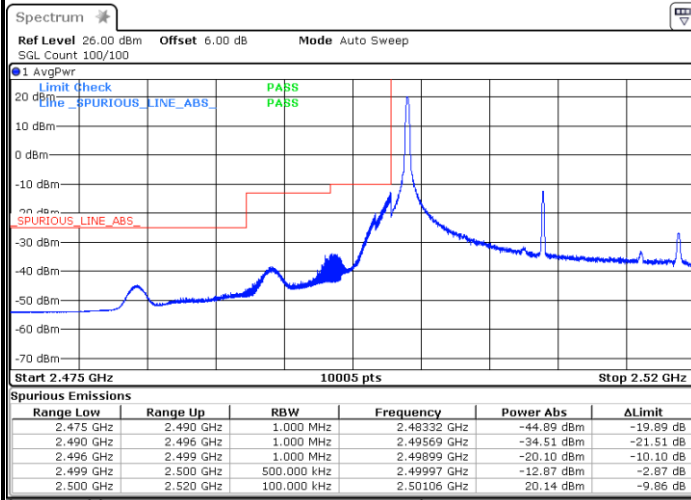


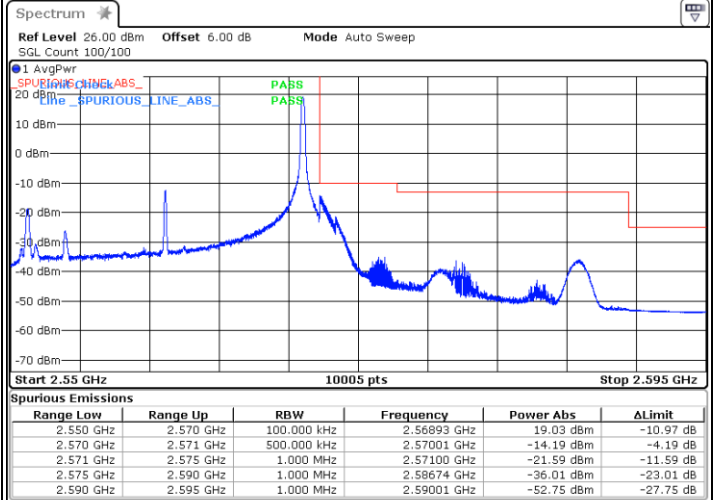


LTE Band 7 / 20MHz / 16QAM

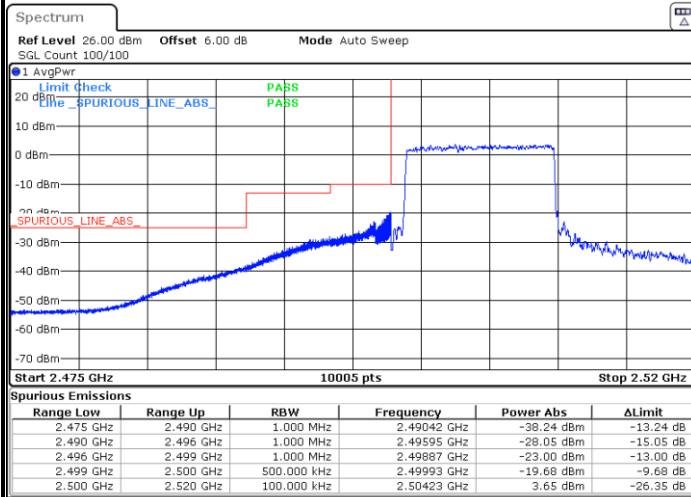
Lowest Band Edge / 1 RB



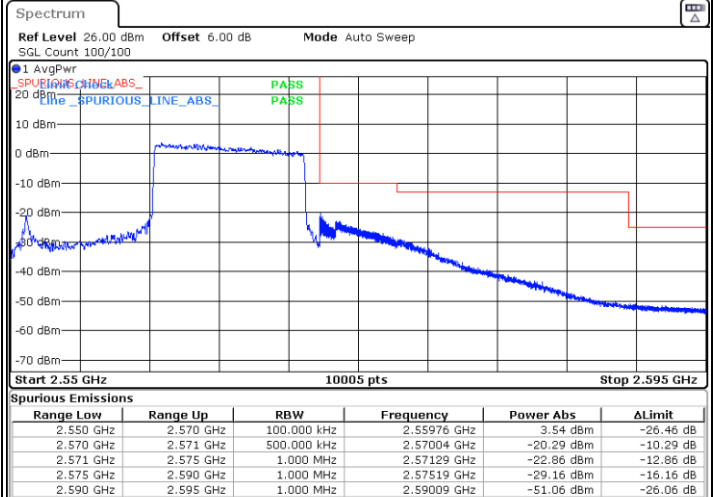
Highest Band Edge / 1RB

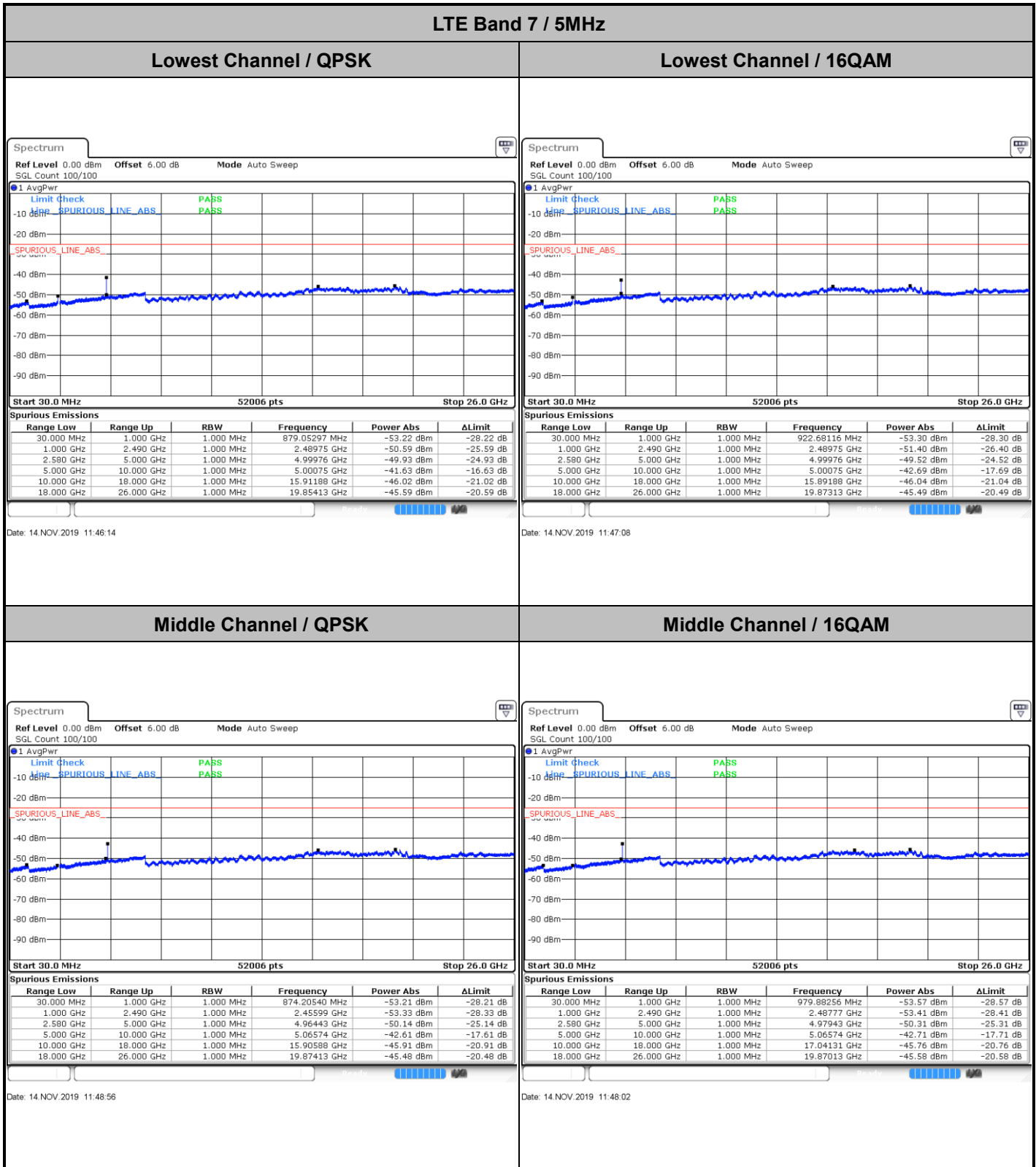


Lowest Band Edge / Full RB



Highest Band Edge / Full RB

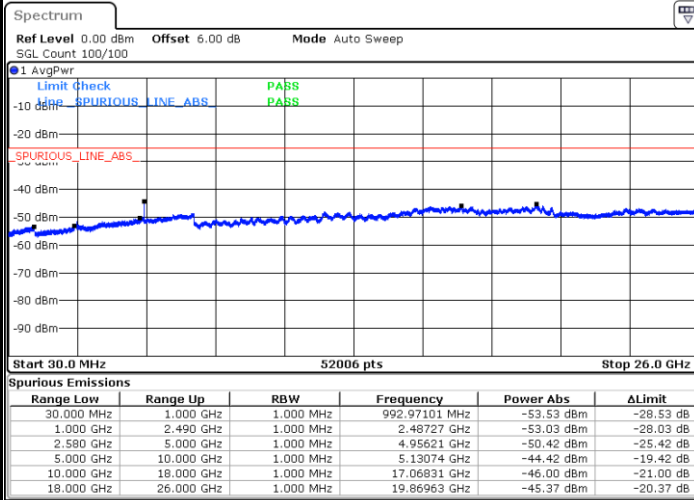


**Conducted Spurious Emission**



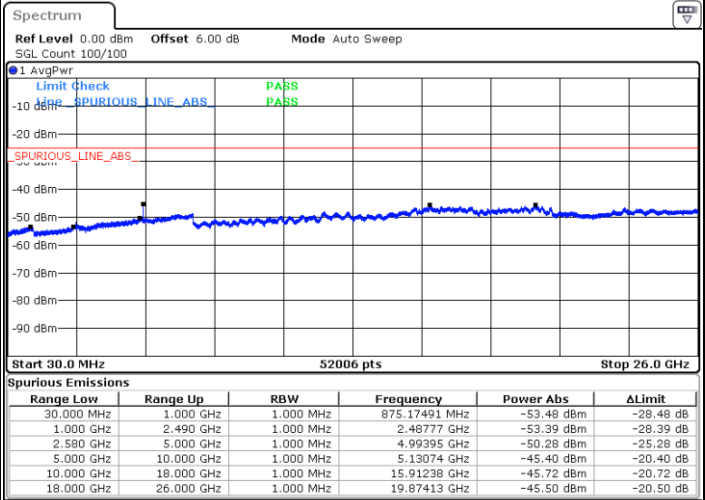
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 14.NOV.2019 11:49:50

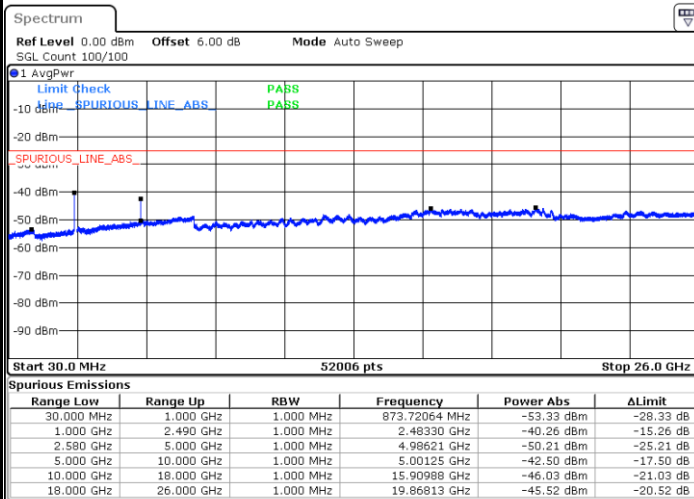
Highest Channel / 16QAM



Date: 14.NOV.2019 11:50:44

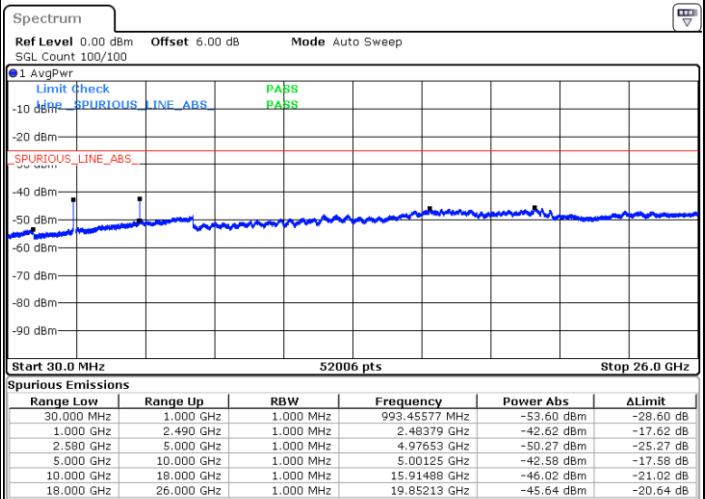
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 14.NOV.2019 12:02:44

Lowest Channel / 16QAM

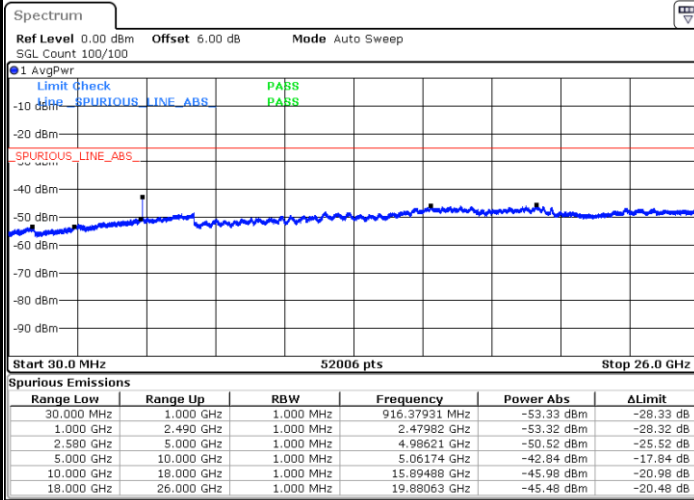


Date: 14.NOV.2019 12:03:38



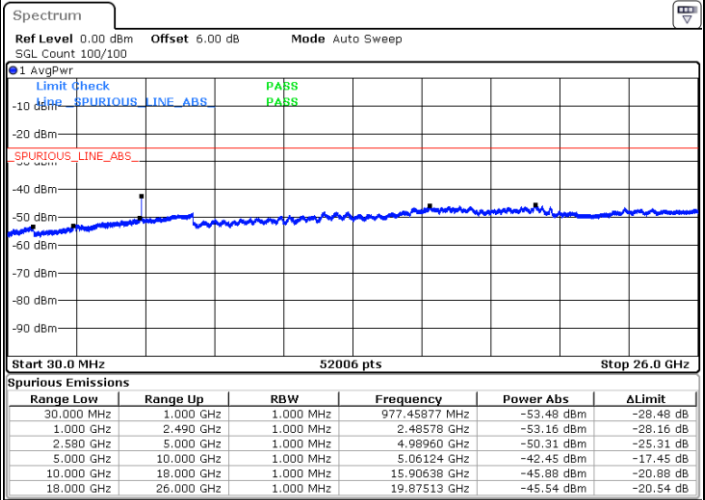
LTE Band 7 / 10MHz

Middle Channel / QPSK



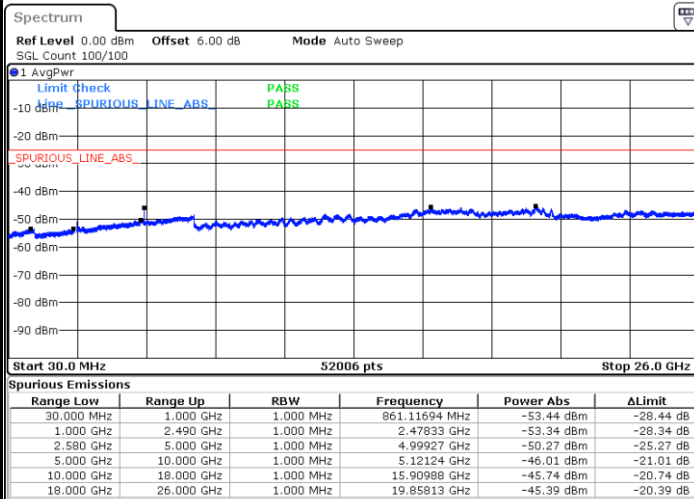
Date: 14 NOV 2019 12:05:25

Middle Channel / 16QAM



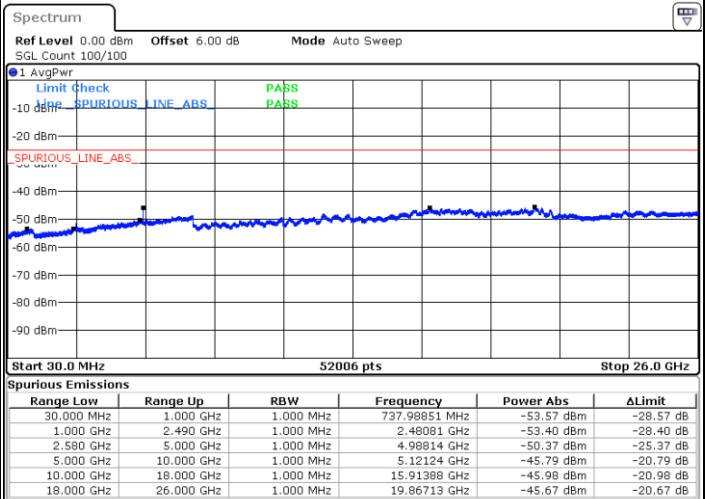
Date: 14 NOV 2019 12:04:31

Highest Channel / QPSK



Date: 14 NOV 2019 12:06:19

Highest Channel / 16QAM

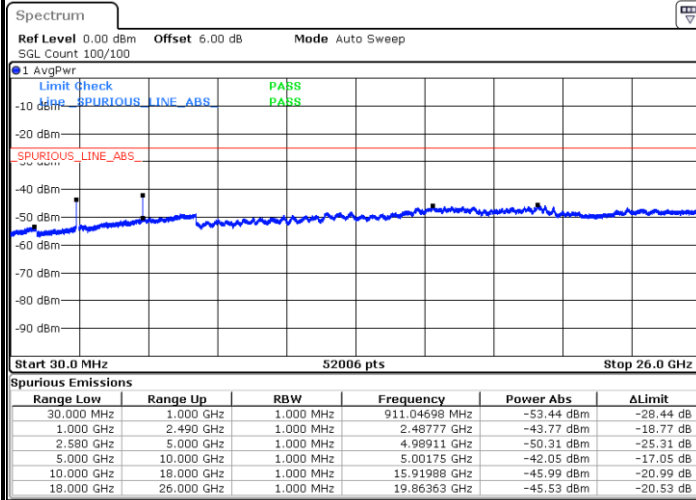


Date: 14 NOV 2019 12:07:13



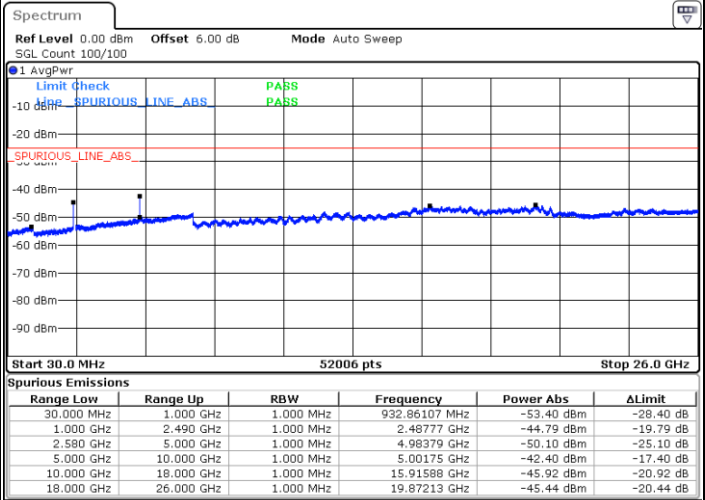
LTE Band 7 / 15MHz

Lowest Channel / QPSK



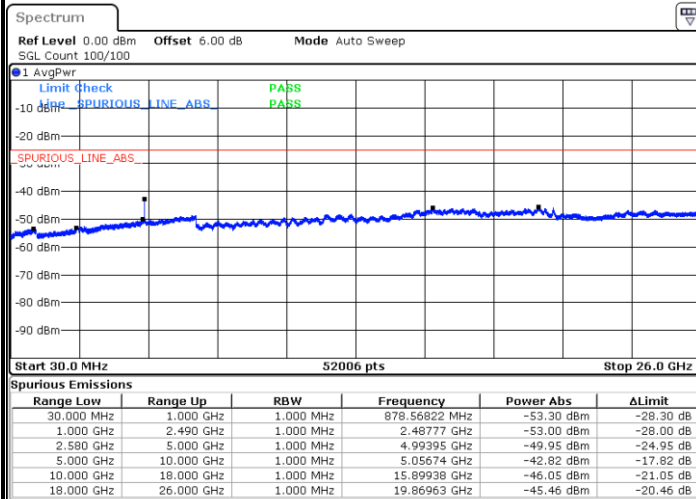
Date: 14 NOV 2019 13:52:06

Lowest Channel / 16QAM



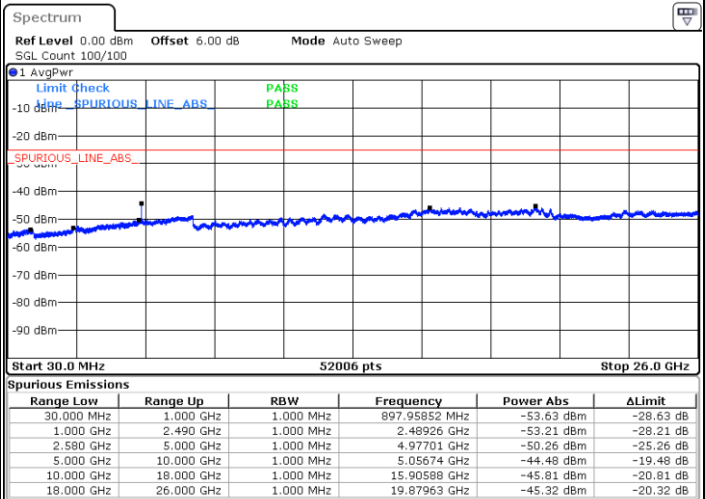
Date: 14 NOV 2019 13:53:00

Middle Channel / QPSK



Date: 14 NOV 2019 13:54:48

Middle Channel / 16QAM

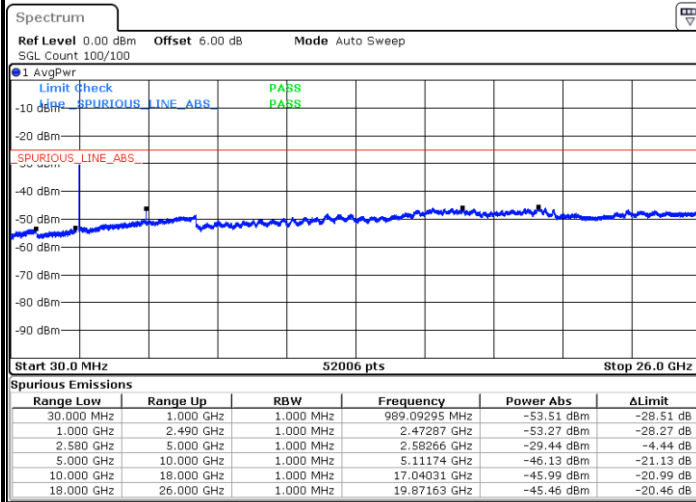


Date: 14 NOV 2019 13:53:54



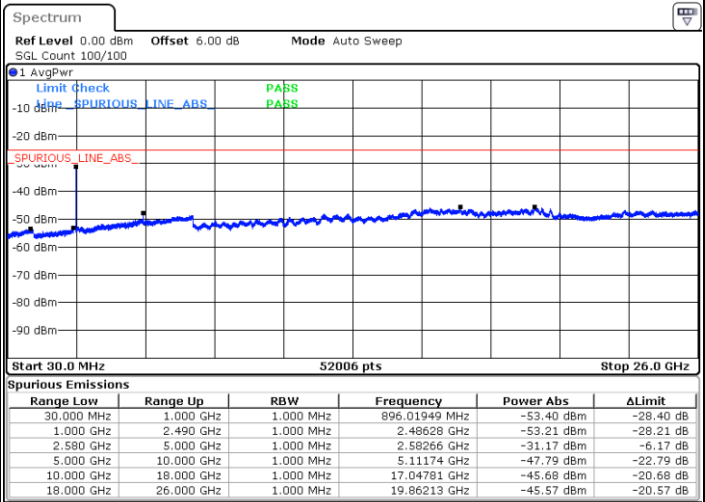
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 14 NOV 2019 13:55:41

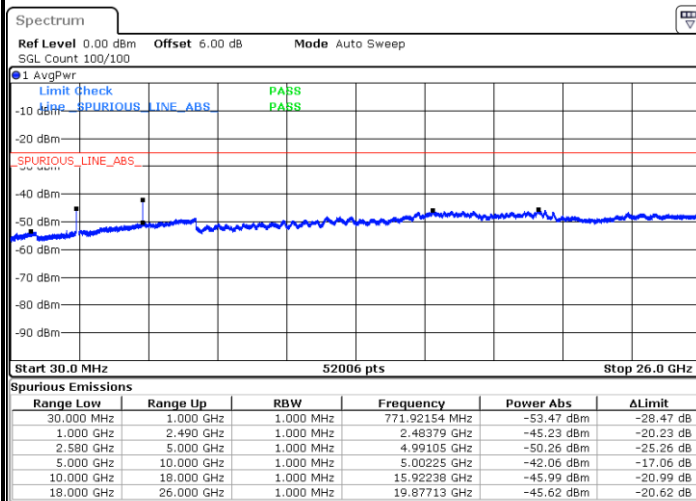
Highest Channel / 16QAM



Date: 14 NOV 2019 13:56:35

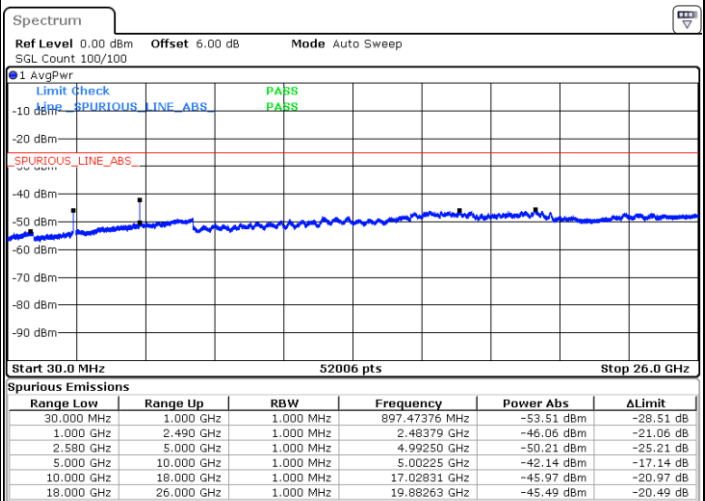
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 14 NOV 2019 14:02:02

Lowest Channel / 16QAM

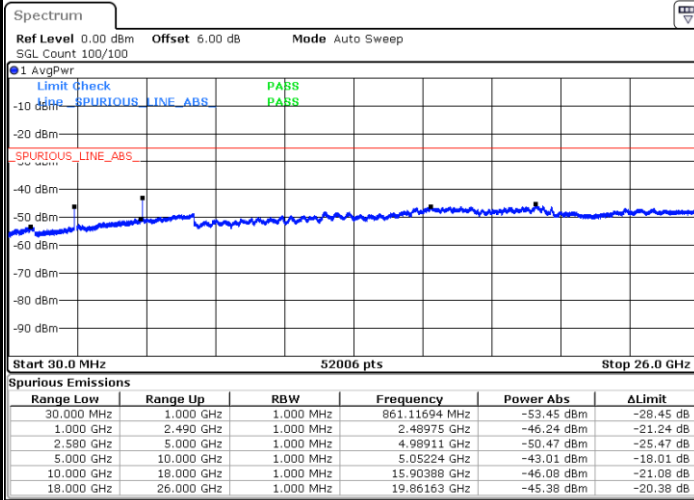


Date: 14 NOV 2019 14:02:56



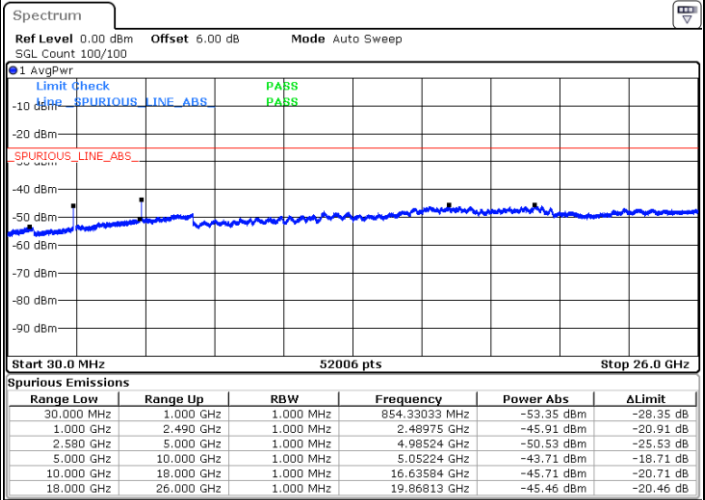
LTE Band 7 / 20MHz

Middle Channel / QPSK



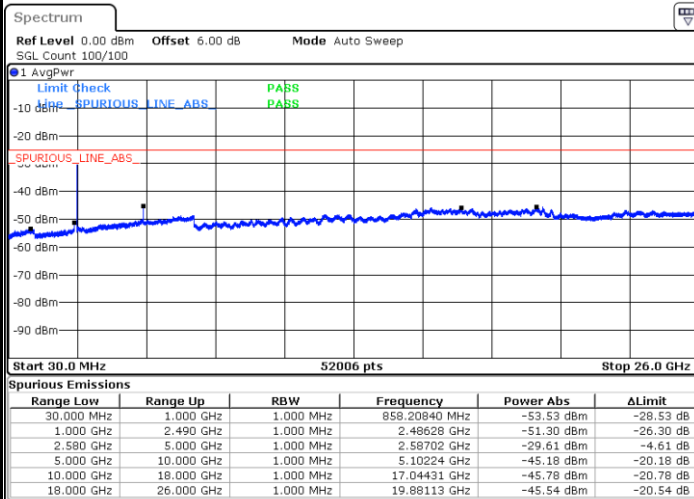
Date: 14 NOV 2019 14:04:44

Middle Channel / 16QAM



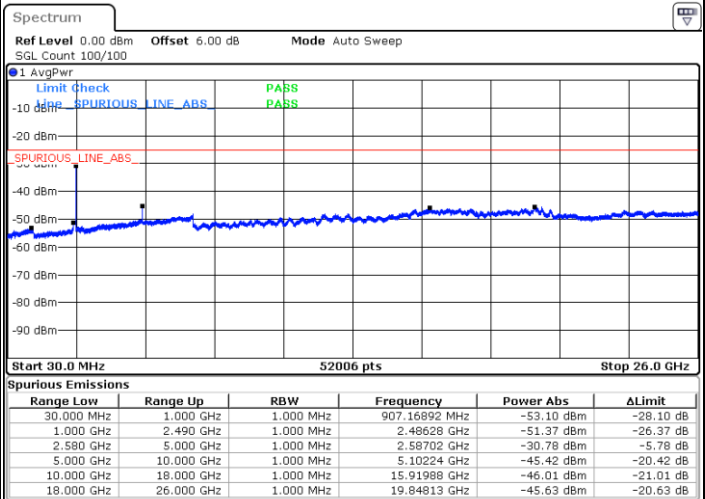
Date: 14 NOV 2019 14:03:50

Highest Channel / QPSK



Date: 14 NOV 2019 14:05:38

Highest Channel / 16QAM



Date: 14 NOV 2019 14:06:32

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	0.0034	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0040	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0010	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0030	
20	Battery End Point	0.0033	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 38

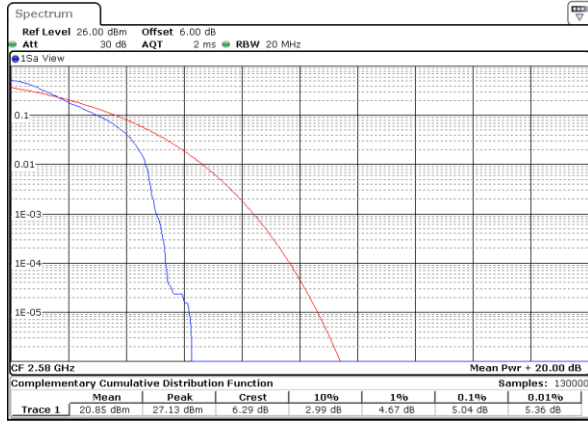
Peak-to-Average Ratio

Mode	LTE Band 38 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	5.04	6.17	6.26	6.49	PASS
Middle CH	4.75	6.52	6.06	6.41	
Highest CH	5.68	6.32	6.81	6.75	



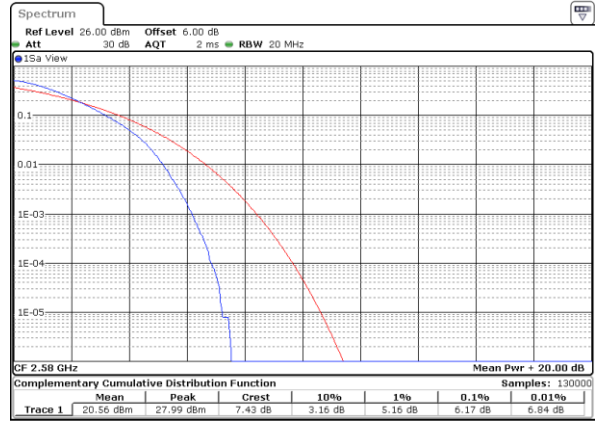
LTE Band 38 / 20MHz / QPSK

Lowest Channel / 1RB



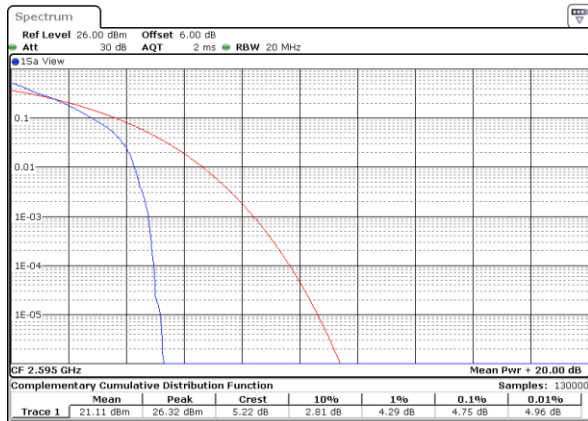
Date: 16 NOV 2019 10:50:46

Lowest Channel / Full RB



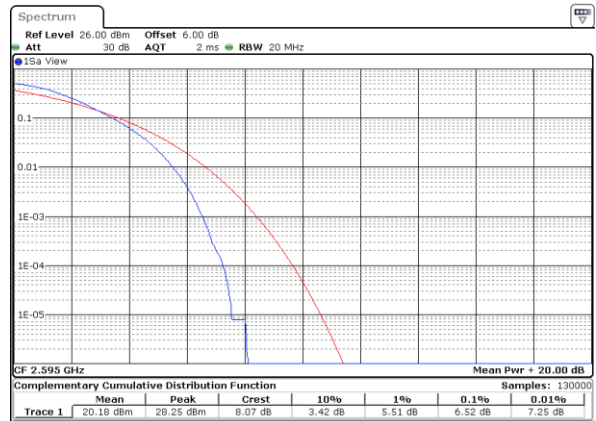
Date: 16 NOV 2019 10:56:04

Middle Channel / 1RB



Date: 16 NOV 2019 10:51:46

Middle Channel / Full RB



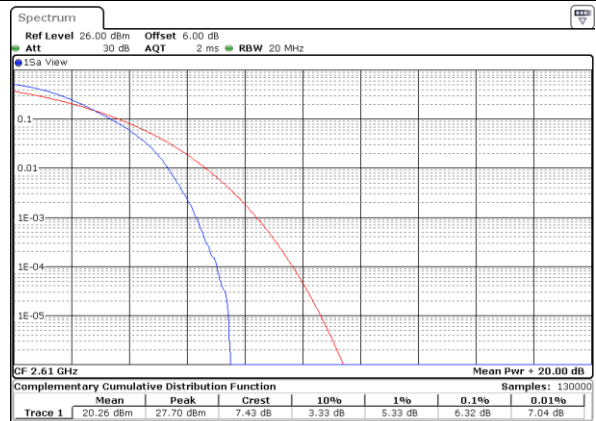
Date: 16 NOV 2019 10:56:19

Highest Channel / 1RB



Date: 16 NOV 2019 10:52:08

Highest Channel / Full RB

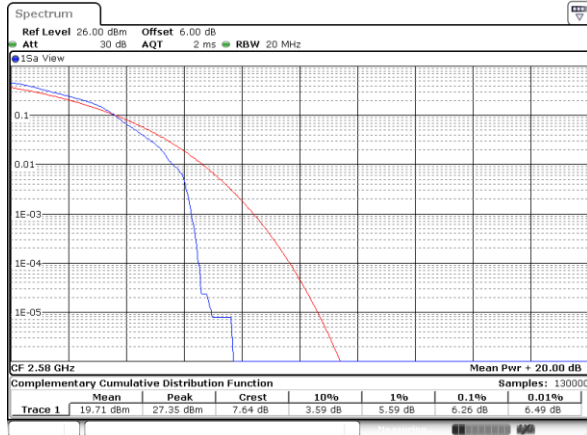


Date: 16 NOV 2019 10:56:36



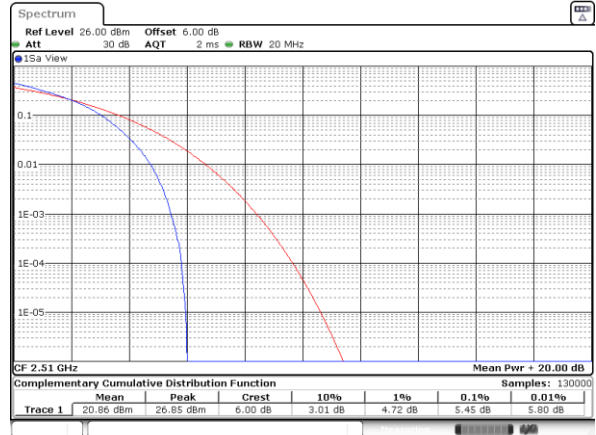
LTE Band 38 / 20MHz / 16QAM

Lowest Channel / 1RB



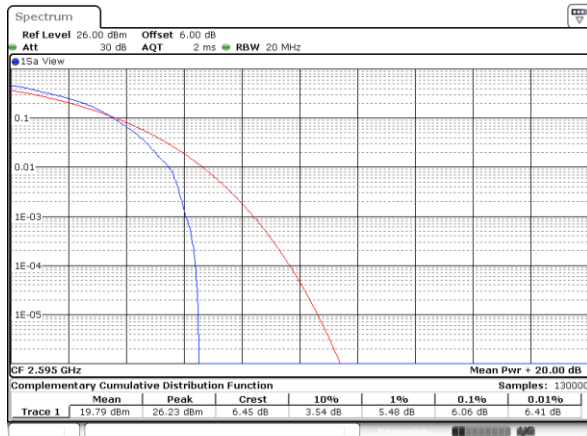
Date: 16 NOV 2019 10:54:05

Lowest Channel / Full RB



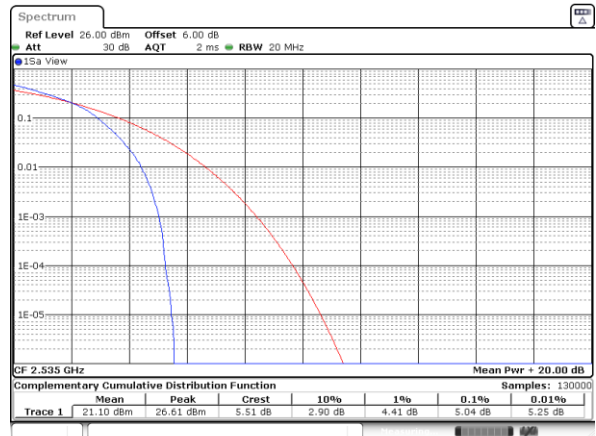
Date: 26 NOV 2019 09:15:18

Middle Channel / 1RB



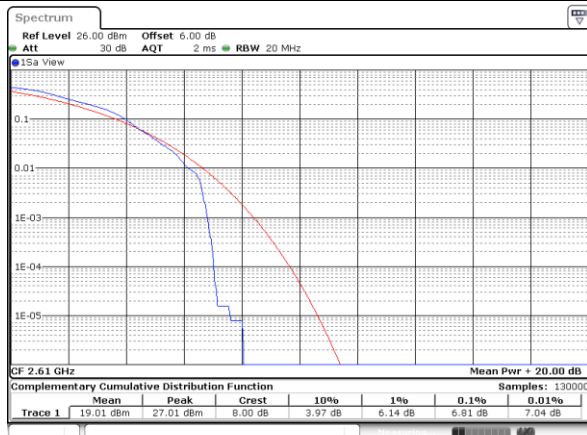
Date: 16 NOV 2019 10:53:47

Middle Channel / Full RB



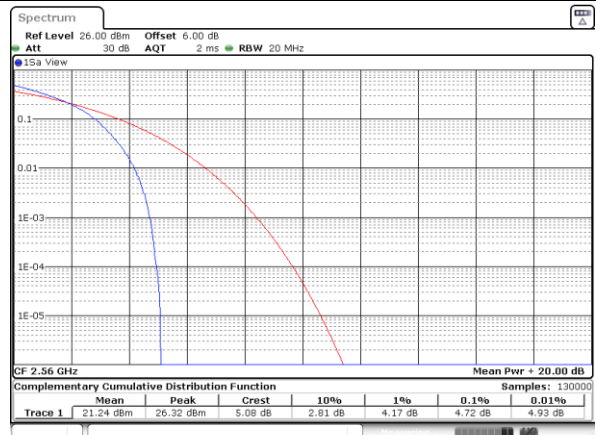
Date: 26 NOV 2019 09:13:38

Highest Channel / 1RB



Date: 16 NOV 2019 10:53:30

Highest Channel / Full RB



Date: 26 NOV 2019 09:12:41



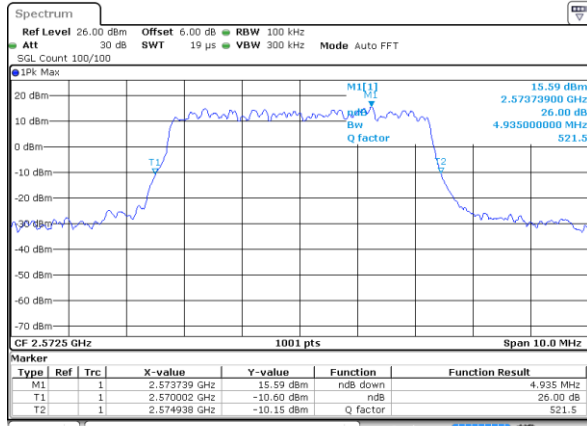
26dB Bandwidth

Mode	LTE Band 38 : 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	-	-	-	-	4.935	4.875	9.65	9.57	15.944	13.516	20.739	11.908
Middle CH	-	-	-	-	4.885	4.955	9.59	9.63	15.674	12.977	20.14	16.304
Highest CH	-	-	-	-	4.815	4.825	9.65	9.61	14.655	10.40	21.419	11.908

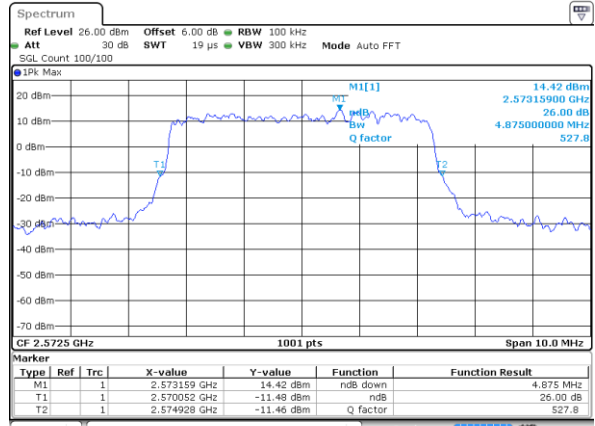


LTE Band 38

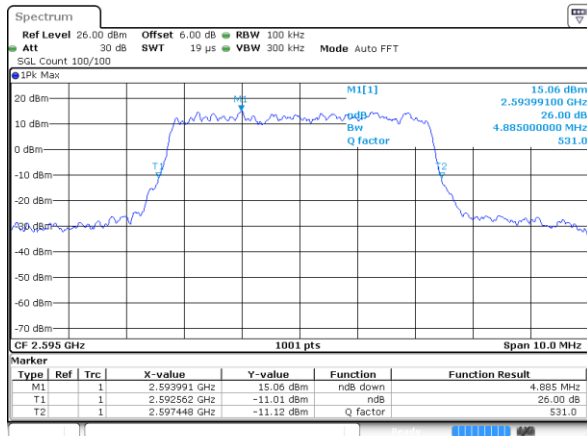
Lowest Channel / 5MHz / QPSK



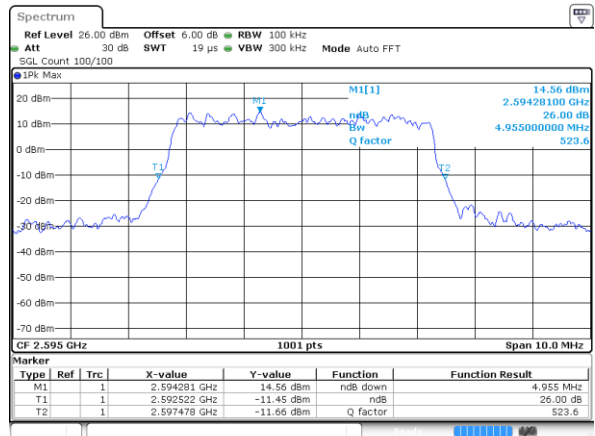
Lowest Channel / 5MHz / 16QAM



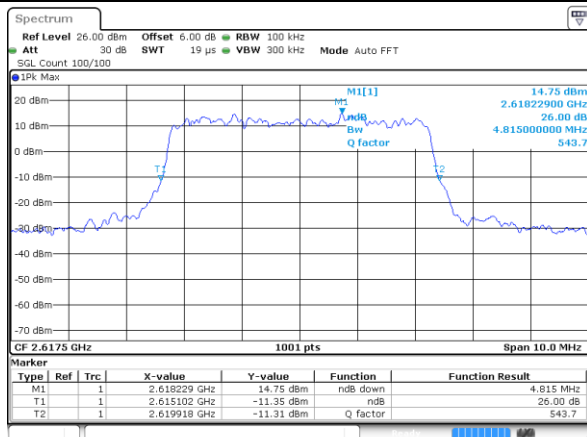
Middle Channel / 5MHz / QPSK



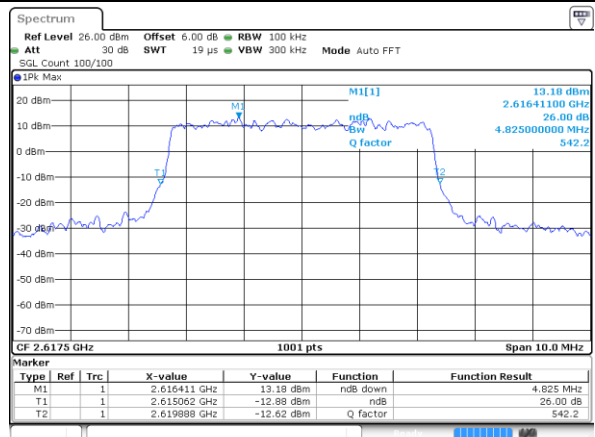
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



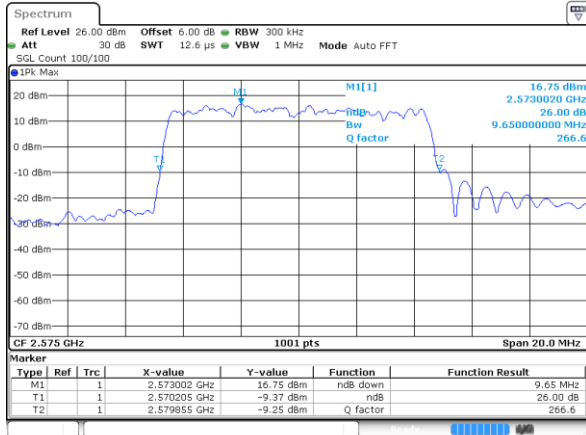
Highest Channel / 5MHz / 16QAM





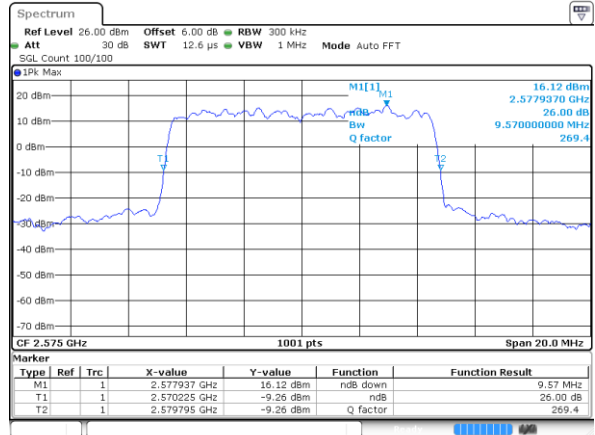
LTE Band 38

Lowest Channel / 10MHz / QPSK



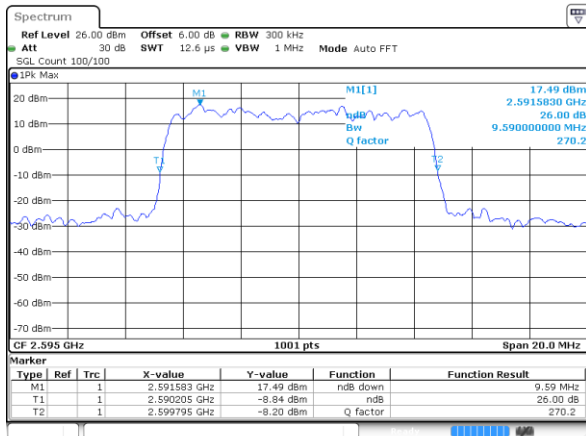
Date: 15 NOV 2019 15:35:45

Lowest Channel / 10MHz / 16QAM



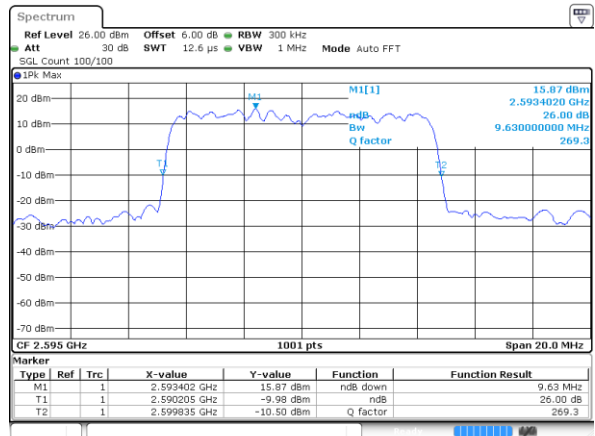
Date: 15 NOV 2019 15:35:55

Middle Channel / 10MHz / QPSK



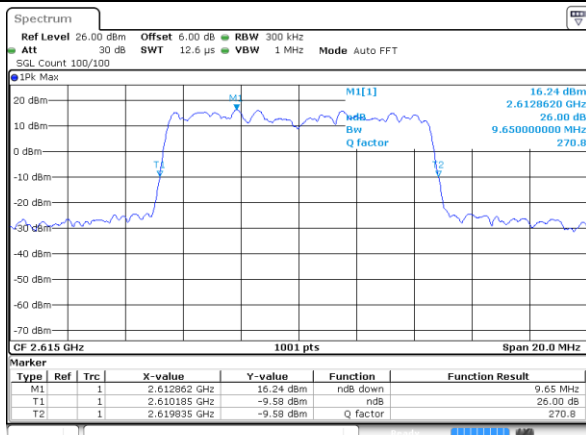
Date: 15 NOV 2019 15:36:26

Middle Channel / 10MHz / 16QAM



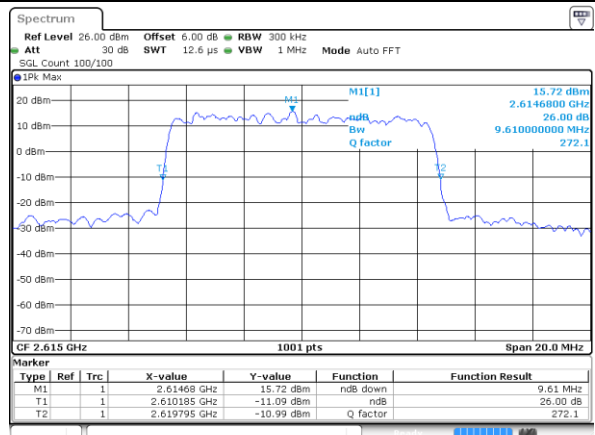
Date: 15 NOV 2019 15:36:36

Highest Channel / 10MHz / QPSK



Date: 15 NOV 2019 15:37:06

Highest Channel / 10MHz / 16QAM

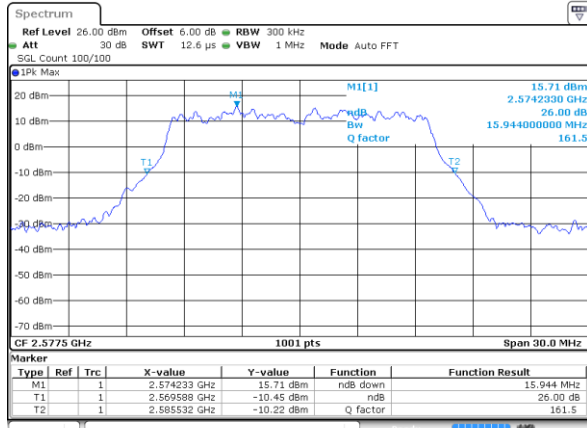


Date: 15 NOV 2019 15:37:16



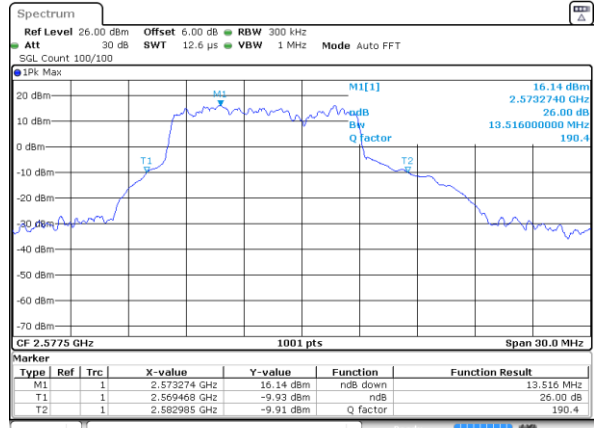
LTE Band 38

Lowest Channel / 15MHz / QPSK



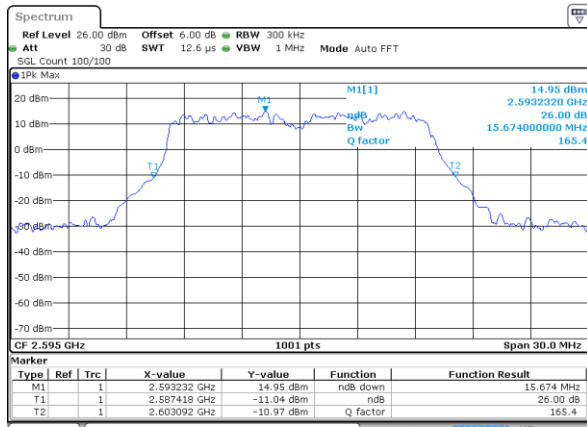
Date: 15 NOV 2019 15:37:36

Lowest Channel / 15MHz / 16QAM



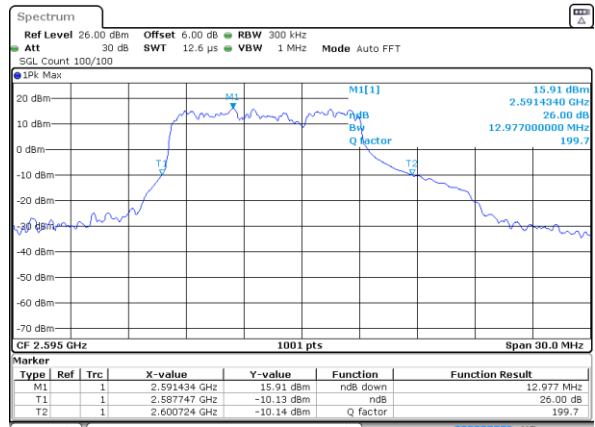
Date: 26 NOV 2019 09:19:44

Middle Channel / 15MHz / QPSK



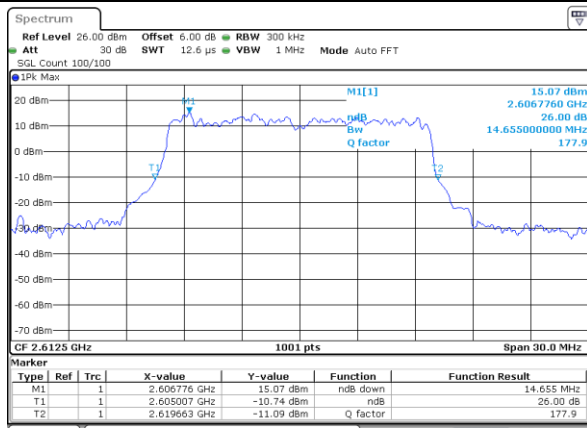
Date: 15 NOV 2019 15:37:56

Middle Channel / 15MHz / 16QAM



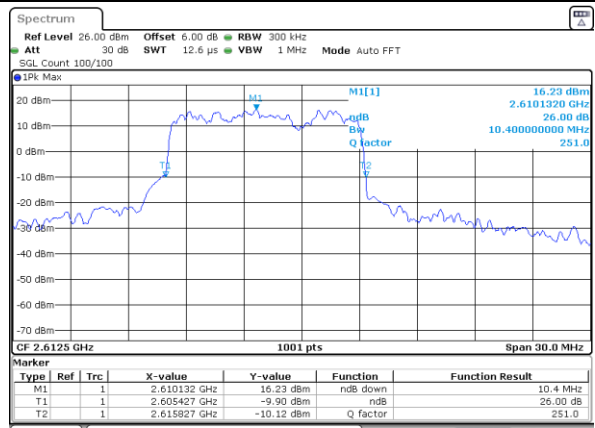
Date: 26 NOV 2019 09:20:12

Highest Channel / 15MHz / QPSK



Date: 15 NOV 2019 15:38:16

Highest Channel / 15MHz / 16QAM

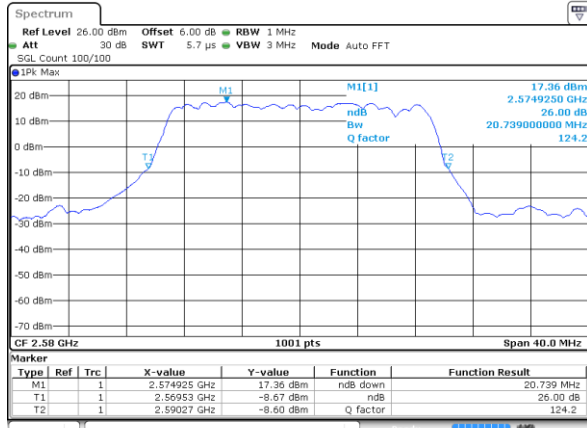


Date: 26 NOV 2019 09:20:36



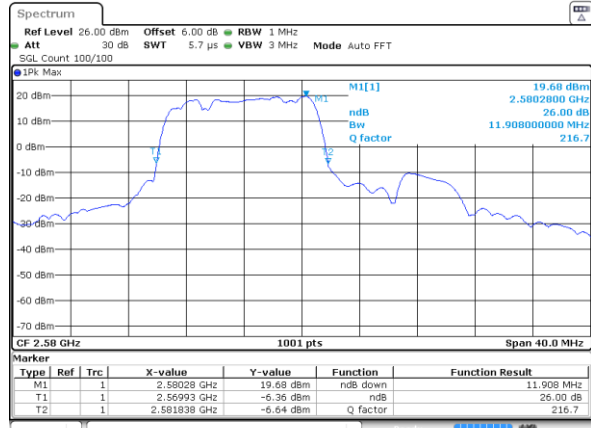
LTE Band 38

Lowest Channel / 20MHz / QPSK



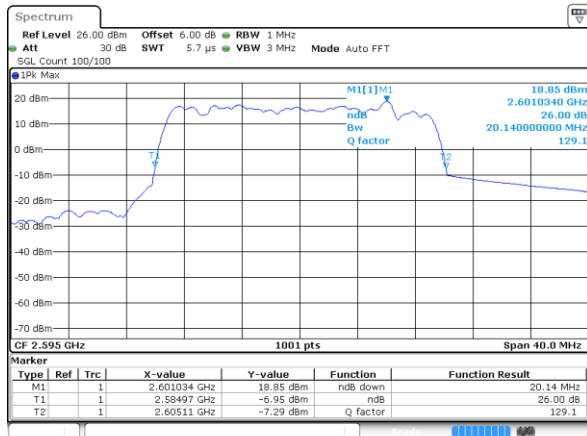
Date: 15 NOV 2019 15:38:36

Lowest Channel / 20MHz / 16QAM



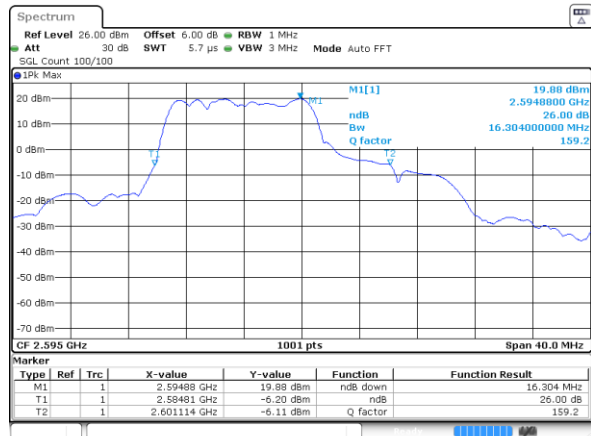
Date: 26 NOV 2019 09:26:04

Middle Channel / 20MHz / QPSK



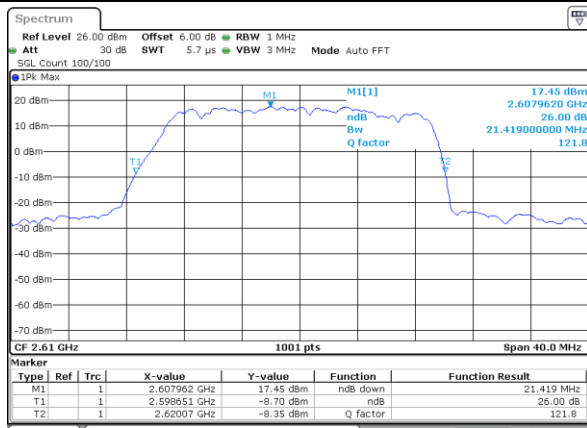
Date: 15 NOV 2019 15:38:56

Middle Channel / 20MHz / 16QAM



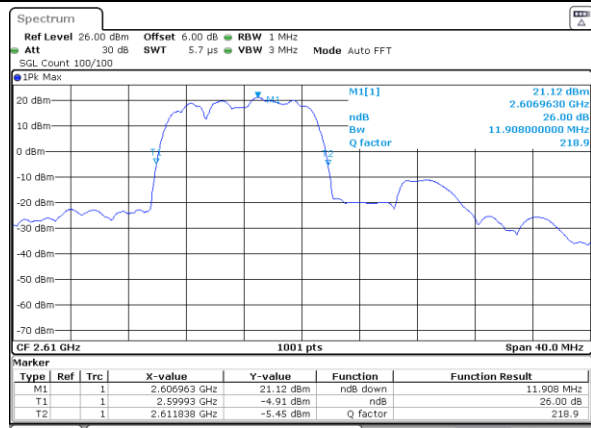
Date: 26 NOV 2019 09:25:12

Highest Channel / 20MHz / QPSK



Date: 15 NOV 2019 15:39:16

Highest Channel / 20MHz / 16QAM



Date: 26 NOV 2019 09:24:29

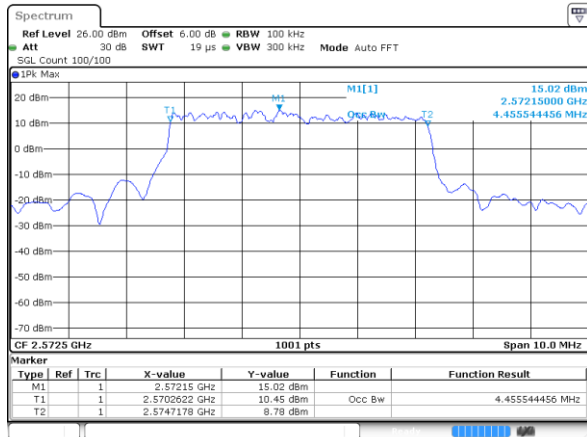
**Occupied Bandwidth**

Mode	LTE Band 38 : 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	-	-	-	-	4.46	4.48	8.91	8.97	13.40	9.95	18.34	10.71
Middle CH	-	-	-	-	4.47	4.46	9.01	8.99	13.40	9.77	18.30	10.43
Highest CH	-	-	-	-	4.47	4.50	8.95	8.93	13.37	9.71	18.34	10.43

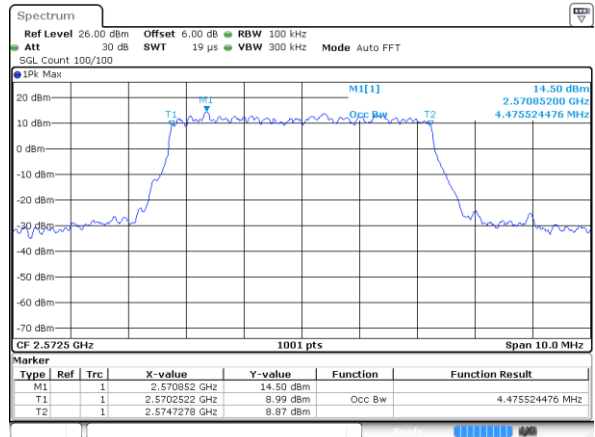


LTE Band 38

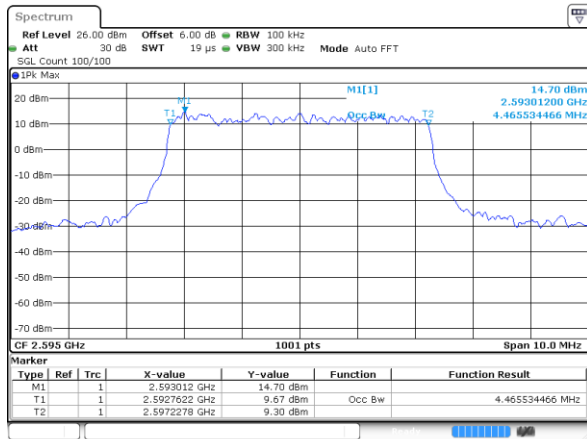
Lowest Channel / 5MHz / QPSK



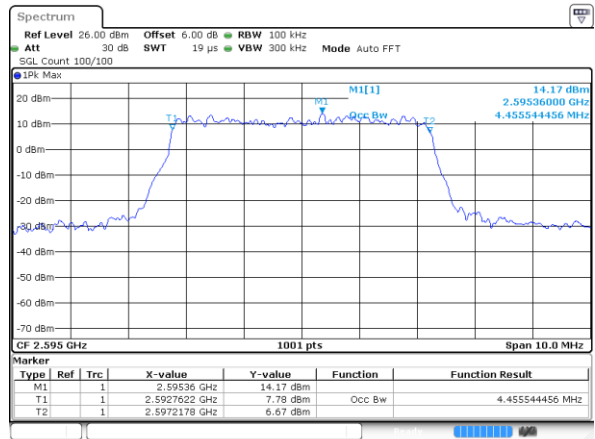
Lowest Channel / 5MHz / 16QAM



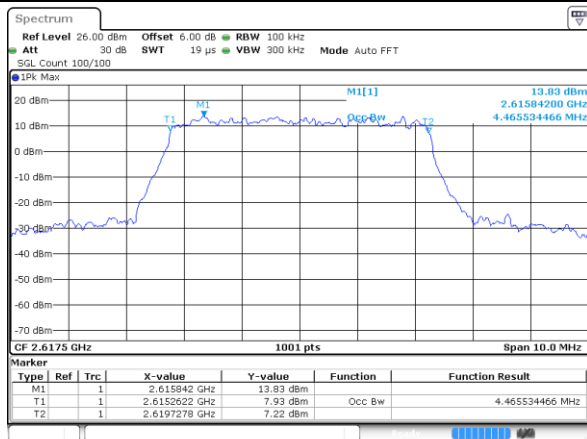
Middle Channel / 5MHz / QPSK



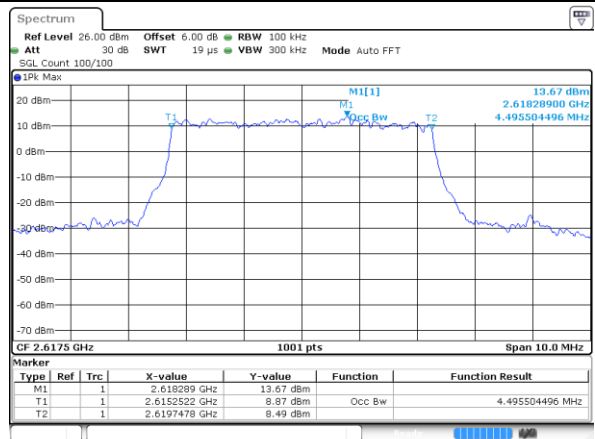
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



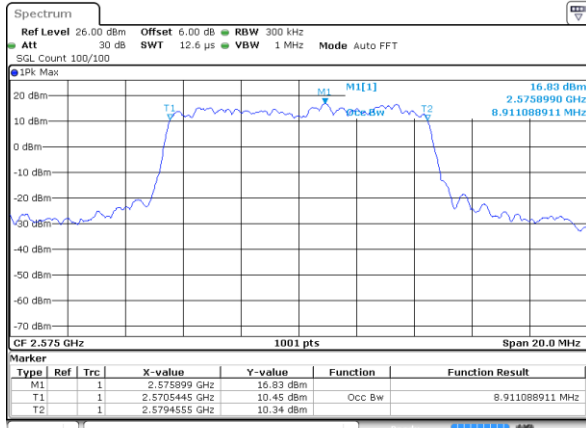
Highest Channel / 5MHz / 16QAM





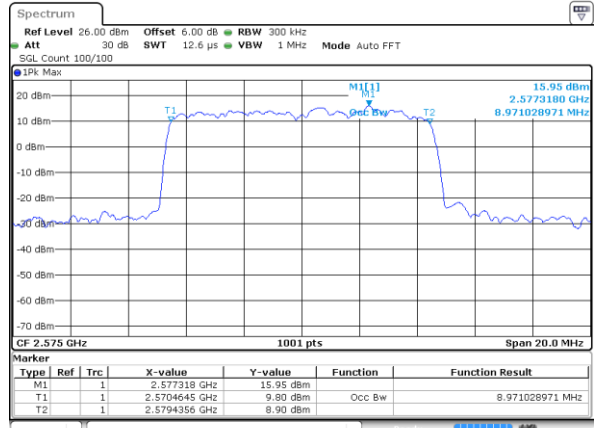
LTE Band 38

Lowest Channel / 10MHz / QPSK



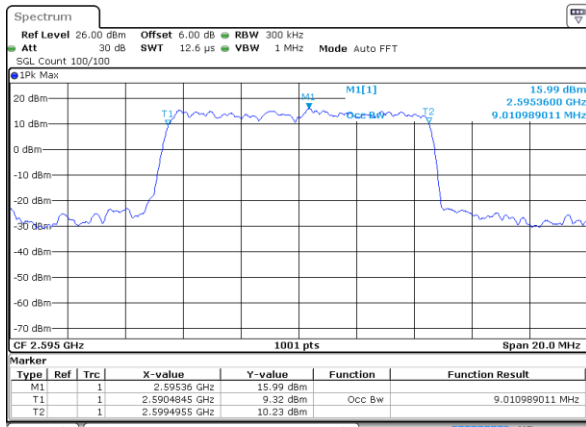
Date: 15 NOV 2019 15:35:25

Lowest Channel / 10MHz / 16QAM



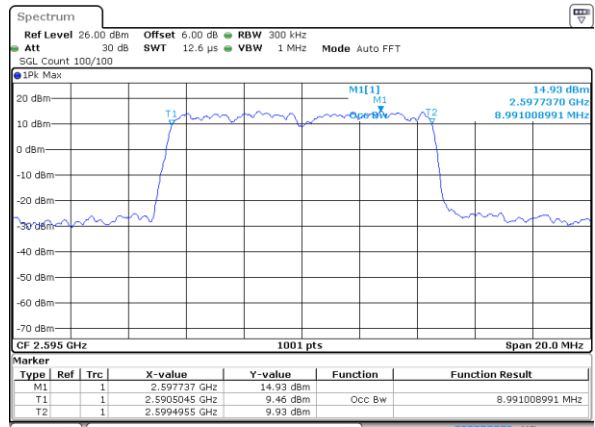
Date: 15 NOV 2019 15:35:35

Middle Channel / 10MHz / QPSK



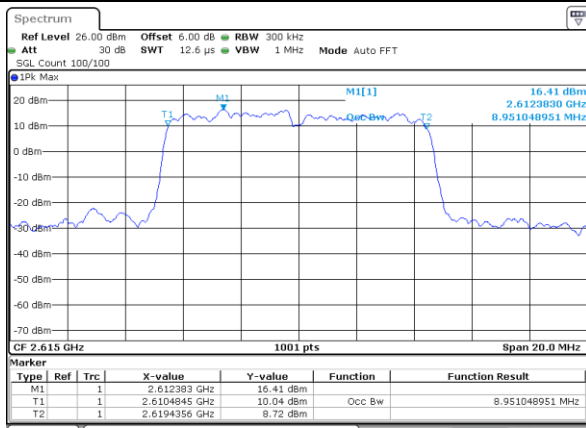
Date: 15 NOV 2019 15:36:05

Middle Channel / 10MHz / 16QAM



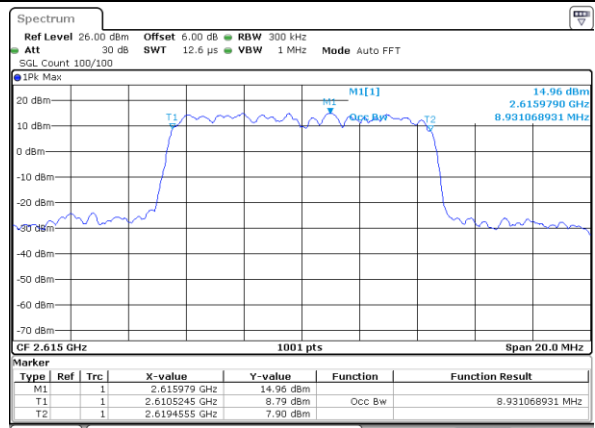
Date: 15 NOV 2019 15:36:15

Highest Channel / 10MHz / QPSK



Date: 15 NOV 2019 15:36:46

Highest Channel / 10MHz / 16QAM

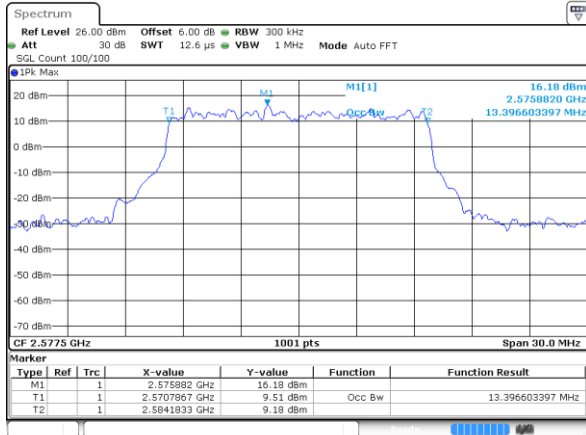


Date: 15 NOV 2019 15:36:56



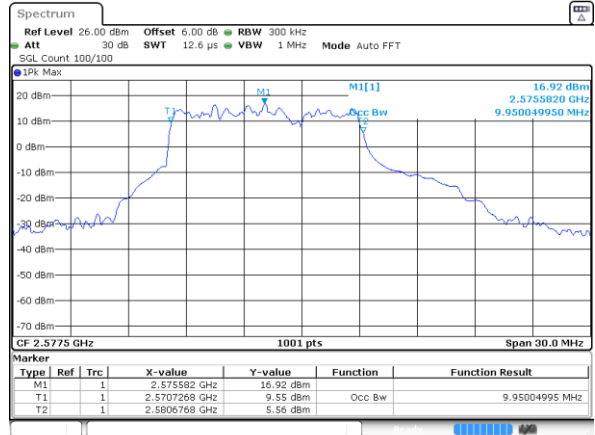
LTE Band 38

Lowest Channel / 15MHz / QPSK



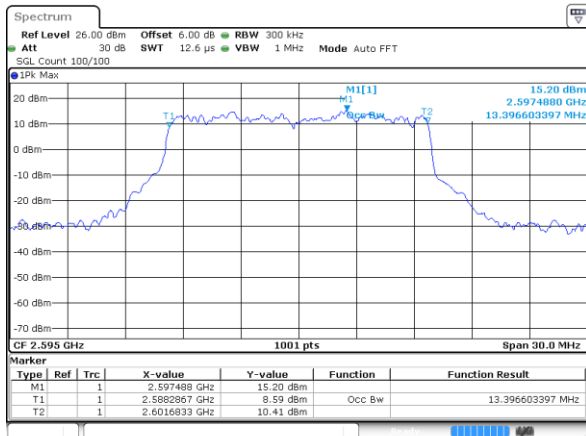
Date: 15 NOV 2019 15:37:28

Lowest Channel / 15MHz / 16QAM



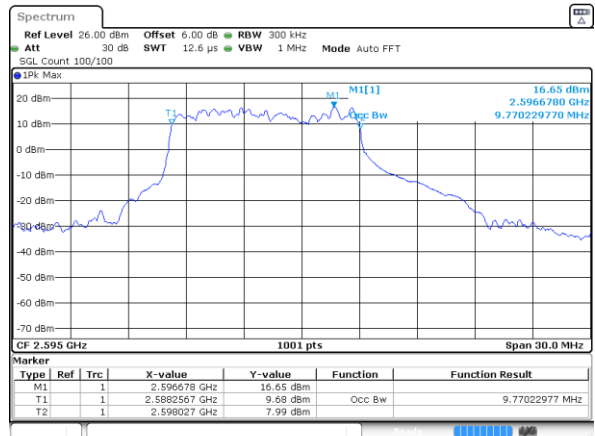
Date: 26 NOV 2019 09:19:36

Middle Channel / 15MHz / QPSK



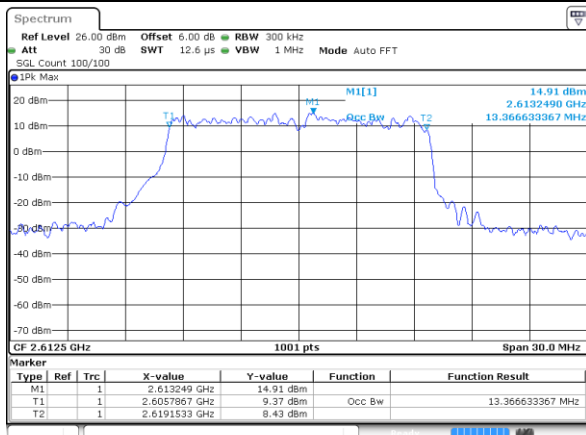
Date: 15 NOV 2019 15:37:46

Middle Channel / 15MHz / 16QAM



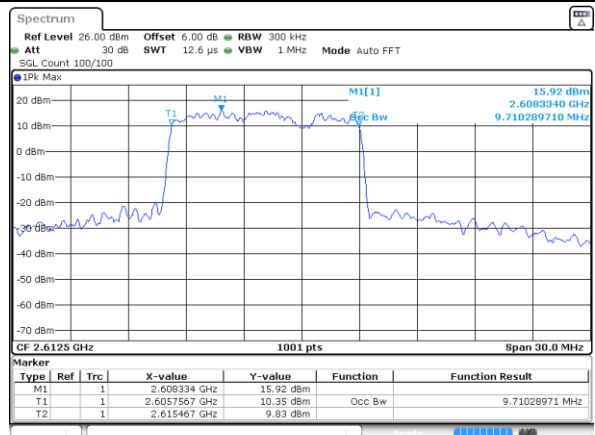
Date: 26 NOV 2019 09:20:04

Highest Channel / 15MHz / QPSK



Date: 15 NOV 2019 15:38:06

Highest Channel / 15MHz / 16QAM

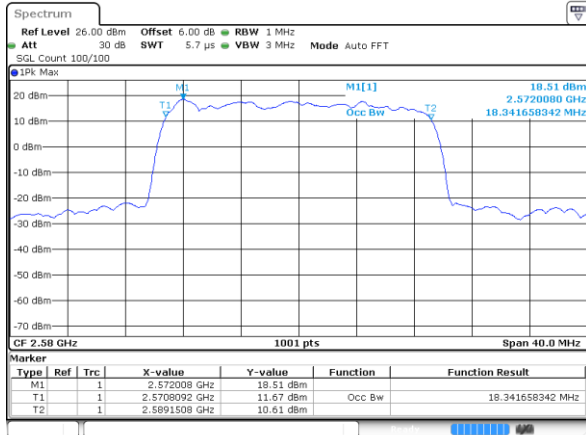


Date: 26 NOV 2019 09:20:28



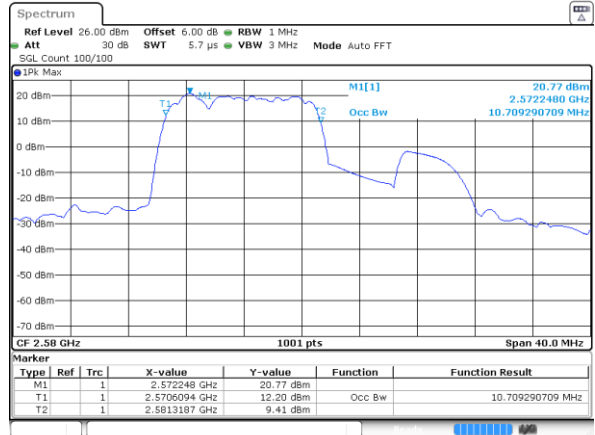
LTE Band 38

Lowest Channel / 20MHz / QPSK



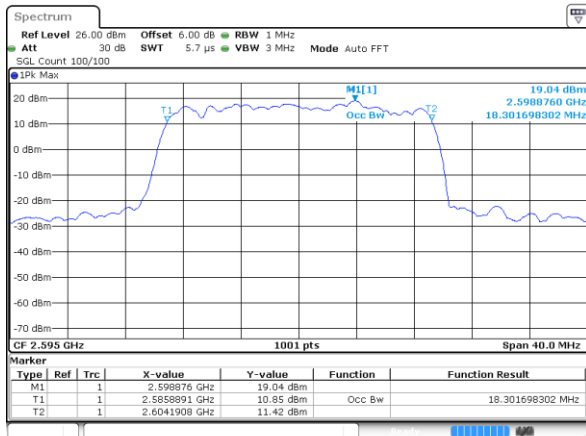
Date: 15 NOV 2019 15:38:28

Lowest Channel / 20MHz / 16QAM



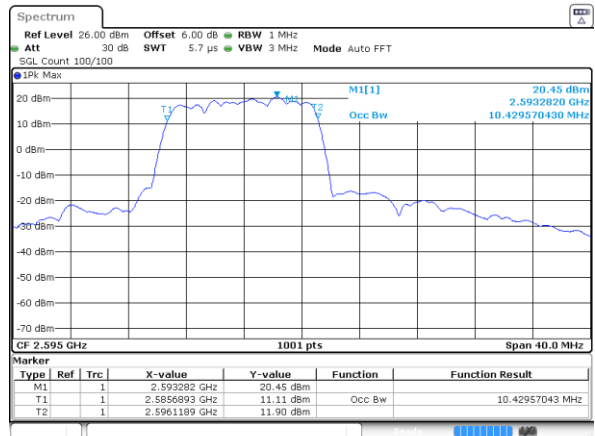
Date: 26 NOV 2019 09:25:57

Middle Channel / 20MHz / QPSK



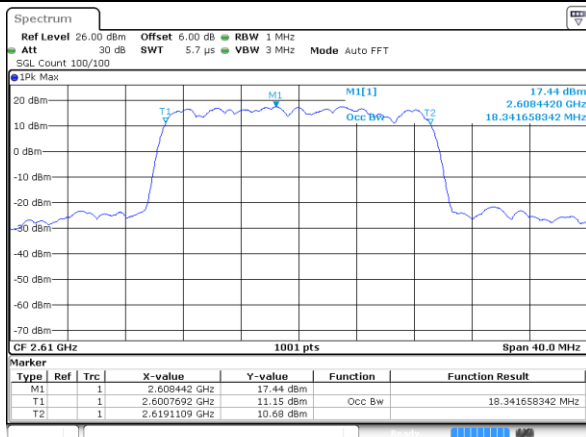
Date: 15 NOV 2019 15:38:46

Middle Channel / 20MHz / 16QAM



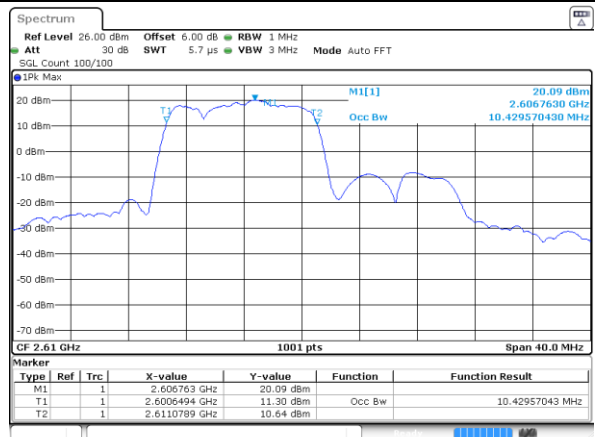
Date: 26 NOV 2019 09:25:05

Highest Channel / 20MHz / QPSK



Date: 15 NOV 2019 15:39:06

Highest Channel / 20MHz / 16QAM



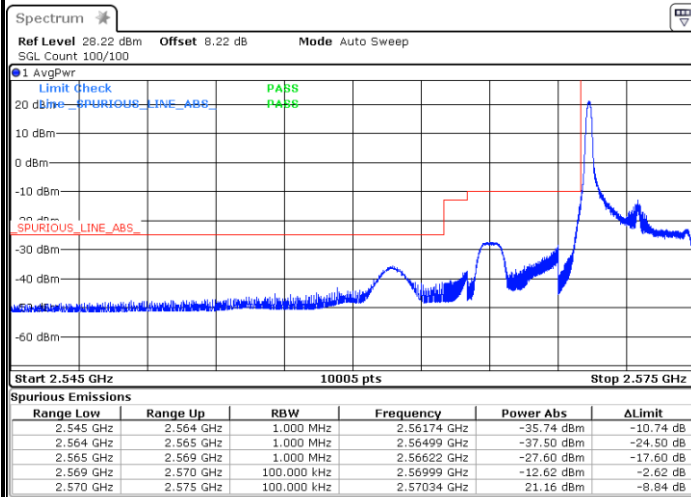
Date: 26 NOV 2019 09:24:20



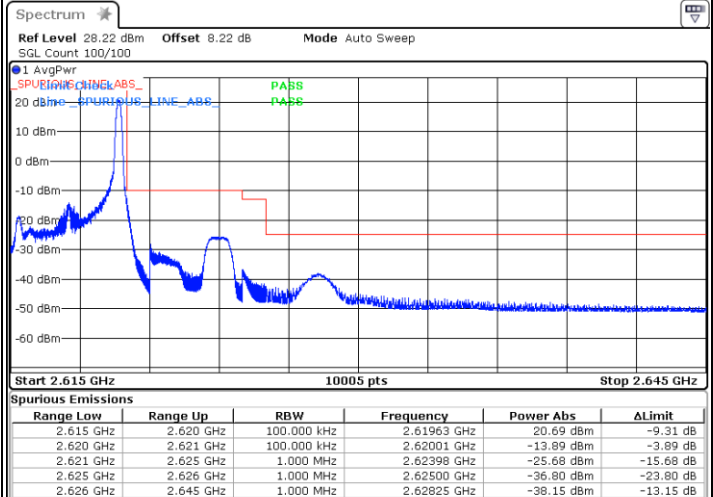
Conducted Band Edge

LTE Band 38 / 5MHz / QPSK

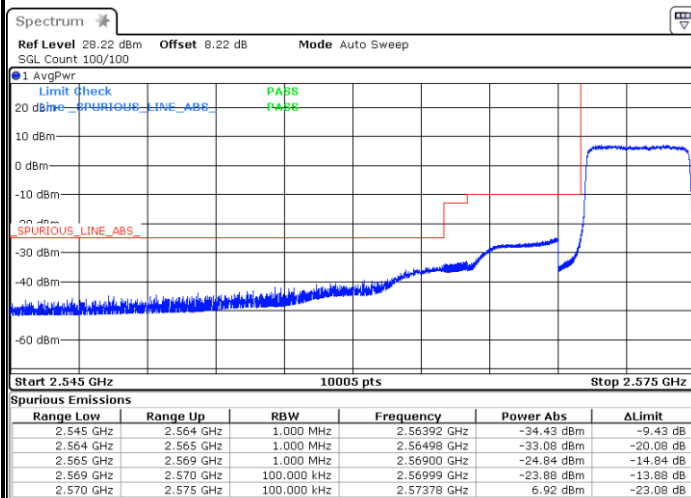
Lowest Band Edge / 1 RB



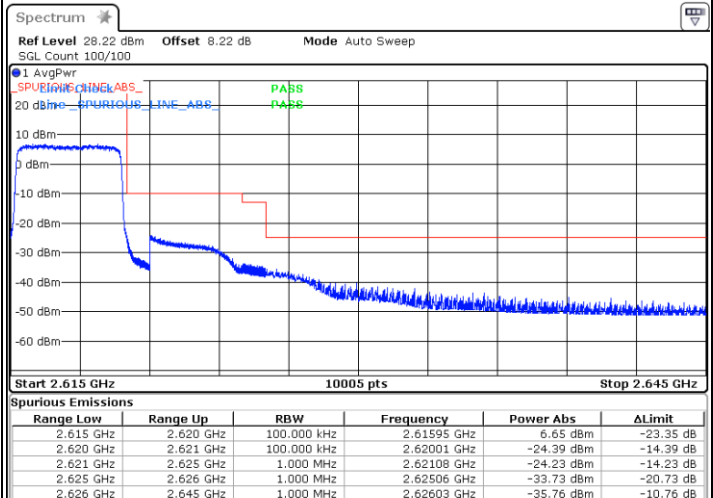
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



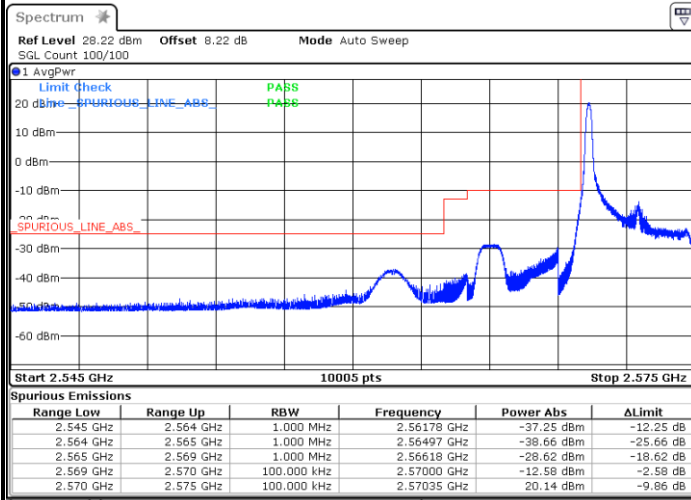
Highest Band Edge / Full RB



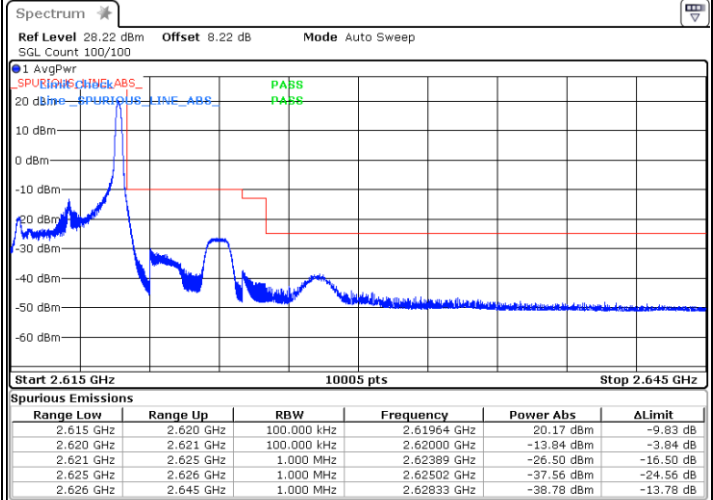


LTE Band 38 / 5MHz / 16QAM

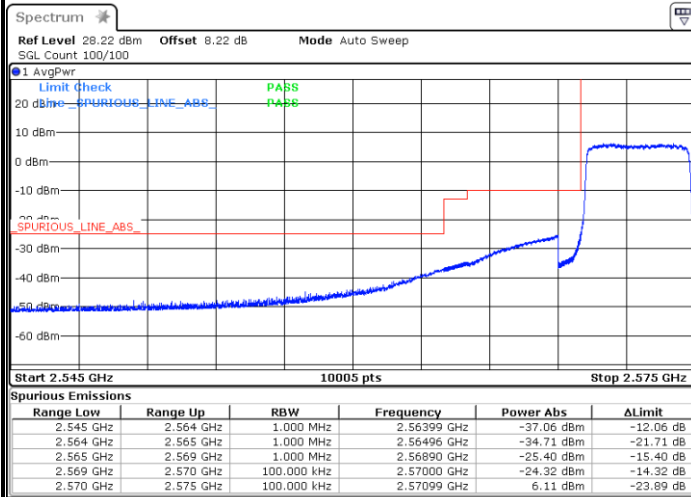
Lowest Band Edge / 1RB



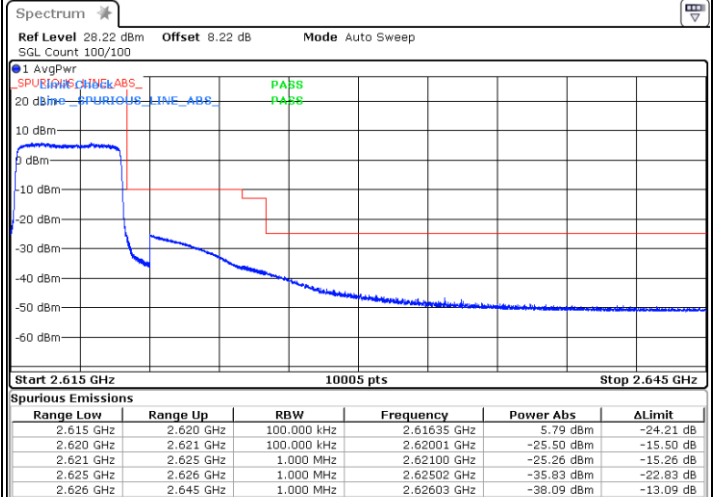
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



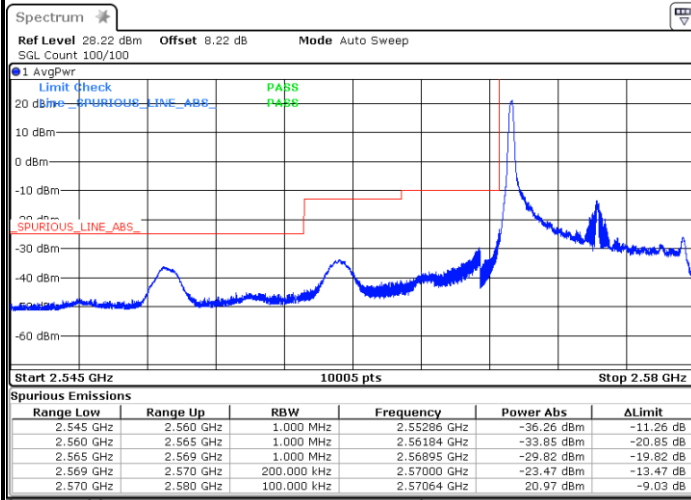
Highest Band Edge / Full RB



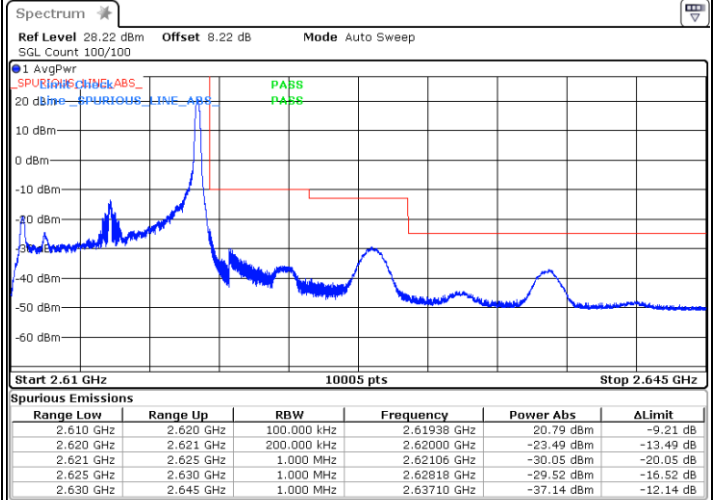


LTE Band 38 / 10MHz / QPSK

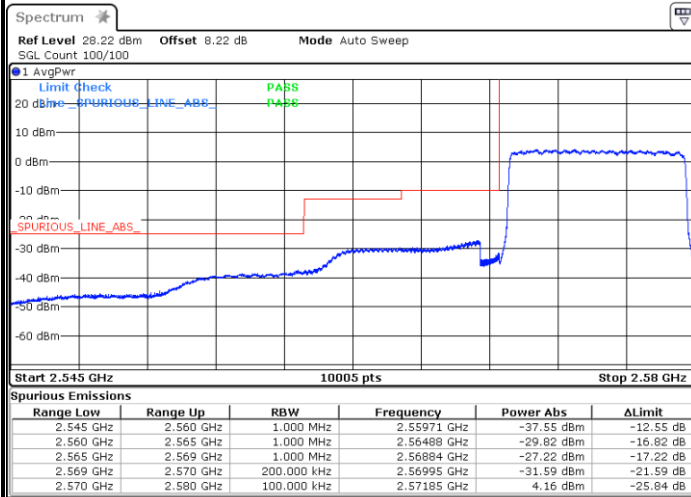
Lowest Band Edge / 1 RB



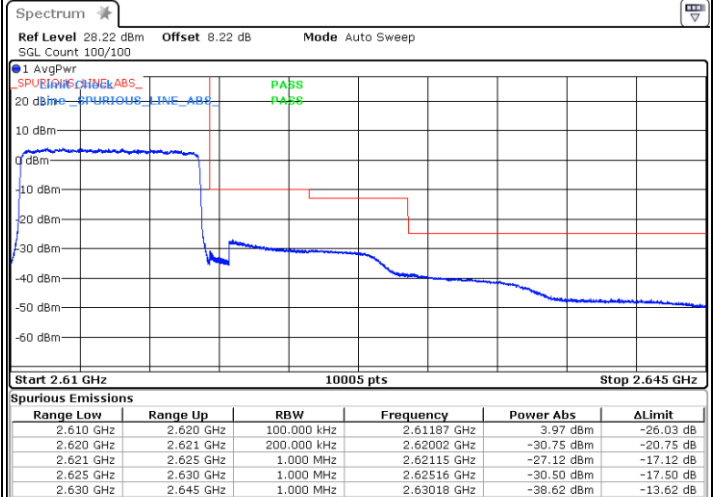
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



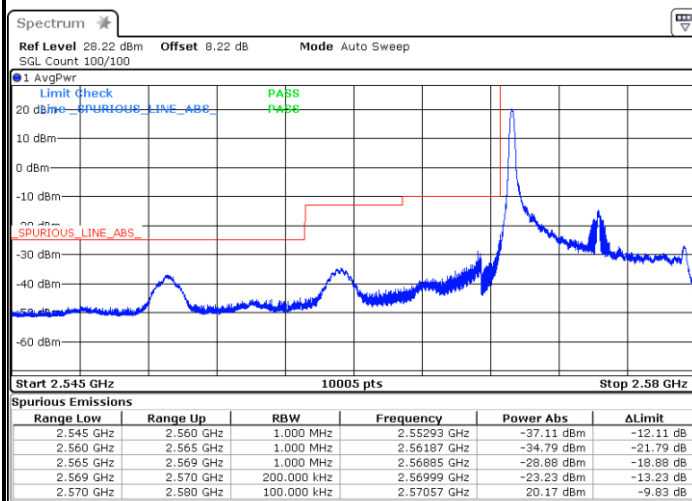
Highest Band Edge / Full RB



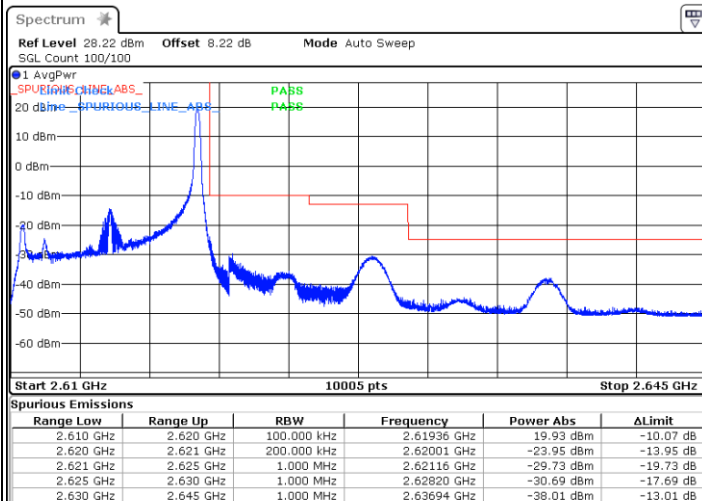


LTE Band 38 / 10MHz / 16QAM

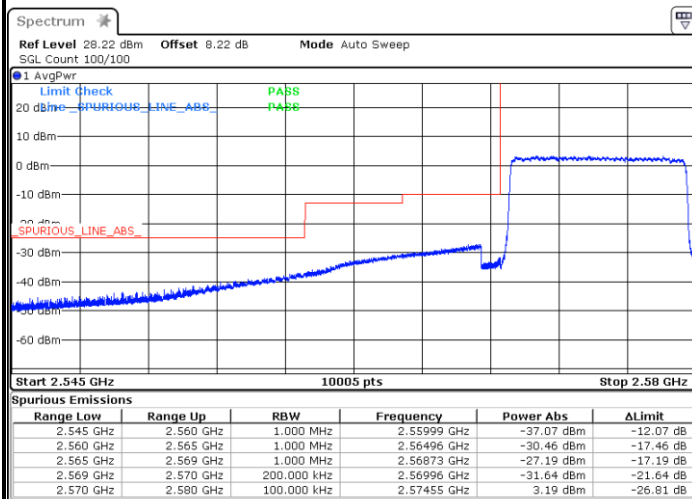
Lowest Band Edge / 1 RB



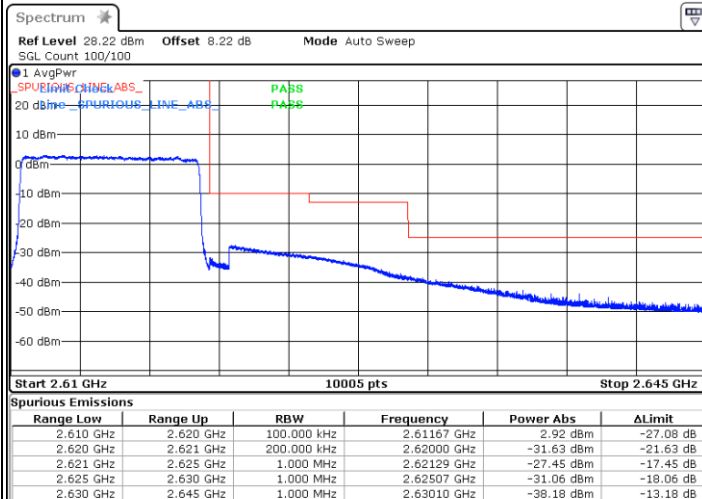
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



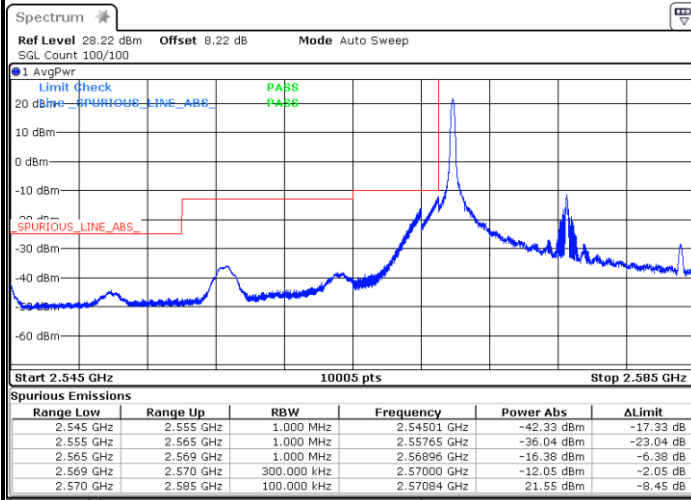
Highest Band Edge / Full RB





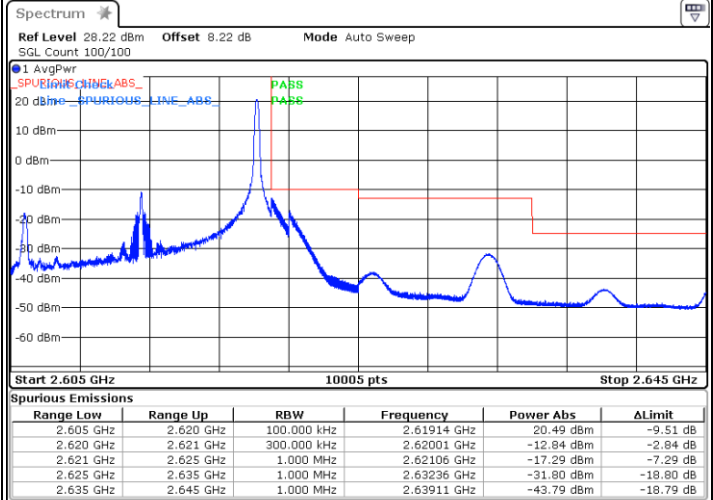
LTE Band 38 / 15MHz / QPSK

Lowest Band Edge / 1 RB



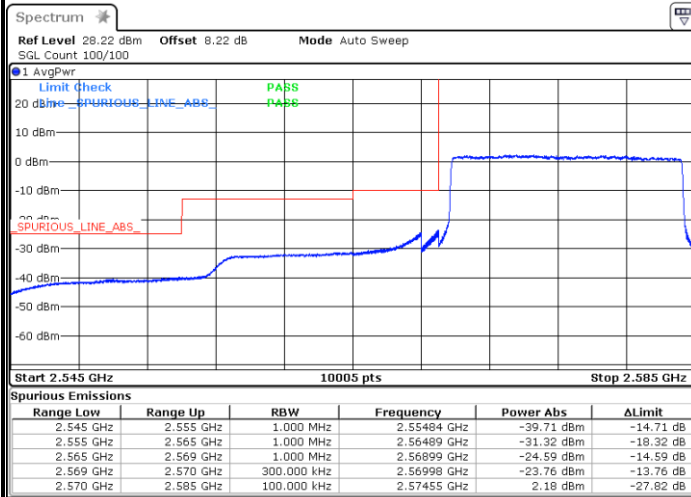
Date: 15 NOV 2019 17:03:35

Highest Band Edge / 1 RB



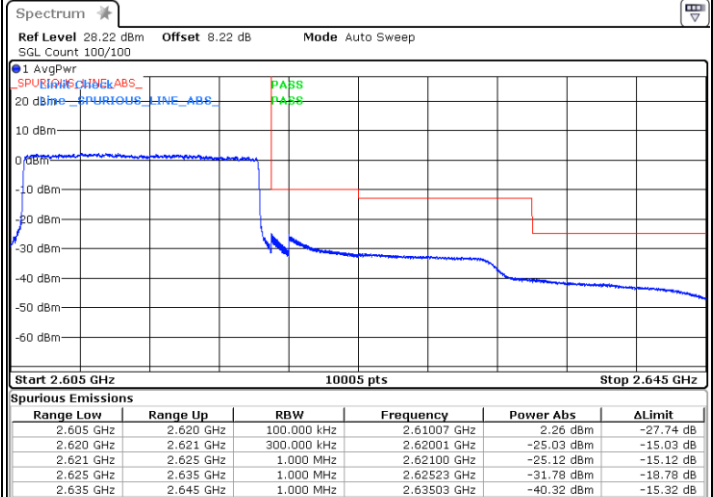
Date: 15 NOV 2019 17:09:57

Lowest Band Edge / Full RB



Date: 15 NOV 2019 17:07:02

Highest Band Edge / Full RB



Date: 15 NOV 2019 17:08:33