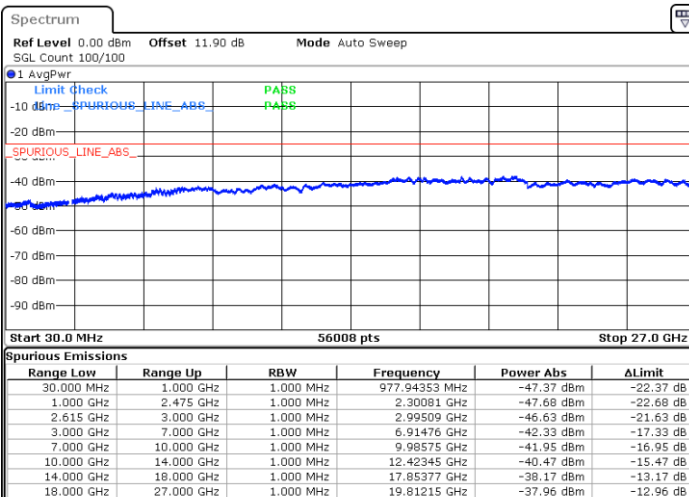
Date: 13 NOV 2019 01:22:15



Date: 13 NOV 2019 01:29:21

Middle Channel / FullIRB

N/A



Date: 13 NOV 2019 01:20:50

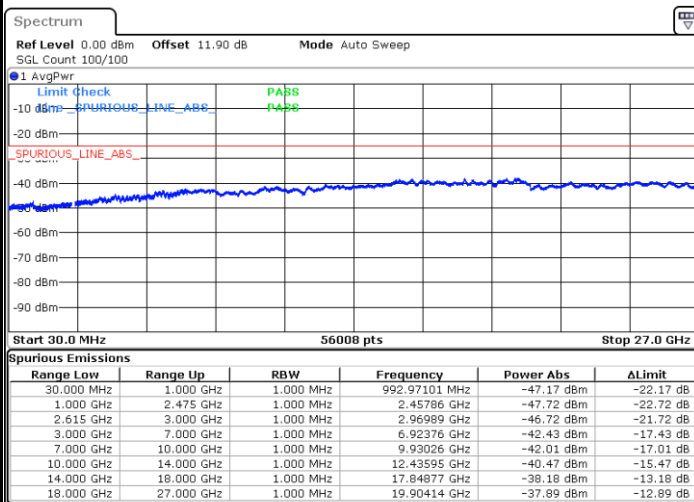


LTE Band 7C / 20MHz+15MHz

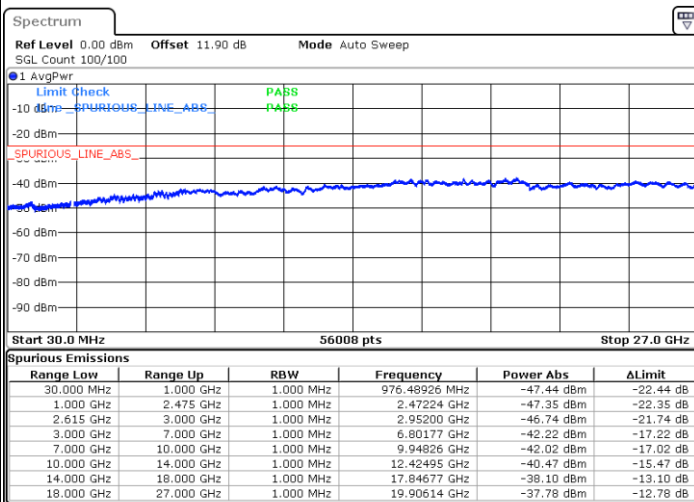
64QAM

Highest Channel / 1RB0 and 1RB74

Highest Channel / 1RB99 and 1RB0



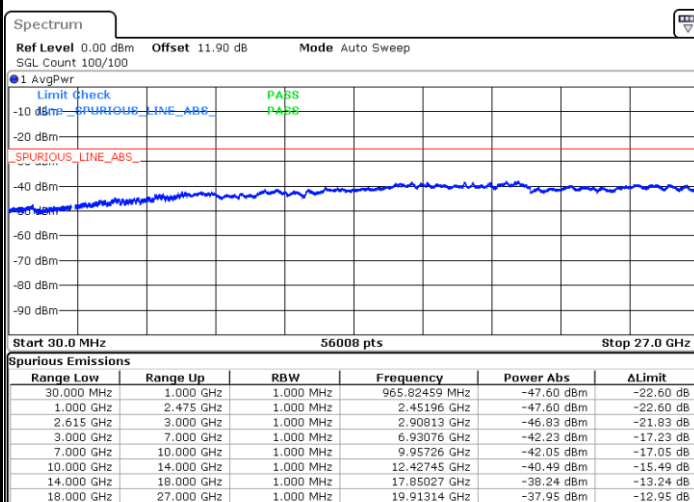
Date: 13 NOV 2019 23:57:47



Date: 13 NOV 2019 23:56:26

Highest Channel / FullIRB

N/A



Date: 14 NOV 2019 00:04:35

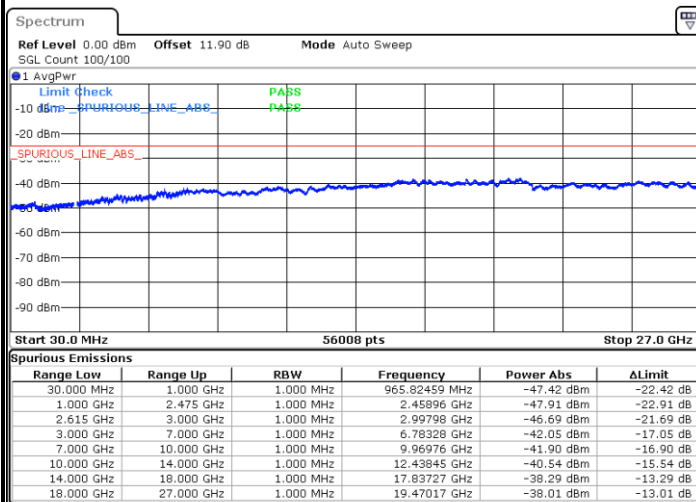


LTE Band 7C / 20MHz+20MHz

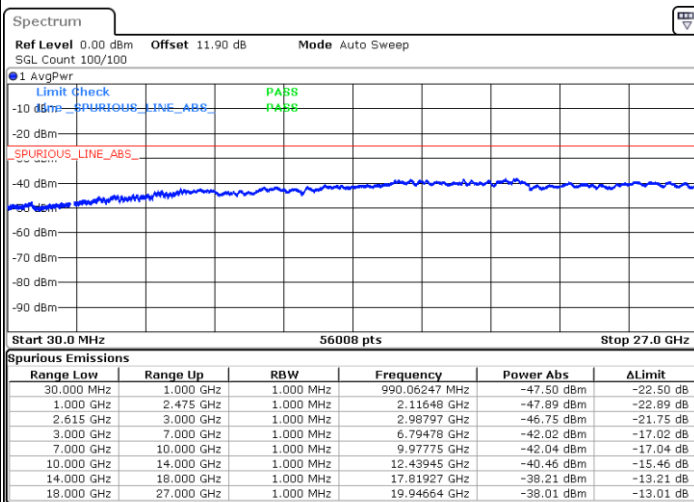
64QAM

Lowest Channel / 1RB0 and 1RB99

Lowest Channel / 1RB99 and 1RB0



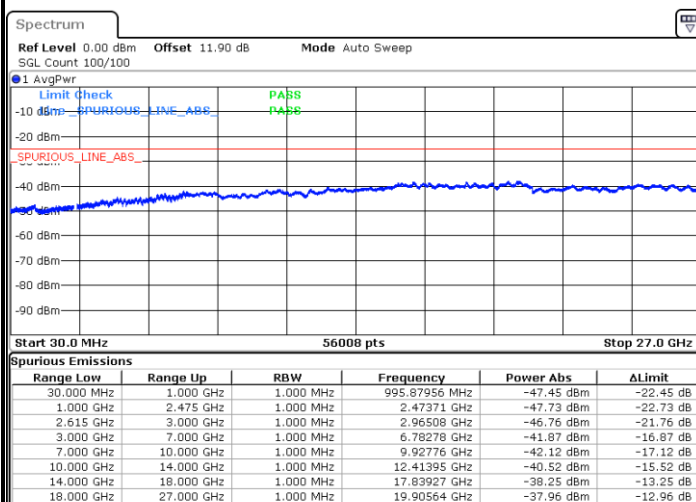
Date: 14 NOV 2019 00:45:15



Date: 14 NOV 2019 00:38:28

Lowest Channel / FullIRB

N/A



Date: 14 NOV 2019 00:46:37

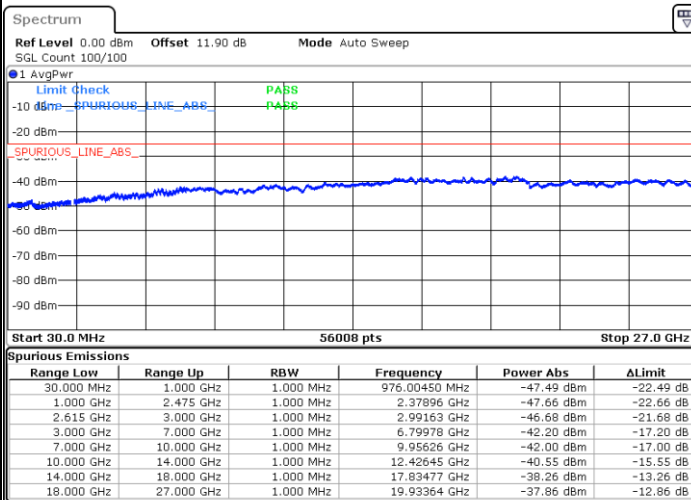


LTE Band 7C / 20MHz+20MHz

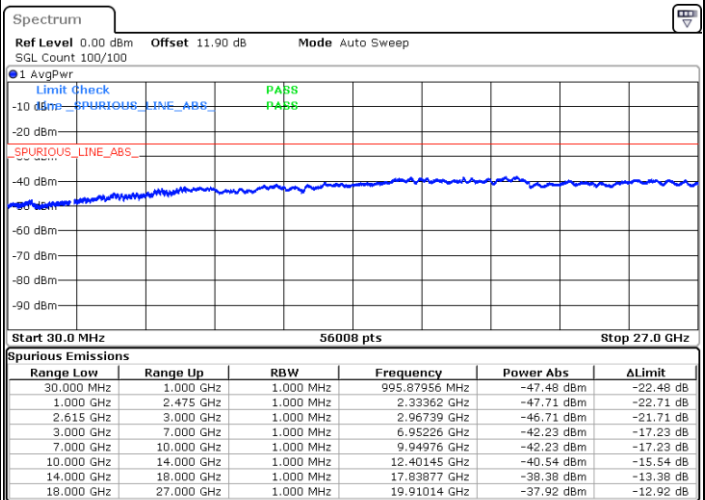
64QAM

Middle Channel / 1RB0 and 1RB99

Middle Channel / 1RB99 and 1RB0



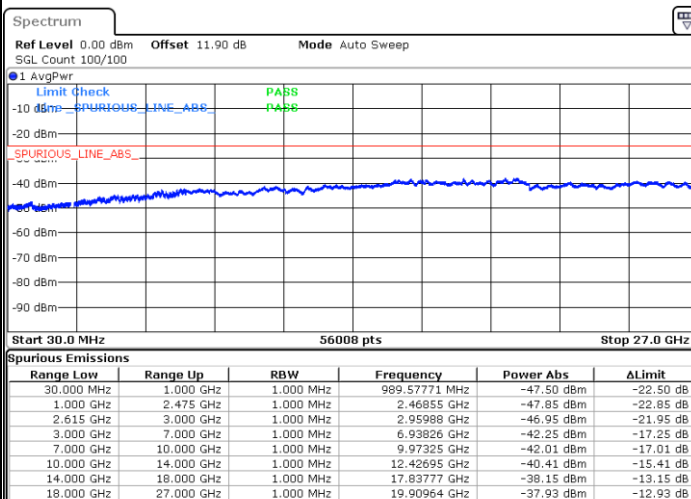
Date: 14 NOV 2019 01:02:35



Date: 14 NOV 2019 01:09:22

Middle Channel / FullIRB

N/A



Date: 14 NOV 2019 01:01:13

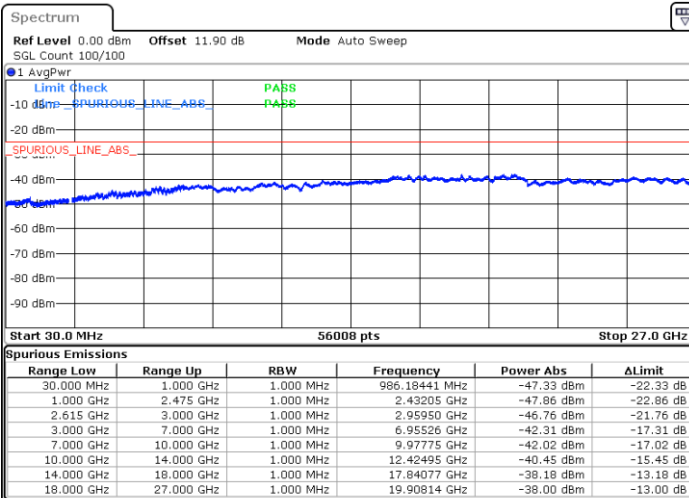


LTE Band 7C / 20MHz+20MHz

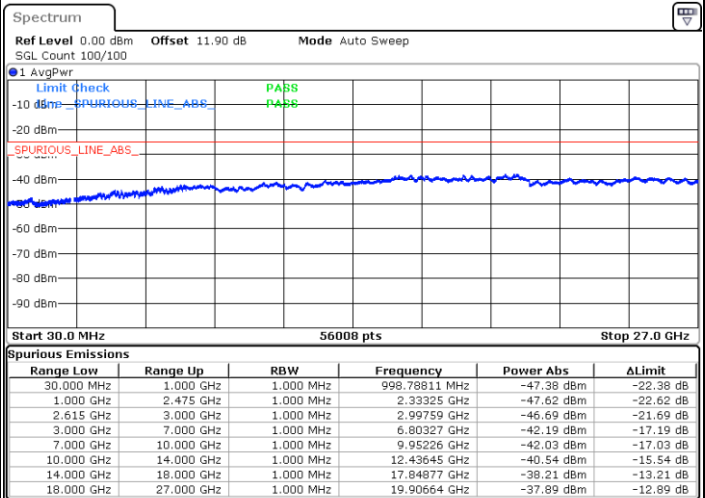
64QAM

Highest Channel / 1RB0 and 1RB99

Highest Channel / 1RB99 and 1RB0



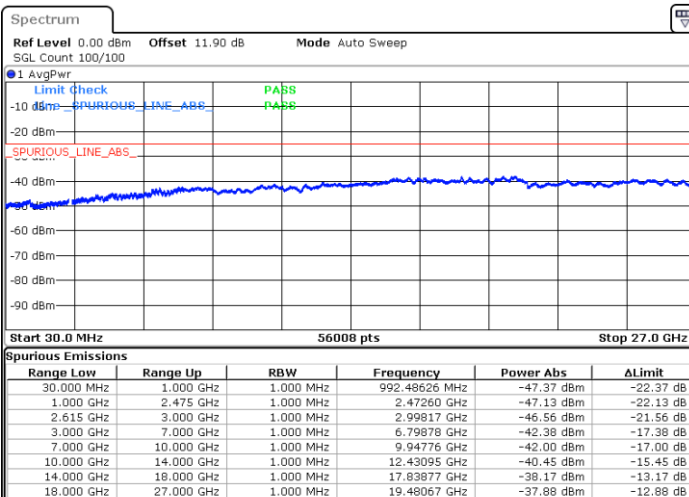
Date: 14 NOV 2019 01:32:53



Date: 14 NOV 2019 01:31:32

Highest Channel / FullIRB

N/A



Date: 14 NOV 2019 01:39:41



LTE Band 13

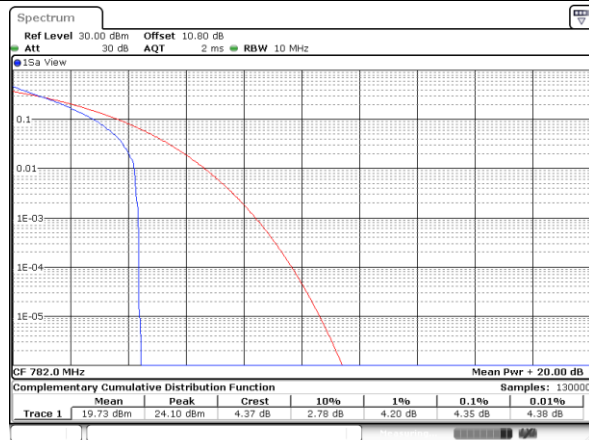
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.35	5.19	4.93	6.03	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.00	6.55	-	-	
Highest CH	-	-	-	-	



LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB

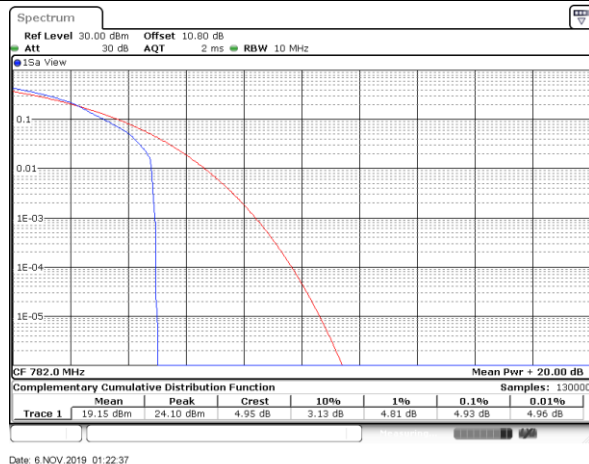


Middle Channel / Full RB

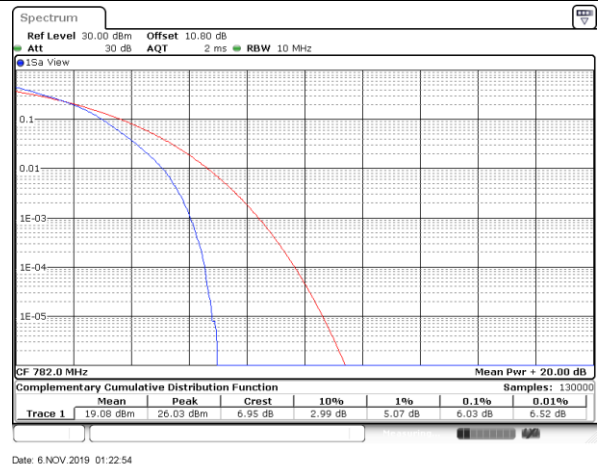


LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB

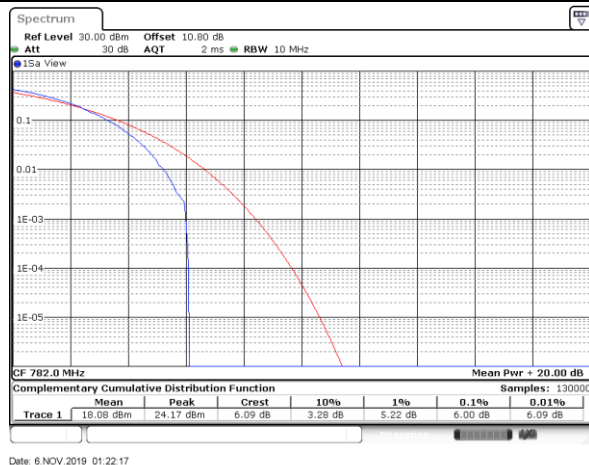


Middle Channel / Full RB

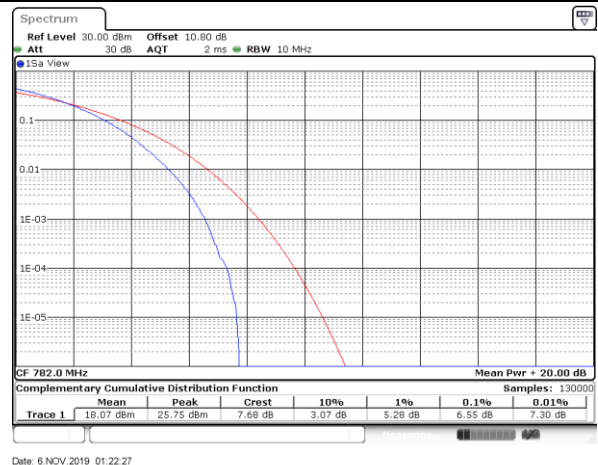


LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Middle Channel / Full RB



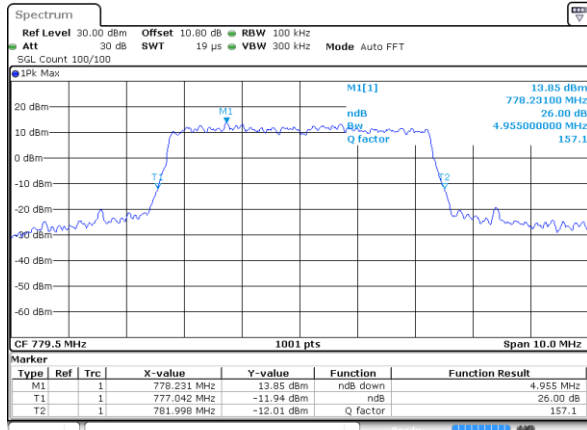
**26dB Bandwidth**

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	-	-	-	-	4.96	4.91	-	-	-	-	-	-
Middle CH	-	-	-	-	4.94	4.97	9.87	9.75	-	-	-	-
Highest CH	-	-	-	-	4.96	4.91	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.97	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.97	-	9.97	-	-	-	-	-
Highest CH	-	-	-	-	4.92	-	-	-	-	-	-	-



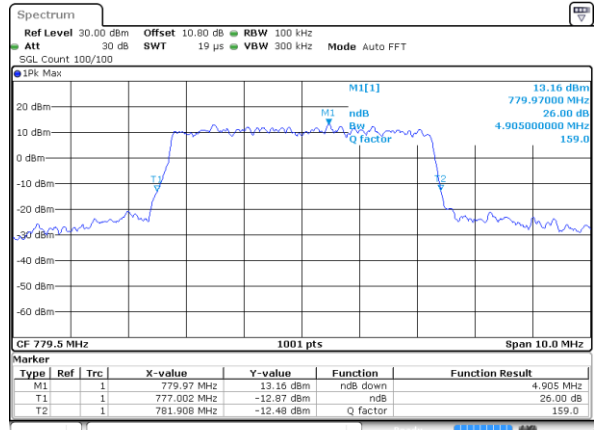
LTE Band 13

Lowest Channel / 5MHz / QPSK



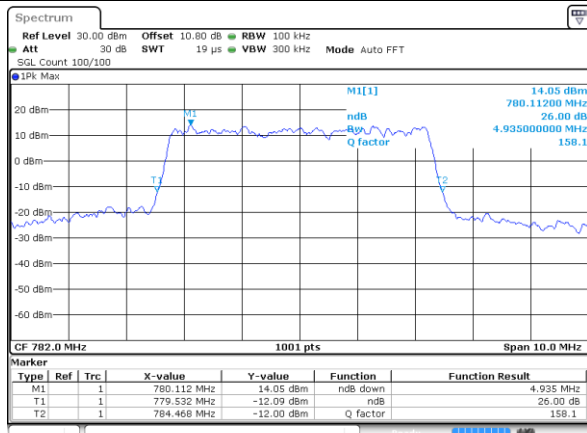
Date: 6 NOV 2019 00:35:12

Lowest Channel / 5MHz / 16QAM



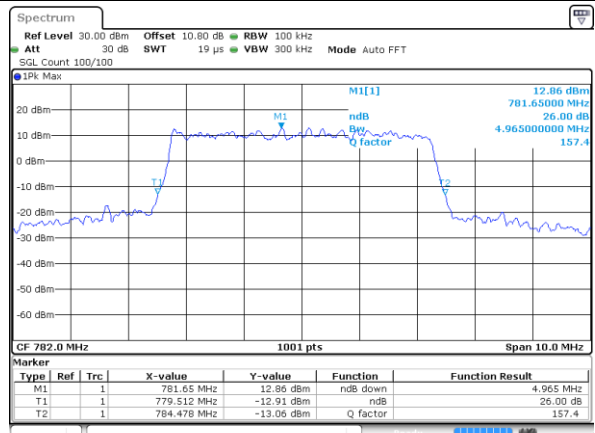
Date: 6 NOV 2019 00:35:00

Middle Channel / 5MHz / QPSK



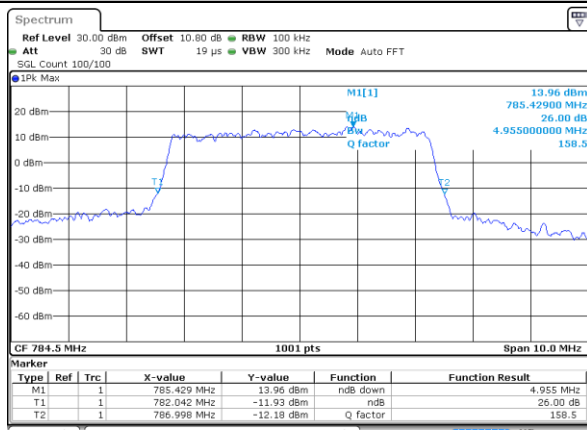
Date: 6 NOV 2019 00:44:27

Middle Channel / 5MHz / 16QAM



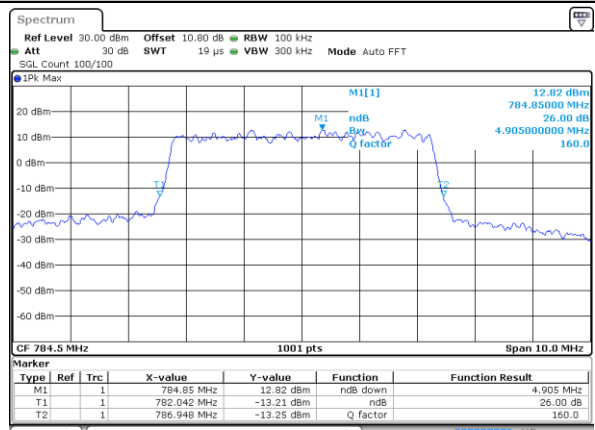
Date: 6 NOV 2019 00:44:38

Highest Channel / 5MHz / QPSK



Date: 6 NOV 2019 00:45:49

Highest Channel / 5MHz / 16QAM

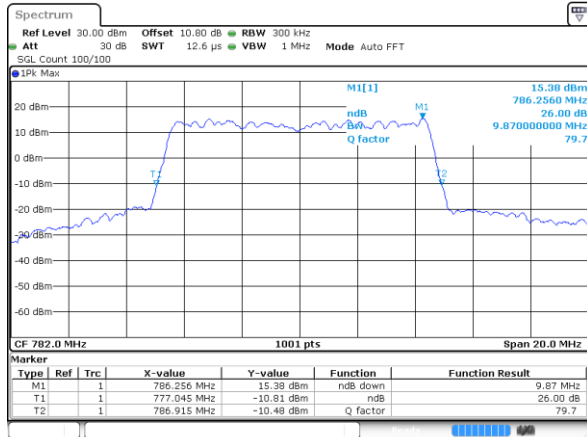


Date: 6 NOV 2019 00:45:37



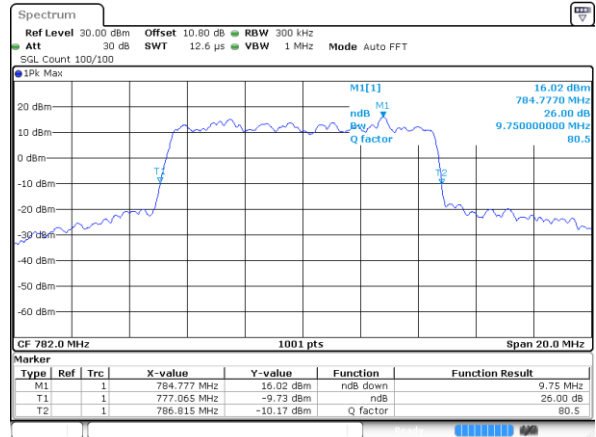
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 6 NOV 2019 01:04:09

Middle Channel / 10MHz / 16QAM

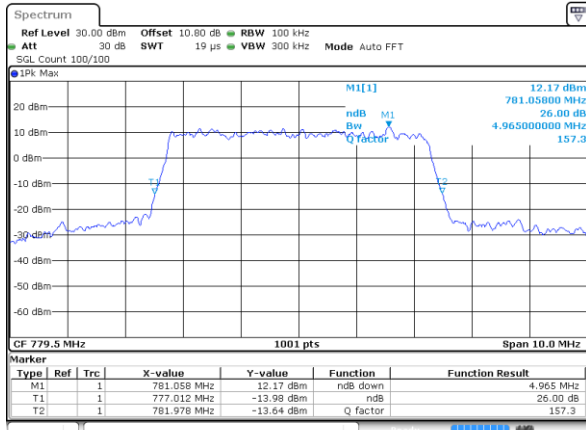


Date: 6 NOV 2019 01:03:57



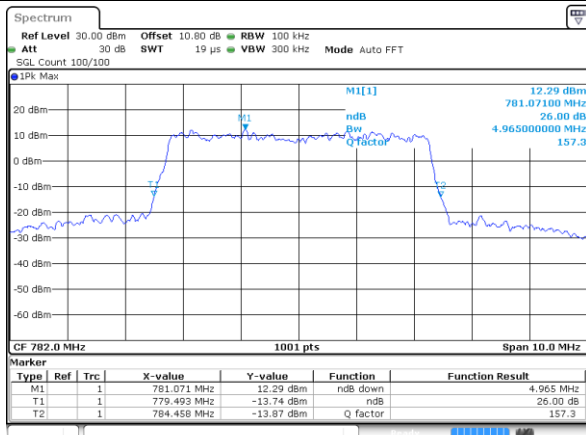
LTE Band 13

Lowest Channel / 5MHz / 64QAM



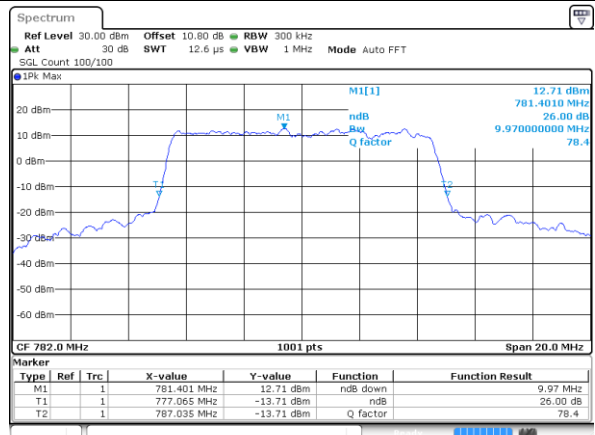
Date: 6 NOV 2019 00:54:07

Middle Channel / 5MHz / 64QAM



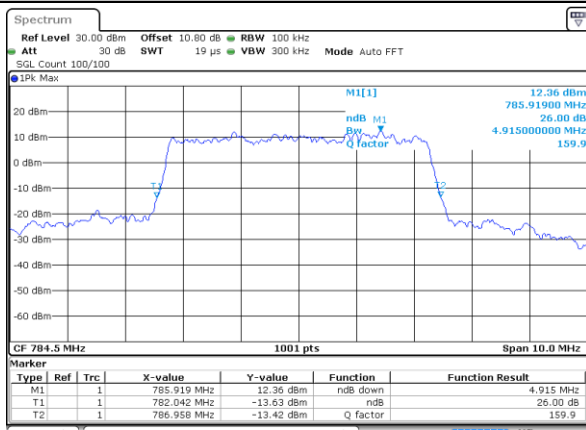
Date: 6 NOV 2019 00:58:50

Middle Channel / 10MHz / 64QAM



Date: 6 NOV 2019 01:15:42

Highest Channel / 5MHz / 64QAM



Date: 6 NOV 2019 00:59:25

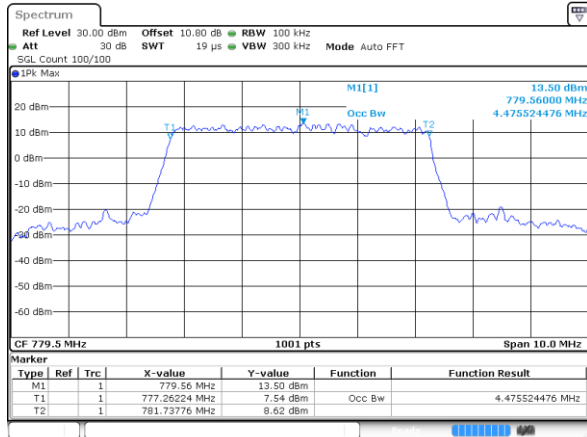
**Occupied Bandwidth**

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	-	-	-	-	4.48	4.51	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.50	9.07	9.05	-	-	-	-
Highest CH	-	-	-	-	4.50	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	-	-	-	-	4.51	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	-	9.03	-	-	-	-	-
Highest CH	-	-	-	-	4.52	-	-	-	-	-	-	-

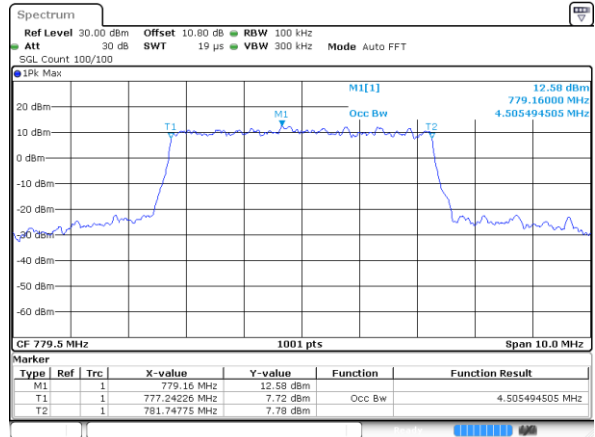


LTE Band 13

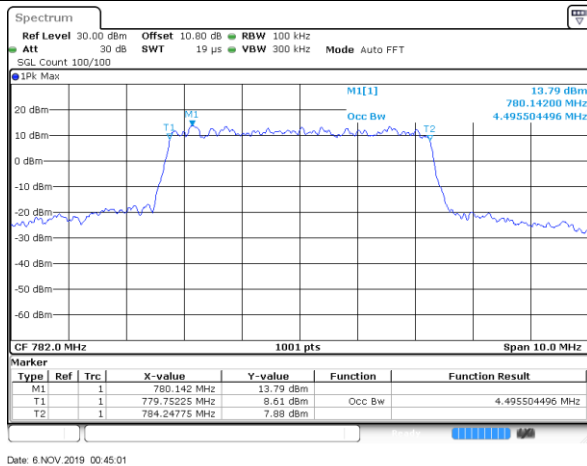
Lowest Channel / 5MHz / QPSK



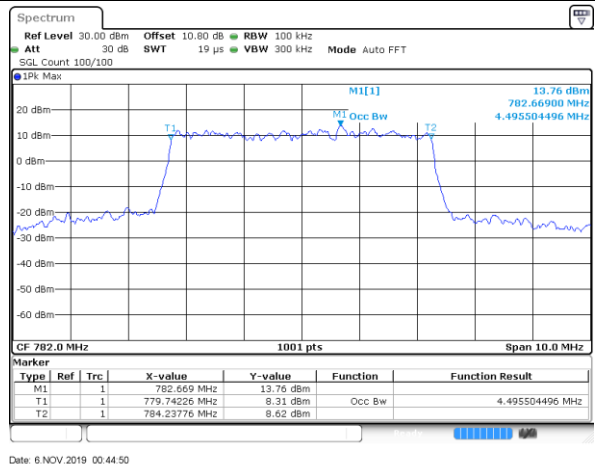
Lowest Channel / 5MHz / 16QAM



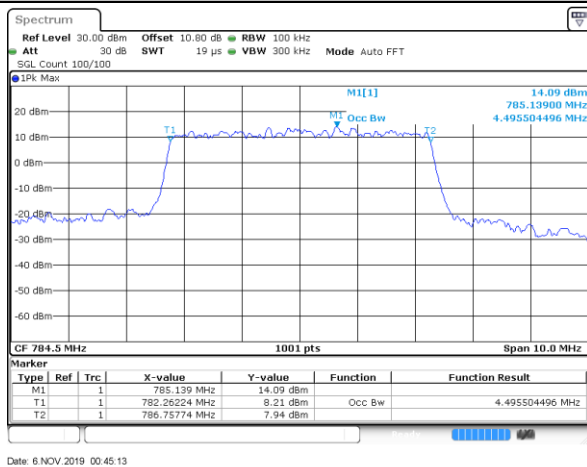
Middle Channel / 5MHz / QPSK



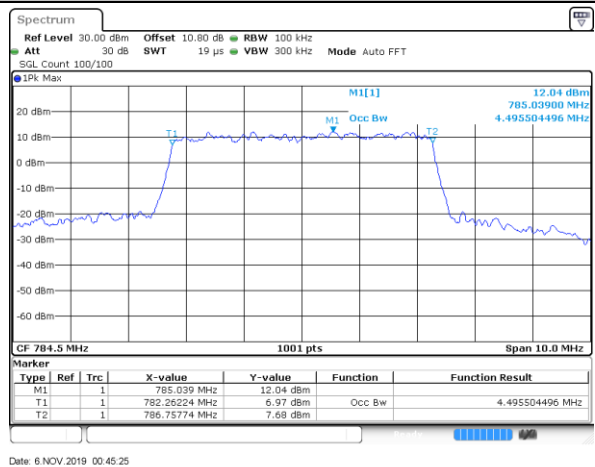
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



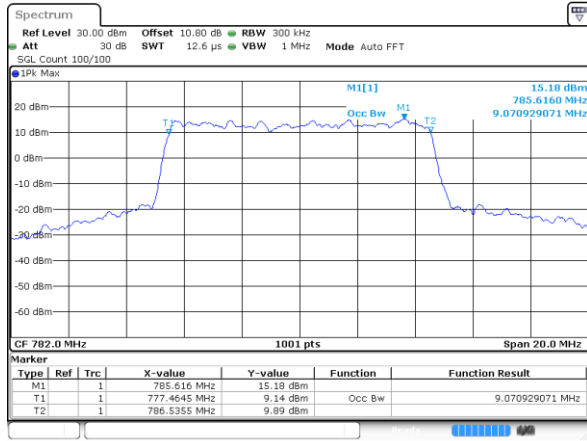
Highest Channel / 5MHz / 16QAM





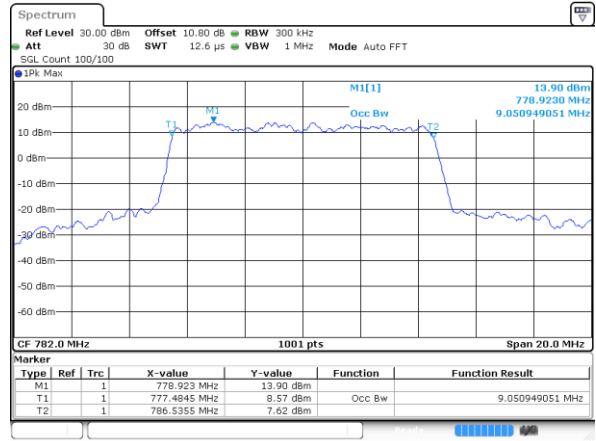
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 6 NOV 2019 01:03:34

Middle Channel / 10MHz / 16QAM

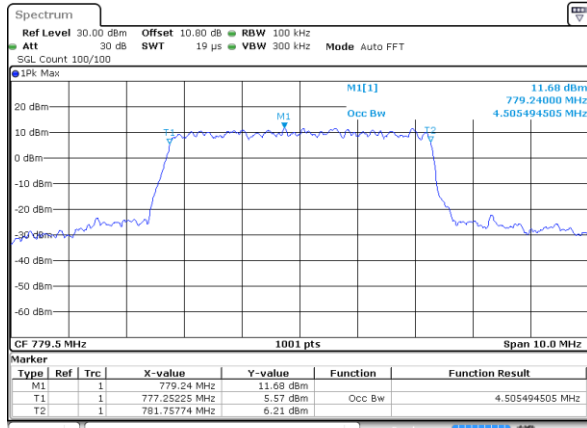


Date: 6 NOV 2019 01:03:46



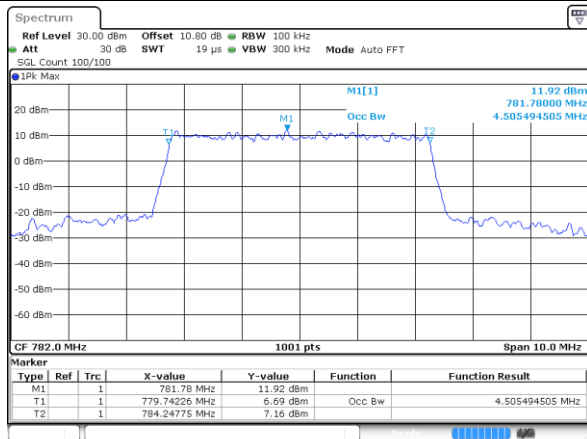
LTE Band 13

Lowest Channel / 5MHz / 64QAM



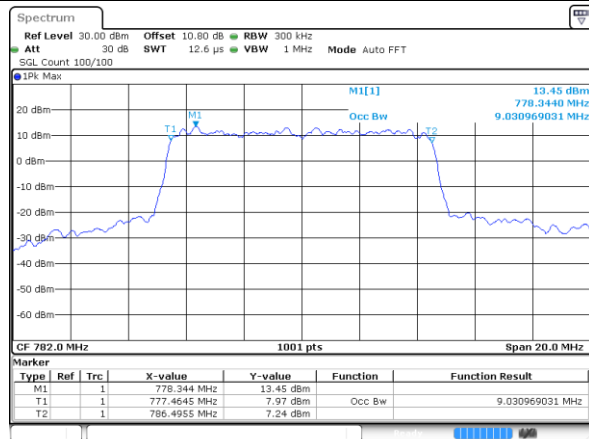
Date: 6 NOV 2019 00:53:55

Middle Channel / 5MHz / 64QAM



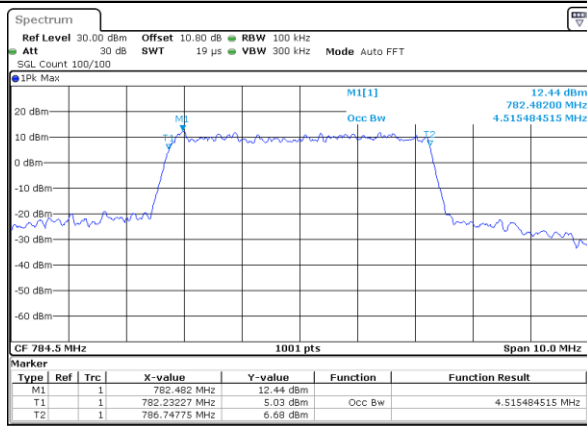
Date: 6 NOV 2019 00:59:01

Middle Channel / 10MHz / 64QAM

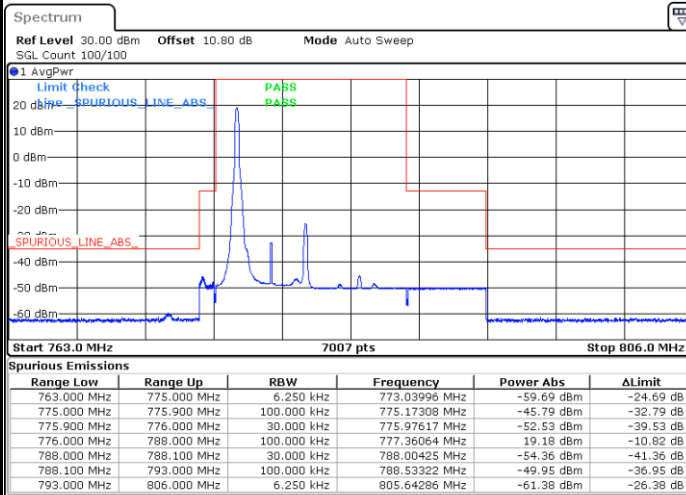


Date: 6 NOV 2019 01:15:31

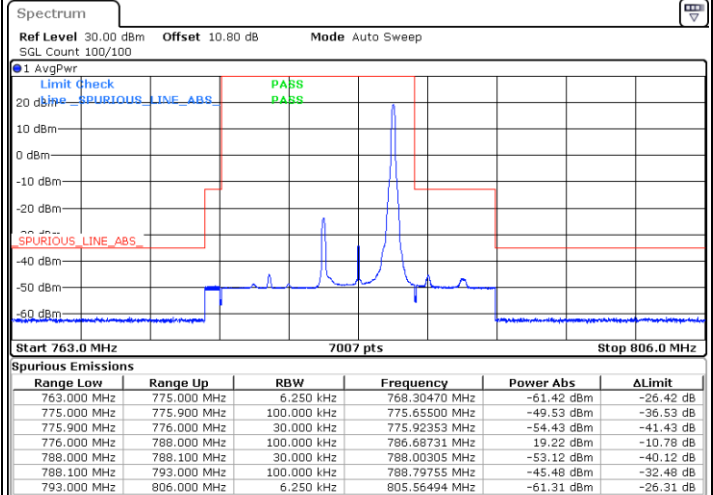
Highest Channel / 5MHz / 64QAM



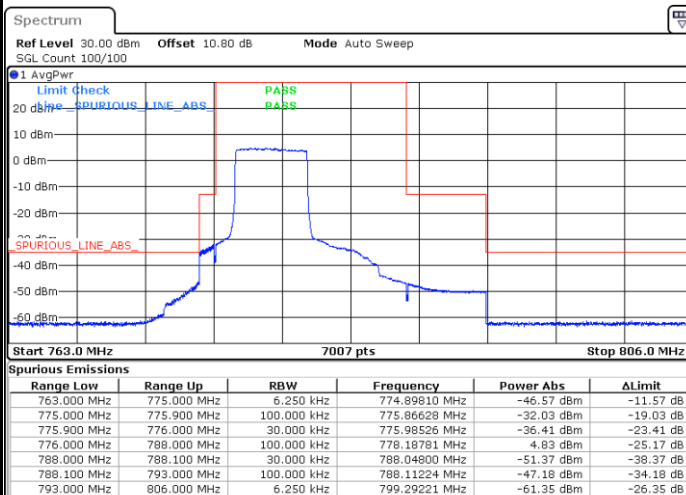
Date: 6 NOV 2019 00:59:13

**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB**

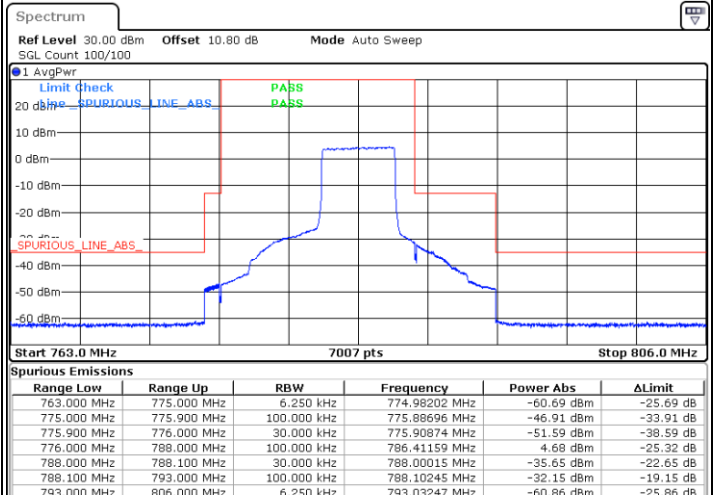
Date: 6.NOV.2019 00:41:54

Highest Band Edge / 1 RB

Date: 6.NOV.2019 00:52:31

Lowest Band Edge / Full RB

Date: 6.NOV.2019 00:36:52

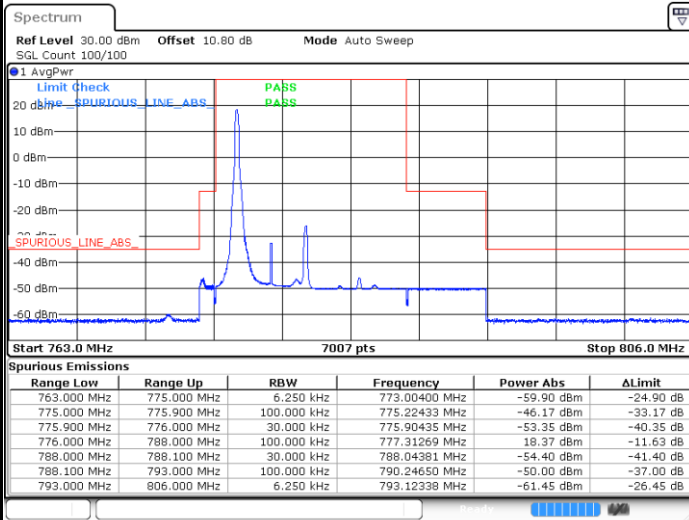
Highest Band Edge / Full RB

Date: 6.NOV.2019 00:47:29

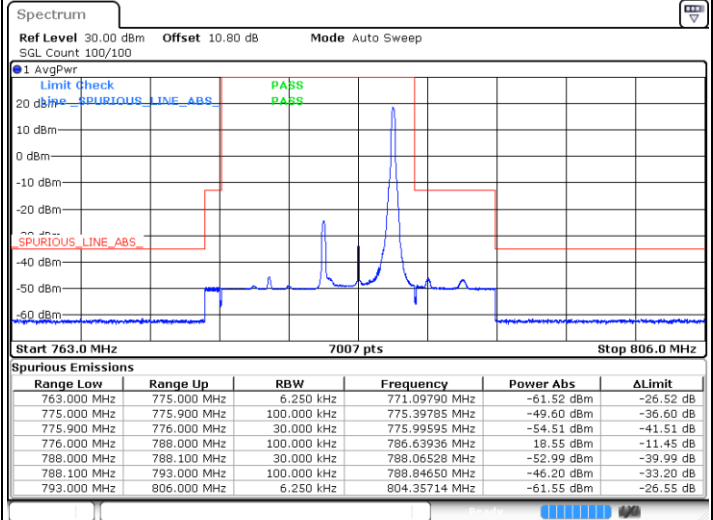


LTE Band 13 / 5MHz / 16QAM

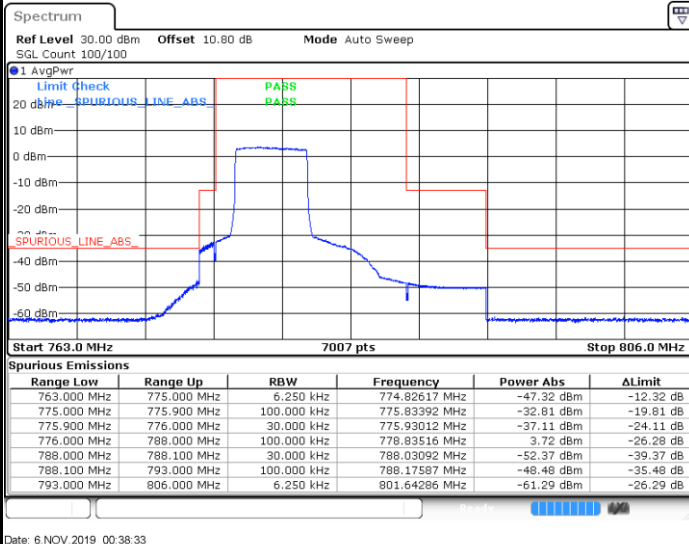
Lowest Band Edge / 1 RB



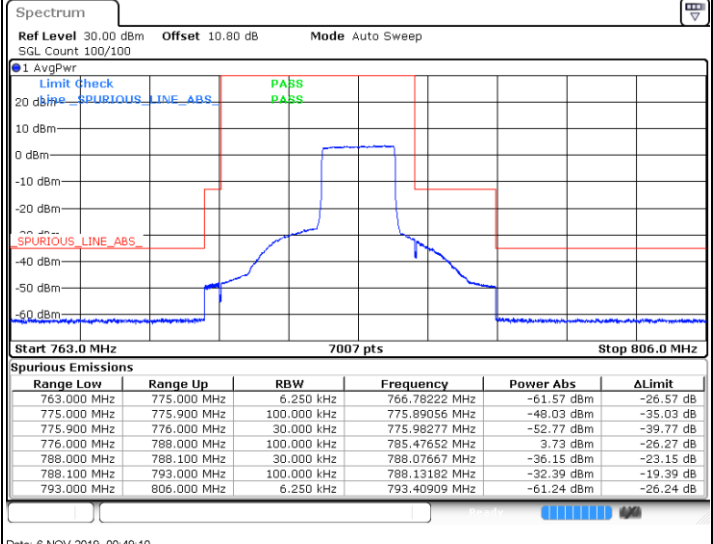
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



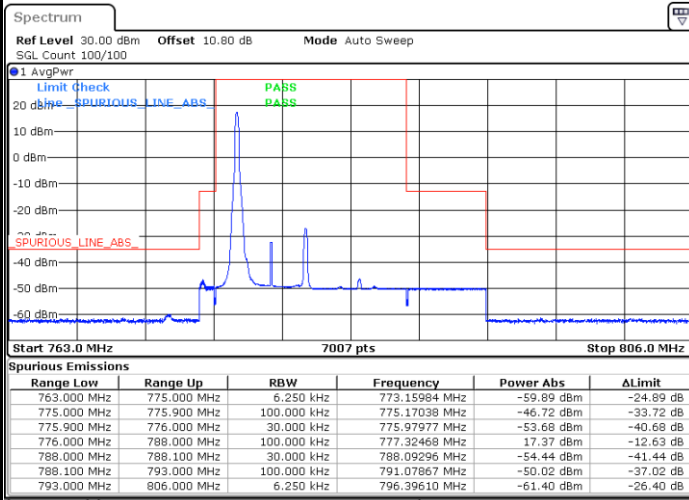
Highest Band Edge / Full RB





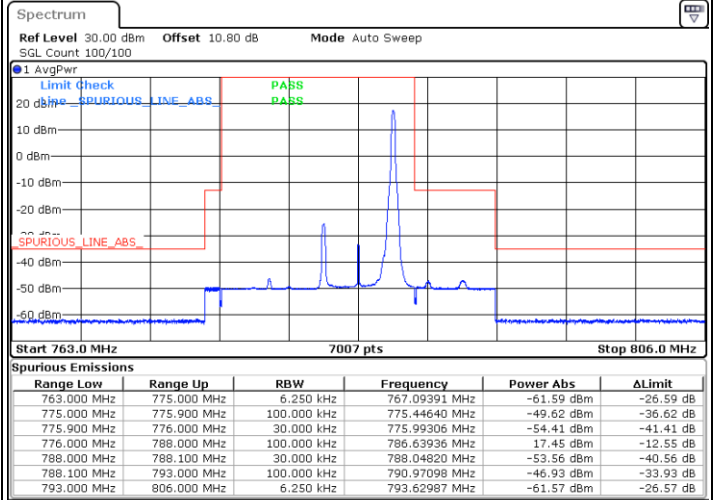
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



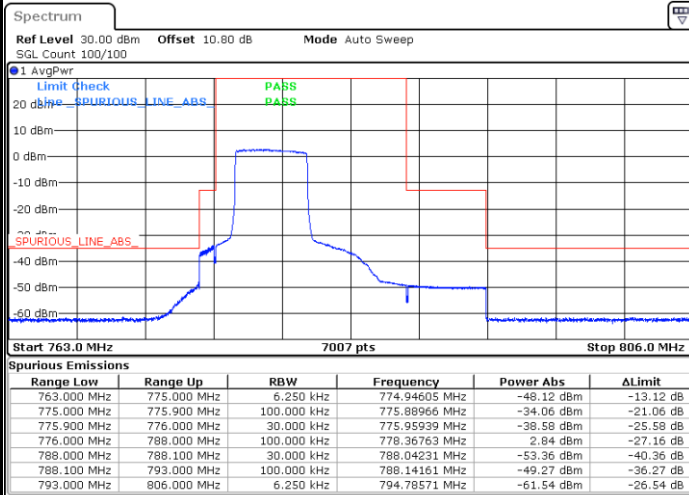
Date: 6 NOV 2019 00:57:27

Highest Band Edge / 1 RB



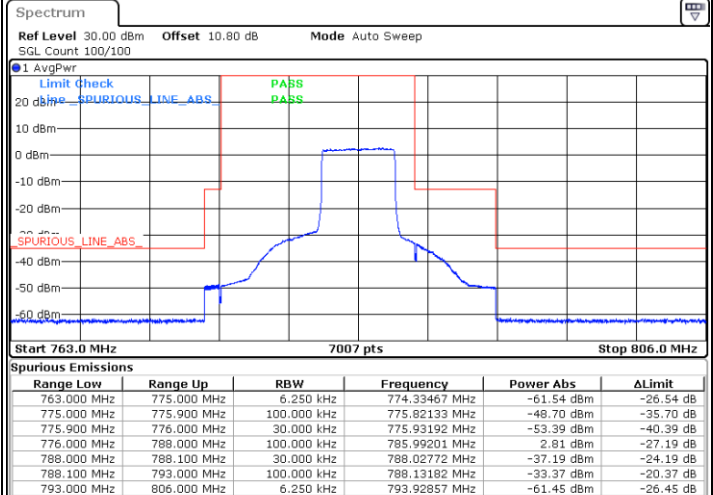
Date: 6 NOV 2019 01:02:46

Lowest Band Edge / Full RB



Date: 6 NOV 2019 00:55:47

Highest Band Edge / Full RB

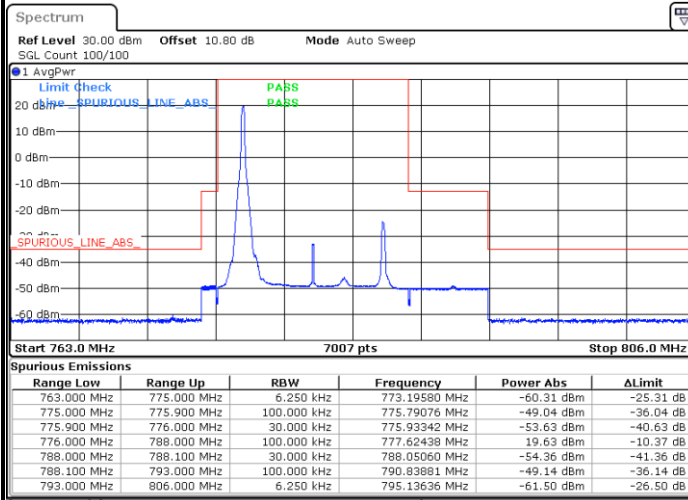


Date: 6 NOV 2019 01:01:05



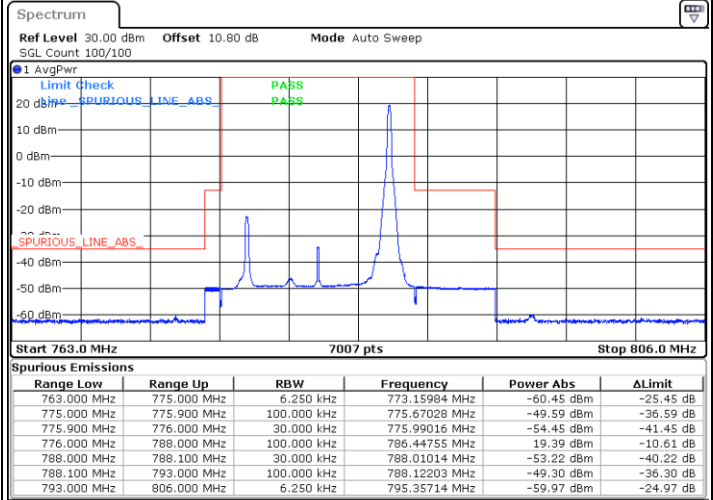
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



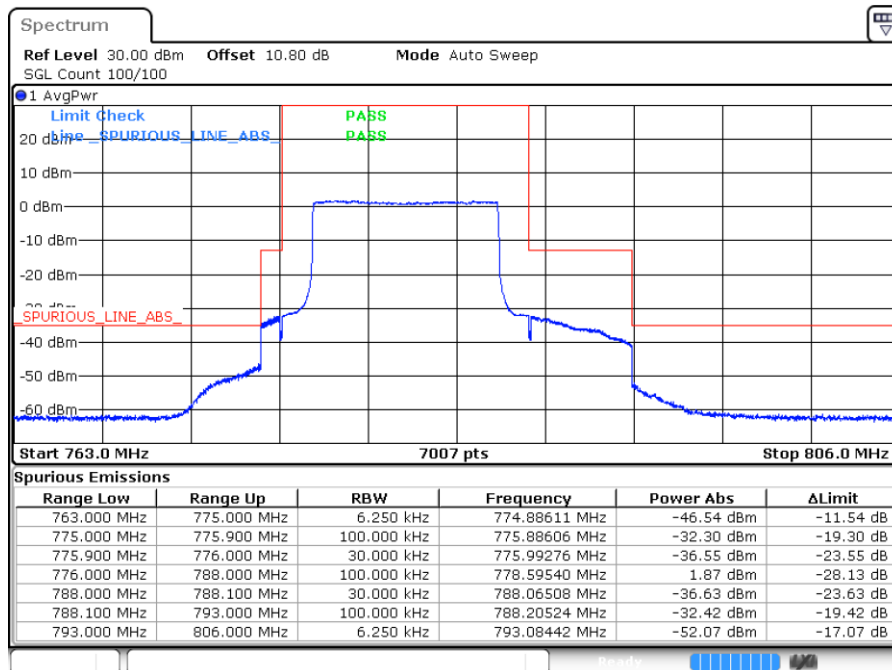
Date: 6 NOV 2019 01:10:49

Highest Band Edge / 1 RB



Date: 6 NOV 2019 01:12:29

Band Edge / Full RB

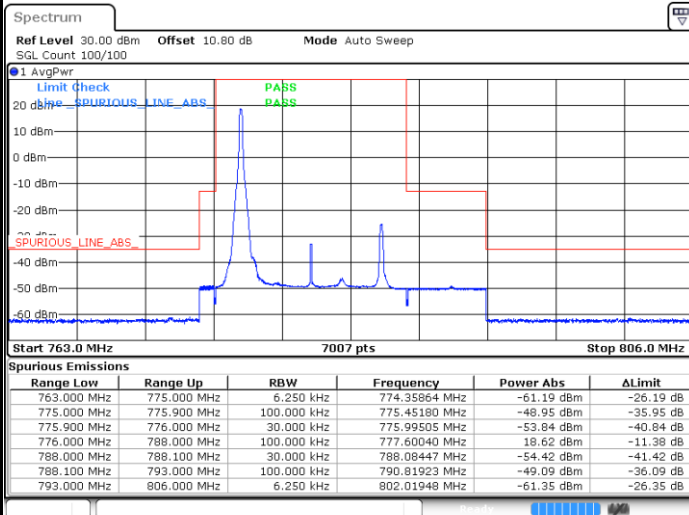


Date: 6 NOV 2019 01:05:48



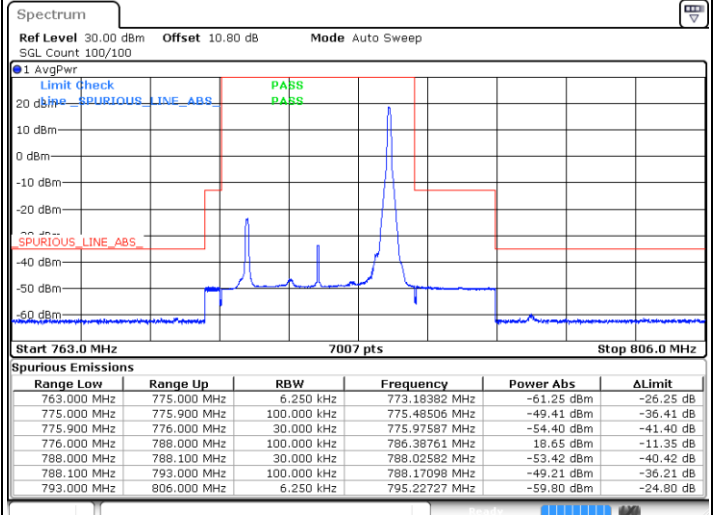
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



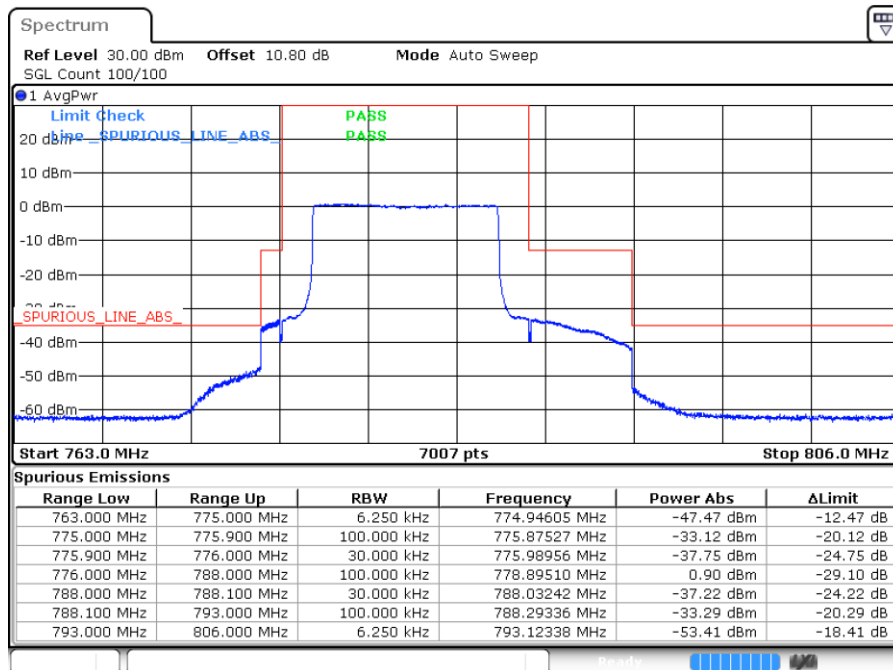
Date: 6 NOV 2019 01:09:09

Highest Band Edge / 1 RB



Date: 6 NOV 2019 01:14:09

Band Edge / Full RB

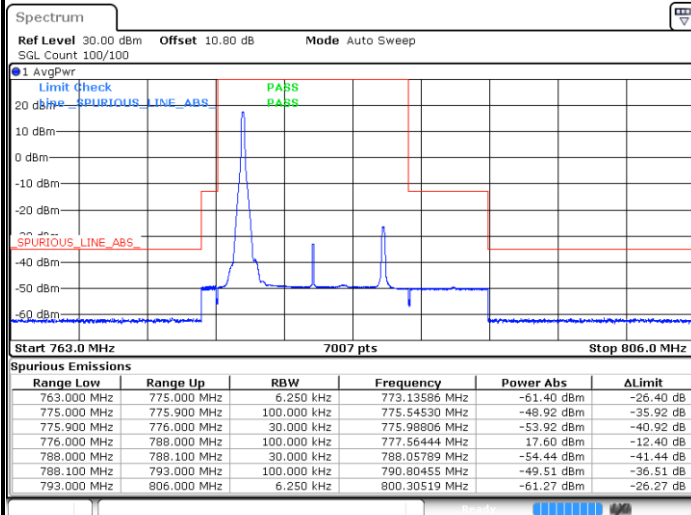


Date: 6 NOV 2019 01:07:28

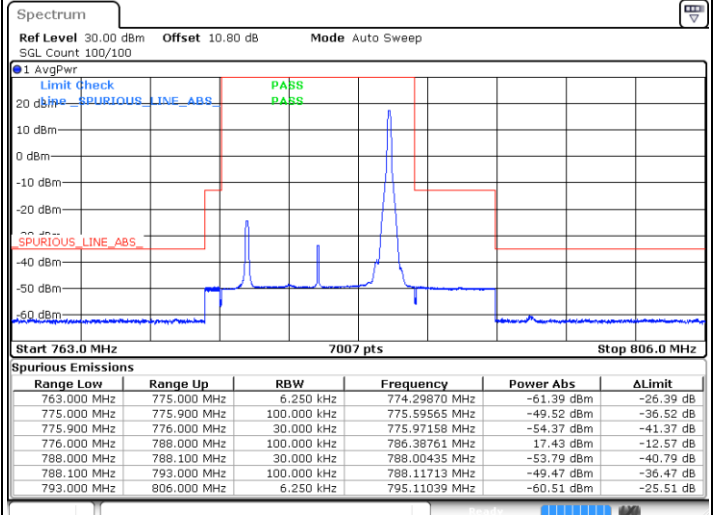


LTE Band 13 / 10MHz / 64QAM

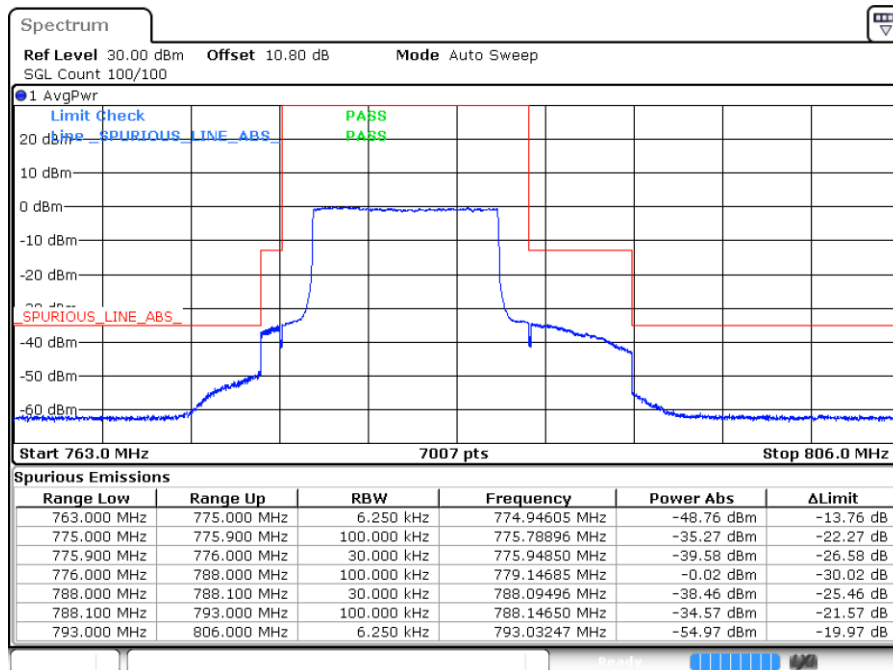
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Band Edge / Full RB

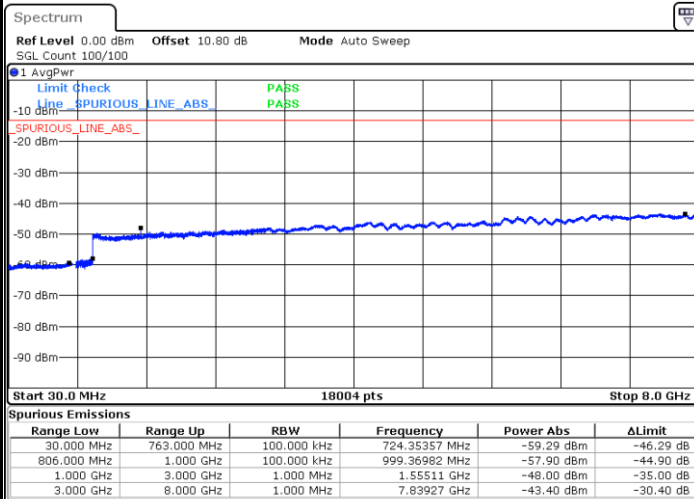




Conducted Spurious Emission

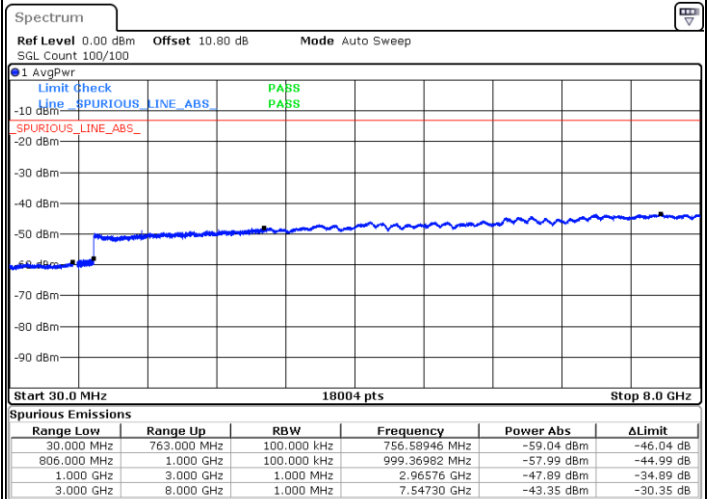
LTE Band 13 / 5MHz

Lowest Channel / QPSK



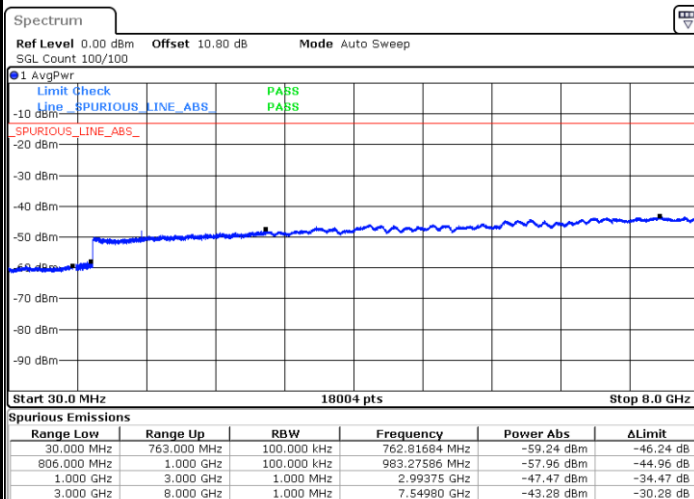
Date: 6 NOV. 2019 00:42:30

Lowest Channel / 16QAM



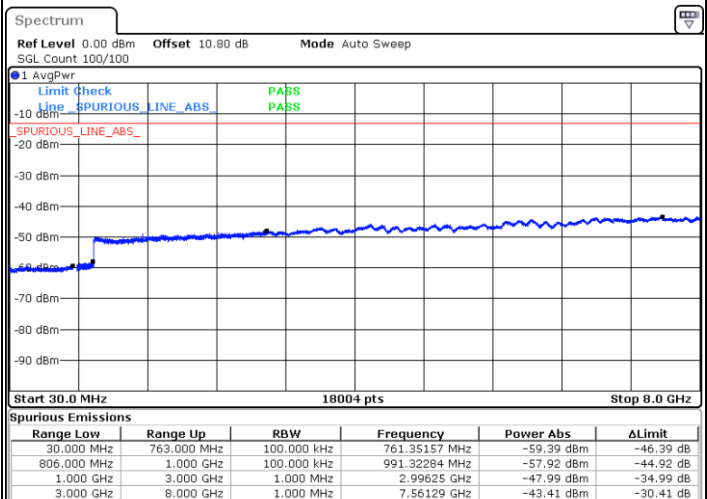
Date: 6 NOV. 2019 00:43:06

Middle Channel / QPSK



Date: 6 NOV. 2019 00:44:16

Middle Channel / 16QAM

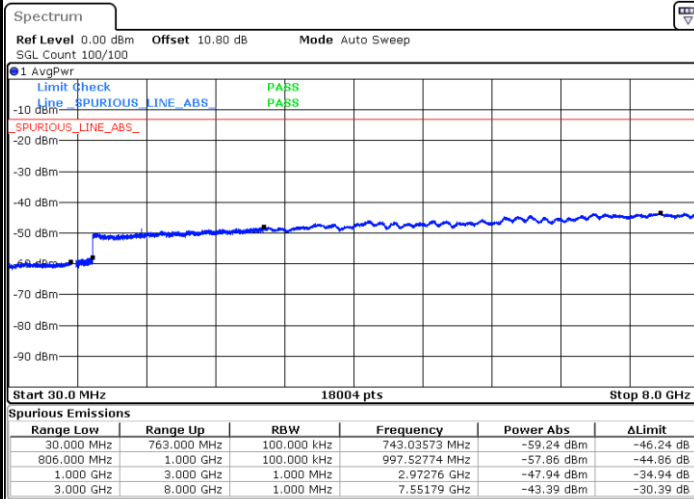


Date: 6 NOV. 2019 00:43:41



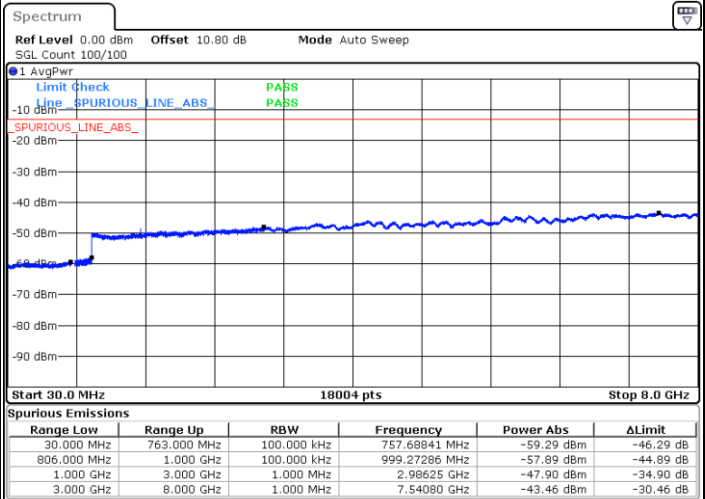
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 6 NOV. 2019 00:53:07

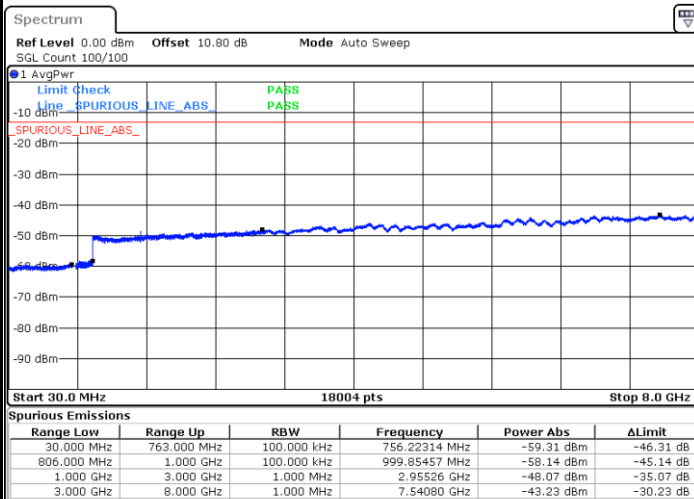
Highest Channel / 16QAM



Date: 6 NOV. 2019 00:53:43

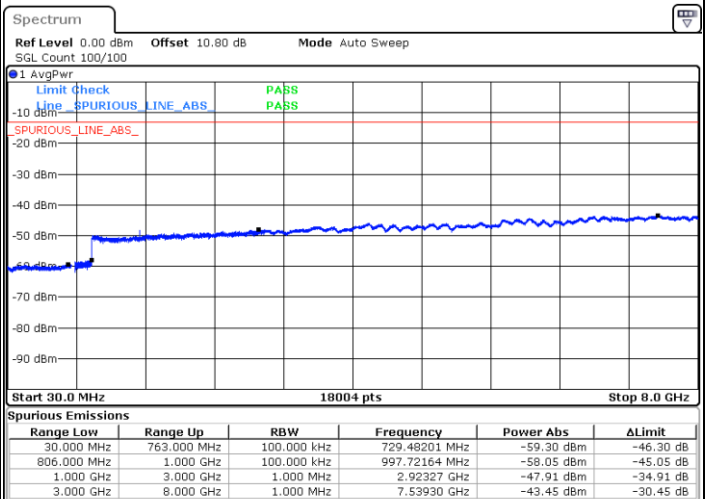
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 6 NOV. 2019 01:15:19

Middle Channel / 16QAM

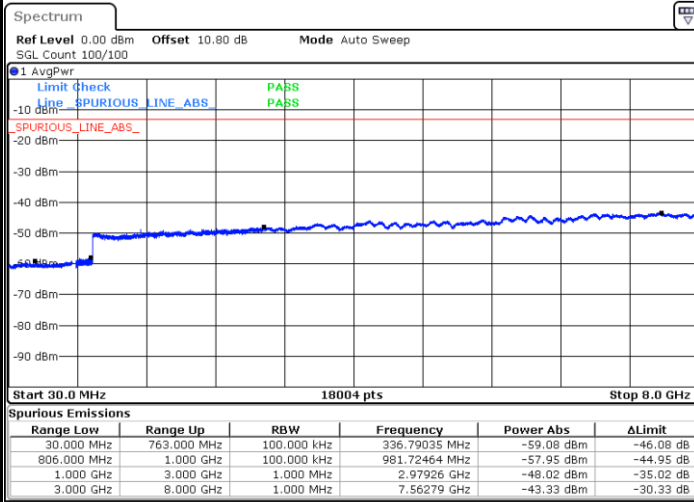


Date: 6 NOV. 2019 01:14:45



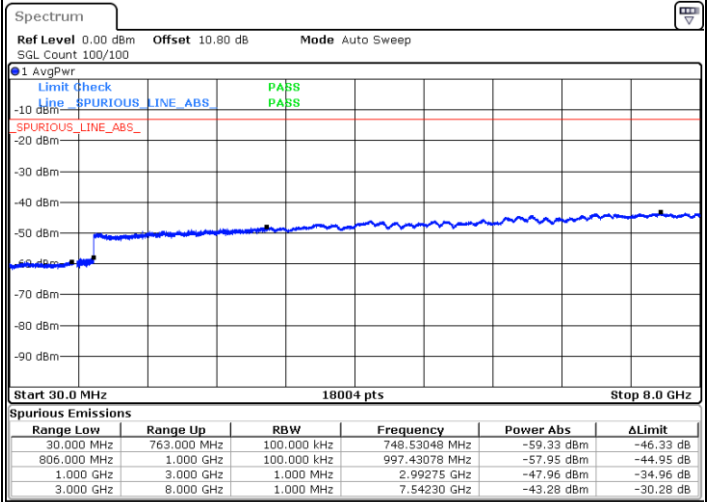
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



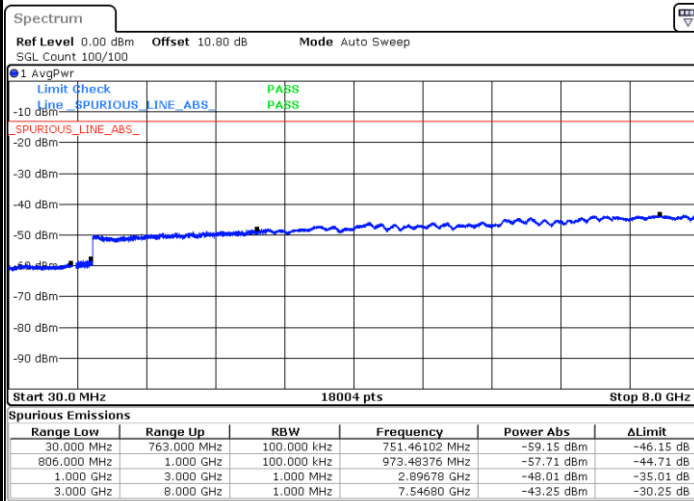
Date: 6 NOV. 2019 00:58:04

Middle Channel / 64QAM



Date: 6 NOV. 2019 00:58:39

Highest Channel / 64QAM

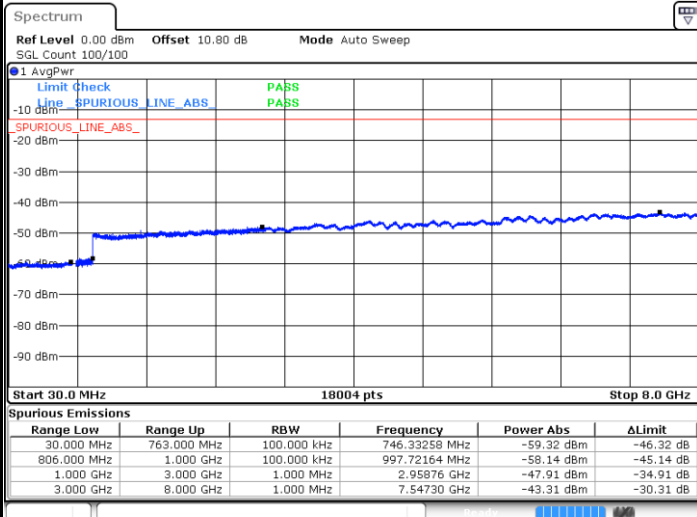


Date: 6 NOV. 2019 01:03:22



LTE Band 13 / 10MHz

Middle Channel / 64QAM



Date: 6 NOV. 2019 01:21:17

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0146	PASS
40	Normal Voltage	0.0100	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0159	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	n/a	
20	Maximum Voltage	0.0205	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0121	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. By manufacturer declaration, EUT will automatically inhibit from operating outside the lesser temperature range. (when temperature lower than -20 °C, EUT will be shut down automatically)



LTE Band 26

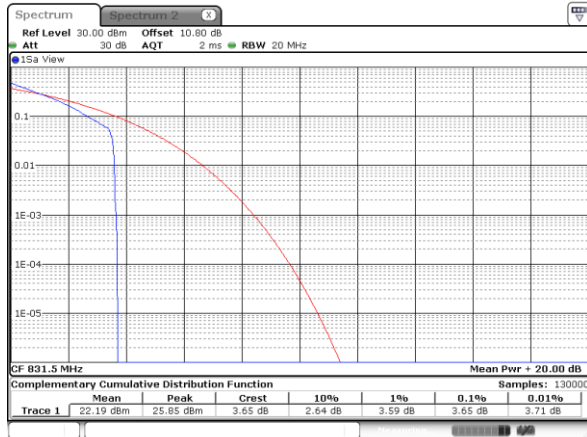
Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.65	5.25	4.52	6.03	PASS
Middle CH	3.65	5.04	4.90	5.94	
Highest CH	3.65	5.30	4.29	5.97	
Mode	LTE Band 26 / 15MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.59	6.61	-	-	PASS
Middle CH	5.68	6.41	-	-	
Highest CH	5.33	6.43	-	-	



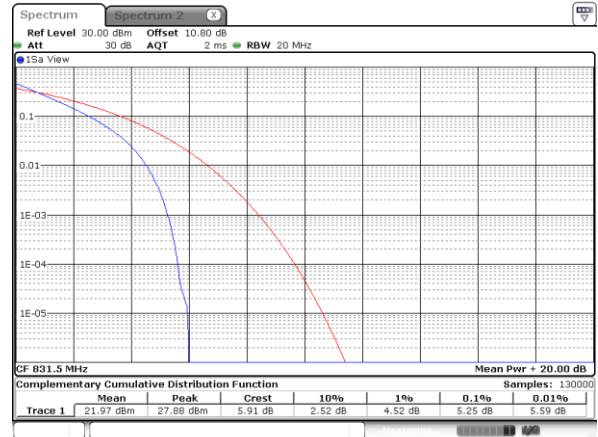
LTE Band 26 / 15MHz / QPSK

Lowest Channel / 1RB



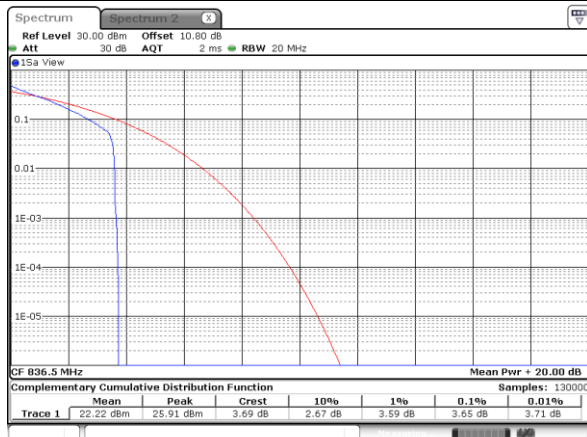
Date: 7.NOV.2019 00:38:15

Lowest Channel / Full RB



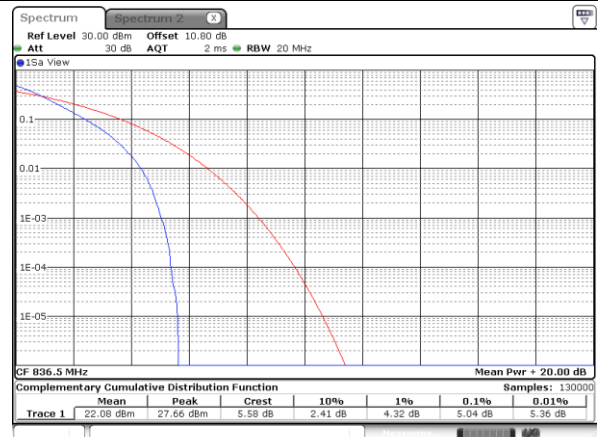
Date: 7.NOV.2019 00:37:07

Middle Channel / 1RB



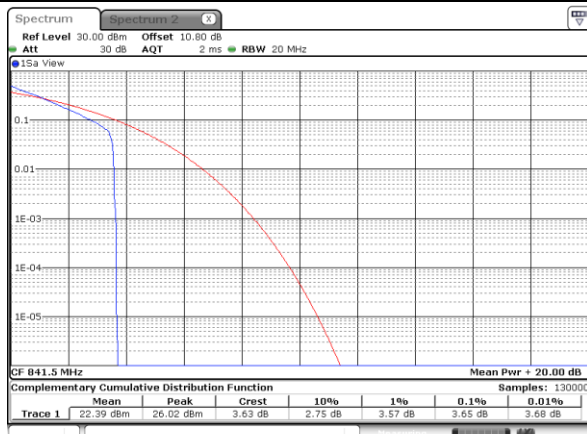
Date: 7.NOV.2019 00:38:27

Middle Channel / Full RB



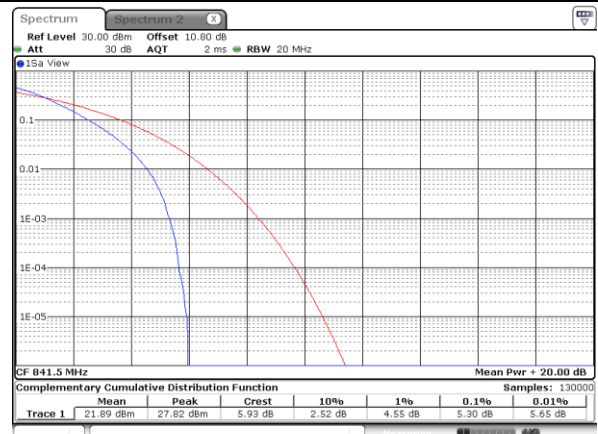
Date: 7.NOV.2019 00:39:03

Highest Channel / 1RB



Date: 7.NOV.2019 00:41:11

Highest Channel / Full RB

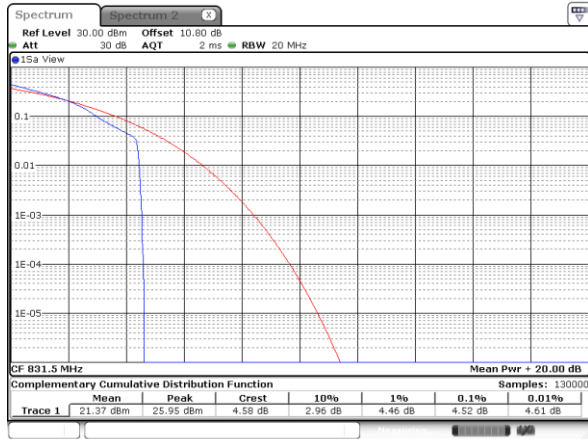


Date: 7.NOV.2019 00:39:27



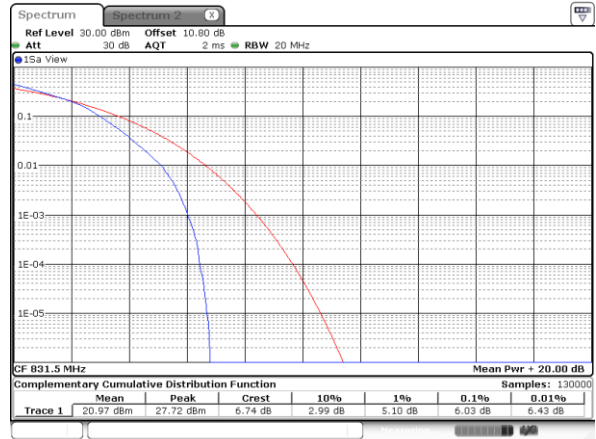
LTE Band 26 / 15MHz / 16QAM

Lowest Channel / 1RB



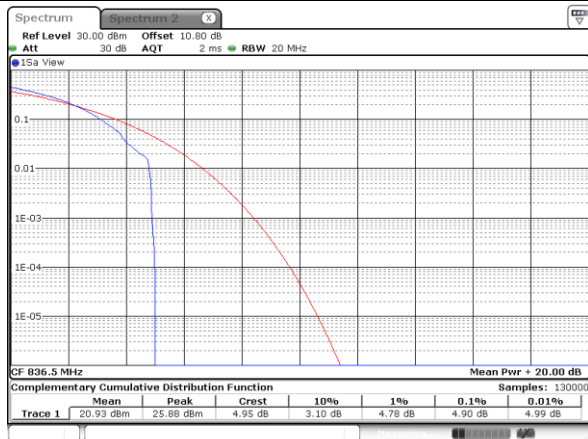
Date: 7.NOV.2019 00:38:04

Lowest Channel / Full RB



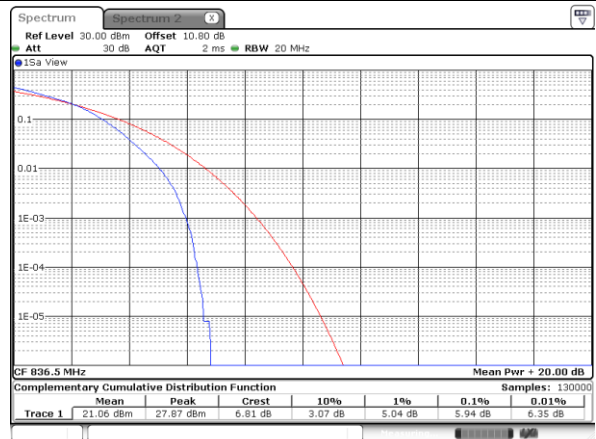
Date: 7.NOV.2019 00:37:29

Middle Channel / 1RB



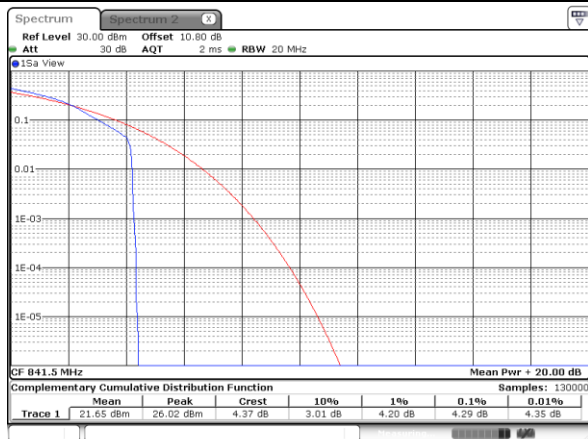
Date: 7.NOV.2019 00:38:38

Middle Channel / Full RB



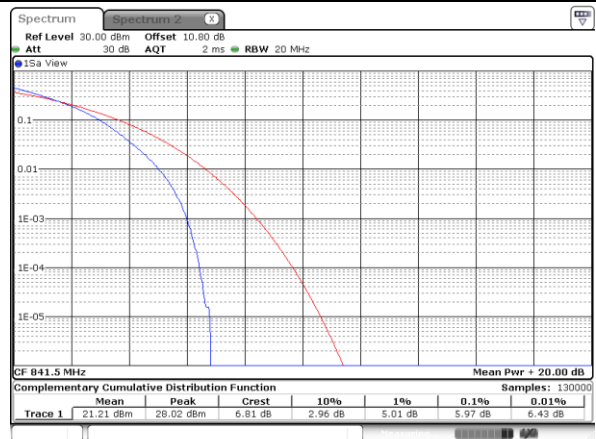
Date: 7.NOV.2019 00:38:50

Highest Channel / 1RB



Date: 7.NOV.2019 00:40:43

Highest Channel / Full RB

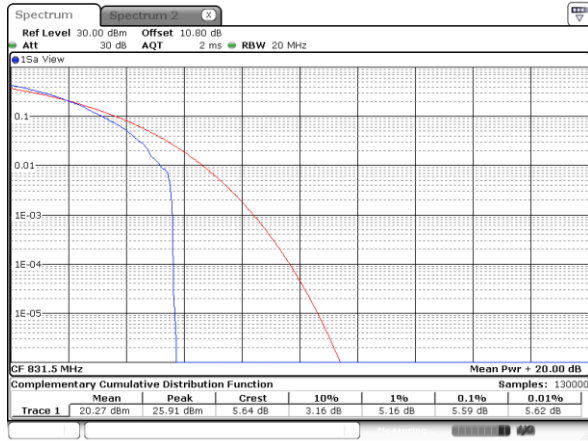


Date: 7.NOV.2019 00:40:16

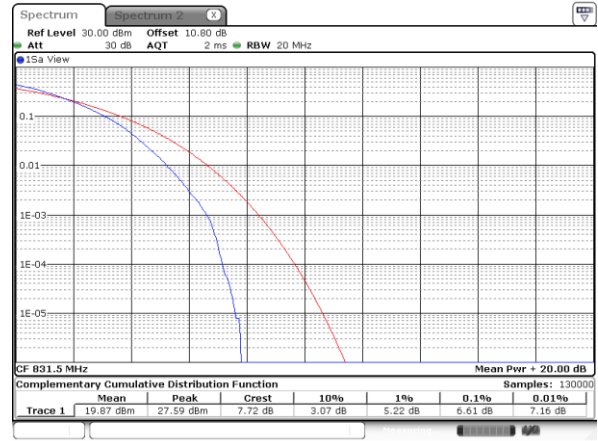


LTE Band 26 / 15MHz / 64QAM

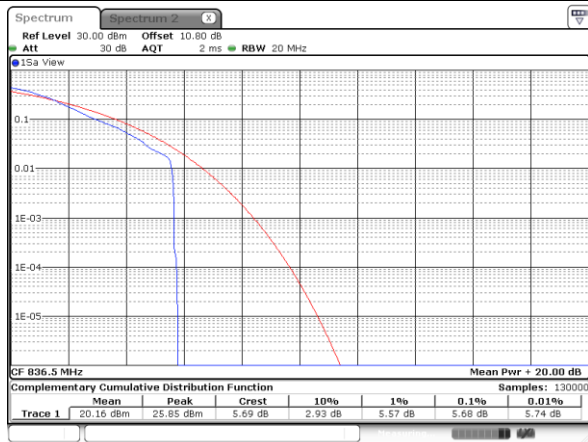
Lowest Channel / 1RB



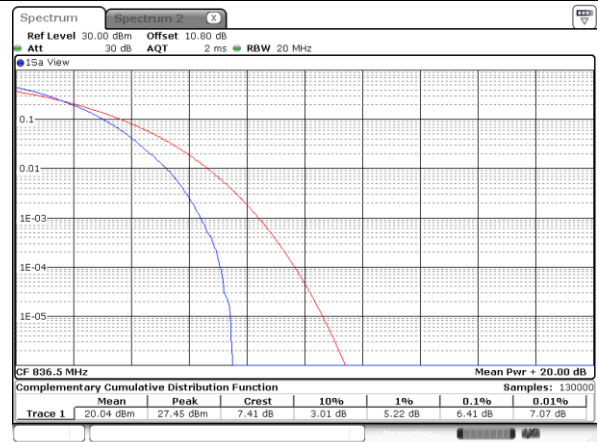
Lowest Channel / Full RB



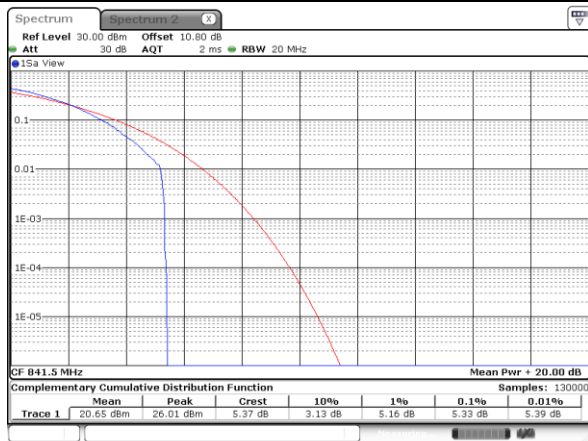
Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



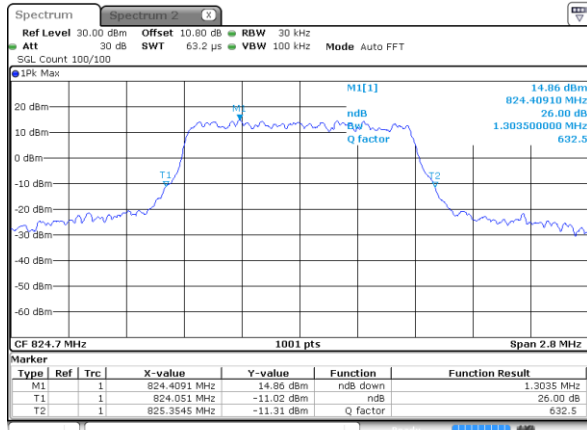
**26dB Bandwidth**

Mode	LTE Band 26 : 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	1.30	1.30	3.00	2.97	5.00	5.03	9.79	9.71	14.27	14.60	-	-
Middle CH	1.30	1.25	3.01	3.02	4.99	4.96	9.89	9.81	14.45	14.45	-	-
Highest CH	1.27	1.28	3.01	2.99	4.97	4.92	9.91	9.71	14.48	14.36	-	-
Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.29	-	2.99	-	4.89	-	9.73	-	14.48	-	-	-
Middle CH	1.31	-	2.96	-	4.90	-	9.81	-	14.54	-	-	-
Highest CH	1.27	-	3.05	-	4.90	-	9.89	-	14.45	-	-	-



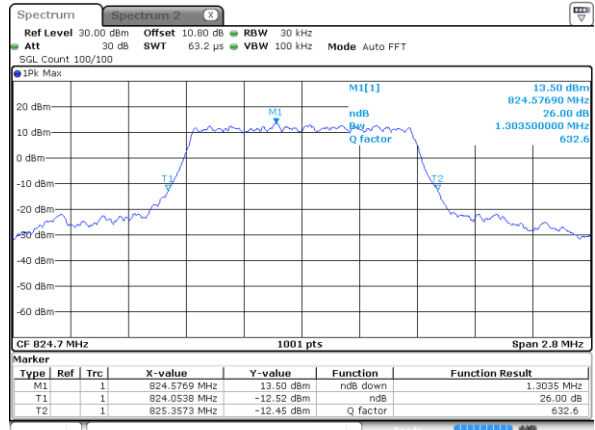
LTE Band 26

Lowest Channel / 1.4MHz / QPSK



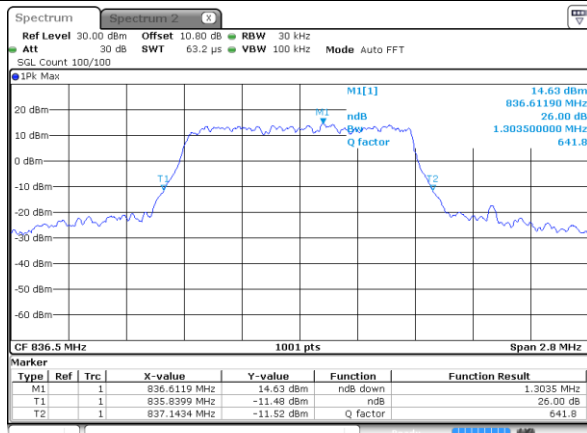
Date: 6 NOV 2019 17:07:33

Lowest Channel / 1.4MHz / 16QAM



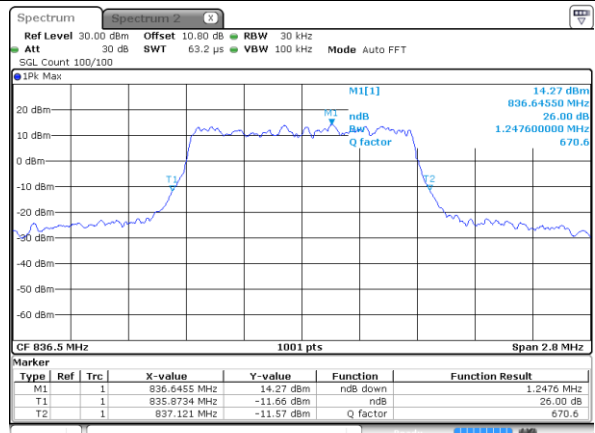
Date: 6 NOV 2019 17:07:21

Middle Channel / 1.4MHz / QPSK



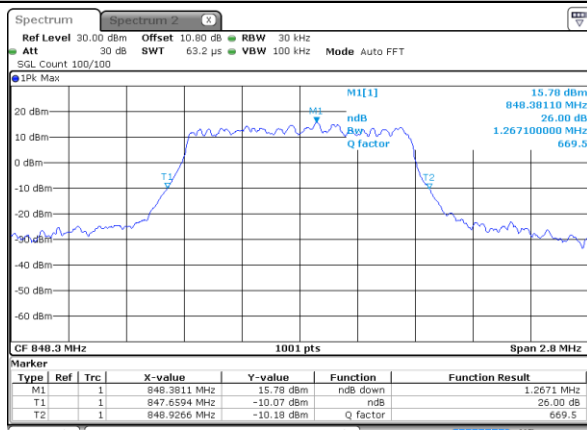
Date: 6 NOV 2019 17:16:26

Middle Channel / 1.4MHz / 16QAM



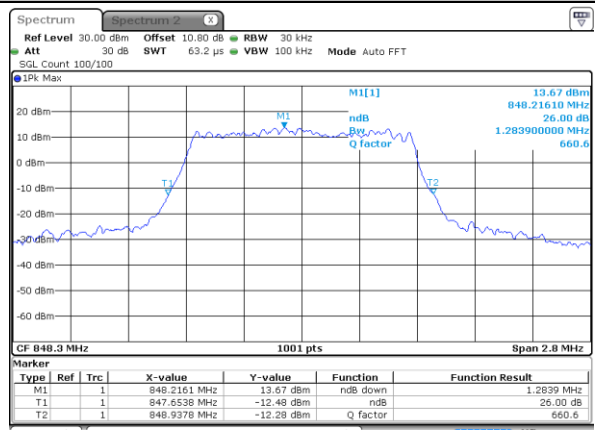
Date: 6 NOV 2019 17:16:14

Highest Channel / 1.4MHz / QPSK



Date: 6 NOV 2019 17:18:36

Highest Channel / 1.4MHz / 16QAM



Date: 6 NOV 2019 17:18:24